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JAN 10 2014

WA State Department
of Ecology (SWRO)

January 7, 2014

Mr. Thomas Middleton
Washington Department of Ecology
SWRO Toxics Cleanup Program
PO Box 47775
Olympia, Washington 98504

**Re: Submittal of Annual 2013 Groundwater Monitoring
Status Report**

BNSF - Former Cummings Oil Lease Site
908 Northwest Kerron Avenue, Winlock, Washington
Facility/Site No.: 3151688
Cleanup Site ID No.: 2247
VCP Project No.: SW0775

Dear Mr. Middleton:

On behalf of BNSF and Farallon Consulting, LLC (Farallon), TRC is submitting the *Annual 2013 Groundwater Monitoring Status Report*, dated October 31, 2013 for the Former Cummings Oil Lease Site located in Winlock, Washington.

If you have any questions regarding this submittal, please contact me at (925) 688-2488.

Sincerely,

Keith Woodburne, L.G.
Senior Project Manager

cc: Scott MacDonald, BNSF
Stacy Patterson, Farallon

Attachment: Annual 2013 Groundwater Monitoring Status Report



975 5th Avenue Northwest, Issaquah, Washington 98027
Tel: (425) 295-0800 Fax: (425) 295-0850
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GROUNDWATER MONITORING STATUS REPORT AUGUST 2013

**FORMER CUMMINGS OIL LEASE SITE
908 NORTHWEST KERRON AVENUE
WINLOCK, WASHINGTON
VCP NO. SW0775**

**Submitted by:
Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027**

Farallon PN: 283-005

**For:
TRC Environmental Corporation
One Concord Center
2300 Clayton Road, Suite 610
Concord, California 94520**

October 31, 2013

Prepared by:

A handwritten signature in blue ink, appearing to read "Javan Ruark".

Javan Ruark
Project Geologist

Reviewed by:

A handwritten signature in blue ink, appearing to read "Stacy Patterson".

Stacy Patterson
Senior Environmental Scientist

A handwritten signature in blue ink, appearing to read "Jeffrey Kasper".

Jeffrey Kasper, L.G., L.H.G.
Senior Project Manager



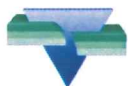


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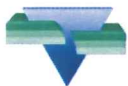
APPENDIX

- Appendix A *Laboratory Analytical Report*



ACRONYMS AND ABBREVIATIONS

BTEX	benzene, toluene, ethylbenzene, and xylenes
DRO	total petroleum hydrocarbons as diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
GRO	total petroleum hydrocarbons as gasoline-range organics
µg/l	micrograms per liter
MTCA	Washington State Model Toxics Control Act Cleanup Regulation
ORO	total petroleum hydrocarbons as oil-range organics
PQL	practical quantitation limit
Site	Former Cummings Oil Lease Site at 908 Northwest Kerron Avenue in Winlock, Lewis County, Washington
VCP	Voluntary Cleanup Program
Work Plan	<i>Cleanup Action Work Plan, Former Cummings Oil Lease Site, 908 Northwest Kerron Avenue, Winlock, Washington</i> dated December 18, 2008, prepared by Farallon Consulting, L.L.C.



1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Groundwater Monitoring Status Report on behalf of BNSF Railway Company to summarize the results of the groundwater monitoring and sampling event conducted on August 1, 2013 at the former Cummings Oil Lease Site at 908 Northwest Kerron Avenue in Winlock, Lewis County, Washington (herein referred to as the Site) (Figure 1). Prior site investigations and a tank removal and soil excavation cleanup action have confirmed that concentrations of total petroleum hydrocarbons as gasoline-range organics (GRO), as diesel-range organics (DRO), and as oil-range organics (ORO); and benzene, toluene, ethylbenzene, and xylenes (BTEX) were released to the subsurface as a result of historical activities at the Site. The groundwater monitoring and sampling is being performed to monitor concentrations of petroleum hydrocarbon constituents previously detected in groundwater above Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup levels; assess the effectiveness of the cleanup action; and determine whether natural attenuation of residual petroleum hydrocarbon constituents is occurring.

The cleanup action at the Site was performed under the Washington State Department of Ecology (Ecology) Voluntary Cleanup Program (VCP) in accordance with MTCA, as established in Chapter 173-340 of the Washington Administrative Code, and the *Cleanup Action Work Plan, Former Cummings Oil Lease Site, 908 Northwest Kerron Avenue, Winlock, Washington* dated December 18, 2008, prepared by Farallon (2008) (Work Plan). The Site was entered into the Ecology VCP in 2006 and assigned VCP Identification No. SW0775 under the Ecology Toxics Cleanup Program.

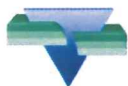
The Work Plan presented the selected cleanup approach and specified the cleanup standards and associated requirements for the cleanup action. The selected cleanup action for the Site was executed in conjunction with tank closure activities conducted at the Site between March 10 and August 1, 2008. The tank closure and cleanup action included removal of two underground storage tanks and four aboveground storage tanks, excavation and off-Site disposal of soil with petroleum hydrocarbon constituents at concentrations above MTCA cleanup levels, and installation of monitoring wells to delineate the nature and extent of petroleum hydrocarbon constituents in groundwater and to assess the progress of groundwater cleanup by natural attenuation processes. The results of the tank closure and cleanup action are summarized in the *Tank Closure Report, Former Cummings Oil Lease Site, 908 Northwest Kerron Avenue, Winlock, Washington* dated March 11, 2010, prepared by Farallon (2010).

An assessment of the potential for natural attenuation via biodegradation processes to reduce concentrations of residual petroleum hydrocarbon constituents in groundwater was conducted during the December 27, 2010 groundwater monitoring and sampling event (Farallon 2011) using geochemical indicators and the Ecology (2005) Guidance on Remediation of Petroleum Contaminated Groundwater by Natural Attenuation. The results of the assessment projected with an 85 percent confidence level that concentrations of DRO exceeding the MTCA Method A cleanup level in monitoring wells MW-1 and MW-3 would reach the cleanup level through natural attenuation by January 2012 and March 2013, respectively.



The time frame in which concentrations of benzene exceeding the MTCA Method A cleanup level at each well location will reach the target clean-up level could not be determined with the confidence level established by Ecology, although the data indicate that concentrations of benzene are decreasing.

Groundwater monitoring will continue to be conducted to assess the progress of natural attenuation at the Site and to evaluate the need for and frequency of subsequent sampling events.



2.0 MONITORING ACTIVITIES AND RESULTS

The monitoring and sampling activities conducted at the Site by Farallon on August 1, 2013 included measuring groundwater levels and collecting groundwater quality data and samples for laboratory analysis. The monitoring and sampling activities and results are summarized in the following sections.

2.1 GROUNDWATER MONITORING ACTIVITIES

The groundwater monitoring and sampling event included the following elements:

- Measuring the depth to groundwater in monitoring wells MW-1 through MW-5;
- Purging and sampling monitoring wells MW-1 through MW-5 using U.S. Environmental Protection Agency (EPA) low-flow sampling methods;
- Measuring water quality parameters during monitoring well purging; and
- Submitting the groundwater samples for laboratory analysis.

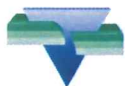
Farallon opened monitoring wells MW-1 through MW-5 to allow the water levels to equilibrate with atmospheric pressure for a minimum of 15 minutes prior to obtaining groundwater level measurements. Groundwater levels in the monitoring wells were measured to an accuracy of 0.01 foot using an electronic water-level meter.

Purging and sampling of monitoring wells MW-1 through MW-5 was conducted using a peristaltic pump and polyethylene tubing. The purging was conducted at flow rates between 175 and 200 milliliters per minute, with the intake tubing placed a maximum of 3 feet below the water table in each monitoring well. During purging, water quality was monitored using a Horiba U-50 water-quality meter equipped with a flow-through cell. Water quality parameters monitored and recorded during purging and sampling included temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. The monitoring wells were purged until the water quality parameters stabilized in accordance with EPA guidelines for low-flow sampling. The groundwater samples were transferred directly from the tubing into laboratory-prepared containers. The containers from each sampling event were placed on ice in a cooler and transported under standard chain-of-custody protocols to an Ecology-accredited laboratory. The groundwater samples were analyzed for DRO and ORO by Northwest Method NWTPH-Dx; GRO by Northwest Method NWTPH-Gx; and BTEX by EPA Method 8260B.

Purge water generated during groundwater sampling was stored in a 16-gallon drum on the Site. The purge water will be scheduled for disposal during a future groundwater sampling event.

2.2 GROUNDWATER MONITORING RESULTS

Groundwater level measurements and elevations are summarized in Table 1. Figure 2 provides a groundwater elevation contour map illustrating the estimated groundwater flow direction and



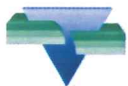
gradient for the groundwater monitoring and sampling event conducted on August 1, 2013. The August 1, 2013 groundwater level measurements indicate a groundwater flow direction of west/southwest, and an average hydraulic gradient at the Site of approximately 0.05.

Groundwater analytical results for petroleum hydrocarbon constituents are summarized in Table 2. The analytical results for the groundwater samples collected on August 1, 2013 are depicted on Figure 3.

The laboratory analytical results for the August 1, 2013 groundwater monitoring and sampling event are summarized as follows:

- DRO was detected at concentrations exceeding the MTCA Method A cleanup level of 500 micrograms per liter ($\mu\text{g/l}$) in the groundwater samples collected from monitoring wells MW-2 and MW-3. DRO was not detected at concentrations exceeding the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells MW-1, MW-4, or MW-5.
- ORO was detected at a concentration exceeding the MTCA Method A cleanup level of 500 $\mu\text{g/l}$ in the groundwater sample collected from monitoring well MW-2. ORO was not detected at concentrations exceeding the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells MW-1, or MW-3 through MW-5.
- GRO was not detected at a concentration exceeding the MTCA Method A cleanup level of 800 $\mu\text{g/l}$ in the groundwater samples collected from monitoring wells MW-1 through MW-5.
- Benzene was the only BTEX constituent detected at a concentration exceeding the MTCA Method A cleanup level. The groundwater sample collected from monitoring well MW-2 contained benzene at a concentration exceeding the MTCA Method A cleanup level of 5 $\mu\text{g/l}$. Benzene was not detected at concentrations exceeding the MTCA Method A cleanup level in the groundwater samples collected from monitoring wells MW-1, or MW-3 through MW-5.

The laboratory analytical report for the groundwater monitoring event is provided in Appendix A.



3.0 CONCLUSIONS

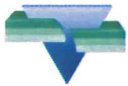
The groundwater flow direction for the August 1, 2013 groundwater monitoring event was west/southwest at an average estimated hydraulic gradient of approximately 0.05 foot per foot. The groundwater flow direction is consistent with the August 2012 sampling event.

DRO, ORO, and/or benzene were detected at concentrations exceeding the MTCA Method A cleanup levels in the groundwater samples collected from monitoring wells MW-2 and MW-3 in the area west of the former underground storage tank excavation on the western portion of the Site, and the aboveground storage tank excavation area on the central portion of the Site. GRO, DRO, ORO, and BTEX constituents at monitoring wells MW-1, MW-4, and MW-5 were not detected at concentrations exceeding the MTCA Method A cleanup levels.

Based on the overall decreasing trend in concentrations of petroleum hydrocarbon constituents at monitoring wells MW-1 through MW-3 and absence of increasing concentrations of these constituents at the down-gradient monitoring well MW-5 through the August 2013 groundwater sampling event, plume stability has been established and natural attenuation via biodegradation is likely occurring at the Site. Furthermore, the decreasing trends in petroleum hydrocarbon constituents in all Site wells, with the possible exception of some recent fluctuations in concentrations of petroleum hydrocarbons in monitoring well MW-2, would support the conclusions of the 2011 natural attenuation assessment (Farallon 2011). The results of the assessment projected at an 85 percent confidence level that concentrations of DRO at monitoring wells MW-1 and MW-3 would attenuate to the MTCA Method A cleanup level of 500 µg/l by January 2012 and March 2013, respectively. The concentration of DRO at monitoring well MW-1 has been below the MTCA Method A cleanup level for the sampling events performed in August 2012 and 2013. The concentration of DRO at monitoring well MW-3 shows a continued decreasing trend, with residual concentrations currently at 550 µg/l.

Benzene, DRO, and ORO at monitoring well MW-2 continue to fluctuate and currently exceed MTCA Method A cleanup levels, but show an overall decreasing trend. Based on the observed natural attenuation trends, the concentrations of petroleum constituents at monitoring well MW-2 are expected to reach MTCA Method A cleanup levels within a reasonable time frame; however, the fluctuations in concentrations inhibit prediction of a specific time frame. Historical analytical data for petroleum hydrocarbons at monitoring well MW-2 indicate that the plume is stable, only isolated to monitoring well MW-2, and is not migrating off the Site to down-gradient monitoring well MW-5.

Annual groundwater monitoring for DRO, ORO, and BTEX will be conducted in August 2014 to continue to assess the progress of natural attenuation of these constituents and estimate a restoration time frame for all monitoring well locations at the Site.



4.0 BIBLIOGRAPHY

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FIGURES

GROUNDWATER MONITORING STATUS REPORT

AUGUST 2013

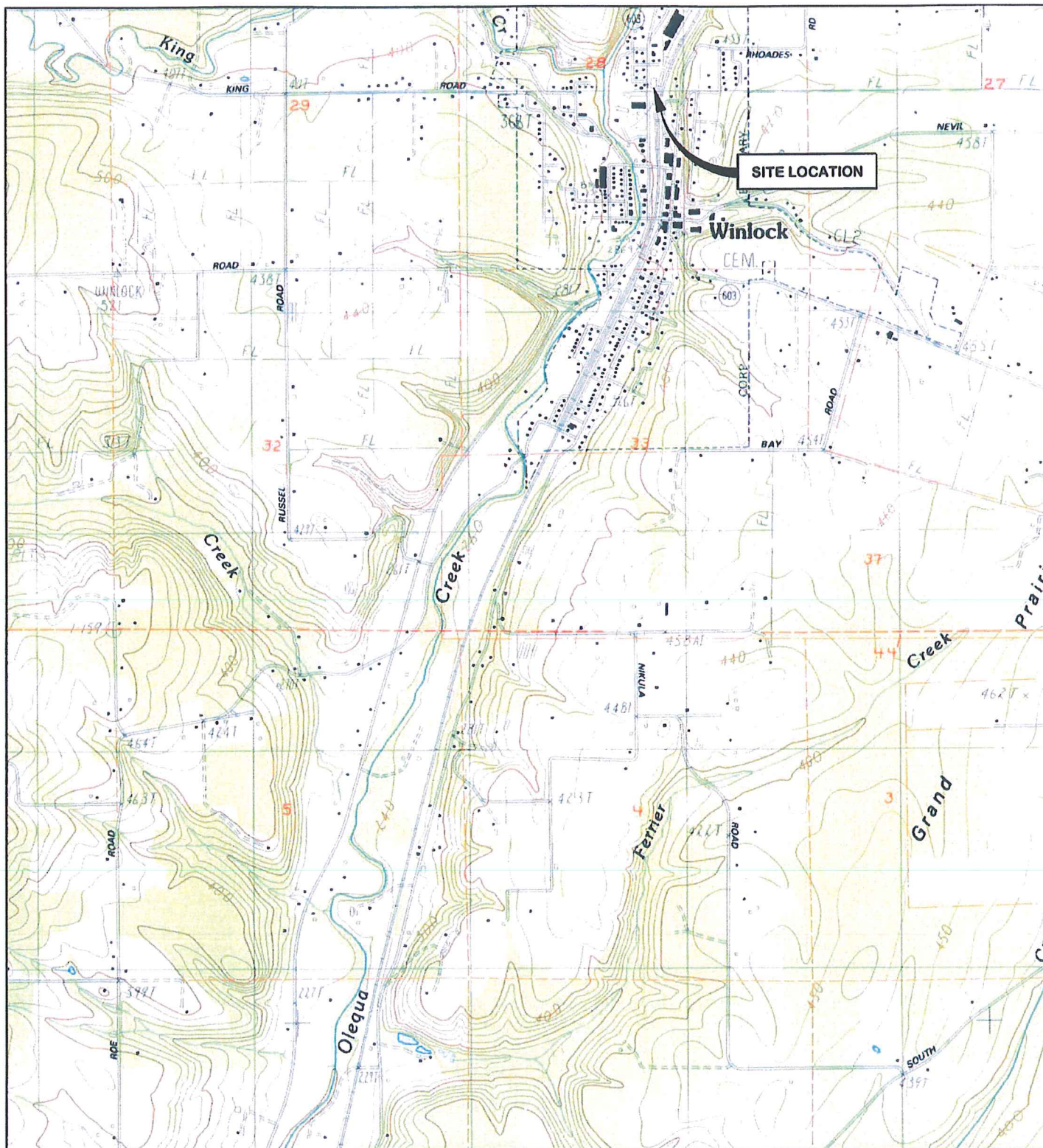
Former Cummings Oil Lease Site

908 Northwest Kerron Avenue

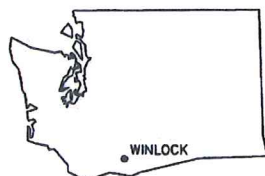
Winlock, Washington

VCP No. SW0775

Farallon PN: 283-005



REFERENCE: 7.5 MINUTE USGS QUADRANGLE WINLOCK, WASHINGTON. DATED 1985



WASHINGTON



FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 1

SITE VICINITY MAP
FORMER CUMMINGS OIL LEASE SITE
908 NORTHWEST KERRON AVENUE
WINLOCK, WASHINGTON

FARALLON PN: 283-005

Drawn By: DEW

Checked By: SP

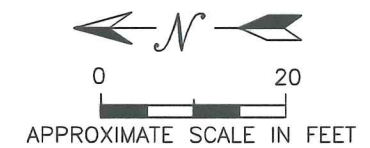
Date: 2/22/11

Disk Reference: 283005

BNSF MAIN LINE

LEGEND

- PROPERTY BOUNDARY
- RAILROAD TRACKS
- DRAINAGE DITCH AND DIRECTION OF FLOW
- STORM SEWER LINE
- SANITARY SEWER
- MW-3 MONITORING WELL (FARALLON 2006)
- (99.14) GROUNDWATER ELEVATION (AUGUST 1, 2013)
- 98.00 GROUNDWATER ELEVATION CONTOUR
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- CATCH BASIN



MW-4
(99.14)

SPUR

GRAVEL PARKING

FORMER UST EXCAVATION AREA

GRAVEL

GRAVEL PARKING

SPUR

CULVERT

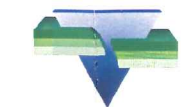
MW-1
(97.60)

MW-2
(97.46)

MW-3
(97.27)

NORTHWEST KERRON AVENUE

MW-5
(94.40)



FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 2

GROUNDWATER CONTOUR MAP
FOR AUGUST 1, 2013
FORMER CUMMINGS OIL LEASE SITE
908 NORTHWEST KERRON AVENUE
WINLOCK, WASHINGTON

FARALLON PN: 283-005

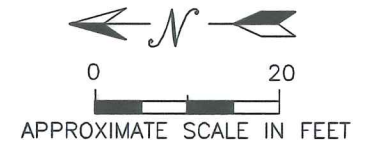
Drawn By:DEW	Checked By:SP	Date:9/5/13	Disk Reference:283005
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BNSF MAIN LINE

LEGEND

- PROPERTY BOUNDARY
RAILROAD TRACKS
STORM SEWER LINE
SANITARY SEWER
DRAINAGE DITCH AND DIRECTION OF FLOW
MW-3 MONITORING WELL
CATCH BASIN

ALL RESULTS IN MICROGRAMS PER LITER
GRO = TOTAL PETROLEUM HYDROCARBONS (TPH) AS GASOLINE-RANGE ORGANICS
DRO = TPH AS DIESEL-RANGE ORGANICS
ORO = TPH AS OIL-RANGE ORGANICS
B = BENZENE
T = TOLUENE
E = ETHYLBENZENE
X = TOTAL XYLENES
BOLD = INDICATES CONCENTRATIONS EXCEED WASHINGTON STATE MODEL TOXICS CONTROL ACT CLEANUP REGULATION METHOD A GROUNDWATER CLEANUP LEVELS
< = INDICATES CONCENTRATIONS NOT DETECTED AT OR ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT
-- = NOT ANALYZED



DATE	GRO	DRO	ORO	B	T	E	X	NAPHTHALENE
12/23/2005	<50.0	<238	<476	<0.500	<0.500	<0.500	<1.00	--
8/18/2008	<50.0	<243	<485	<0.500	<0.500	<0.500	<1.00	--
3/11/2010	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0	<0.016
6/9/2010	<50.0	<82	<410	<1.0	<1.0	<1.0	<3.0	<0.014
10/20/2010	<50.0	<86	<430	<1.0	<1.0	<1.0	<3.0	---
12/27/2010	<50.0	<83	<420	<1.0	<1.0	<1.0	<3.0	---
3/22/2011	<50.0	<85	<430	<1.0	<1.0	<1.0	<3.0	<0.016
8/29/2012	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0	---
8/1/2013	<50	<120	<240	<1.0	<1.0	<1.0	<3.0	---

MW-4

SPUR

GRAVEL PARKING

AST EXCAVATION

UST EXCAVATION

DATE	GRO	DRO	ORO	B	T	E	X	NAPHTHALENE
12/23/2005	<50.0	<238	<476	<0.500	<0.500	<0.500	<1.00	--
8/18/2008	<50.0	1,480	836	<0.500	<0.500	<0.500	<1.00	--
3/11/2010	<50.0	590	540	<1.0	<1.0	<1.0	<3.0	<0.016
6/9/2010	<50.0	720	<460	<1.0	<1.0	<1.0	<3.0	0.020
10/20/2010	<50.0	670	<430	<1.0	<1.0	<1.0	<3.0	---
12/27/2010	<50.0	520	<380	<1.0	<1.0	<1.0	<3.0	---
3/22/2011	<50.0	630	<410	<1.0	<1.0	<1.0	<3.0	<0.016
8/17/2012	<50.0	470	<380	<1.0	<1.0	3.1	4.2	---
8/1/2013	<50	490	500	<1.0	<1.0	<1.0	<3.0	---

FORMER UST EXCAVATION AREA

MW-3

GRAVEL PARKING

GRAVEL

CULVERT

MW-1

MW-2

DATE	GRO	DRO	ORO	B	T	E	X	NAPHTHALENE
12/23/2005	465	<238	<476	55.2	2.84	3.46	35.6	--
8/18/2008	606	876	<500	30.6	1.12	2.56	30.9	--
3/11/2010	150	660	470	27.7	<1.0	<1.0	<3.0	<0.016
6/9/2010	116	690	440	22.4	<1.0	<1.0	<3.0	0.056
10/20/2010	95.2	810	590	10.6	<1.0	<1.0	<3.0	---
12/27/2010	130	400	<380	18.6	<1.0	<1.0	<3.0	---
3/22/2011	196	660	<430	47.8	<1.0	<1.0	<3.0	0.18
8/17/2012	158	500	<380	12.6	<1.0	5.2	9.6	---
8/1/2013	260	700	590	8.5	<1.0	<1.0	4.1	---

DATE	GRO	DRO	ORO	B	T	E	X	NAPHTHALENE
12/23/2005	<50.0	<238	<476	<0.500	<0.500	<0.500	<1.00	--
8/18/2008	<50.0	1,660	887	<0.500	<0.500	<0.500	<1.00	--
3/11/2010	NOT SAMPLED							
6/9/2010	<50.0	830	<400	<1.0	<1.0	<1.0	<3.0	<0.014
10/20/2010	<50.0	900	460	<1.0	<1.0	<1.0	<3.0	---
12/27/2010	<50.0	630	<410	<1.0	<1.0	<1.0	<3.0	---
3/22/2011	<50.0	780	<380	<1.0	<1.0	<1.0	<3.0	<0.016
8/29/2012	<50.0	660	<400	<1.0	<1.0	<1.0	<3.0	---
8/1/2013	<50	550	500	<1.0	<1.0	<1.0	<3.0	---

NORTHWEST KERRON AVENUE

MW-5

DATE	GRO	DRO	ORO	B	T	E	X	NAPHTHALENE
8/18/2008	<50.0	433	<481	<0.500	<0.500	<0.500	<1.00	--
3/11/2010	<50.0	<82	<410	<1.0	<1.0	<1.0	<3.0	<0.01
6/9/2010	<50.0	<84	<420	<1.0	<1.0	<1.0	<3.0	<0.014
10/20/2010	<50.0	<85	<430	<1.0	<1.0	<1.0	<3.0	---
12/27/2010	<50.0	<87	<430	<1.0	<1.0	<1.0	<3.0	---
3/22/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0	<0.015
8/17/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0	---
8/1/2013	<50	<120	<240	<1.0	<1.0	<1.0	<3.0	---



FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER CUMMINGS OIL LEASE SITE
908 NW KERRON AVE
WINLOCK, WASHINGTON

FARALLON PN: 283-005

Drawn By: DEW Checked By: SP Date: 10/23/14 Disk Reference: 283005

TABLES

GROUNDWATER MONITORING STATUS REPORT

AUGUST 2013

Former Cummings Oil Lease Site

908 Northwest Kerron Avenue

Winlock, Washington

VCP No. SW0775

Farallon PN: 283-005

Table 1
Summary of Groundwater Elevation Data
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 283-005

Well Identification	Monitoring Date	Depth of Monitoring Well (feet)	Monitoring Well Screened Interval (feet bgs)	Wellhead Elevation ¹ (feet)	Depth to Water (feet bgs)	Groundwater Elevation (feet)
MW-1	12/23/2005	12	5-12	100.46	2.13	98.33
	8/18/2008				4.50	95.96
	3/11/2010				3.00	97.46
	6/8/2010				4.20	96.26
	10/20/2010				3.00	97.46
	12/27/2010				1.95	98.51
	3/22/2011				2.59	97.87
	8/17/2012				3.01	97.45
	8/1/2013				2.86	97.60
MW-2	12/23/2005	11	5-11	100.40	2.50	97.90
	8/18/2008				4.67	95.73
	3/11/2010				1.88	98.52
	6/8/2010				2.28	98.12
	10/20/2010				2.65	97.75
	12/27/2010				1.52	98.88
	3/22/2011				2.09	98.31
	8/17/2012				3.01	97.39
	8/1/2013				2.94	97.46
MW-3	12/23/2005	10	5-10	100.18	2.21	97.97
	8/18/2008				4.40	95.78
	3/11/2010				--	--
	6/8/2010				2.26	97.92
	10/20/2010				2.68	97.50
	12/27/2010				1.98	98.20
	3/22/2011				2.16	98.02
	8/29/2012				3.02	97.16
	8/1/2013				2.91	97.27
MW-4	12/23/2005	12	5-12	102.45	0.50	101.95
	8/18/2008				5.02	97.43
	3/11/2010				1.9	100.55
	6/8/2010				1.45	101.00
	10/20/2010				2.40	100.05
	12/27/2010				0.48	101.97
	3/22/2011				1.33	101.12
	8/29/2012				3.48	98.97
	8/1/2013				3.31	99.14
MW-5	8/18/2008	10	5-10	99.92	5.54	94.38
	3/11/2010				3.29	96.63
	6/8/2010				4.00	95.92
	10/20/2010				5.25	94.67
	12/27/2010				3.17	96.75
	3/22/2011				4.51	95.41
	8/17/2012				5.47	94.45
	8/1/2013				5.52	94.40

NOTES:

-- denotes depth not measured

bgs = below ground surface

¹Elevations based on survey conducted by Farallon Consulting, L.L.C. to a benchmark of 105.59.

Table 2
Groundwater Analytical Results for Petroleum Hydrocarbon Constituents
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 283-005

Sample Identification	Well Identification	Sample Date	Analytical Results (micrograms per liter)						
			GRO ¹	DRO ²	ORO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
MW1-122305	MW-1	12/23/2005	<50.0	<238	<476	<0.500	<0.500	<0.500	<1.00
MW1-081808		8/18/2008	<50.0	1,480	836	<0.500	<0.500	<0.500	<1.00
MW1-031110		3/11/2010	<50.0	590	540	<1.0	<1.0	<1.0	<6.0
MW1-060910		6/9/2010	<50.0	720	<460	<1.0	<1.0	<1.0	<3.0
MW1-102010		10/20/2010	<50.0	670	<430	<1.0	<1.0	<1.0	<3.0
MW1-122710		12/27/2010	<50.0	520	<380	<1.0	<1.0	<1.0	<3.0
MW1-032211		3/22/2011	<50.0	630	<410	<1.0	<1.0	<1.0	<3.0
MW1-081712		8/17/2012	<50.0	470	<380	<1.0	<1.0	3.1	4.2
MW-1-080113		8/1/2013	<50	490	500	<1.0	<1.0	<1.0	<3.0
MW2-122305	MW-2	12/23/2005	465	<238	<476	55.2	2.84	3.46	35.6
MW2-081808		8/18/2008	606	876	<500	30.6	1.12	2.56	30.9
MW2-031110		3/11/2010	150	660	470	27.7	<1.0	<1.0	<6.0
MW2-060910		6/9/2010	116	690	440	22.4	<1.0	<1.0	<3.0
MW2-102010		10/20/2010	95.2	810	590	10.6	<1.0	<1.0	<3.0
MW2-122710		12/27/2010	130	400	<380	18.6	<1.0	<1.0	<3.0
MW2-032211		3/22/2011	196	660	<430	47.8	<1.0	<1.0	<3.0
MW2-081712		8/17/2012	158	500	<380	12.6	<1.0	5.2	9.6
MW-2-080113		8/1/2013	260	700	590	8.5	<1.0	<1.0	4.1
MW3-122305	MW-3	12/23/2005	<50.0	<238	<476	<0.500	<0.500	<0.500	<1.00
MW3-081808		8/18/2008	<50.0	1,660	887	<0.500	<0.500	<0.500	<1.00
Not Sampled		3/11/2010	--	--	--	--	--	--	--
MW3-060910		6/9/2010	<50.0	830	<400	<1.0	<1.0	<1.0	<3.0
MW3-102010		10/20/2010	<50.0	900	460	<1.0	<1.0	<1.0	<3.0
MW3-122710		12/27/2010	<50.0	630	<410	<1.0	<1.0	<1.0	<3.0
MW3-032211		3/22/2011	<50.0	780	<380	<1.0	<1.0	<1.0	<3.0
MW3-082912		8/29/2012	<50.0	660	<400	<1.0	<1.0	<1.0	<3.0
MW-3-080113		8/1/2013	<50	550	500	<1.0	<1.0	<1.0	<3.0
MW4-122305	MW-4	12/23/2005	<50.0	<238	<476	<0.500	<0.500	<0.500	<1.00
MW4-081808		8/18/2008	<50.0	<243	<485	<0.500	<0.500	<0.500	<1.00
MW4-031110		3/11/2010	<50.0	<78	<390	<1.0	<1.0	<1.0	<6.0
MW4-060910		6/9/2010	<50.0	<82	<410	<1.0	<1.0	<1.0	<3.0
MW4-102010		10/20/2010	<50.0	<86	<430	<1.0	<1.0	<1.0	<3.0
MW4-122710		12/27/2010	<50.0	<83	<420	<1.0	<1.0	<1.0	<3.0
MW4-032211		3/22/2011	<50.0	<85	<430	<1.0	<1.0	<1.0	<3.0
MW4-082912		8/29/2012	<50.0	<78	<390	<1.0	<1.0	<1.0	<3.0
MW-4-080113		8/1/2013	<50	<120	<240	<1.0	<1.0	<1.0	<3.0
MTCA Method A Cleanup Levels ⁴			800	500	500	5	1,000	700	1,000

Table 2
Groundwater Analytical Results for Petroleum Hydrocarbon Constituents
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 283-005

Sample Identification	Well Identification	Sample Date	Analytical Results (micrograms per liter)						
			GRO ¹	DRO ²	ORO ²	Benzene ³	Toluene ³	Ethylbenzene ³	Total Xylenes ³
MW5-081808	MW-5	8/18/2008	<50.0	433	<481	<0.500	<0.500	<0.500	<1.00
MW5-031110		3/11/2010	<50.0	<82	<410	<1.0	<1.0	<1.0	<6.0
MW5-060910		6/9/2010	<50.0	<84	<420	<1.0	<1.0	<1.0	<3.0
MW5-102010		10/20/2010	<50.0	<85	<430	<1.0	<1.0	<1.0	<3.0
MW5-122710		12/27/2010	<50.0	<87	<430	<1.0	<1.0	<1.0	<3.0
MW5-032211		3/22/2011	<50.0	<75	<380	<1.0	<1.0	<1.0	<3.0
MW5-081712		8/17/2012	<50.0	<76	<380	<1.0	<1.0	<1.0	<3.0
MW-5-080113		8/1/2013	<50	<120	<240	<1.0	<1.0	<1.0	<3.0
MTCA Method A Cleanup Levels ⁴			800	500	500	5	1,000	700	1,000

NOTES:

Results in **bold** denote concentrations above applicable cleanup levels.

< denotes analyte not detected at or above the reporting limit listed.

-- denotes sample not analyzed.

¹ Analyzed by Northwest Method NWTPH-Gx.

² Analyzed by Northwest Method NWTPH-Dx.

³ Analyzed by U.S. Environmental Protection Agency (EPA) Method 8260B.

⁴ Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

DRO = total petroleum hydrocarbons (TPH) as diesel-range organics

GRO = TPH as gasoline-range organics

ORO = TPH as oil-range organics

Table 3
Summary of Groundwater Analytical Results for Polycyclic Aromatic Hydrocarbons
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 283-005

Sample Identification	Well Identification	Sample Date	Naphthalene	Analytical Results (micrograms per liter)										Total cPAHs TEC ^{2,3}	
				Carcinogenic Polycyclic Aromatic Hydrocarbons ¹											
				Acenaphthene	Acenaphthylene	Fluorene ¹	Phenanthrene ¹	Benzo(a)pyrene	Chrysene	Dibenz(a,b)anthracene	Indeno(1,2,3-c,d)pyrene	Benzo(a)anthracene	Benzo(b)fluoranthene		Benzo(k)fluoranthene
MW1-031110	MW-1	3/11/2010	<0.016	<0.015	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	0.0121
MW1-060910		6/9/2010	0.020	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.0106	
MW1-032511		3/25/2011	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	0.0121
MW2-031110	MW-2	3/11/2010	<0.016	<0.015	0.12	0.023	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	0.0121
MW2-060910		6/9/2010	0.056	0.074	0.019	0.26	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.0106	
MW2-032511		3/25/2011	0.18	0.075	<0.017	0.17	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	0.0128
MW3-031110	MW-3	3/11/2010													
MW3-060910		6/9/2011	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.0106
MW3-032511		3/25/2011	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	0.0121
MW4-031110	MW-4	3/11/2010	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.0121
MW4-060910		6/9/2010	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.0106
MW4-032511		3/25/2011	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	0.0121
MW5-031110	MW-5	3/11/2010	<0.016	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.0113
MW5-060910		6/9/2010	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	0.0106
MW5-032511		3/25/2011	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.0113
MTCA Method A Cleanup Levels for Groundwater			160 ⁴	960 ⁵	NR	160 ⁵	NR								0.10

NOTES:

< Denotes analyte not detected at or above the reporting limit listed.

¹ Analyzed by U.S. Environmental Protection Agency Method 8270C.

² Total carcinogenic polycyclic aromatic hydrocarbons derived using the total toxicity equivalency method in Section 708(8) of Chapter 173-340 of the Washington Administrative Code.

³ For concentrations reported at less than the laboratory reporting limit, half the reporting limit was used to calculate the TEC.

⁴ Washington State Model Toxics Control Act Cleanup Regulation (MTCAR) Method A Cleanup Levels for Groundwater, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, as revised November 2007.

⁵ Washington State Department of Ecology Cleanup Levels and Risk Calculations under MTCAR Standard Method B Formula Values for Groundwater

cPAHs = carcinogenic polycyclic aromatic hydrocarbons

NR = not researched

TEC = toxic equivalent concentration

Table 4
Summary of Groundwater Geochemical Parameters
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 283-005

Well Identification	Sample Date	Temperature (°C)	Specific Conductance (mS/cm)	pH (pH units)	Dissolved Oxygen (mg/l)	Oxidation-Reduction Potential (mV)	Sulfate ¹ (mg/l)	Nitrate ¹ (mg/l as Nitrogen)	Nitrite ¹ (mg/l)	Methane ² (µg/l)	Ferrous Iron ³ (mg/l)
MW-1	8/18/2008	17.60	0.221	6.03	0.92	-7.70	—	—	—	—	—
	3/11/2010	10.08	0.289	6.70	0.47	117.7	74.4	<0.20	<0.20	289	—
	6/9/2010	14.21	0.348	6.21	0.42	11.1	59.4	<0.050	0.012	520	9.8
	10/20/2010	16.20	0.234	6.13	0.64	12.1	59.1	<0.20	<0.10	388	2.3
	12/27/2010	10.65	0.28	6.16	0.29	-1.2	38.3	<0.20	<0.10	668	15.3
	3/22/2011	9.27	0.308	7.29	0.15	-61.9	34.3	0.080 ⁴	—	22.0	3.2
MW-2	8/18/2008	17.65	0.316	6.64	0.99	-77.20	0.420	<0.200	—	1,660	—
	3/11/2010	9.93	0.247	7.28	0.77	101.2	30.31	<0.20	<0.10	1,620	—
	6/9/2010	14.48	0.277	6.84	1.00	75.8	7.9	<0.050	<0.010	3,500	3.2
	10/20/2010	16.76	0.279	6.61	0.91	-50.3	11.2	<0.20	<0.10	6,320	1.3
	12/27/2010	10.39	0.305	6.60	0.39	-78.5	12.5	<0.20	<0.10	2,980	30.2
	3/22/2011	8.97	0.253	6.63	0.57	191.6	8.3	0.10 ⁴	—	1,160	1.8
MW-3	8/18/2008	17.38	0.382	6.34	1.08	-75.60	—	—	—	—	—
	3/11/2010	—	—	—	—	—	—	—	—	—	—
	6/9/2010	13.87	0.387	6.36	0.50	-6.80	13.4	<0.050	<0.010	380	3.90
	10/20/2010	17.26	0.321	6.57	0.87	-33.4	14.6	<0.20	<0.10	338	1.50
	12/27/2010	11.09	0.378	6.48	0.45	-50.8	13.9	<0.20	<0.10	339	23.2
	3/22/2011	9.72	0.416	8.06	0.25	-78.2	17.8	0.073 ⁴	—	224	4.2
MW-4	8/18/2008	13.78	0.241	6.75	0.97	-74.90	16.7	<0.200	—	22.8	—
	3/11/2010	9.59	0.255	7.92	0.57	85.60	17.6	<0.20	<0.20	47.6	—
	6/9/2010	12.42	0.260	7.16	0.51	85.5	12.5	<0.050	0.011	93	1.2
	10/20/2010	12.96	0.206	7.42	0.66	-77.8	14.1	<0.20	<0.10	16.9	0.52
	12/27/2010	10.84	0.205	6.11	0.49	53.5	9.1	<0.20	<0.10	51.6	19.5
	3/22/2011	9.20	0.196	6.01	0.91	211.2	14.3	0.12 ⁴	—	<10.0	2.2
MW-5	8/18/2008	17.57	0.466	6.62	1.45	-31.60	8.03	<0.200	—	40.6	—
	3/11/2010	10.30	0.067	7.63	5.66	107.9	3.2	0.61	<0.10	<10.0	—
	6/9/2010	14.74	0.074	5.76	2.27	213.5	4.7	0.87	<0.010	<2.3	<0.17
	10/20/2010	17.59	0.085	6.03	1.34	75.5	6.3	0.65	<0.10	<10.0	<0.20
	12/27/2010	10.69	0.073	5.72	5.62	140.7	3.9	1.2	<0.10	<10.0	<0.20
	3/22/2011	8.89	0.072	5.62	6.02	47.2	7.0	0.48 ⁴	—	<10.0	0.50

NOTES:

— = not measured/analyzed

¹Analyzed by U.S. Environmental Protection Agency (EPA) Method 300.0. Samples collected on March 22, 2011 were analyzed by EPA Method 353.2.

²Analyzed by Method RSK 175.

³Analyzed by SM 3500-FE B#4. Samples collected on March 22, 2011 were analyzed in the field using Ferrous iron reagent test kits.

⁴Total nitrogen

°C = degrees Celsius

µg/l = micrograms per liter

mg/l = milligrams per liter

mS/cm = millisiemens per centimeter

mV = millivolts

APPENDIX A
LABORATORY ANALYTICAL REPORT

GROUNDWATER MONITORING STATUS REPORT
AUGUST 2013

Former Cummings Oil Lease Site
908 Northwest Kerron Avenue
Winlock, Washington
VCP No. SW0775

Farallon PN: 283-005

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 580-39647-1

Client Project/Site: 283-005

For:

Farallon Consulting LLC
975 5th Avenue NW
Suite 100
Issaquah, Washington 98027

Attn: Stacy Patterson

Kristine D. Allen

Authorized for release by:
8/20/2013 3:42:47 PM

Kristine Allen, Project Manager I
kristine.allen@testamericainc.com

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

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

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Case Narrative

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Job ID: 580-39647-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The samples were received on 8/5/2013 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

Except:

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC). Added sample 6 as Trip Blank with earliest sample date of 08/01/2013 and default time of 0000. No analyses assigned to Trip Blank.

GC/MS VOA

No analytical or quality issues were noted.

GC Semi VOA - Method(s) NWTPH-Dx

In analytical batch 142043, for the following sample(s) from preparation batch 141906: MW-1-080113 (580-39647-1), MW-3-080113 (580-39647-3), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

In analytical batch 142043, for the following sample(s) from preparation batch 141906: MW-2-080113 (580-39647-2), the results in the #2 Diesel Fuel (C10-C24) and Motor Oil (>C24-C36) range(s) are due to what most closely resembles a complex mixture of a weathered gasoline product, heavily weathered/degraded diesel fuel and/or a mineral/transformer oil range product and possible biogenic interference; method 3630 silica gel cleanup procedure is recommended. The affected analyte range(s) have been Y qualified and reported.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
Y	The chromatographic response resembles a typical fuel pattern.

Glossary

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

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-1-080113

Lab Sample ID: 580-39647-1

Date Collected: 08/01/13 15:38

Matrix: Water

Date Received: 08/05/13 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/08/13 23:23	1
Toluene	ND		1.0		ug/L			08/08/13 23:23	1
Ethylbenzene	ND		1.0		ug/L			08/08/13 23:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/08/13 23:23	1
o-Xylene	ND		1.0		ug/L			08/08/13 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorobenzene (Surr)	94		80 - 120		08/08/13 23:23	1
Toluene-d8 (Surr)	100		85 - 120		08/08/13 23:23	1
Ethylbenzene-d10	106		80 - 120		08/08/13 23:23	1
Trifluorotoluene (Surr)	106		80 - 120		08/08/13 23:23	1
4-Bromofluorobenzene (Surr)	96		75 - 120		08/08/13 23:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			08/14/13 16:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150		08/14/13 16:19	1
Trifluorotoluene (Surr)	105		50 - 150		08/14/13 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.49	Y	0.12		mg/L		08/07/13 11:28	08/08/13 19:20	1
Motor Oil (>C24-C36)	0.50	Y	0.24		mg/L		08/07/13 11:28	08/08/13 19:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	85		50 - 150	08/07/13 11:28	08/08/13 19:20	1

TestAmerica Seattle

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-2-080113

Lab Sample ID: 580-39647-2

Date Collected: 08/01/13 16:25

Matrix: Water

Date Received: 08/05/13 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	8.5		1.0		ug/L			08/08/13 23:46	1
Toluene	ND		1.0		ug/L			08/08/13 23:46	1
Ethylbenzene	ND		1.0		ug/L			08/08/13 23:46	1
m-Xylene & p-Xylene	4.1		2.0		ug/L			08/08/13 23:46	1
o-Xylene	ND		1.0		ug/L			08/08/13 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorobenzene (Surr)	96		80 - 120		08/08/13 23:46	1
Toluene-d8 (Surr)	100		85 - 120		08/08/13 23:46	1
Ethylbenzene-d10	104		80 - 120		08/08/13 23:46	1
Trifluorotoluene (Surr)	101		80 - 120		08/08/13 23:46	1
4-Bromofluorobenzene (Surr)	96		75 - 120		08/08/13 23:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	0.26		0.050		mg/L			08/14/13 16:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150		08/14/13 16:40	1
Trifluorotoluene (Surr)	72		50 - 150		08/14/13 16:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.70	Y	0.12		mg/L		08/07/13 11:28	08/08/13 19:38	1
Motor Oil (>C24-C36)	0.59	Y	0.24		mg/L		08/07/13 11:28	08/08/13 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	86		50 - 150	08/07/13 11:28	08/08/13 19:38	1

TestAmerica Seattle

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-3-080113

Lab Sample ID: 580-39647-3

Date Collected: 08/01/13 17:15

Matrix: Water

Date Received: 08/05/13 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/09/13 00:09	1
Toluene	ND		1.0		ug/L			08/09/13 00:09	1
Ethylbenzene	ND		1.0		ug/L			08/09/13 00:09	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/09/13 00:09	1
o-Xylene	ND		1.0		ug/L			08/09/13 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorobenzene (Surr)	96		80 - 120		08/09/13 00:09	1
Toluene-d8 (Surr)	98		85 - 120		08/09/13 00:09	1
Ethylbenzene-d10	105		80 - 120		08/09/13 00:09	1
Trifluorotoluene (Surr)	98		80 - 120		08/09/13 00:09	1
4-Bromofluorobenzene (Surr)	94		75 - 120		08/09/13 00:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			08/14/13 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150		08/14/13 17:02	1
Trifluorotoluene (Surr)	68		50 - 150		08/14/13 17:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	0.55	Y	0.12		mg/L		08/07/13 11:28	08/08/13 19:56	1
Motor Oil (>C24-C36)	0.50	Y	0.24		mg/L		08/07/13 11:28	08/08/13 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	77		50 - 150	08/07/13 11:28	08/08/13 19:56	1

TestAmerica Seattle

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-4-080113

Lab Sample ID: 580-39647-4

Date Collected: 08/01/13 14:08

Matrix: Water

Date Received: 08/05/13 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/09/13 00:32	1
Toluene	ND		1.0		ug/L			08/09/13 00:32	1
Ethylbenzene	ND		1.0		ug/L			08/09/13 00:32	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/09/13 00:32	1
o-Xylene	ND		1.0		ug/L			08/09/13 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorobenzene (Surr)	96		80 - 120		08/09/13 00:32	1
Toluene-d8 (Surr)	98		85 - 120		08/09/13 00:32	1
Ethylbenzene-d10	103		80 - 120		08/09/13 00:32	1
Trifluorotoluene (Surr)	99		80 - 120		08/09/13 00:32	1
4-Bromofluorobenzene (Surr)	94		75 - 120		08/09/13 00:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			08/14/13 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		50 - 150		08/14/13 17:24	1
Trifluorotoluene (Surr)	68		50 - 150		08/14/13 17:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		08/07/13 11:28	08/08/13 20:50	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		08/07/13 11:28	08/08/13 20:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	78		50 - 150	08/07/13 11:28	08/08/13 20:50	1

TestAmerica Seattle

Client Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-5-080113

Lab Sample ID: 580-39647-5

Date Collected: 08/01/13 14:48

Matrix: Water

Date Received: 08/05/13 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/09/13 00:55	1
Toluene	ND		1.0		ug/L			08/09/13 00:55	1
Ethylbenzene	ND		1.0		ug/L			08/09/13 00:55	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/09/13 00:55	1
o-Xylene	ND		1.0		ug/L			08/09/13 00:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorobenzene (Surr)	95		80 - 120		08/09/13 00:55	1
Toluene-d8 (Surr)	99		85 - 120		08/09/13 00:55	1
Ethylbenzene-d10	102		80 - 120		08/09/13 00:55	1
Trifluorotoluene (Surr)	100		80 - 120		08/09/13 00:55	1
4-Bromofluorobenzene (Surr)	95		75 - 120		08/09/13 00:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			08/14/13 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150		08/14/13 17:46	1
Trifluorotoluene (Surr)	69		50 - 150		08/14/13 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.12		mg/L		08/07/13 11:28	08/08/13 21:08	1
Motor Oil (>C24-C36)	ND		0.24		mg/L		08/07/13 11:28	08/08/13 21:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	89		50 - 150	08/07/13 11:28	08/08/13 21:08	1

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

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

Lab Sample ID: MB 580-142037/38

Matrix: Water

Analysis Batch: 142037

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0		ug/L			08/08/13 14:23	1
Toluene	ND		1.0		ug/L			08/08/13 14:23	1
Ethylbenzene	ND		1.0		ug/L			08/08/13 14:23	1
m-Xylene & p-Xylene	ND		2.0		ug/L			08/08/13 14:23	1
o-Xylene	ND		1.0		ug/L			08/08/13 14:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Fluorobenzene (Surr)	97		80 - 120		08/08/13 14:23	1
Toluene-d8 (Surr)	100		85 - 120		08/08/13 14:23	1
Ethylbenzene-d10	103		80 - 120		08/08/13 14:23	1
Trifluorotoluene (Surr)	102		80 - 120		08/08/13 14:23	1
4-Bromofluorobenzene (Surr)	93		75 - 120		08/08/13 14:23	1

Lab Sample ID: LCS 580-142037/39

Matrix: Water

Analysis Batch: 142037

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	20.1	19.3		ug/L		96	80 - 120
Toluene	20.1	19.6		ug/L		97	75 - 120
Ethylbenzene	20.0	19.7		ug/L		98	75 - 125
m-Xylene & p-Xylene	40.1	45.8		ug/L		114	75 - 130
o-Xylene	20.1	19.8		ug/L		98	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Fluorobenzene (Surr)	97		80 - 120
Toluene-d8 (Surr)	101		85 - 120
Ethylbenzene-d10	102		80 - 120
Trifluorotoluene (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	100		75 - 120

Lab Sample ID: LCSD 580-142037/40

Matrix: Water

Analysis Batch: 142037

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	20.1	19.7		ug/L		98	80 - 120	2	30
Toluene	20.1	20.0		ug/L		99	75 - 120	2	30
Ethylbenzene	20.0	20.0		ug/L		100	75 - 125	1	30
m-Xylene & p-Xylene	40.1	46.7		ug/L		116	75 - 130	2	30
o-Xylene	20.1	19.9		ug/L		99	80 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Fluorobenzene (Surr)	98		80 - 120
Toluene-d8 (Surr)	99		85 - 120
Ethylbenzene-d10	101		80 - 120
Trifluorotoluene (Surr)	105		80 - 120

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

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

Lab Sample ID: LCSD 580-142037/40

Matrix: Water

Analysis Batch: 142037

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		75 - 120

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

Lab Sample ID: MB 580-142446/5

Matrix: Water

Analysis Batch: 142446

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	ND		0.050		mg/L			08/14/13 09:20	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		50 - 150					08/14/13 09:20	1
Trifluorotoluene (Surr)	112		50 - 150					08/14/13 09:20	1

Lab Sample ID: LCS 580-142446/6

Matrix: Water

Analysis Batch: 142446

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline	1.00	0.911		mg/L		91	79 - 110
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	100		50 - 150				
Trifluorotoluene (Surr)	103		50 - 150				

Lab Sample ID: LCSD 580-142446/7

Matrix: Water

Analysis Batch: 142446

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline	1.00	0.859		mg/L		86	79 - 110	6	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		50 - 150						
Trifluorotoluene (Surr)	96		50 - 150						

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

Lab Sample ID: MB 580-141906/1-A

Matrix: Water

Analysis Batch: 142043

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 141906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
#2 Diesel (C10-C24)	ND		0.13		mg/L		08/07/13 11:27	08/08/13 15:15	1
Motor Oil (>C24-C36)	ND		0.25		mg/L		08/07/13 11:27	08/08/13 15:15	1

TestAmerica Seattle

QC Sample Results

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

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

Lab Sample ID: MB 580-141906/1-A
Matrix: Water
Analysis Batch: 142043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 141906

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier					
o-Terphenyl	62		50 - 150	08/07/13 11:27	08/08/13 15:15	1

Lab Sample ID: LCS 580-141906/2-A
Matrix: Water
Analysis Batch: 142043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 141906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
#2 Diesel (C10-C24)	0.500	0.406		mg/L		81	70 - 140
Motor Oil (>C24-C36)	0.500	0.513		mg/L		103	66 - 125

Surrogate	LCS	LCS	Limits
%Recovery	Qualifier		
o-Terphenyl	90		50 - 150

Lab Sample ID: LCSD 580-141906/3-A
Matrix: Water
Analysis Batch: 142043

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 141906

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
#2 Diesel (C10-C24)	0.500	0.409		mg/L		82	70 - 140	1	27
Motor Oil (>C24-C36)	0.500	0.527		mg/L		105	66 - 125	3	27

Surrogate	LCSD	LCSD	Limits
%Recovery	Qualifier		
o-Terphenyl	91		50 - 150

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-1-080113

Lab Sample ID: 580-39647-1

Date Collected: 08/01/13 15:38

Matrix: Water

Date Received: 08/05/13 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	142037	08/08/13 23:23	EB1	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	142446	08/14/13 16:19	EB1	TAL SEA
Total/NA	Prep	3510C			141906	08/07/13 11:28	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	142043	08/08/13 19:20	JL1	TAL SEA

Client Sample ID: MW-2-080113

Lab Sample ID: 580-39647-2

Date Collected: 08/01/13 16:25

Matrix: Water

Date Received: 08/05/13 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	142037	08/08/13 23:46	EB1	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	142446	08/14/13 16:40	EB1	TAL SEA
Total/NA	Prep	3510C			141906	08/07/13 11:28	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	142043	08/08/13 19:38	JL1	TAL SEA

Client Sample ID: MW-3-080113

Lab Sample ID: 580-39647-3

Date Collected: 08/01/13 17:15

Matrix: Water

Date Received: 08/05/13 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	142037	08/09/13 00:09	EB1	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	142446	08/14/13 17:02	EB1	TAL SEA
Total/NA	Prep	3510C			141906	08/07/13 11:28	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	142043	08/08/13 19:56	JL1	TAL SEA

Client Sample ID: MW-4-080113

Lab Sample ID: 580-39647-4

Date Collected: 08/01/13 14:08

Matrix: Water

Date Received: 08/05/13 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	142037	08/09/13 00:32	EB1	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	142446	08/14/13 17:24	EB1	TAL SEA
Total/NA	Prep	3510C			141906	08/07/13 11:28	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	142043	08/08/13 20:50	JL1	TAL SEA

Client Sample ID: MW-5-080113

Lab Sample ID: 580-39647-5

Date Collected: 08/01/13 14:48

Matrix: Water

Date Received: 08/05/13 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	142037	08/09/13 00:55	EB1	TAL SEA
Total/NA	Analysis	NWTPH-Gx		1	142446	08/14/13 17:46	EB1	TAL SEA

TestAmerica Seattle

Lab Chronicle

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Client Sample ID: MW-5-080113

Lab Sample ID: 580-39647-5

Date Collected: 08/01/13 14:48

Matrix: Water

Date Received: 08/05/13 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			141906	08/07/13 11:28	RES	TAL SEA
Total/NA	Analysis	NWTPH-Dx		1	142043	08/08/13 21:08	JL1	TAL SEA

Laboratory References:

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

TestAmerica Seattle

Certification Summary

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Laboratory: TestAmerica Seattle

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-04-14
California	NELAP	9	01115CA	01-31-14
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-13
USDA	Federal		P330-11-00222	05-20-14
Washington	State Program	10	C553	02-17-14

TestAmerica Seattle

Sample Summary

Client: Farallon Consulting LLC
Project/Site: 283-005

TestAmerica Job ID: 580-39647-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-39647-1	MW-1-080113	Water	08/01/13 15:38	08/05/13 15:30
580-39647-2	MW-2-080113	Water	08/01/13 16:25	08/05/13 15:30
580-39647-3	MW-3-080113	Water	08/01/13 17:15	08/05/13 15:30
580-39647-4	MW-4-080113	Water	08/01/13 14:08	08/05/13 15:30
580-39647-5	MW-5-080113	Water	08/01/13 14:48	08/05/13 15:30

TestAmerica Seattle

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THE LEADER IN ENVIRONMENTAL TESTING

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☐ Rush
☐ Short Hold

Chain of
Custody Record

8/20/2013

Client: PARALION CONSULTING		Client Contact: STACY PATTERSON		Date: 8/2/13	Chain of Custody Number: 19675
Address: 975 5TH AVE NW		Telephone Number (Area Code/Fax Number): 425 245 0800		Lab Number: 391047	Page 1 of 1
City: ISSAQUAH	State: WA	Zip Code: 98027	Sampler: DIVINE LAYMAN		
Project Name and Location (State): 283-005			Billing Contact:		
Contract/Purchase Order/Quote No.:			Lab Contact:		

Sample ID and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives						Analysis (Attach list if more space is needed)	Special Instructions/Conditions of Receipt	
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH			ZnAc/NaOH
1- MW-1-080113	8/1/13	1538	X											
2- MW-2-080113		1625	X											
3- MW-3-080113		1715	X											
4- MW-4-080113		1408	X											
5- MW-5-080113		1448	X											
6- Trip Blank	8/1/13	0000												



580-39647 Chain of Custody

☒ Cooler ☐ Yes ☐ No (Cooler Temp: _____) Turn Around Time Required (business days): ☐ 24 Hours ☐ 48 Hours ☐ 5 Days ☐ 10 Days ☐ 15 Days ☒ Other STAY OVER	Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown Sample Disposal: ☐ Return To Client ☒ Disposed By Lab Months: _____ (A fee may be assessed if samples are retained longer than 1 month)
QC Requirements (Specify): 1. Received By Sign/Print: Francisco Luna, Jr Date: 8/5/13 Time: 1720 2. Received By Sign/Print: _____ Date: _____ Time: _____ 3. Received By Sign/Print: _____ Date: _____ Time: _____	

Cooler/DB Dig/IR cor 4.0 unc 4.0
 Cooler Dsc L Gray/ble @ Lab 1530
 Vial/Packs Packing Rabbie
 v/o AT

DISTRIBUTION: WHITE - Stays with the Samples; CANARY - Returned to Client with Report; PINK - Field Copy

TAL-8274-580 (02/10)

Login Sample Receipt Checklist

Client: Farallon Consulting LLC

Job Number: 580-39647-1

Login Number: 39647

List Source: TestAmerica Seattle

List Number: 1

Creator: Balles, Racheal M

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