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ConocoPhillips

GROUNDWATER MONITORING REPORT

Release # 471257
Tosco # 6380
Bellingham
UST # 8394

DATE: June 15, 2007

Map # NW1487

Facility No.: 256380 Address: 200 South 36th Street, Bellingham, Washington
 ConocoPhillips Site Manager: Michael Noll (RM&R 1571)
 Consultant / Contact Person: SECOR International Inc. / Alice Larsen
 Primary Agency/Regulatory ID No.: Washington State Department of Ecology / Site ID No. 8394
 SECOR Project No: 01CP.01571.07

WORK PERFORMED THIS QUARTER(S) [1st - 2007]:

- On March 7, 2007, SECOR personnel monitored, purged, and sampled seven wells (MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, and MW-8) of the existing network of eight groundwater monitoring wells (MW-1 through MW-8). Well MW-1 was not sampled because the City of Bellingham Public Works truck was parked over the well monument.
- Groundwater samples were collected using a peristaltic pump, with dedicated polyethylene tubing in the well casing and a new section of silicon tubing in the pump head. Complete groundwater monitoring, purging, and sampling procedures are provided in Attachment B.
- Samples were submitted to Lancaster Laboratories for analysis of gasoline-range hydrocarbons (TPH-g) per Washington State Department of Ecology (Ecology) Method NWTPH-Gx; diesel range (TPH-d) and heavy oil range (TPH-o) hydrocarbons per Ecology Method NWTPH-Dx modified with an acid/silica gel cleanup; benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tert butyl ether (MTBE) per United States Environmental Protection Agency (USEPA) Method 8260B. The laboratory analytical report is presented in Attachment A.

WORK PROPOSED FOR NEXT QUARTER [2nd - 2007]:

- Measure depth to water, purge, and sample eight groundwater monitoring wells (MW-1 through MW-8). Submit groundwater samples for analysis for NWTPH-Gx, NWTPH-Dx, BTEX, and MTBE.

DATA SUMMARY THIS QUARTER:

Frequency of Sampling Events:	Quarterly	(03/07,06/07,09/07,12/07)
Depth to Groundwater:	3.48 ft. (MW-5) ✓	(Measured Feet Below
	7.80 ft. (MW-2)	Top of Well Casing/Well ID)
Groundwater Gradient:	Southwest ✓	(Flow Direction)
	0.04 feet per foot.	(Magnitude)
Maximum TPH-G Concentrations:	340 µg/L (MW-7)	(ppb / well ID)
Maximum TPH-D Concentrations:	870 µg/L (MW-7)	(ppb / well ID)
Maximum TPH-O Concentrations:	None Detected	(ppb / well ID)
Maximum Benzene Concentration:	None Detected	(ppb / well ID)
Maximum Dissolved Lead Concentration:	Not Analyzed	(ppb / well ID)
Measurable Free Product Detected:	No	(Yes - ID well(s)/No)
Free Product Recovered This Quarter:	None	(Gallons)
Cumulative Free Product Recovered to Date:	None	(Gallons)
Water Wells or	One Water Well	(Type)
Surface Waters w/in 2,000 ft:	Connelly Creek	
Radius and Respective	1600 ft. West	(Respective Distance)

M. Adams Reviewed
7/17/07

Direction From Site:	1000 ft. Southwest	& Direction)
Current Remedial Action:	NA	(SVE/AS/P&T/NA etc.)
Permits for Discharge:	None	(NPDES, POTW, etc.)

DISCUSSION:

- The groundwater samples were received by Lancaster Laboratories on March 8, 2007. Based on a review of the laboratory reports, it appears that the submitted water samples were analyzed within the specified holding times and that Lancaster followed their appropriate quality assurance/quality control (QA/QC) procedures during analysis.
- TPH-g was detected at concentrations greater than the laboratory reporting limits (RLs) in the groundwater sample collected from MW-7 (at 340 micrograms per liter [µg/L]). TPH-g was not detected at concentrations greater than the RLs in any of the remaining samples collected this quarter.
- TPH-d was detected at concentrations greater than the Model Toxics Control (MTCA) Act Method A Cleanup Levels for groundwater in the groundwater sample collected from MW-7 (at 870 µg/L). TPH-d was detected at concentrations greater than RLs, but less than the MTCA Method A Cleanup Level, in the groundwater sample collected from MW-4 (at 83 µg/L). TPH-d was not detected at concentrations greater than the RLs in any of the remaining samples collected this quarter.
- TPH-o was not detected at concentrations greater than the RLs in the groundwater samples collected this quarter.
- BTEX constituents were not detected at concentrations greater than the RLs in the groundwater samples collected this quarter.
- MTBE was detected at concentrations greater than the RLs, but less than MTCA Method A Cleanup Level, in the groundwater sample collected from MW-7 (at 0.7 µg/L). MTBE was not detected at concentrations greater than the RLs in the remaining groundwater samples collected this quarter.
- No drums were left on site.

ATTACHMENTS:

Figure 1: Site Location Map

Figure 2: Site Plan with Groundwater Elevations (03/07/07)


Figure 3: Site Plan with Groundwater Analytical Results (03/07/07)

Table 1: Summary of Groundwater Elevations and Sample Analytical Results

Attachment A: Laboratory Analytical Report and Chain-of-Custody Record

Attachment B: SECOR Monitoring Well Gauging, Purging and Sampling Procedures; Groundwater Monitoring Field Data Records

Prepared By:



Tammy Parise
Staff Geologist

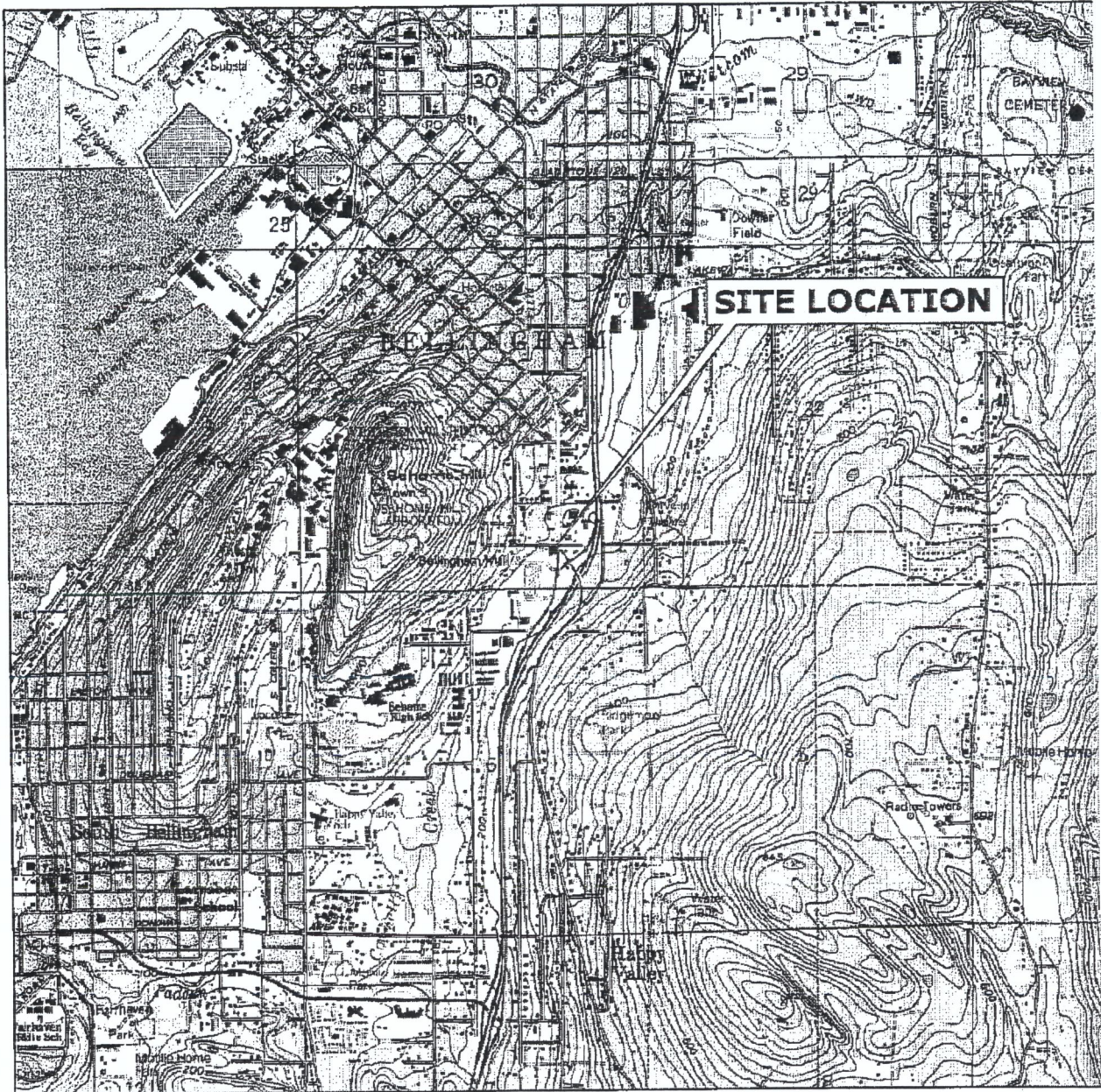
Reviewed By:



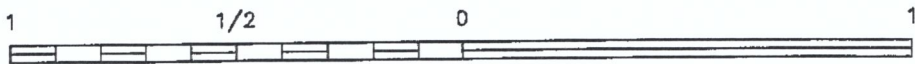
Meredith Redmon
Project Scientist

cc: LUST Coordinator, Washington State Department of Ecology, Northwest Regional Office
Mr. Victor Boulos, Keith Oil Corporation
Mark Adams, Washington State Department of Ecology, Northwest Regional Office

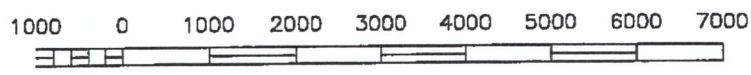
FIGURES



WASHINGTON




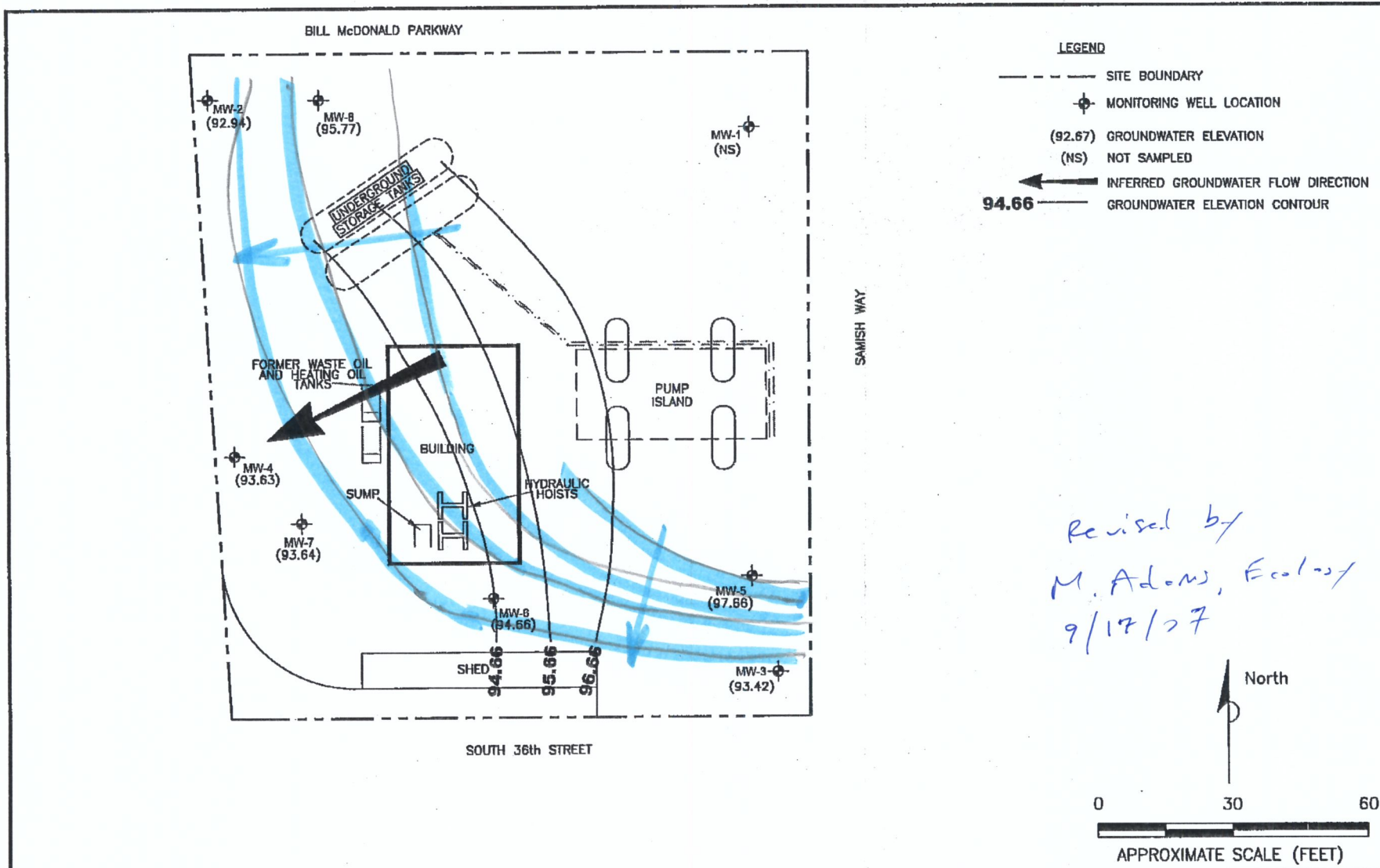
SCALE (MILES)



SCALE (FEET)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; BELLINGHAM SOUTH, WASHINGTON; 1972

 SECOR 12034 134th COURT, SUITE 102 REDMOND, WASHINGTON PHONE: (425) 372-1800 FAX: (425) 372-1850	PREPARED FOR: ConocoPhillips FACILITY NO 256380 (RM & R 1571) 200 SOUTH 36th STREET BELLINGHAM, WASHINGTON	SITE LOCATION MAP		FIGURE: 1
	JOB NUMBER: 01CP.01571.07	DRAWN BY: S. SIMMONS	CHECKED BY:	APPROVED BY:



SOURCE:
 BASE MAP FROM: ENVIRONMENTAL RESOLUTIONS, INC.
 (ERI) TITLED GROUNDWATER SAMPLE ANALYSIS MAP-
 06/10/03, PLATE 1, DATED 07/08/03, PROJECT
 NO. 31065. CADD FILE 31065.13.DWG

SECOR
 12034 134th COURT, SUITE 102
 REDMOND, WASHINGTON
 PHONE: (425) 372-1600 FAX: (425) 372-1650

PREPARED FOR:
ConocoPhillips
 FACILITY NO. 256380 (RM & R 1571)
 200 SOUTH 36th STREET
 BELLINGHAM, WASHINGTON

JOB NUMBER: 01CP.01571.07 DRAWN BY: CFS

**SITE PLAN WITH GROUNDWATER
 ELEVATIONS (3/7/07)**

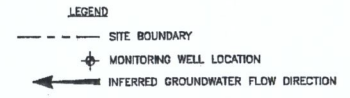
CHECKED BY: MT APPROVED BY: AL

FIGURE:
2

DATE: 04/03/07

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ANALYTES

TPH-B	GASOLINE RANGE HYDROCARBONS
TPH-D	DIESEL RANGE HYDROCARBONS
TPH-S	HEAVY OIL RANGE HYDROCARBONS
B	BENZENE
T	TOLUENE
E	ETHYL BENZENE
X	TOTAL XYLENES
MTBE	METHYL TERTIARY BUTYL ETHER

ND NOT DETECTED AT OR ABOVE THE LABORATORY METHOD REPORTING LIMIT
- NOT ANALYZED OR NOT APPLICABLE

NOTES
ALL LOCATIONS ARE APPROXIMATE
ALL UNITS ARE IN MICROGRAMS PER LITER (µg/L)

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-2	µg/L	µg/L	µg/L	µg/L
TPH-B	<48	<48	<48	<48
TPH-D	<76	<76	<76	<76
TPH-S	<95	<95	<94	<95
B	<0.2	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.8	<0.8	<0.8	<0.8
MTBE	<0.3	<0.5	<0.5	<0.5

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-1	µg/L	µg/L	µg/L	µg/L
TPH-B	<48	<48	<48	---
TPH-D	<76	<75	84	---
TPH-S	<95	<94	<94	---
B	<0.2	<0.5	<0.5	---
T	<0.2	<0.7	<0.7	---
E	<0.2	<0.8	<0.8	---
X	<0.6	<0.8	<0.8	---
MTBE	<0.3	<0.5	1	---

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-3	µg/L	µg/L	µg/L	µg/L
TPH-B	<48	<48	<48	<48
TPH-D	<77	<76	<76	<76
TPH-S	<95	<95	<95	<95
B	<0.2	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.8	<0.8	<0.8	<0.8
MTBE	<0.3	<0.5	<0.5	<0.5

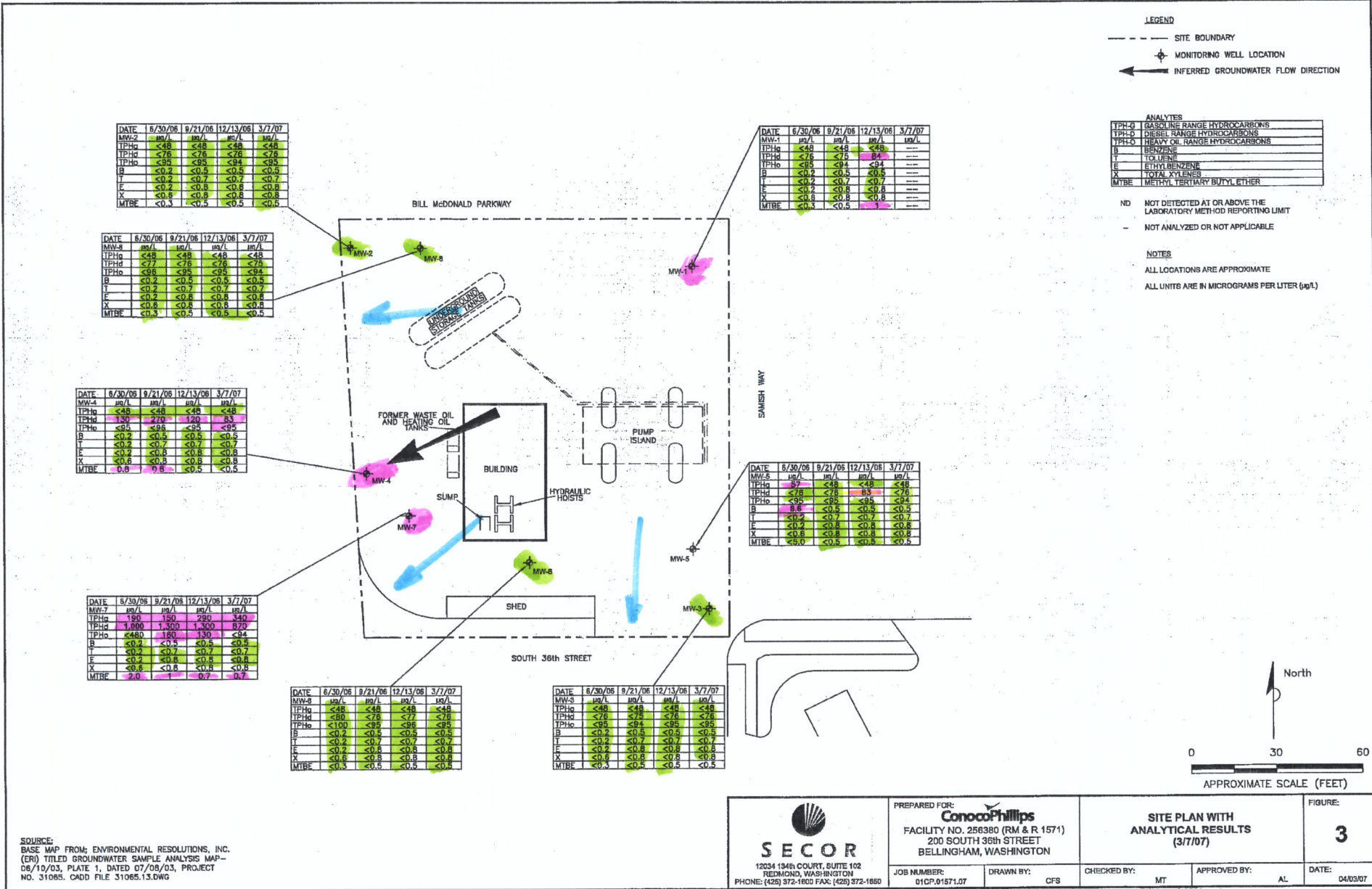
DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-4	µg/L	µg/L	µg/L	µg/L
TPH-B	<48	<48	<48	<48
TPH-D	130	719	109	63
TPH-S	<95	<95	<95	<95
B	<0.2	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.6	<0.8	<0.8	<0.8
MTBE	0.8	9.8	<0.5	<0.5

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-5	µg/L	µg/L	µg/L	µg/L
TPH-B	87	<48	<48	<48
TPH-D	<76	<75	83	<76
TPH-S	<95	<95	<95	<94
B	8.8	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.6	<0.8	<0.8	<0.8
MTBE	<0.3	<0.5	<0.5	<0.5

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-7	µg/L	µg/L	µg/L	µg/L
TPH-B	180	180	280	340
TPH-D	1,000	1,300	1,300	870
TPH-S	<480	180	130	<84
B	<0.2	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.8	<0.8	<0.8	<0.8
MTBE	2.0	1	0.7	0.7

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-8	µg/L	µg/L	µg/L	µg/L
TPH-B	<48	<48	<48	<48
TPH-D	<80	<76	<77	<76
TPH-S	<100	<95	<95	<95
B	<0.2	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.8	<0.8	<0.8	<0.8
MTBE	<0.3	<0.5	<0.5	<0.5

DATE	6/30/06	9/21/06	12/13/06	3/7/07
MW-9	µg/L	µg/L	µg/L	µg/L
TPH-B	<48	<48	<48	<48
TPH-D	<76	<75	<76	<76
TPH-S	<95	<94	<95	<95
B	<0.2	<0.5	<0.5	<0.5
T	<0.2	<0.7	<0.7	<0.7
E	<0.2	<0.8	<0.8	<0.8
X	<0.6	<0.8	<0.8	<0.8
MTBE	<0.3	<0.5	<0.5	<0.5



SOURCE:
BASE MAP FROM: ENVIRONMENTAL RESOLUTIONS, INC.
(ER) TITLED GROUNDWATER SAMPLE ANALYSIS MAP-
06/10/03, PLATE 1, DATED 07/08/03, PROJECT
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 12034 134th COURT, SUITE 102 REDMOND, WASHINGTON PHONE: (425) 372-1600 FAX: (425) 372-1660	PREPARED FOR: ConocoPhillips FACILITY NO. 256380 (RM & R 1571) 200 SOUTH 36th STREET BELLINGHAM, WASHINGTON	SITE PLAN WITH ANALYTICAL RESULTS (3/7/07)		FIGURE: 3
	JOB NUMBER: 01CP.01571.07	DRAWN BY: CFS	CHECKED BY: MT	APPROVED BY: AL

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TABLE

**TABLE 1
GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**

ConocoPhillips Facility No. 256380 (RM&R 1571)
200 South 36th Street
Bellingham, Washington

Well Name	Sample Date	Depth to Water	GW Elevation	Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Lead
				Gasoline Range	Diesel Range	Heavy Range	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	Total Pb
MW-1 98.49	06/30/06	8.88	89.61	<48	<76	<95	<0.2	<0.2	<0.2	<0.6	1.3	--
	09/21/06	6.13	92.36	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	<6.9
	12/13/06	5.75	92.74	<48	84	<94	<0.5	<0.7	<0.8	<0.8	1	--
	03/07/07	Unable to sample; Public Works truck parked over well.						--	--	--	--	--
MW-2 100.74	06/30/06	8.71	92.03	<48	<76	<95	<0.2	<0.2	<0.2	<0.6	<0.3	--
	09/21/06	9.00	91.74	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<6.9
	12/13/06	7.80	92.94	<48	<76	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
	03/07/07	7.80	92.94	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
MW-3 97.84	06/30/06	5.40	92.44	<48	<76	<95	<0.2	<0.2	<0.2	<0.6	<0.3	--
	09/21/06	5.51	92.33	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	<6.9
	12/13/06	4.75	93.09	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
	03/07/07	4.42	93.42	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
MW-4 99.44	06/30/06	6.80	92.64	<48	130	<95	<0.2	<0.2	<0.2	<0.6	0.8	--
	09/21/06	7.20	92.24	<48	270	<96	<0.5	<0.7	<0.8	<0.8	0.8	<6.9
	12/13/06	5.86	93.58	<48	120	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
	03/07/07	5.81	93.63	<48	83	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
MW-5 101.14	06/30/06	4.46	96.68	57	<76	<95	8.6	<0.2	<0.2	<0.6	<5.0	--
	09/21/06	4.85	96.29	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<6.9
	12/13/06	4.98	96.16	<48	83	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
	03/07/07	3.48	97.66	<48	<76	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
MW-6 99.74	06/30/06	6.50	93.24	<48	<80	<100	<0.2	<0.2	<0.2	<0.6	<0.3	--
	09/21/06	6.39	93.35	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<6.9
	12/13/06	4.98	94.76	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	--
	03/07/07	5.08	94.66	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--

**TABLE 1
GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**

ConocoPhillips Facility No. 256380 (RM&R 1571)
200 South 36th Street
Bellingham, Washington

Well Name	Sample Date	Depth to Water	GW Elevation	Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Lead
				Gasoline Range	Diesel Range	Heavy Range	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE	Total Pb
MW-7	06/30/06	7.31	92.33	190	1,000	<480	0.2	<0.2	<0.2	<0.6	2.0	--
99.64	09/21/06	7.56	92.08	150	1,300	160	<0.5	<0.7	<0.8	<0.8	1	<6.9
	12/13/06	6.05	93.59	290	1,300	130	<0.5	<0.7	<0.8	<0.8	0.7	--
	03/07/07	6.00	93.64	340	870	<94	<0.5	<0.7	<0.8	<0.8	0.7	--
MW-8	06/30/06	7.97	94.73	<48	<77	<96	<0.2	<0.2	<0.2	<0.6	<0.3	--
102.7	09/21/06	8.42	94.28	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	<6.9
	12/13/06	7.10	95.60	<48	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--
	03/07/07	6.93	95.77	<48	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--
MTCA Method A Cleanup Levels				1000/800^a	500	500	5	1000	700	1000	20	15

NOTES:

All concentrations are in µg/L (ppb).

Wellhead elevations were taken from prior consultants reports.

DTW = Depth to water in feet below top of casing.

GW Elev. = Groundwater elevation relative to top of casing elevation.

TPH-g = Gasoline range hydrocarbons by Ecology Method NWTPH-Gx.

TPH-d and TPH-o = Diesel and heavy oil range hydrocarbons, respectively, by Ecology Method NWTPH-Dx.

BTEX by EPA Method 5030/8260B.

Total lead by ICP-US EPA Method 6010.

-- = Not Analyzed or Sampled.

< = Less than the stated laboratory reporting limit.

Bolded values equal or exceed MTCA Method A Cleanup Levels.

^a Cleanup levels stated by MTCA Method A for TPH-G are 1000 µg/L when no benzene is present and 800 µg/L when benzene is present.

**ATTACHMENT A
LABORATORY ANALYTICAL REPORT
AND CHAIN-OF-CUSTODY RECORD**



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

ANALYTICAL RESULTS

Prepared for:

ConocoPhillips
1230 West Washington Street
Suite 212
Tempe AZ 85281

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1028473. Samples arrived at the laboratory on Thursday, March 08, 2007. The PO# for this group is 4506583796 and the release number is TROTTER.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
MW-8 Grab Water Sample	5000107
MW2 Grab Water Sample	5000108
MW4 Grab Water Sample	5000109
MW-7 Grab Water Sample	5000110
MW-6 Grab Water Sample	5000111
MW3 Grab Water Sample	5000112
MW-5 Grab Water Sample	5000113
Trip Blank Water Sample	5000114

ELECTRONIC COPY TO SECOR International
ELECTRONIC COPY TO SECOR International

Attn: Tammy Parise

Attn: Meredith Redmon



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2881 • www.lancasterlabs.com

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300

Respectfully Submitted,

A handwritten signature in cursive script that reads "Marla S. Lord".

Marla S. Lord
Senior Specialist



Analysis Report

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Page 1 of 1

Lancaster Laboratories Sample No. WW 5000109

MW4 Grab Water Sample
 Site# 1571 (256380)
 200 S 36th St-Bellingham, WA
 Collected: 03/07/2007 11:37

by TP

Account Number: 11817

Submitted: 03/08/2007 09:45
 Reported: 03/20/2007 at 14:18
 Discard: 04/20/2007

ConocoPhillips
 1230 West Washington Street
 Suite 212
 Tempe AZ 85281

36B04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	83.	76.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	95.	ug/l	1
08273	TPH by NWTTPH-Gx waters					
01645	TPH by NWTTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
02211	TPH by NWTTPH-Dx(water) w/SiGel	ECY 97-602 NWTTPH-Dx modified	1	03/15/2007 21:21	Matthew E Barton	1
08273	TPH by NWTTPH-Gx waters	ECY 97-602 NWTTPH-Gx modified	1	03/09/2007 12:38	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 19:03	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 12:38	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 19:03	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5000107

MW-8 Grab Water Sample

Site# 1571 (256380)

200 S 36th St-Bellingham, WA

Collected: 03/07/2007 10:32 by TP

Account Number: 11817

Submitted: 03/08/2007 09:45

Reported: 03/20/2007 at 14:18

Discard: 04/20/2007

ConocoPhillips

1230 West Washington Street

Suite 212

Tempe AZ 85281

36B08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	75.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	94.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	03/15/2007 20:42	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	03/09/2007 11:33	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 18:16	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 11:33	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 18:16	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5000110

MW-7 Grab Water Sample
 Site# 1571 (256380)
 200 S 36th St-Bellingham, WA
 Collected: 03/07/2007 12:10

by TP

Account Number: 11817

Submitted: 03/08/2007 09:45
 Reported: 03/20/2007 at 14:18
 Discard: 04/20/2007

ConocoPhillips
 1230 West Washington Street
 Suite 212
 Tempe AZ 85281

36B07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	870.	75.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	94.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	340.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	0.7	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	03/15/2007 21:40	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	03/09/2007 13:11	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 19:26	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 13:11	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 19:26	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5000111

MW-6 Grab Water Sample
 Site# 1571 (256380)
 200 S 36th St-Bellingham, WA
 Collected: 03/07/2007 12:45

by TP.

Account Number: 11817

Submitted: 03/08/2007 09:45
 Reported: 03/20/2007 at 14:18
 Discard: 04/20/2007

ConocoPhillips
 1230 West Washington Street
 Suite 212
 Tempe AZ 85281

36B06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	76.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	95.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	03/15/2007 22:00	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	03/09/2007 13:43	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 19:49	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 13:43	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 19:49	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



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Lancaster Laboratories Sample No. WW 5000113

MW-5 Grab Water Sample
 Site# 1571 (256380)
 200 S 36th St-Bellingham, WA
 Collected: 03/07/2007 13:49

by TP

Account Number: 11817

Submitted: 03/08/2007 09:45
 Reported: 03/20/2007 at 14:18
 Discard: 04/20/2007

ConocoPhillips
 1230 West Washington Street
 Suite 212
 Tempe AZ 85281

36B05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	76.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	94.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	03/15/2007 22:58	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	03/09/2007 14:48	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 21:22	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 14:48	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 21:22	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



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Lancaster Laboratories Sample No. WW 5000112

MW3 Grab Water Sample
 Site# 1571 (256380)
 200 S 36th St-Bellingham, WA
 Collected: 03/07/2007 13:17

by TP

Account Number: 11817

Submitted: 03/08/2007 09:45
 Reported: 03/20/2007 at 14:18
 Discard: 04/20/2007

ConocoPhillips
 1230 West Washington Street
 Suite 212
 Tempe AZ 85281

36B03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	76.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	95.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	03/15/2007 22:39	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	03/09/2007 14:15	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 20:13	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 14:15	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 20:13	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



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Lancaster Laboratories Sample No. WW 5000108

MW2 Grab Water Sample
 Site# 1571 (256380)
 200 S 36th St-Bellingham, WA
 Collected: 03/07/2007 11:02

by TP

Account Number: 11817

Submitted: 03/08/2007 09:45
 Reported: 03/20/2007 at 14:18
 Discard: 04/20/2007

ConocoPhillips
 1230 West Washington Street
 Suite 212
 Tempe AZ 85281

36B02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	76.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	95.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis			Dilution Factor
			Trial#	Date and Time	Analyst	
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	03/15/2007 21:01	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	03/09/2007 12:06	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 18:39	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 12:06	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 18:39	Ryan V Nolt	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	03/15/2007 11:00	Mariam G Attalla	1



Analysis Report

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Lancaster Laboratories Sample No. WW 5000114

Trip Blank Water Sample
Site# 1571 (256380)
200 S 36th St-Bellingham, WA
Collected: 03/07/2007

Account Number: 11817

Submitted: 03/08/2007 09:45
Reported: 03/20/2007 at 14:18
Discard: 04/20/2007

ConocoPhillips
1230 West Washington Street
Suite 212
Tempe AZ 85281

36BTB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
08273	TPH by NWTPE-Gx waters					
01645	TPH by NWTPE-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	GC/MS Volatiles					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08273	TPH by NWTPE-Gx waters	ECY 97-602 NWTPE-Gx modified	1	03/09/2007 11:01	Steven A Skiles	1
02300	GC/MS Volatiles	SW-846 8260B	1	03/13/2007 21:46	Ryan V Nolt	1
01146	GC VOA Water Prep	SW-846 5030B	1	03/09/2007 11:01	Steven A Skiles	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	03/13/2007 21:46	Ryan V Nolt	1

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 03/20/07 at 02:18 PM

Group Number: 1028473

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 07064A07C TPH by NWTPH-Gx waters	N.D.	48.	ug/l	109	116	75-135	6	30
Batch number: 070730021A Diesel Range Organics Heavy Range Organics	N.D.	80. 100.	ug/l	74	79	61-106	7	20
Batch number: T070721AA Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	N.D.	0.5 0.5 0.7 0.8 0.8	ug/l	97 104 104 103 102		73-119 78-119 85-115 82-119 83-113		

Sample Matrix Quality Control

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

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 07064A07C TPH by NWTPH-Gx waters	124	124	63-154			UNSPK: 5000107			
Batch number: T070721AA Methyl Tertiary Butyl Ether Benzene Toluene Ethylbenzene Xylene (Total)	104 120 113 113 111	105 118 113 112 112	69-127 83-128 83-127 82-129 82-130	1 2 0 1 1	30 30 30 30 30	UNSPK: 5000107			

Surrogate Quality Control

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

Analysis Name: TPH by NWTPH-Gx waters
 Batch number: 07064A07C
 Trifluorotoluene-F

5000107	101
5000108	98

*- Outside of specification

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

Quality Control Summary

 Client Name: ConocoPhillips
 Reported: 03/20/07 at 02:18 PM

Group Number: 1028473

Surrogate Quality Control

5000109	97
5000110	101
5000111	99
5000112	98
5000113	98
5000114	100
Blank	102
LCS	109
LCSD	109
MS	106

Limits: 63-135

 Analysis Name: TPH by NWTPH-Dx(water) w/SiGel
 Batch number: 070730021A
 Orthoterphenyl

5000107	99
5000108	80
5000109	90
5000110	97
5000111	96
5000112	87
5000113	89
Blank	103
LCS	99
LCSD	103

Limits: 50-150

 Analysis Name: UST-Unleaded Waters by 8260B
 Batch number: T070721AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5000107	97	94	91	85
5000108	99	94	91	84
5000109	99	94	92	85
5000110	99	94	90	87
5000111	98	94	93	86
5000112	100	93	92	86
5000113	96	95	93	85
5000114	98	93	93	87
Blank	96	94	97	88
LCS	92	92	96	89
MS	95	94	94	90
MSD	95	97	95	91

Limits: 80-116 77-113 80-113 78-113

*- Outside of specification

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

ConocoPhillips Analysis Request/Chain of Custody



006706

For Lancaster Labs Use ONLY Acct. #: 11817 Group # 1028473 Sample#: 45000107-14 SCR#: _____

Site #: 256380 AOC#: _____
 Site City: Bellingham State: WA
 Enfos PO#: 4506583796
 ConocoPhillips PM: J. Trates
 Samplers Name: Tammy Parise

List total number of containers in the box under each analysis.

Analyses Requested

Preservation Codes

Preservative Codes
 H = HCl T = Thiosulfate
 N = HNO₃ B = NaOH
 S = H₂SO₄ O = Other

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix			Analyses Requested										Remarks								
					Soil	Water	Air	1	2	3	4	5	6	7	8	9	10		11	12						
MW-8	3/7/07	10:32																								
MW-2		11:02																								
MW-4		11:37																								
MW-7		12:10																								
MW-6		12:45																								
MW-3		1:17																								
MW-5		1:49																								
Trip blanks																										

Consultant Information:
 Office City: Redmond State: WA
 Project Manager: MARC SUMER
 Phone Number: 372-1680 Fax: 372-1650
 Email: msumer@scior.com

Turnaround Time Requested in Business Days (TAT) (Circle One):
 STD 5 day 48 hour 24 hour Other _____

Electronic Data Deliverables (Circle One) Yes / No Format _____
 Reporting Requirements (Circle One)
 Standard Reports/QC Summary Full Validation (LLI Type I)
 NJ Regulatory NJ Reduced NY ASP-A NY ASP-B Other _____

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Tammy Parise</u>	<u>3/7/07</u>	<u>3:00</u>	<u>[Signature]</u>	<u>3/7/07</u>	<u>09:15</u>
Relinquished by:	Date	Time	Received by:	Date	Time
			<u>[Signature]</u>	<u>3/7/07</u>	<u>09:15</u>
Relinquished by Commercial Carrier:	UPS _____ FedEx <input checked="" type="checkbox"/> Other _____		Temperature Upon Receipt <u>1.5-7.0</u> °C		

Lancaster Laboratories Explanation of Symbols and Abbreviations

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

N.D.	none detected	BMQL	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	MPN	Most Probable Number
IU	international Units	CP Units	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	NTU	nephelometric turbidity units
C	degrees Celsius	F	degrees Fahrenheit
Cal	(diet) calories	lb.	pound(s)
meq	milliequivalents	kg	kilogram(s)
g	gram(s)	mg	milligram(s)
ug	microgram(s)	l	liter(s)
ml	milliliter(s)	ul	microliter(s)
m3	cubic meter(s)	fib >5 um/ml	fibers greater than 5 microns in length per ml
<	less than – The number following the sign is the <u>limit of quantitation</u> , the smallest amount of analyte which can be reliably determined using this specific test.		
>	greater than		
ppm	parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.		

U.S. EPA data qualifiers:

Organic Qualifiers	Inorganic Qualifiers		
A	TIC is a possible aldol-condensation product	B	Value is <CRDL, but ≥IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike amount not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
J	Estimated value	U	Compound was not detected
N	Presumptive evidence of a compound (TICs only)	W	Post digestion spike out of control limits
P	Concentration difference between primary and confirmation columns >25%	*	Duplicate analysis not within control limits
U	Compound was not detected	+	Correlation coefficient for MSA <0.995
X,Y,Z	Defined in case narrative		

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

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**ATTACHMENT B
SECOR MONITORING WELL GAUGING, PURGING AND
SAMPLING PROCEDURES
GROUNDWATER MONITORING FIELD DATA RECORDS**

SECOR MONITORING WELL GAUGING, PURGING AND SAMPLING PROCEDURES

Monitoring well purging and sampling was conducted based on USEPA approved (Puls and Barcelona, 1996) low-flow sampling techniques whenever possible.

Purging Procedures

- A. Using a decontaminated instrument (i.e., tape measure, continuity meter, or interface probe) measure the depth to groundwater in reference to the measuring point at the top of the casing. Measure the total depth of the well and diameter of the well casing to calculate the volume of water in the well casing.
- B. Based on previously obtained data, if a monitoring well is suspected of containing LPH concentrations, lower a transparent bailer into the well to evaluate the presence of a hydrocarbon sheen on the water table.
- C. Decontaminate the purge pump and/or PVC bailers by scrubbing in Alconox detergent solution, followed by a tap water rinse and then a de-ionized water rinse.
- D. Purge by low-flow pumping (less than 0.5 liters per minute) for approximately five minutes. Monitor the static water level in the well using a decontaminated instrument and adjust the pumping rate to maintain a minimal drawdown. If low-flow purging is not possible and bailing is used to purge the well, then a minimum of three well volumes will be removed. When purging 3 well volumes, parameters should be measured after each casing volume is removed. If the well goes dry, the procedure listed in step E2 (below) should be followed.
- E. Conduct field measurements (i.e., pH, specific conductivity, temperature, and oxidation-reduction potential) note clarity, color, turbidity, and odor of purge water, and measure depth to groundwater.
 1. If the well has not been purged dry and drawdown is minimal, continue to pump and conduct field measurements (including depth to water) again every three to five minutes during purging.
 - a) If the first through third series of measurements vary by less than 10 percent, the well has been adequately purged. If bailers are used to purge the well, then the water level is allowed to recover to 80 percent of its static condition, or for two hours, whichever comes first prior to beginning the sampling procedure.
 - b) If the measurements vary by 10 percent or greater, repeat Step E1 above.
 - c) If a minimum of three parameters cannot be measured during purging and or drawdown cannot be controlled to minimal, remove three well volumes with a bailer prior to sampling.
 2. If the well has been purged dry, measure the water level and allow the well to recharge to 80 percent, or for two hours, whichever occurs first. Calculate the percent recovery, and begin the sampling procedure.

Sampling Procedures

- Use the pump and a clean, dedicated section of tubing to collect the groundwater sample from the screened interval of the water column. If the pump cannot be used, collect the water sample with a clean, dedicated polyethylene disposable bailer.
- Transfer the groundwater sample into the appropriate container(s). Where applicable, some containers are completely filled to achieve zero headspace. Label the samples according to location and date of collection.
- Enter the samples into Chain-of-Custody and preserve on ice until delivery to the analytical laboratory. Complete the Well Development or Purging/Sampling Log to be stored in the project file.

Reference:

Puls, R.W., and Barcelona M.J., 1996. EPA Ground Water Issue Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures, EPA/540/S-95/504.

SECOR

DAILY FIELD LOG

Page: 1 of 1
Date: 3/7/07

Client: ConocoPhillips	Site No: 256380	Project No: 01CP.01571.02/7
Scope of Work: <input checked="" type="checkbox"/> Quarter Monitoring/Sampling		
Describe Daily Activities:		
Gauged <u>7</u> monitoring wells. Purged <u>7</u> monitoring wells. Sampled <u>7</u> monitoring wells.	Number of drums left on site: <u>0</u>	
Field Notes: 9:10 Check in w/ Meredith + station employee Go over HASP, apply PPE + rain gear Set up decon + begin gauging 10:52 Sampled MW-8 11:02 Sampled MW-2 11:37 Sampled MW-4 12:10 Sampled MW-7 12:45 Sampled MW-6 1:17 Sampled MW-3 1:49 Sampled MW-5 Decon equipment + pack up Empty purge water into drums Arrived on Site: <u>9:10</u>		
Access denied unable to gauge & sample MW1, Public works - City of Bellingham truck and trailer parked + left on well monument Pack samples on ice Check in w/ Meredith + Station Remove PPE + depart Departed Site: <u>3:00</u>		
Decontamination Procedures: 3-Stage (Alconox Wash, Tap Water Rinse, & Distilled Water Rinse)		
Daily Health and Safety Log Completed?: <u>Yes</u>		Utility Locations Checked?: <u>N/A</u>
Important Conversations: <u>No</u>		
Important Changes in Scope of Work: <u>No</u>		
Weather Conditions: <u>50°F rain</u>		Subcontractors On Site: <u>ND</u>
SECOR Personnel On Site: <u>TAMMARA PARISE</u>		
Signed: <u>Tammara Parise</u>		Date: <u>3/7/07</u>

SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: ENFOS PO# 4506583796 DATE: 3/7/07 WELL NO. MW2

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C
FIELD PERSONNEL: Tammv Parise WEATHER: RAIN + SUN

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 7.80 FT. or IN.
- B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
- C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
- D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.
- E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	3 Well Vols.	5 Well Vols.	
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water _____ = _____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water _____ = _____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water _____ = _____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 10:50 END: 11:17

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct.	SWL
1 st Volume:	<u>10:55</u>	<u>C</u>	<u>270</u>	<u>32</u>	<u>7.39</u>	<u>4.57</u>	<u>10.39</u>	<u>0.559</u>	<u>7.66</u>
2 nd Volume:	<u>10:58</u>	<u>C</u>	<u>300</u>	<u>35</u>	<u>7.20</u>	<u>4.42</u>	<u>10.33</u>	<u>0.569</u>	<u>7.66</u>
3 rd Volume:	<u>11:01</u>	<u>O</u>	<u>280</u>	<u>36</u>	<u>7.11</u>	<u>3.97</u>	<u>10.25</u>	<u>0.567</u>	<u>7.66</u>
4 th Volume:									
Addl. Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: .25 gallons
PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 7.66

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW2</u>	<u>11:02</u>	<u>6 voas</u>	<u>HCL</u>
		<u>1 amber</u>	<u>HCL</u>

COMMENTS:

Casing Capacities:
2-inch hole.....0.16 gal/in ft.
4-inch hole.....0.65 gal/in ft.
6.5-inch hole.....1.70 gal/in ft.
8-inch hole.....2.60 gal/in ft.
10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
Original Water Column: _____ x 0.80 = _____
Collect sample when Depth to Water measures
Less than or equal to:

SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: ENPOS PO# 4506583796 DATE: 3/7/07 WELL NO. MW3

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C
FIELD PERSONNEL: Tammy Parise WEATHER: raining

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 4.42 FT. or IN.
- B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
- C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
- D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>	
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water = _____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water = _____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water = _____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 1:05 END: 1:31

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct.	SWL
1 st Volume:	<u>1:10</u>	<u>C</u>	<u>290</u>	<u>-63</u>	<u>7.26</u>	<u>5.10</u>	<u>9.85</u>	<u>0.801</u>	<u>4.42</u>
2 nd Volume:	<u>1:13</u>	<u>C</u>	<u>340</u>	<u>-62</u>	<u>7.20</u>	<u>4.98</u>	<u>9.30</u>	<u>0.785</u>	<u>4.42</u>
3 rd Volume:	<u>1:16</u>	<u>C</u>	<u>370</u>	<u>-62</u>	<u>7.15</u>	<u>4.52</u>	<u>9.53</u>	<u>0.785</u>	<u>4.42</u>
4 th Volume:									
Addl Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: .25 gallons
PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 4.42

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW3</u>	<u>1:17</u>	<u>6 voas</u>	<u>HCL</u>
		<u>1 amber</u>	<u>HCL</u>

COMMENTS:

Casing Capacities:
2-inch hole.....0.16 gal/in ft.
4-inch hole.....0.65 gal/in ft.
6.5-inch hole.....1.70 gal/in ft.
8-inch hole.....2.60 gal/in ft.
10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:
Total Depth of Well: _____
Original Water Column: _____ x 0.80 = _____
Collect sample when Depth to Water measures
Less than or equal to:

SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: ENFOS PO# 4506583796 DATE: 3/7/07 WELL NO. AW4

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C
FIELD PERSONNEL: Tammy Parise WEATHER: RAINING

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 5.81 FT. or IN.
- B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
- C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
- D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>	
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water _____ = _____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water _____ = _____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water _____ = _____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 11:25 END: 11:51
Or 6:02

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct.	SWL
1 st Volume:	<u>11:30</u>	<u>C</u>	<u>430</u>	<u>16</u>	<u>6.89</u>	<u>5.68</u>	<u>9.97</u>	<u>6.592</u>	<u>5.85</u>
2 nd Volume:	<u>11:33</u>	<u>C</u>	<u>420</u>	<u>19</u>	<u>6.84</u>	<u>4.77</u>	<u>9.85</u>	<u>6.594</u>	<u>5.85</u>
3 rd Volume:	<u>11:36</u>	<u>C</u>	<u>340</u>	<u>22</u>	<u>6.78</u>	<u>4.29</u>	<u>9.80</u>	<u>1.590</u>	<u>5.85</u>
4 th Volume:									
Addl. Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: .25 gallons
PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 5.85

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>AW4</u>	<u>11:37</u>	<u>6 voas</u>	<u>HCL</u>
		<u>1 amber</u>	<u>HCL</u>

COMMENTS:

Casing Capacities:
2-inch hole.....0.16 gal/in ft.
4-inch hole.....0.65 gal/in ft.
6.5-inch hole.....1.70 gal/in ft.
8-inch hole.....2.60 gal/in ft.
10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:
Total Depth of Well:
Original Water Column: _____ x 0.80 = ---
Collect sample when Depth to Water measures
Less than or equal to:

SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: ENFOS PO# 4506583796 DATE: 3/7/07 WELL NO. MW-5

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C
FIELD PERSONNEL: Tammy Parise WEATHER: raining

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 3.48 FT. or IN.
B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.
E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	3 Well Vols.	5 Well Vols.		
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water	= _____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water	= _____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water	= _____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 1:37 END: 2:05

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct.	SWL
1 st Volume:	<u>1:42</u>	<u>C</u>	<u>180</u>	<u>-34</u>	<u>7.03</u>	<u>4.88</u>	<u>9.87</u>	<u>0.781</u>	<u>3.84</u>
2 nd Volume:	<u>1:45</u>	<u>C</u>	<u>200</u>	<u>-31</u>	<u>7.03</u>	<u>4.48</u>	<u>9.84</u>	<u>0.786</u>	<u>3.83</u>
3 rd Volume:	<u>1:48</u>	<u>C</u>	<u>190</u>	<u>-29</u>	<u>6.98</u>	<u>3.97</u>	<u>9.73</u>	<u>0.784</u>	<u>3.83</u>
4 th Volume:									
Addl. Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: 25 gallons
PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 3.83

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW-5</u>	<u>1:49</u>	<u>6 voas</u>	<u>HCL</u>
		<u>1 amber</u>	<u>HCL</u>

COMMENTS:

Casing Capacities:
2-inch hole.....0.16 gal/lin ft.
4-inch hole.....0.65 gal/lin ft.
6.5-inch hole.....1.70 gal/lin ft.
8-inch hole.....2.60 gal/lin ft.
10-inch hole.....4.10 gal/lin ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
Original Water Column: _____ x 0.80 = _____
Collect sample when Depth to Water measures
Less than or equal to:

**SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET**

SECOR PN: ENFOS PO# 4506583796 DATE: 3/7/07 WELL NO. MW-6

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C
 FIELD PERSONNEL: Tammy Parise WEATHER: raining

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 5.08 ~~4.45~~ FT. or IN.
 B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
 C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
 D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.
 E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	3 Well Vols.	5 Well Vols.			
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water	=	_____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water	=	_____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water	=	_____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 10:30 END: 10:53

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct	SWL
1 st Volume:	<u>12:35</u>	<u>C</u>	<u>150</u>	<u>-63</u>	<u>7.18</u>	<u>4.43</u>	<u>9.51</u>	<u>0.545</u>	<u>5.16</u>
2 nd Volume:	<u>12:38</u>	<u>C</u>	<u>150</u>	<u>-60</u>	<u>7.12</u>	<u>4.91</u>	<u>9.55</u>	<u>0.794</u>	<u>5.25</u>
3 rd Volume:	<u>12:41</u>	<u>C</u>	<u>150</u>	<u>-61</u>	<u>7.19</u>	<u>4.60</u>	<u>9.53</u>	<u>0.708</u>	<u>5.15</u>
4 th Volume:	<u>12:44</u>	<u>C</u>	<u>150</u>	<u>-59</u>	<u>7.20</u>	<u>4.17</u>	<u>9.50</u>	<u>0.727</u>	<u>5.15</u>
Addl. Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: .25 gallons
 PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 5.15

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW-6</u>	<u>12:45</u>	<u>6 voas</u>	<u>HCL</u>
_____	_____	<u>1 amber</u>	<u>HCL</u>
_____	_____	_____	_____

COMMENTS: I took an additional reading to stabilize conductivity.

Casing Capacities:
 2-inch hole.....0.16 gal/in ft.
 4-inch hole.....0.65 gal/in ft.
 6.5-inch hole.....1.70 gal/in ft.
 8-inch hole.....2.60 gal/in ft.
 10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well: _____
 Original Water Column: _____ x 0.80 = _____
 Collect sample when Depth to Water measures
Less than or equal to:

SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: ENFOS PO# 4506583796 DATE: 3/7/07 WELL NO. MW-7

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C
FIELD PERSONNEL: Tammy Parise WEATHER: raining

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 6.0 FT. or IN.
- B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
- C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
- D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.
- E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	<u>3 Well Vols.</u>	<u>5 Well Vols.</u>	
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water _____ = _____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water _____ = _____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water _____ = _____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 11:58 END: 12:24

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct.	SWL
1 st Volume:	<u>12:03</u>	<u>C</u>	<u>180</u>	<u>-709</u>	<u>7.17</u>	<u>4.98</u>	<u>9.39</u>	<u>0.752</u>	<u>6.05</u>
2 nd Volume:	<u>12:05</u>	<u>C</u>	<u>170</u>	<u>-113</u>	<u>7.19</u>	<u>4.66</u>	<u>9.32</u>	<u>0.751</u>	<u>6.05</u>
3 rd Volume:	<u>12:09</u>	<u>C</u>	<u>150</u>	<u>-117</u>	<u>7.18</u>	<u>3.95</u>	<u>9.23</u>	<u>0.744</u>	<u>6.05</u>
4 th Volume:									
Addl. Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: .25 gallons
PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 6.05

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW-7</u>	<u>12:10</u>	<u>6 voas</u>	<u>HCL</u>
		<u>1 amber</u>	<u>HCL</u>

COMMENTS:

Casing Capacities:
2-inch hole.....0.16 gal/in ft.
4-inch hole.....0.65 gal/in ft.
6.5-inch hole.....1.70 gal/in ft.
8-inch hole.....2.60 gal/in ft.
10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:

Total Depth of Well:
Original Water Column: _____ x 0.80 = -(_____)
Collect sample when Depth to Water measures
Less than or equal to:

SECOR
GROUNDWATER SAMPLING FIELD DATA SHEET

SECOR PN: ENFOS PO# 4506583796 DATE: 3/7/07 WELL NO. MW-8

FACILITY NAME: 256380 TEMPERATURE: 50 °F or °C

FIELD PERSONNEL: Tammy Parise WEATHER: raining

FIELD MEASUREMENTS:

- A. Static Water Level (SWL) below top of casing/piezometer: 6.93 FT. or IN.
- B. Thickness of Free Product, if present: _____ Inches _____ FT. or IN.
- C. Total Depth of well (TD) from top of casing/piezometer: _____ FT. or IN.
- D. Height of Water Column in casing (h = TD - SWL): _____ FT. or IN.

E. Useful approximate Purge Volumes (PV) per foot of water column for common casing sizes:

	3 Well Vols.	5 Well Vols.	
2" Diameter =	0.5 gals/ft	0.82 gals/ft	x feet of water = _____ PV (Gal)
4" Diameter =	2.0 gals/ft	3.25 gals/ft	x feet of water = _____ PV (Gal)
6" Diameter =	4.4 gals/ft	7.35 gals/ft	x feet of water = _____ PV (Gal)

PURGING METHOD: LOW FLOW DURATION: START: 10:20 END: 10:45

OBSERVATIONS:	Time	Color	Turbidity	ORP	pH	DO	Temp.	Conduct.	SWL
1 st Volume:	<u>10:25</u>	<u>C</u>	<u>310</u>	<u>11</u>	<u>7.0</u>	<u>4.78</u>	<u>10.99</u>	<u>6.93</u>	<u>7.05</u>
2 nd Volume:	<u>10:28</u>	<u>C</u>	<u>250</u>	<u>6</u>	<u>7.07</u>	<u>4.34</u>	<u>10.89</u>	<u>6.93</u>	<u>7.06</u>
3 rd Volume:	<u>10:31</u>	<u>C</u>	<u>210</u>	<u>7</u>	<u>7.13</u>	<u>3.77</u>	<u>10.77</u>	<u>6.94</u>	<u>7.07</u>
4 th Volume:									
Addl. Volumes:									

TOTAL VOLUME OF WATER PURGED FROM WELL: .25 gallons
PURGE WATER STORED/DISPOSED OF WHERE/HOW: Taken offsite

SAMPLES COLLECTED: Depth to Water at time of sample collection: 7.07

Sample Number(s)	Time	Size/Number of Container(s)	Preservative
<u>MW-8</u>	<u>10:32</u>	<u>6 voas</u>	<u>HCL</u>
_____	_____	<u>1 amber</u>	<u>HCL</u>
_____	_____	_____	_____

COMMENTS:

Casing Capacities:
2-inch hole.....0.16 gal/in ft.
4-inch hole.....0.65 gal/in ft.
6.5-inch hole.....1.70 gal/in ft.
8-inch hole.....2.60 gal/in ft.
10-inch hole.....4.10 gal/in ft.

Recharge Calculation at Time of Sample Collection:
Total Depth of Well: _____
Original Water Column: _____ x 0.80 = -()
Collect sample when Depth to Water measures
Less than or equal to:



Sample Container Record

Order Number: 39954
Order Date: 02/28/2007
Page 1 of 1
Standard Frm#: 73134

Client: 11817
ConocoPhillips
WASHINGTON

Ship To:
SECOR International
12034 134th Court NE
Ste 102
Redmond, WA 98052
425-372-1600
Attn: Tammy Parise

Group: 1

Number of Sample Locations: 9
One complete set of bottles listed below must be filled for each of the 9 sample location(s).
QC type

Count	Code	Description	Preservative	Analysis Name	Hold Time
3	26	40 ml glass vial	HCl	TPH by NWTPH-Gx waters	14 days
1	29	1000 ml round amber glass	HCl	TPH by NWTPH-Dx(water) w/SIGel	14 days
3	38	40 ml glass vial (GC/MS)	HCl	GC/MS Volatiles	14 days

Group: 2

Number of Sample Locations: 1
Sample Description
Trip Blank
QC type
Trip Blank

Count	Code	Description	Preservative	Analysis Name	Hold Time
2	26	40 ml glass vial	HCl	TPH by NWTPH-Gx waters	14 days
2	38	40 ml glass vial (GC/MS)	HCl	GC/MS Volatiles	14 days

If you have any questions, please contact your Client Service Representative, Barbara Weyand: at (717) 656-2300 X 1576

Date Needed:

03/02/2007

Shipping Method

2nd Day

This order is:

Per your Request