FARALLON consulting

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JUNE 2010
GROUNDWATER MONITORING STATUS REPORT

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

Farallon Consulting, L.L.C.
975 5th Avenue Northwest
Issaquah, Washington 98027

Farallon PN: 683-009

For:

BNSF RAILWAY

2454 Occidental Avenue South, Suite 1A
Seattle, Washington

September 13, 2010

Prepared by:

Brett T. Carp
Project Environmental Scientist

Reviewed by:

Stacy Patterson
Senior Environmental Scientist

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ACRONYMS AND ABBREVIATIONS

BNSF	BNSF Railway Company
BTEX	benzene, toluene, ethylbenzene, and xylenes
cPAHs	carcinogenic polycyclic aromatic hydrocarbons
DRO	diesel-range organics
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
Farallon	Farallon Consulting, L.L.C.
GRO	gasoline-range organics
µg/l	micrograms per liter
mg/l	milligrams per liter
MTCA	Washington State Model Toxics Control Act Cleanup Regulation
ORP	oxidation-reduction potential
ORO	oil-range organics
PAHs	polycyclic aromatic hydrocarbons
PQLs	practical quantitation limits
Site	Former Cummings Oil Lease Site located at 908 Northwest Kerron Avenue in Winlock, Washington
TPH	total petroleum hydrocarbons
VCP	voluntary cleanup program

1.0 INTRODUCTION

This Groundwater Monitoring Status Report has been prepared on behalf of BNSF Railway Company (BNSF) to summarize the results of the groundwater monitoring and sampling event conducted on June 9, 2010 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 investigations and the cleanup action have confirmed that concentrations of total petroleum hydrocarbons (TPH) 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 TPH previously detected in groundwater above the Washington State Model Toxics Control Act Cleanup Regulation (MTCA) Method A cleanup level and to assess whether natural attenuation 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 (WAC 173-340); 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 VCP in 2006 and is listed under the Ecology Toxics Cleanup Program as Identification No. SW0775.

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 concentrations of TPH above MTCA cleanup levels; and installation of monitoring wells to delineate the nature and extent of TPH in groundwater and assess groundwater cleanup by natural attenuation. 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). Additional information regarding previous activities conducted at the Site is available in the documents presented in Section 4, References.

2.0 MONITORING ACTIVITIES AND RESULTS

The monitoring activities conducted at the Site by Farallon on June 9, 2010 included measuring groundwater levels and collecting groundwater quality data and samples for laboratory analysis. The monitoring activities and results are summarized in the following sections.

2.1 GROUNDWATER MONITORING ACTIVITIES

The groundwater monitoring and sampling event included:

- 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 to assess natural attenuation; 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 accessible monitoring wells were measured to an accuracy of 0.01 foot using an electronic water-level meter.

Following collection of groundwater level measurements, monitoring wells MW-1 through MW-5 were purged and sampled using a peristaltic pump and polyethylene tubing. The purging was conducted at flow rates ranging from 100 to 300 milliliters per minute, with the intake tubing placed at a maximum of 3 feet below the water table in each monitoring well. During purging, water quality was monitored using a Yellow Springs Instrument water-quality meter equipped with a flow-through cell. The water quality parameters monitored and recorded during purging and sampling included temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential (ORP). 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 to an Ecology-accredited laboratory under standard chain-of-custody protocols. The groundwater samples were analyzed for DRO and ORO by Northwest Method NWTPH-Dx; GRO by Northwest Method NWTPH-Gx; BTEX by EPA Method 8260B; methane by Method RSK 175; nitrate and sulfate by EPA Method 300.0; ferrous iron by SM 3500; and polycyclic aromatic hydrocarbons (PAHs), including naphthalene by EPA Method 8270 Selective Ion Monitoring.

Purge water generated by groundwater sampling is stored in a 35-gallon drum located on the Site. The purge water will be scheduled for disposal during a future groundwater monitoring and 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 June 9, 2010. The groundwater level measurements indicate an approximate groundwater flow direction to the west, and an average approximate hydraulic gradient at the Site of 0.04 foot per foot. The groundwater flow direction during previous groundwater monitoring events has varied from northwest to southwest.

The groundwater analytical results are summarized in Tables 2 and 3. The analytical data for the groundwater samples collected on June 9, 2010 are illustrated on Figure 3.

The laboratory analytical results for June 9, 2010 indicated the following:

- Concentrations of DRO exceeded the MTCA Method A cleanup level of 500 micrograms per liter (µg/l) in groundwater samples collected from monitoring wells MW-1, MW-2, and MW-3.
- Concentrations of BTEX were not detected above the laboratory practical quantitation limit (PQL) with the exception of benzene, which exceeded the MTCA Method A cleanup level of 5 µg/l in a groundwater sample collected from monitoring well MW-2;
- PAHs (acenaphthene, acenaphthylene, fluorene, and phenanthrene) were detected above the laboratory PQL but below the MTCA Method B cleanup level in a groundwater sample collected from monitoring well MW-2;
- Concentrations of carcinogenic polycyclic aromatic hydrocarbons (cPAHs) were not detected above the laboratory PQL in the groundwater samples collected; and
- The calculated toxicity equivalent factor for cPAHs was not detected above the MTCA Method A cleanup level of 0.1 for benzo(a)pyrene in the groundwater samples collected.

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

2.3 NATURAL ATTENUATION RESULTS

An assessment of the potential for natural attenuation via biodegradation processes to reduce the concentrations of residual TPH and BTEX in groundwater was conducted during the June 9, 2010 groundwater monitoring and sampling event. The assessment included laboratory analyses and measurement of field parameters that provide data to assess whether and, if so, by what processes biodegradation is occurring. The laboratory analyses and field measurements for the assessment included the following:

- Primary electron receptors that are potential energy sources for native bacteria capable of biodegradation of petroleum compounds, and indicators of groundwater geochemistry:
  - Dissolved oxygen (O_2);

- Ferric Iron (Fe^{+2});
- Nitrate (NO_3^-); and
- Sulfate (SO_4^{-2}).

The laboratory report noted that the nitrate and nitrite samples were analyzed out of hold time. Therefore, nitrite concentration may be reported low because nitrite quickly converts back to nitrate.

- Metabolic byproducts of biodegradation and indicators of groundwater geochemistry:
  - Methane (CH_4).
- Geochemical indicators of whether the subsurface environment is amenable to biodegradation of petroleum compounds:
  - ORP;
  - Temperature; and
  - pH.

The laboratory analytical results and field measurements for natural attenuation parameters and geochemical indicators are summarized in Table 4. The results of the assessment for the June 9, 2010 sampling event are as follows:

- **Dissolved Oxygen**—Measurements less than 1 milligram per liter (mg/l) indicate that available oxygen is trending toward more anaerobic conditions. The concentrations of dissolved oxygen in groundwater at monitoring wells MW-1, MW-3, and MW-4 were below 1 mg/l during the June 9, 2010 monitoring and sampling event. These dissolved oxygen measurements indicate that the available oxygen likely is being used as an energy source for biodegradation in areas with residual petroleum hydrocarbons.
- **Nitrite**—Nitrite is formed by anaerobic microbial nitrate reduction, referred to as de-nitrification. The anaerobic respiratory process reduces nitrate (NO_3^-) to nitrite (NO_2^-). Concentrations of nitrite were detected in monitoring wells MW-1 and MW-4, indicating that anaerobic microbial respiration was occurring through de-nitrification in some groundwater at some locations at the Site.
- **Sulfate**—Concentrations of sulfate greater than 1 mg/l indicate a favorable environment for sulfate-reducing conditions. The concentrations of sulfate in groundwater samples collected from all monitoring wells ranged from 4.7 to 59.4 mg/l.
- **Methane**—Concentrations of methane in the groundwater samples collected from all monitoring wells ranged from less than the laboratory practical quantitation limit to 3,500 mg/l during the monitoring and sampling event conducted at the Site. The elevated concentrations of methane indicate that methanogenesis is occurring in some Site monitoring wells.
- **Ferrous Iron**—Concentrations of ferrous iron in the groundwater samples collected from all monitoring wells ranged from less than the laboratory practical quantitation limit to 9.8 mg/l during the monitoring and sampling event conducted at the Site. The elevated concentrations of ferrous iron indicate that organisms are using ferric iron and producing ferrous iron through respiration in some Site monitoring wells.

- **ORP**—The ORP measured in monitoring wells MW-1, MW-2, MW-4, and MW-5 during the monitoring event ranged from 11.1 to 213.5 millivolts, which is within a range typically considered indicative of moderately aerobic conditions. The ORP measured in monitoring MW-3 during the monitoring event was -6.8, which indicates an anaerobic environment.
- **Temperature**—The groundwater temperature measured at monitoring wells MW-1 through MW-5 ranged from 12.42 to 14.74°C during the groundwater monitoring and sampling event. Biodegradation processes occur at these temperatures but typically are accelerated at higher temperatures approaching 20°C or greater.
- **pH**—The values for pH measured at monitoring wells MW-1 through MW-5 ranged from 5.76 to 7.16, with 7 being a neutral value. These pH values are within a range amenable to the bacteria capable of biodegrading petroleum hydrocarbons.

3.0 CONCLUSIONS

The groundwater flow direction and hydraulic gradient estimated for the June 9, 2010 groundwater monitoring event was to the west at a gradient of 0.04 foot per foot. During the previous monitoring events, the groundwater flow direction has ranged from northwest to southwest.

Groundwater samples collected from monitoring wells MW-4 and MW-5 during the June 2010 groundwater monitoring and sampling event did not detect concentrations of GRO, DRO, ORO, or BTEX above the laboratory PQL. Samples collected from monitoring wells MW-1 and MW-2, located directly west of the Former UST Excavation Area on the western portion of the Site, detected concentrations of DRO and/or benzene above the MTCA Method A cleanup levels. Samples collected from monitoring well MW-3, west of the Former AST Excavation Area on the western portion of the Site, detected concentrations of DRO above the MTCA Method A cleanup levels.

The rate of biodegradation of TPH and benzene in groundwater remains unknown. However, the results of the assessment of natural attenuation and the trend toward lower concentrations of TPH and benzene in groundwater indicate that biodegradation of petroleum hydrocarbons is occurring under anaerobic conditions. Dissolved oxygen, an electron receptor, appears to be depleted in monitoring wells MW-1, MW-3, and MW-4 indicating that the available oxygen is being used as an energy source for biodegradation. The concentrations of the metabolic by-product indicators (i.e., sulfate, nitrite, methane, and ferrous iron) detected in groundwater in monitoring wells MW-1, MW-2, MW-3, and MW-4 also indicate that biodegradation of petroleum hydrocarbons is occurring.

4.0 REFERENCES

Farallon Consulting, L.L.C. (Farallon). 2006. *Supplemental Subsurface Investigation, BNSF Winlock, 908 Northwest Kerron Avenue, Winlock, Washington.* Prepared for BNSF Railway Company, Seattle, Washington. May 31.

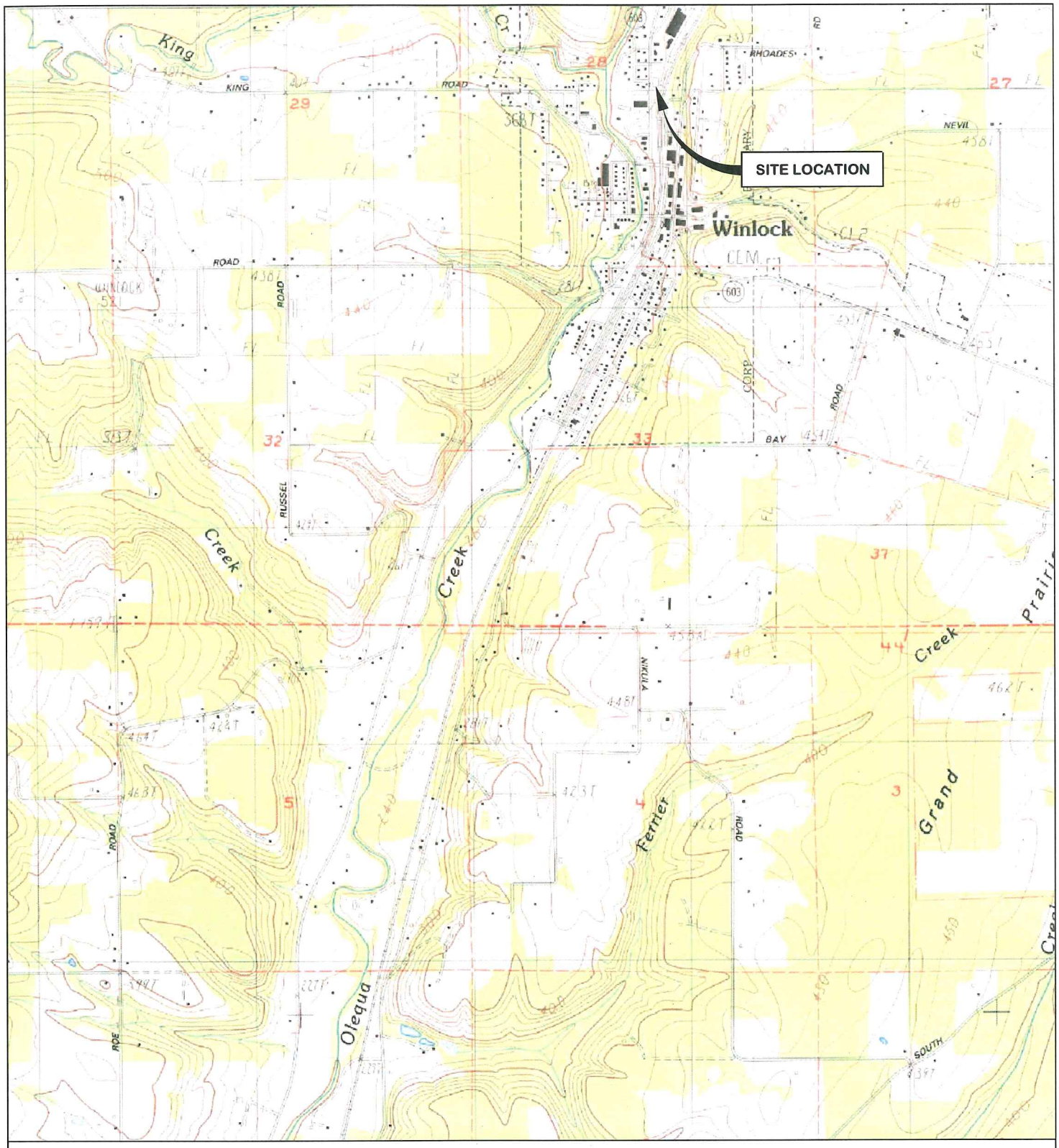
———. 2008. *Cleanup Action Work Plan, Former Cummings Oil Lease Site, 908 Northwest Kerron Avenue, Winlock, Washington.* Prepared for BNSF Railway Company, Seattle, Washington. December 18.

———. 2010. *Tank Closure Report, Former Cummings Oil Lease Site, 908 Northwest Kerron Avenue, Winlock, Washington.* Prepared for BNSF Railway Company, Seattle, Washington. March 11.

FIGURES

JUNE 2010
GROUNDWATER MONITORING STATUS REPORT
Former Cummings Oil Lease Site
908 Northwest Kerron Avenue
Winlock, Washington
VCP No. SW0775

Farallon PN: 683-009



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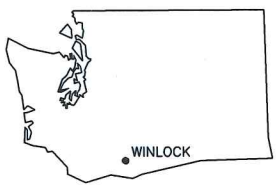


WASHINGTON

N

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: 683-009

Drawn By: DEW	Checked By: SP	Date: 2/25/09	Disk Reference: 683009

BNSF MAIN LINE

SPUR

GRAVEL PARKING

MW-4
(101.00)

100.00

99.00

98.00

97.00

96.00

FORMER UST EXCAVATION AREA

GRAVEL

MW-3
(97.92)

CULVERT

MW-1
(96.26)

MW-2
(98.12)

MW-5
(95.92)

NORTHWEST KERRON AVENUE

LEGEND

- PROPERTY BOUNDARY
- RAILROAD TRACKS
- DITCH AND DIRECTION OF FLOW
- SANITARY SEWER
- MW3 — MONITORING WELL (FARALLON 2006)
- (97.92) — GROUNDWATER ELEVATION (JUNE 2010)
- 97.00 — GROUNDWATER ELEVATION CONTOUR
- APPROXIMATE DIRECTION OF GROUNDWATER FLOW
- CATCH BASIN

N

0 20

APPROXIMATE SCALE IN FEET

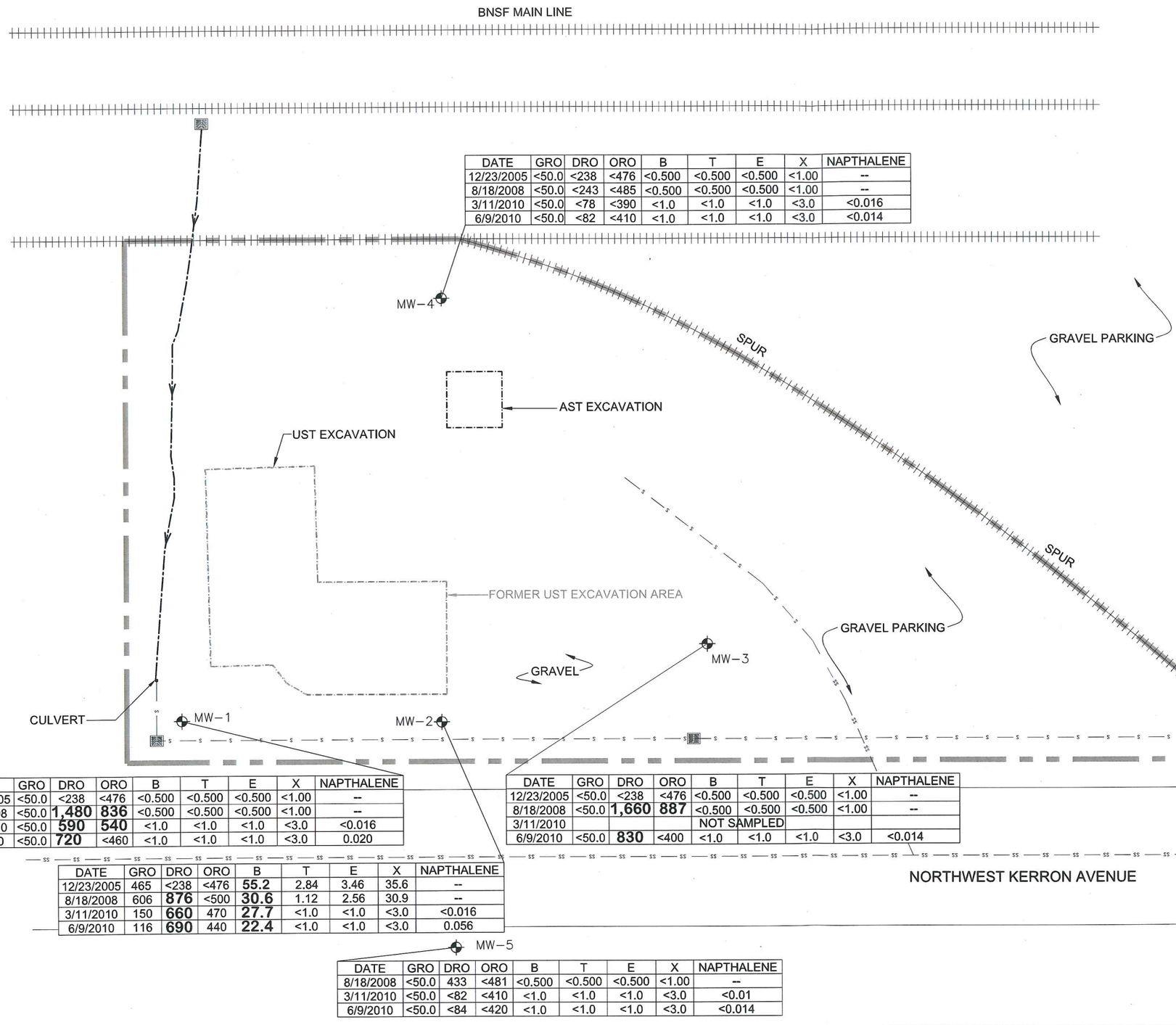
FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 2

GROUNDWATER CONTOUR MAP
FOR JUNE 9, 2010
FORMER CUMMINGS OIL LEASE SITE
908 NORTHWEST KERRON AVENUE
WINLOCK, WASHINGTON

FARALLON PN: 683-009

Drawn By: DEW	Checked By: SP	Date 8/12/10	Disk Reference: 683009a



DATE	GRO	DRO	ORO	B	T	E	X	NAPTHALENE
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

DATE	GRO	DRO	ORO	B	T	E	X	NAPTHALENE
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

DATE	GRO	DRO	ORO	B	T	E	X	NAPTHALENE
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

DATE	GRO	DRO	ORO	B	T	E	X	NAPTHALENE
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

DATE	GRO	DRO	ORO	B	T	E	X	NAPTHALENE
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

LEGEND

- PROPERTY BOUNDARY
- RAILROAD TRACKS
- STORM LINE
- SANITARY SEWER
- 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 = DIESEL-RANGE ORGANICS

ORO = 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 CLEANUP LEVELS

< = INDICATES CONCENTRATIONS NOT DETECTED ABOVE THE STATED LABORATORY PRACTICAL QUANTITATION LIMIT

-- = NOT ANALYZED

N

0 20

APPROXIMATE SCALE IN FEET

FARALLON CONSULTING
975 5th Avenue Northwest
Issaquah, WA 98027

FIGURE 3

GROUNDWATER ANALYTICAL RESULTS
FOR JUNE 9, 2010
FORMER CUMMINGS OIL LEASE SITE
908 NW KERRON AVE
WINLOCK, WASHINGTON

FARALLON PN: 683-009

Drawn By: DEW	Checked By: SP	Date: 8/12/10	Disk Reference: 683009a

TABLES

JUNE 2010
GROUNDWATER MONITORING STATUS REPORT
Former Cummings Oil Lease Site
908 Northwest Kerron Avenue
Winlock, Washington
VCP No. SW0775

Farallon PN: 683-009

Table 1
Summary of Groundwater Elevation Data
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 683-009

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
MW-2	12/23/2005	11	5-11	100.4	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
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
MW-4	12/23/2005	12	5-12	102.45	0.50	101.95
	8/18/2008				5.02	97.43
	3/11/2010				1.90	100.55
	6/8/2010				1.45	101.00
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

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

bgs = below ground surface
-- = not measured

Table 3
Summary of Groundwater Analytical Results for Polycyclic Aromatic Hydrocarbons
Former Cummings Oil Lease Site
Winlock, Washington
Farallon PN: 683-009

Sample Identification	Well Identification	Sample Date	Analytical Results (micrograms per liter)												
							Carcinogenic Polycyclic Aromatic Hydrocarbons [1]								
			Naphthalene	Acenaphthene	Acenaphthylene	Fluorene [1]	Benzo(a)pyrene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-c,d)pyrene	Benzo(a)anthracene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Total cPAHs TEF [2,3]
MW1-060910	MW-1	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
MW2-060910	MW-2	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
MW3-060910	MW-3	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	0.0106
MW4-060910	MW-4	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	0.0106
MW5-060910	MW-5	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	0.0106
MTCA Method A Cleanup Levels for Groundwater			**160**	**960[4]**	**NR**	**160 [4]**								**0.10**

NOTES:

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

[1] Analyzed by U.S. Environmental Protection Agency Method 8270C. The full list of polycyclic aromatic hydrocarbons (PAHs) was analyzed by EPA Method 8270C. Only PAHs detected above the laboratory PQL and cPAHs are summarized here.

[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 use to calculate the TEF.

[4] Washington State Department of Ecology Cleanup Levels and Risk Calculations under MTCA, Version 3.1 Standard Method B Formula Values for Groundwater https://fortress.wa.gov/ecy/clarc/Reporting/ChemicalQuery.aspx. (Unrestricted Land Use) - Non-carcinogen

TEF = toxicity equivalency factor

NR = not researched and no cleanup level established

APPENDIX A
LABORATORY ANALYTICAL REPORT

JUNE 2010
GROUNDWATER MONITORING STATUS REPORT
Former Cummings Oil Lease Site
908 Northwest Kerron Avenue
Winlock, Washington
VCP No. SW0775

Farallon PN: 683-009

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
940 South Harney
Seattle, WA 98108
(206)767-5060

June 25, 2010

Stacy Patterson
Farallon Consulting LLC
975 5th Avenue Northwest
Issaquah, WA 98027

RE: Project: Winlock
Pace Project No.: 253921

Dear Stacy Patterson:
Enclosed are the analytical results for sample(s) received by the laboratory on June 11, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

The Pace courier was not scheduled as requested by Farallon; therefore, the nitrate and nitrite samples were received outside of holding time. Samples were analyzed, per client request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Heidi Geri

heidi.geri@pacelabs.com
Project Manager

Enclosures

cc: Carla Brock, Farallon Consulting

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
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Seattle, WA 98108
(206)767-5060

CERTIFICATIONS

Project: Winlock
Pace Project No.: 253921

Washington Certification IDs
940 South Harney Street Seattle, WA 98108
Alaska CS Certification #: UST-025
Alaska Drinking Water VOC Certification #: WA01-09
Alaska Drinking Water Micro Certification #: WA01230
California Certification #: 01153CA
Florida/NELAP Certification #: E87617
Oregon Certification #: WA200007
Washington Certification #: C1229

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940 South Harney
Seattle, WA 98108
(206)767-5060

SAMPLE ANALYTE COUNT

Project: Winlock
Pace Project No.: 253921

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
253921001	**MW-5-060910**	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8270 by SIM	DMT	18	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		SM 3500-Fe B#4	KMT	1	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	1	PASI-S
253921002	**MW-4-060910**	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8270 by SIM	DMT	18	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		SM 3500-Fe B#4	KMT	1	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	1	PASI-S
253921003	**MW-1-060910**	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8270 by SIM	DMT	18	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		SM 3500-Fe B#4	KMT	1	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	1	PASI-S
253921004	**MW-2-060910**	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8270 by SIM	DMT	18	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		SM 3500-Fe B#4	KMT	1	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	1	PASI-S
253921005	**MW-3-060910**	NWTPH-Dx	ERB	4	PASI-S
		NWTPH-Gx	LPM	3	PASI-S
		EPA 8270 by SIM	DMT	18	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S
		SM 3500-Fe B#4	KMT	1	PASI-S
		EPA 300.0	CMS	1	PASI-S
		EPA 353.2	CMS	1	PASI-S
253921006	**VOA Trip Blanks**	NWTPH-Gx	LPM	3	PASI-S
		EPA 5030B/8260	LNH	10	PASI-S

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **NWTPH-Dx**
Description: NWTPH-Dx GCS
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
5 samples were analyzed for NWTPH-Dx. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **NWTPH-Gx**
Description: NWTPH-Gx GCV
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
6 samples were analyzed for NWTPH-Gx. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **EPA 8270 by SIM**
Description: 8270 MSSV Low Level PAH SIM
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
5 samples were analyzed for EPA 8270 by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSSV/1320

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: OEXT/2259

1n: RPD value was outside control limits. Batch acceptance based upon target analyte recovery of both the LCS/LCSD being within control limits.

- LCSD (Lab ID: 29921)
  - Anthracene

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **EPA 8270 by SIM**
Description: 8270 MSSV Low Level PAH SIM
Client: Farallon Consulting LLC
Date: June 25, 2010

Analyte Comments:

QC Batch: OEXT/2259

1n: RPD value was outside control limits. Batch acceptance based upon target analyte recovery of both the LCS/LCSD being within control limits.

- LCSD (Lab ID: 29921)
  - Dibenz(a,h)anthracene
  - Pyrene

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
6 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **SM 3500-Fe B#4**
Description: Iron, Ferrous
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
5 samples were analyzed for SM 3500-Fe B#4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated more than 15 minutes after sample collection.
- MW-1-060910 (Lab ID: 253921003)
- MW-2-060910 (Lab ID: 253921004)
- MW-3-060910 (Lab ID: 253921005)
- MW-4-060910 (Lab ID: 253921002)
- MW-5-060910 (Lab ID: 253921001)

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
5 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1576

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 253921001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 30237)
  - Sulfate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/1576

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 30237)
  - Sulfate
- MSD (Lab ID: 30238)
  - Sulfate

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PROJECT NARRATIVE

Project: Winlock
Pace Project No.: 253921

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: Farallon Consulting LLC
Date: June 25, 2010

General Information:
5 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-5-060910 **Lab ID: 253921001** Collected: 06/09/10 09:58 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Range	ND	mg/L	0.084	1	06/14/10 09:24	06/16/10 23:44		
Motor Oil Range	ND	mg/L	0.42	1	06/14/10 09:24	06/16/10 23:44	64742-65-0	
n-Octacosane (S)	113	%	50-150	1	06/14/10 09:24	06/16/10 23:44	630-02-4	
o-Terphenyl (S)	108	%	50-150	1	06/14/10 09:24	06/16/10 23:44	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	ND	ug/L	50.0	1		06/15/10 17:09		
a,a,a-Trifluorotoluene (S)	107	%	50-150	1		06/15/10 17:09	98-08-8	
4-Bromofluorobenzene (S)	106	%	50-150	1		06/15/10 17:09	460-00-4	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	83-32-9	
Acenaphthylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	208-96-8	
Anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	207-08-9	
Chrysene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	53-70-3	
Fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	206-44-0	
Fluorene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	193-39-5	
Naphthalene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	91-20-3	
Phenanthrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	85-01-8	
Pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:29	129-00-0	
2-Fluorobiphenyl (S)	60	%	40-106	1	06/15/10 15:00	06/21/10 11:29	321-60-8	
Terphenyl-d14 (S)	89	%	55-146	1	06/15/10 15:00	06/21/10 11:29	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		06/16/10 01:48	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/16/10 01:48	100-41-4	
Toluene	ND	ug/L	1.0	1		06/16/10 01:48	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/16/10 01:48	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/16/10 01:48	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/16/10 01:48	95-47-6	
4-Bromofluorobenzene (S)	99	%	80-120	1		06/16/10 01:48	460-00-4	
Dibromofluoromethane (S)	108	%	80-122	1		06/16/10 01:48	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%	80-124	1		06/16/10 01:48	17060-07-0	
Toluene-d8 (S)	103	%	80-123	1		06/16/10 01:48	2037-26-5	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4							
Iron, Ferrous	ND	mg/L	0.17	1		06/14/10 13:00		H6

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-5-060910 **Lab ID: 253921001** Collected: 06/09/10 09:58 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**4.7**	mg/L	1.0	1		06/17/10 17:33	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	**0.87**	mg/L	0.050	1		06/17/10 15:02		
	Analytical Method: SM 4500-NO2 B							
Nitrite as N	ND	mg/L	0.010	1		06/11/10 13:56	14797-65-0	H3

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-4-060910 **Lab ID: 253921002** Collected: 06/09/10 10:30 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Range	ND	mg/L	0.082	1	06/14/10 09:24	06/17/10 00:00		
Motor Oil Range	ND	mg/L	0.41	1	06/14/10 09:24	06/17/10 00:00	64742-65-0	
n-Octacosane (S)	116	%	50-150	1	06/14/10 09:24	06/17/10 00:00	630-02-4	
o-Terphenyl (S)	111	%	50-150	1	06/14/10 09:24	06/17/10 00:00	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	ND	ug/L	50.0	1		06/15/10 17:57		
a,a,a-Trifluorotoluene (S)	106	%	50-150	1		06/15/10 17:57	98-08-8	
4-Bromofluorobenzene (S)	105	%	50-150	1		06/15/10 17:57	460-00-4	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	83-32-9	
Acenaphthylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	208-96-8	
Anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	207-08-9	
Chrysene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	53-70-3	
Fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	206-44-0	
Fluorene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	193-39-5	
Naphthalene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	91-20-3	
Phenanthrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	85-01-8	
Pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 11:45	129-00-0	
2-Fluorobiphenyl (S)	52	%	40-106	1	06/15/10 15:00	06/21/10 11:45	321-60-8	
Terphenyl-d14 (S)	79	%	55-146	1	06/15/10 15:00	06/21/10 11:45	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		06/16/10 02:10	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/16/10 02:10	100-41-4	
Toluene	ND	ug/L	1.0	1		06/16/10 02:10	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/16/10 02:10	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/16/10 02:10	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/16/10 02:10	95-47-6	
4-Bromofluorobenzene (S)	101	%	80-120	1		06/16/10 02:10	460-00-4	
Dibromofluoromethane (S)	107	%	80-122	1		06/16/10 02:10	1868-53-7	
1,2-Dichloroethane-d4 (S)	105	%	80-124	1		06/16/10 02:10	17060-07-0	
Toluene-d8 (S)	103	%	80-123	1		06/16/10 02:10	2037-26-5	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4							
Iron, Ferrous	**1.2**	mg/L	0.17	1		06/14/10 13:00		H6

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-4-060910 **Lab ID: 253921002** Collected: 06/09/10 10:30 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**12.5**	mg/L	1.0	1		06/17/10 18:24	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.050	1		06/17/10 15:04		
	Analytical Method: SM 4500-NO2 B							
Nitrite as N	**0.011**	mg/L	0.010	1		06/11/10 13:56	14797-65-0	H3

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-1-060910 **Lab ID: 253921003** Collected: 06/09/10 11:15 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Range	**0.72**	mg/L	0.092	1	06/14/10 09:24	06/17/10 00:16		
Motor Oil Range	ND	mg/L	0.46	1	06/14/10 09:24	06/17/10 00:16	64742-65-0	
n-Octacosane (S)	111	%	50-150	1	06/14/10 09:24	06/17/10 00:16	630-02-4	
o-Terphenyl (S)	106	%	50-150	1	06/14/10 09:24	06/17/10 00:16	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	ND	ug/L	50.0	1		06/15/10 18:21		
a,a,a-Trifluorotoluene (S)	107	%	50-150	1		06/15/10 18:21	98-08-8	
4-Bromofluorobenzene (S)	105	%	50-150	1		06/15/10 18:21	460-00-4	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	83-32-9	
Acenaphthylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	208-96-8	
Anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	207-08-9	
Chrysene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	53-70-3	
Fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	206-44-0	
Fluorene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	193-39-5	
Naphthalene	**0.020**	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	91-20-3	
Phenanthrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	85-01-8	
Pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:02	129-00-0	
2-Fluorobiphenyl (S)	73	%	40-106	1	06/15/10 15:00	06/21/10 12:02	321-60-8	
Terphenyl-d14 (S)	88	%	55-146	1	06/15/10 15:00	06/21/10 12:02	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		06/16/10 02:33	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/16/10 02:33	100-41-4	
Toluene	ND	ug/L	1.0	1		06/16/10 02:33	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/16/10 02:33	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/16/10 02:33	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/16/10 02:33	95-47-6	
4-Bromofluorobenzene (S)	100	%	80-120	1		06/16/10 02:33	460-00-4	
Dibromofluoromethane (S)	107	%	80-122	1		06/16/10 02:33	1868-53-7	
1,2-Dichloroethane-d4 (S)	108	%	80-124	1		06/16/10 02:33	17060-07-0	
Toluene-d8 (S)	102	%	80-123	1		06/16/10 02:33	2037-26-5	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4							
Iron, Ferrous	**9.8**	mg/L	0.33	2		06/14/10 13:00		H6

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-1-060910 **Lab ID: 253921003** Collected: 06/09/10 11:15 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**59.4**	mg/L	5.0	5		06/21/10 13:37	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.050	1		06/17/10 15:05		
	Analytical Method: SM 4500-NO2 B							
Nitrite as N	**0.012**	mg/L	0.010	1		06/11/10 13:56	14797-65-0	H1

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-2-060910 **Lab ID: 253921004** Collected: 06/09/10 11:45 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Range	**0.69**	mg/L	0.087	1	06/14/10 09:24	06/17/10 00:32		
Motor Oil Range	**0.44**	mg/L	0.43	1	06/14/10 09:24	06/17/10 00:32	64742-65-0	
n-Octacosane (S)	112	%	50-150	1	06/14/10 09:24	06/17/10 00:32	630-02-4	
o-Terphenyl (S)	106	%	50-150	1	06/14/10 09:24	06/17/10 00:32	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	**116**	ug/L	50.0	1		06/15/10 18:45		
a,a,a-Trifluorotoluene (S)	104	%	50-150	1		06/15/10 18:45	98-08-8	
4-Bromofluorobenzene (S)	101	%	50-150	1		06/15/10 18:45	460-00-4	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	**0.074**	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	83-32-9	
Acenaphthylene	**0.019**	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	208-96-8	
Anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	207-08-9	
Chrysene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	53-70-3	
Fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	206-44-0	
Fluorene	**0.26**	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	193-39-5	
Naphthalene	**0.056**	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	91-20-3	
Phenanthrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	85-01-8	
Pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:18	129-00-0	
2-Fluorobiphenyl (S)	60	%	40-106	1	06/15/10 15:00	06/21/10 12:18	321-60-8	
Terphenyl-d14 (S)	86	%	55-146	1	06/15/10 15:00	06/21/10 12:18	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	**22.4**	ug/L	1.0	1		06/16/10 02:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/16/10 02:56	100-41-4	
Toluene	ND	ug/L	1.0	1		06/16/10 02:56	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/16/10 02:56	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/16/10 02:56	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/16/10 02:56	95-47-6	
4-Bromofluorobenzene (S)	100	%	80-120	1		06/16/10 02:56	460-00-4	
Dibromofluoromethane (S)	107	%	80-122	1		06/16/10 02:56	1868-53-7	
1,2-Dichloroethane-d4 (S)	106	%	80-124	1		06/16/10 02:56	17060-07-0	
Toluene-d8 (S)	101	%	80-123	1		06/16/10 02:56	2037-26-5	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4							
Iron, Ferrous	**3.2**	mg/L	0.17	1		06/14/10 13:00		H6

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-2-060910 **Lab ID: 253921004** Collected: 06/09/10 11:45 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**7.9**	mg/L	1.0	1		06/17/10 18:59	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.050	1		06/17/10 15:47		
	Analytical Method: SM 4500-NO2 B							
Nitrite as N	ND	mg/L	0.010	1		06/11/10 13:56	14797-65-0	H1

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-3-060910 **Lab ID: 253921005** Collected: 06/09/10 12:53 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Dx GCS	Analytical Method: NWTPH-Dx Preparation Method: EPA 3510							
Diesel Range	**0.83**	mg/L	0.081	1	06/14/10 09:24	06/17/10 01:21		
Motor Oil Range	ND	mg/L	0.40	1	06/14/10 09:24	06/17/10 01:21	64742-65-0	
n-Octacosane (S)	114	%	50-150	1	06/14/10 09:24	06/17/10 01:21	630-02-4	
o-Terphenyl (S)	110	%	50-150	1	06/14/10 09:24	06/17/10 01:21	84-15-1	
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	ND	ug/L	50.0	1		06/15/10 19:09		
a,a,a-Trifluorotoluene (S)	101	%	50-150	1		06/15/10 19:09	98-08-8	
4-Bromofluorobenzene (S)	100	%	50-150	1		06/15/10 19:09	460-00-4	
8270 MSSV Low Level PAH SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3510							
Acenaphthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	83-32-9	
Acenaphthylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	208-96-8	
Anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	207-08-9	
Chrysene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	53-70-3	
Fluoranthene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	206-44-0	
Fluorene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	193-39-5	
Naphthalene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	91-20-3	
Phenanthrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	85-01-8	
Pyrene	ND	ug/L	0.014	1	06/15/10 15:00	06/21/10 12:35	129-00-0	
2-Fluorobiphenyl (S)	69	%	40-106	1	06/15/10 15:00	06/21/10 12:35	321-60-8	
Terphenyl-d14 (S)	89	%	55-146	1	06/15/10 15:00	06/21/10 12:35	1718-51-0	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		06/16/10 07:05	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/16/10 07:05	100-41-4	
Toluene	ND	ug/L	1.0	1		06/16/10 07:05	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/16/10 07:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/16/10 07:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/16/10 07:05	95-47-6	
4-Bromofluorobenzene (S)	99	%	80-120	1		06/16/10 07:05	460-00-4	
Dibromofluoromethane (S)	106	%	80-122	1		06/16/10 07:05	1868-53-7	
1,2-Dichloroethane-d4 (S)	107	%	80-124	1		06/16/10 07:05	17060-07-0	
Toluene-d8 (S)	102	%	80-123	1		06/16/10 07:05	2037-26-5	
Iron, Ferrous	Analytical Method: SM 3500-Fe B#4							
Iron, Ferrous	**3.9**	mg/L	0.17	1		06/14/10 13:00		H6

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: MW-3-060910 **Lab ID: 253921005** Collected: 06/09/10 12:53 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Sulfate	**13.4**	mg/L	1.0	1		06/17/10 19:16	14808-79-8	
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.050	1		06/17/10 15:49		
	Analytical Method: SM 4500-NO2 B							
Nitrite as N	ND	mg/L	0.010	1		06/11/10 13:56	14797-65-0	H1

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ANALYTICAL RESULTS

Project: Winlock
Pace Project No.: 253921

Sample: VOA Trip Blanks **Lab ID: 253921006** Collected: 06/09/10 00:00 Received: 06/11/10 11:00 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
NWTPH-Gx GCV	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	ND	ug/L	50.0	1		06/15/10 15:34		
a,a,a-Trifluorotoluene (S)	109	%	50-150	1		06/15/10 15:34	98-08-8	
4-Bromofluorobenzene (S)	105	%	50-150	1		06/15/10 15:34	460-00-4	
8260 MSV	Analytical Method: EPA 5030B/8260							
Benzene	ND	ug/L	1.0	1		06/15/10 18:42	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		06/15/10 18:42	100-41-4	
Toluene	ND	ug/L	1.0	1		06/15/10 18:42	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		06/15/10 18:42	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	1		06/15/10 18:42	179601-23-1	
o-Xylene	ND	ug/L	1.0	1		06/15/10 18:42	95-47-6	
4-Bromofluorobenzene (S)	98	%	80-120	1		06/15/10 18:42	460-00-4	
Dibromofluoromethane (S)	107	%	80-122	1		06/15/10 18:42	1868-53-7	
1,2-Dichloroethane-d4 (S)	104	%	80-124	1		06/15/10 18:42	17060-07-0	
Toluene-d8 (S)	103	%	80-123	1		06/15/10 18:42	2037-26-5	

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: OEXT/2264 Analysis Method: NWTPH-Dx
QC Batch Method: EPA 3510 Analysis Description: NWTPH-Dx GCS
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

METHOD BLANK: 29973 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range	mg/L	ND	0.080	06/16/10 22:23	
Motor Oil Range	mg/L	ND	0.40	06/16/10 22:23	
n-Octacosane (S)	%	113	50-150	06/16/10 22:23	
o-Terphenyl (S)	%	103	50-150	06/16/10 22:23	

LABORATORY CONTROL SAMPLE & LCSD: 29974 29975

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range	mg/L	5	4.7	4.7	95	94	51-147	.2	30	
Motor Oil Range	mg/L	5	4.8	4.8	96	96	20-160	.4	30	
n-Octacosane (S)	%				112	116	50-150			
o-Terphenyl (S)	%				123	124	50-150			

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: GCV/1589 Analysis Method: NWTPH-Gx
QC Batch Method: NWTPH-Gx Analysis Description: NWTPH-Gx GCV Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005, 253921006

METHOD BLANK: 30012 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005, 253921006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	ND	50.0	06/15/10 07:56	
4-Bromofluorobenzene (S)	%	95	50-150	06/15/10 07:56	
a,a,a-Trifluorotoluene (S)	%	101	50-150	06/15/10 07:56	

LABORATORY CONTROL SAMPLE: 30013

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	249	99	50-163	
4-Bromofluorobenzene (S)	%			96	50-150	
a,a,a-Trifluorotoluene (S)	%			103	50-150	

SAMPLE DUPLICATE: 30139

Parameter	Units	253921001 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	17.4J		
4-Bromofluorobenzene (S)	%	106	87	20	
a,a,a-Trifluorotoluene (S)	%	107	103	4	

SAMPLE DUPLICATE: 30140

Parameter	Units	253937009 Result	Dup Result	RPD	Qualifiers
Gasoline Range Organics	ug/L	ND	17J		
4-Bromofluorobenzene (S)	%	95	97	2	
a,a,a-Trifluorotoluene (S)	%	103	102	2	

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: OEXT/2259 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3510 Analysis Description: 8270 Low Level PAH SIM
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

METHOD BLANK: 29919 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.015	06/21/10 09:50	
Acenaphthylene	ug/L	ND	0.015	06/21/10 09:50	
Anthracene	ug/L	ND	0.015	06/21/10 09:50	
Benzo(a)anthracene	ug/L	ND	0.015	06/21/10 09:50	
Benzo(a)pyrene	ug/L	ND	0.015	06/21/10 09:50	
Benzo(b)fluoranthene	ug/L	ND	0.015	06/21/10 09:50	
Benzo(g,h,i)perylene	ug/L	ND	0.015	06/21/10 09:50	
Benzo(k)fluoranthene	ug/L	ND	0.015	06/21/10 09:50	
Chrysene	ug/L	ND	0.015	06/21/10 09:50	
Dibenz(a,h)anthracene	ug/L	ND	0.015	06/21/10 09:50	
Fluoranthene	ug/L	ND	0.015	06/21/10 09:50	
Fluorene	ug/L	ND	0.015	06/21/10 09:50	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.015	06/21/10 09:50	
Naphthalene	ug/L	ND	0.015	06/21/10 09:50	
Phenanthrene	ug/L	ND	0.015	06/21/10 09:50	
Pyrene	ug/L	ND	0.015	06/21/10 09:50	
2-Fluorobiphenyl (S)	%	69	40-106	06/21/10 09:50	
Terphenyl-d14 (S)	%	87	55-146	06/21/10 09:50	

LABORATORY CONTROL SAMPLE & LCSD: 29920 29921

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acenaphthene	ug/L	2	1.1	1.4	54	72	32-124	29	30	
Acenaphthylene	ug/L	2	1.2	1.6	59	79	34-128	29	30	
Anthracene	ug/L	2	1.2	1.6	58	79	50-129	31	30	1n
Benzo(a)anthracene	ug/L	2	1.4	1.8	69	92	58-161	30	30	
Benzo(a)pyrene	ug/L	2	1.3	1.8	66	89	52-156	30	30	
Benzo(b)fluoranthene	ug/L	2	1.4	1.9	72	94	61-167	27	30	
Benzo(g,h,i)perylene	ug/L	2	1.4	2.0	72	98	56-167	30	30	
Benzo(k)fluoranthene	ug/L	2	1.5	2.0	74	100	60-149	30	30	
Chrysene	ug/L	2	1.4	1.8	68	92	61-141	30	30	
Dibenz(a,h)anthracene	ug/L	2	1.5	2.1	76	103	60-176	31	30	1n
Fluoranthene	ug/L	2	1.4	1.9	69	93	63-155	30	30	
Fluorene	ug/L	2	1.3	1.7	64	85	44-129	28	30	
Indeno(1,2,3-cd)pyrene	ug/L	2	1.5	2.0	75	101	51-159	30	30	
Naphthalene	ug/L	2	0.91	1.2	45	60	29-120	29	30	
Phenanthrene	ug/L	2	1.3	1.7	63	85	56-136	30	30	
Pyrene	ug/L	2	1.3	1.9	67	93	61-143	32	30	1n
2-Fluorobiphenyl (S)	%				56	70	40-106			
Terphenyl-d14 (S)	%				68	87	55-146			

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: MSV/2487
QC Batch Method: EPA 5030B/8260
Associated Lab Samples: 253921006

Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge

METHOD BLANK: 30014 Matrix: Water
Associated Lab Samples: 253921006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/15/10 13:47	
Ethylbenzene	ug/L	ND	1.0	06/15/10 13:47	
m&p-Xylene	ug/L	ND	2.0	06/15/10 13:47	
o-Xylene	ug/L	ND	1.0	06/15/10 13:47	
Toluene	ug/L	ND	1.0	06/15/10 13:47	
Xylene (Total)	ug/L	ND	3.0	06/15/10 13:47	
1,2-Dichloroethane-d4 (S)	%	107	80-124	06/15/10 13:47	
4-Bromofluorobenzene (S)	%	101	80-120	06/15/10 13:47	
Dibromofluoromethane (S)	%	104	80-122	06/15/10 13:47	
Toluene-d8 (S)	%	103	80-123	06/15/10 13:47	

LABORATORY CONTROL SAMPLE: 30015

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.4	97	75-124	
Ethylbenzene	ug/L	20	18.4	92	76-124	
m&p-Xylene	ug/L	40	37.5	94	75-124	
o-Xylene	ug/L	20	18.8	94	76-121	
Toluene	ug/L	20	18.1	90	75-124	
Xylene (Total)	ug/L	60	56.3	94	76-123	
1,2-Dichloroethane-d4 (S)	%			107	80-124	
4-Bromofluorobenzene (S)	%			102	80-120	
Dibromofluoromethane (S)	%			109	80-122	
Toluene-d8 (S)	%			102	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 30016 30017

Parameter	Units	253912001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Benzene	ug/L	9.3	20	20	30.8	30.8	107	107	75-124	.006	
Ethylbenzene	ug/L	2.2	20	20	22.4	22.6	101	102	76-124	.9	
m&p-Xylene	ug/L		40	40	43.2	43.6	102	103	75-124	.9	
o-Xylene	ug/L		20	20	21.6	21.9	101	103	76-121	1	
Toluene	ug/L	3.1	20	20	22.7	23.0	98	100	75-124	1	
Xylene (Total)	ug/L	3.7	60	60	64.8	65.5	102	103	76-123	1	
1,2-Dichloroethane-d4 (S)	%						105	105	80-124		
4-Bromofluorobenzene (S)	%						103	102	80-120		
Dibromofluoromethane (S)	%						107	108	80-122		
Toluene-d8 (S)	%						102	103	80-123		

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: MSV/2489 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

METHOD BLANK: 30055 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	06/16/10 00:42	
Ethylbenzene	ug/L	ND	1.0	06/16/10 00:42	
m&p-Xylene	ug/L	ND	2.0	06/16/10 00:42	
o-Xylene	ug/L	ND	1.0	06/16/10 00:42	
Toluene	ug/L	ND	1.0	06/16/10 00:42	
Xylene (Total)	ug/L	ND	3.0	06/16/10 00:42	
1,2-Dichloroethane-d4 (S)	%	105	80-124	06/16/10 00:42	
4-Bromofluorobenzene (S)	%	100	80-120	06/16/10 00:42	
Dibromofluoromethane (S)	%	106	80-122	06/16/10 00:42	
Toluene-d8 (S)	%	102	80-123	06/16/10 00:42	

LABORATORY CONTROL SAMPLE: 30056

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.2	91	75-124	
Ethylbenzene	ug/L	20	17.2	86	76-124	
m&p-Xylene	ug/L	40	35.0	87	75-124	
o-Xylene	ug/L	20	17.6	88	76-121	
Toluene	ug/L	20	16.5	82	75-124	
Xylene (Total)	ug/L	60	52.6	88	76-123	
1,2-Dichloroethane-d4 (S)	%			107	80-124	
4-Bromofluorobenzene (S)	%			103	80-120	
Dibromofluoromethane (S)	%			108	80-122	
Toluene-d8 (S)	%			103	80-123	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 30057 30058

Parameter	Units	253921001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Benzene	ug/L	ND	20	20	20.6	21.3	103	106	75-124	3	
Ethylbenzene	ug/L	ND	20	20	20.0	20.2	100	101	76-124	1	
m&p-Xylene	ug/L	ND	40	40	40.7	41.1	102	103	75-124	1	
o-Xylene	ug/L	ND	20	20	20.1	20.4	101	102	76-121	1	
Toluene	ug/L	ND	20	20	19.2	19.8	96	99	75-124	3	
Xylene (Total)	ug/L	ND	60	60	60.8	61.5	101	103	76-123	1	
1,2-Dichloroethane-d4 (S)	%						104	104	80-124		
4-Bromofluorobenzene (S)	%						103	103	80-120		
Dibromofluoromethane (S)	%						107	108	80-122		
Toluene-d8 (S)	%						104	103	80-123		

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: WET/2068 Analysis Method: SM 3500-Fe B#4
QC Batch Method: SM 3500-Fe B#4 Analysis Description: Iron, Ferrous
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

METHOD BLANK: 29908 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron, Ferrous	mg/L	ND	0.17	06/14/10 13:00	H6

LABORATORY CONTROL SAMPLE: 29909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron, Ferrous	mg/L	3.3	3.3	100	80-120	H6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 29910 29911

Parameter	Units	253921001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Iron, Ferrous	mg/L	ND	3.3	3.3	3.4	3.4	99	98	50-150	.7	H6

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: WETA/1576 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

METHOD BLANK: 30235 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	06/17/10 17:15	

LABORATORY CONTROL SAMPLE: 30236

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	15	15.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 30237 30238

Parameter	Units	253921001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Sulfate	mg/L	4.7	15	15	22.2	20.2	116	104	90-110	9	E,M1

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch:	WETA/1575	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, preserved

Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

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QUALITY CONTROL DATA

Project: Winlock
Pace Project No.: 253921

QC Batch: WETA/1569 Analysis Method: SM 4500-NO2 B
QC Batch Method: SM 4500-NO2 B Analysis Description: SM4500NO2-B, Nitrite, unpres
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

METHOD BLANK: 29774 Matrix: Water
Associated Lab Samples: 253921001, 253921002, 253921003, 253921004, 253921005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	ND	0.010	06/11/10 13:56	

LABORATORY CONTROL SAMPLE: 29775

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	.05	0.049	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 29776 29777

Parameter	Units	253918001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Nitrite as N	mg/L	0.0064J	.05	.05	0.056	0.057	99	101	71-109	2	

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QUALIFIERS

Project: Winlock
Pace Project No.: 253921

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

LABORATORIES

PASI-S	Pace Analytical Services - Seattle

BATCH QUALIFIERS

Batch: MSSV/1320

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1n	RPD value was outside control limits. Batch acceptance based upon target analyte recovery of both the LCS/LCSD being within control limits.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received outside EPA method holding time.
H6	Analysis initiated more than 15 minutes after sample collection.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Winlock
Pace Project No.: 253921

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
253921001	MW-5-060910	EPA 3510	OEXT/2264	NWTPH-Dx	GCSV/1658
253921002	MW-4-060910	EPA 3510	OEXT/2264	NWTPH-Dx	GCSV/1658
253921003	MW-1-060910	EPA 3510	OEXT/2264	NWTPH-Dx	GCSV/1658
253921004	MW-2-060910	EPA 3510	OEXT/2264	NWTPH-Dx	GCSV/1658
253921005	MW-3-060910	EPA 3510	OEXT/2264	NWTPH-Dx	GCSV/1658
253921001	MW-5-060910	NWTPH-Gx	GCV/1589		
253921002	MW-4-060910	NWTPH-Gx	GCV/1589		
253921003	MW-1-060910	NWTPH-Gx	GCV/1589		
253921004	MW-2-060910	NWTPH-Gx	GCV/1589		
253921005	MW-3-060910	NWTPH-Gx	GCV/1589		
253921006	VOA Trip Blanks	NWTPH-Gx	GCV/1589		
253921001	MW-5-060910	EPA 3510	OEXT/2259	EPA 8270 by SIM	MSSV/1320
253921002	MW-4-060910	EPA 3510	OEXT/2259	EPA 8270 by SIM	MSSV/1320
253921003	MW-1-060910	EPA 3510	OEXT/2259	EPA 8270 by SIM	MSSV/1320
253921004	MW-2-060910	EPA 3510	OEXT/2259	EPA 8270 by SIM	MSSV/1320
253921005	MW-3-060910	EPA 3510	OEXT/2259	EPA 8270 by SIM	MSSV/1320
253921001	MW-5-060910	EPA 5030B/8260	MSV/2489		
253921002	MW-4-060910	EPA 5030B/8260	MSV/2489		
253921003	MW-1-060910	EPA 5030B/8260	MSV/2489		
253921004	MW-2-060910	EPA 5030B/8260	MSV/2489		
253921005	MW-3-060910	EPA 5030B/8260	MSV/2489		
253921006	VOA Trip Blanks	EPA 5030B/8260	MSV/2487		
253921001	MW-5-060910	SM 3500-Fe B#4	WET/2068		
253921002	MW-4-060910	SM 3500-Fe B#4	WET/2068		
253921003	MW-1-060910	SM 3500-Fe B#4	WET/2068		
253921004	MW-2-060910	SM 3500-Fe B#4	WET/2068		
253921005	MW-3-060910	SM 3500-Fe B#4	WET/2068		
253921001	MW-5-060910	EPA 300.0	WETA/1576		
253921002	MW-4-060910	EPA 300.0	WETA/1576		
253921003	MW-1-060910	EPA 300.0	WETA/1576		
253921004	MW-2-060910	EPA 300.0	WETA/1576		
253921005	MW-3-060910	EPA 300.0	WETA/1576		
253921001	MW-5-060910	EPA 353.2	WETA/1575		
253921002	MW-4-060910	EPA 353.2	WETA/1575		
253921003	MW-1-060910	EPA 353.2	WETA/1575		
253921004	MW-2-060910	EPA 353.2	WETA/1575		
253921005	MW-3-060910	EPA 353.2	WETA/1575		

AirTECHNOLOGY
Laboratories, Inc.

June 24, 2010

FL Cert #E87847/LA Cert #04140
EPA Methods TO3, TO14A, TO15, 25C/3C
RSK-175
TX Cert #T104704450-09-TX
EPA Methods TO14A,TO15

Pace Analytical
ATTN: Heidi Geri
940 S. Harney
Seattle, WA 98108

LABORATORY TEST RESULTS

Project Reference: 253921; Winlock
Lab Number: B061809-01/05

Enclosed are **revised** results for sample(s) received 6/18/10 by Air Technology Laboratories. Analyses were performed according to specifications on the chain of custody provided with the sample(s).

Report Narrative:

- Report revised to include specific target analyte, per client's request.
- Sample analyses were performed within method performance criteria and meet all requirements of the NELAC Standards.
- All results are reported without qualifications.
- The enclosed results relate only to the sample(s).

ATL appreciates the opportunity to provide testing services to your company. If you have any questions regarding these results, please call me at (626) 964-4032.

Sincerely,

Mark Johnson
Operations Manager
MJohnson@AirTechLabs.com

Enclosures

Note: The cover letter is an integral part of this analytical report.

18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Chain of Custody

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Workorder: 253921 Workorder Name: Winlock

Owner Received Date: 6/11/2010 Results Requested By: 6/23/2010

Report To:

Heidi Geri
Pace Analytical Services, Inc.
940 South Harney
Seattle WA 98108
Phone (206)767-5060
Fax (206)767-5063

Subcontract To:

Pace Analytical Minnesota
1700 Elm Street
Suite 200
Minneapolis, MN 55414
Phone (612)607-1700

	Sample ID	Date/Time	Lab ID	Matrix	Preserved Containers: Other	RSK 175 METHANE ONLY*	LAB USE ONLY
1	MW-5-[illegible]	6/9/2010 09:58	253921001	Water	1	X	B061809-01
2	[illegible]	6/9/2010 [illegible]	253921002	Water	1	X	02
3	MW-1-0[illegible]	6/9/2010 11:15	253921003	Water	1	X	03
4	MW-2-[illegible]	6/9/2010 11:45	253921004	Water	1	X	04
5	[illegible]	[illegible]10 [illegible]:53	25392100[illegible]	Water	1	X	05

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	6/14/10 1523		
2	FED EX	6/18/10 9:00	[signature]	6/18/10 9:00
3				

Comments: 4°C on ice [initials] 6/18/10

Cooler Temperature on Receipt °C **Custody Seal Y or N** **Received on Ice Y or N** **Samples Intact Y or N**

* TEST REQUEST REVISED 6/23/10 PER EMAIL FROM H. GERI. [initials] 6/23/10

35 of 40

Client: Pace Analytical
Attn: Heidi Geri

Client's Project: 253921
Date Received: 6/18/2010
Matrix: Water
Units: ug/L

Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		B061809-01		B061809-02		B061809-03		B061809-04		B061809-05	
Client Sample I.D.:		MW-5-060910 / 253921001		MW-4-060910 / 253921002		MW-1-060910 / 253921003		MW-2-060910 / 253921004		MW-3-060910 / 253921005	
Date Sampled:		6/9/2010		6/9/2010		6/9/2010		6/9/2010		6/9/2010	
Date Analyzed:		6/22/2010		6/22/2010		6/22/2010		6/22/2010		6/22/2010	
Analyst Initials:		ZK		ZK		ZK		ZK		ZK	
Data File:		22jun019		22jun020		22jun021		22jun022		22jun023	
QC Batch:		100622GC8A1		100622GC8A1		100622GC8A1		100622GC8A1		100622GC8A1	
Dilution Factor:		1.0		1.0		1.0		1.0		1.0	
ANALYTE	PQL	RL	Results	RL	Results	RL	Results	RL	Results	RL	Results
Methane	6.8	2.3	ND	6.1	93	3.2	520	9.3	3,500	3.3	380

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL)
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 6-24-10
Mark J. Johnson
Operations Manager

The cover letter is an integral part of this analytical report.

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

QC Batch No.: 100622GC8A1
Matrix: Water
Units: ug/L

QC for Dissolved Gases by EPA Procedure RSKSOP-175

Lab No.:		Method Blank		LCS		LCSD			
Date Analyzed:		06/22/10		06/22/10		06/22/10			
Analyst Initials:		ZK		ZK		ZK			
Datafile:		22jun003		22jun001		22jun002			
Dilution Factor:		1.0		1.0		1.0			
ANALYTE	PQL	RL	Results	% Rec.	Criteria	% Rec.	Criteria	%RPD	Criteria
Methane	1.0	1.0	ND	97	70-130%	92	70-130%	5.2	<30

PQL = Practical Quantitation Limit
ND = Not Detected (Below RL).
RL = PQL X Dilution Factor

Reviewed/Approved By: _____ Date: 6-24-10
Mark J. Johnson
Operations Manager

The cover letter is an integral part of this analytical report.

AirTECHNOLOGY Laboratories, Inc.
18501 E. Gale Avenue, Suite 130 ♦ City of Industry, CA 91748 ♦ Ph: (626) 964-4032 ♦ Fx: (626) 964-5832

Sample Condition Upon Receipt

Pace Analytical

Client Name: Fayfallen HB 6-11-10

Project # 253921

Courier: ~~Fed Ex~~ UPS USPS Client Commercial ~~Pace~~ Other 6111APR

Optional
Proj. Due Date:
Proj. Name:

Tracking #: ———

Custody Seal on Cooler/Box Present: ~~yes~~ no Seals intact: ~~yes~~ no

Packing Material: Bubble Wrap ~~Bubble Bags~~ None Other

Thermometer Used: Horiba 132013 Type of Ice: ~~Wet~~ Blue None Samples on ice, cooling process has begun

Cooler Temperature: 4.2, 2.5, 3.7, 3.5 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 6/11/10 AR

Chain of Custody Present:	~~Yes~~ No N/A	1.
Chain of Custody Filled Out:	~~Yes~~ No N/A	2.
Chain of Custody Relinquished:	~~Yes~~ No N/A	3.
Sampler Name & Signature on COC:	~~Yes~~ No N/A	4.
Samples Arrived within Hold Time:	Yes ~~No~~ N/A	5. MW-5 and MW-4 for NO_2 received out of hold
Short Hold Time Analysis (<72hr):	~~Yes~~ No N/A	6. less than 1/2 hold time remaining on all other samples. NO_2/NO_3
Rush Turn Around Time Requested:	Yes ~~No~~ N/A	7.
Sufficient Volume:	~~Yes~~ No N/A	8.
Correct Containers Used:	~~Yes~~ No N/A	9.
-Pace Containers Used:	~~Yes~~ No N/A	
Containers Intact:	~~Yes~~ No N/A	10.
Filtered volume received for Dissolved tests	Yes No ~~N/A~~	11.
Sample Labels match COC:	~~Yes~~ No N/A	12.
-Includes date/time/ID/Analysis Matrix: Water		
All containers needing preservation have been checked.	~~Yes~~ No N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	~~Yes~~ No N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	~~Yes~~ No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	Yes No ~~N/A~~	14.
Headspace in VOA Vials (>6mm):	Yes ~~No~~ N/A	15.
Trip Blank Present:	~~Yes~~ No N/A	16. VOAs Spread across 4 coolers, but trip blanks only received in 2. TB-1 received with MW5, TB-2 received with MW-2.
Trip Blank Custody Seals Present	Yes No ~~N/A~~	
Pace Trip Blank Lot # (if purchased):		

Field Data Required? Y / N

Client Notification/ Resolution:

Person Contacted: Stacy Patterson Date/Time: 6-11-10 @ 13:04

Comments/ Resolution: Nitrates out of hold. Please proceed w/ analyses.

Project Manager Review: HB 6-11-10 Date:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

F-ALLC003rev.3, 11September2006

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

253921

Page: 1 of 1

1318890

Section A
Required Client Information:

Company: Farallon
Address: 975 5th Ave NW

Email To: spatterson@farallonconsulting.com
Phone: 425-295-0800 Fax: 425-295-0850
Requested Due Date/TAT: STD

Section B
Required Project Information:

Report To: Stacy Patterson
Copy To: SAA
Purchase Order No.: 683-009
Project Name: Winlock
Project Number: 683-009

Section C
Invoice Information:

Attention: Stacy Patterson
Company Name: Farallon
Address: Same as A
Pace Quote Reference:
Pace Project Manager: Heidi Geri
Pace Profile #:

REGULATORY AGENCY

NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / OTHER ______

Site Location STATE: WA

Section D
Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Collected: Composite Start (Date, Time); Composite End/Grab (Date, Time)

Preservatives: Unpreserved, H_2SO_4, HNO_3, HCl, NaOH, $Na_2S_2O_3$, Methanol, Other

Requested Analysis Filtered (Y/N)

Analysis Test: A = NWTPH-Dx; B = 8270 PAH/SIM; C = 8260 BTEX; D = NWTPH-Gx; E = 300.0/353.2 Anions NO3; F = SO4; 3500FE Ferrous Iron; G = Anions NO3; H = RSK 175 Methane only; I = ~~VOA Trip Blanks 8260 BTEX~~ (RH)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Start DATE	Start TIME	End/Grab DATE	End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	A	B	C	D	E	F	G	H	I	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-5-060910	WT	G	~~6/9/10~~		6/9/10	0958	15	15	X	X		X					X	X	X	X	X	X	X	X	X		
2	MW-4-060910	WT	G			[ditto]	1030	12	15	X	X		X					[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]			
3	MW-1-060910	WT	G			[ditto]	1115	14	15	X	X		X					[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]			
4	MW-2-060910	WT	G			[ditto]	1145	15	15	X	X		X					[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]			
5	MW-3-060910	WT	G			[ditto]	1253	14	15	X	X		X					[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]	[ditto]			
6	VOA Trip Blanks	WT							4											X	X							
7																												
8																												
9																												
10																												
11																												
12																												

JR

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Ryan Hibbs	6-10-10	1024	Buck Pace	6-11-10	10:10				
	Buck Pace	6-11-10	1100	[illegible]/Pace	6/11/10	1100	4.2, 2.5, 3.7, 3.5	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ryan Hibbs
SIGNATURE of SAMPLER: Ryan Hibbs
DATE Signed (MM/DD/YY): 06-10-10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Sample Container Count

Pace Analytical™ www.pacelabs.com

CLIENT: Farrallon 253921

COC PAGE 1 of 1
COC ID# 1318890

Sample Line Item	VG9H	AG1H	AG1U	BG1H	BP1U	BP2U	BP3U	BP2N	BP2S	WGFU	WGKU	VSG			Comments
1	6	2 1/2	2			1			1/2			3			
2	↓	↓	↓			↓			↓			↓			
3															
4															
5	↓	↓	↓			↓									TB-1 (with mw-5)
6	2														TB-2 (with mw-2)
7	2														
8															
9															
10															
11															Trip Blank? Yes
12															

AG1H	1 liter HCL amber glass		BP2S	500mL H2SO4 plastic		JGFU	4oz unpreserved amber wide
AG1U	1liter unpreserved amber glass		BP2U	500mL unpreserved plastic		R	terra core kit
AG2S	500mL H2SO4 amber glass		BP2Z	500mL NaOH, Zn Ac		U	Summa Can
AG2U	500mL unpreserved amber glass		BP3C	250mL NaOH plastic		VG9H	40mL HCL clear vial
AG3S	250mL H2SO4 amber glass		BP3N	250mL HNO3 plastic		VG9T	40mL Na Thio. clear vial
BG1H	1 liter HCL clear glass		BP3S	250mL H2SO4 plastic		VG9U	40mL unpreserved clear vial
BG1U	1 liter unpreserved glass		BP3U	250mL unpreserved plastic		VG9W	40mL glass vial prewelghted (EPA 5035)
BP1N	1 liter HNO3 plastic		DG9B	40mL Na Bisulfate amber vial		VSG	Headspace septa vial & HCL
BP1S	1 liter H2SO4 plastic		DG9H	40mL HCL amber voa vial		WGFU	4oz clear soil jar
BP1U	1 liter unpreserved plastic		DG9M	40mL MeOH clear vial		WGFX	4oz wide jar w/hexane wipe
BP1Z	1 liter NaOH, Zn, Ac		DG9T	40mL Na Thio amber vial		ZPLC	Ziploc Bag
BP2N	500mL HNO3 plastic		DG9U	40mL unpreserved amber vial			
BP2O	500mL NaOH plastic			Wipe/Swab			