

**QUARTERLY GROUNDWATER
MONITORING REPORT FOR**

**CONOCOPHILLIPS
COMPANY**

RM&R #1234

202 Avenue D

Snohomish, Washington



Stantec

**QUARTERLY GROUNDWATER
MONITORING REPORT FOR
CONOCOPHILLIPS
COMPANY
RM&R #1234
202 Avenue D
Snohomish, Washington**

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Stantec Consulting Corporation
12034 134th Court NE, Suite 102
Redmond, WA 98052
Tel: (425) 372-1600
Fax: (425) 372-1650

Quarterly Groundwater Monitoring Report - Second Quarter 2008
ConocoPhillips Service Station No. 254165 (RM&R #01234)
Washington Department of Ecology Voluntary Cleanup Program ID #NW1804
202 Avenue D
Snohomish, Washington 98290

Stantec Project No.:
01CP.01234.40.8521

Submitted to:
Mr. Mark Adams
Washington State Department of Ecology
3190 160th Avenue SE
Bellevue, WA 98008-5452

Submitted by:
Stantec Consulting Corporation
12034 134th Court NE, Suite 102
Redmond, WA 98052

Prepared on behalf of:
ConocoPhillips Company
Mr. Michael D. Noll
Site Manager
11921 - 185th Ave. SE, Snohomish, WA 98290

November 10, 2008

Stantec

Quarterly Groundwater Monitoring Report - Second Quarter 2008

November 7, 2008

Dear Mr. Adams:

Stantec Consulting Corporation (Stantec) is submitting this quarterly groundwater monitoring report to the Washington State Department of Ecology (DOE) Voluntary Cleanup Program (VCP) on behalf of the ConocoPhillips Company (ConocoPhillips). This report represents the results of groundwater monitoring and sampling performed by Stantec on June 16, 2008 at ConocoPhillips Service Station No. 254165 (RM&R #1234; DOE VCP #NW1804), located at 202 Avenue D, Snohomish, Washington (hereinafter referred to as the "site"). The site location is shown on Figure 1. Groundwater monitoring and sampling was completed in accordance with Stantec's protocols for groundwater monitoring events (Attachment 1).

GROUNDWATER MONITORING AND SAMPLING

On June 16, 2008, Stantec conducted second quarter 2008 groundwater monitoring and sampling at the site. Nine groundwater monitoring wells (MW-1A, MW-2, MW-6A, MW-9, and MW-11 through MW-15) were gauged and sampled. Groundwater monitoring well MW-10 (located within the intersection of Avenue D and Second Street) was not gauged or sampled this quarter due to health and safety concerns associated with traffic.

Monitoring Well Gauging

The monitoring wells were gauged for the presence of separate phase hydrocarbons (SPH) and depth to groundwater prior to the beginning of purging and sampling. SPH was not present in the groundwater monitoring wells. The depth to groundwater ranged from 4.45 feet (MW-2) to 9.05 feet (MW-13) below the top of casing (TOC). These depths to groundwater were used to calculate the groundwater elevation in each well, and these elevations were used to evaluate the groundwater flow direction and gradient. The groundwater elevation from well MW-2 was not used to evaluate the groundwater flow direction and gradient because the depth to groundwater in this well was measured after purging and sampling had been performed at other site wells (a car was initially parked over it). Well locations and groundwater flow direction are shown on Figure 2. The groundwater flow direction was evaluated to be to the south and southeast at an approximate gradient of 0.04 feet per foot (ft/ft).

Groundwater gauging data for the current quarter and the previous three quarters are summarized in Table 1. Current and historical groundwater gauging data are summarized in Table 2.

Monitoring Well Purging

Once the depth to groundwater was measured in the site wells, the wells were purged via low-flow methodology using a peristaltic pump and dedicated polyethylene tubing. Water quality parameters were measured during purging and recorded on field data sheets (Attachment 2). Approximately 0.9 liters of groundwater was purged from each well. A total of approximately 8 liters of purged groundwater and an unspecified amount of rinsate/decontamination water was stored onsite in a 55-gallon steel drum, pending laboratory characterization and offsite disposal.

Monitoring Well Sampling

Following purging operations, groundwater samples were collected using a peristaltic pump and placed into appropriate containers for the requested analyses. Samples that were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), and total petroleum hydrocarbons gasoline range organics (TPH-G) were contained in 40 milliliter (mL) volatile organic analyte vials (VOAs) and preserved with hydrochloric acid (HCl). Samples that were analyzed for total petroleum hydrocarbons diesel range organics (TPH-D) and total petroleum hydrocarbons as oil/heavy range organics (TPH-O) were contained in 1-liter amber bottles preserved with HCl.

Once the sample containers were filled and sealed, they were labeled with the site name, sample name, sample number, collection date and time, preservative used, and analyses requested. This information was included on the chain-of-custody form. The containers were placed on ice in an insulated cooler for delivery under chain-of-custody documentation to Lancaster Laboratories, located in Lancaster, Pennsylvania.

GROUNDWATER SAMPLING RESULTS**Analytical Results**

During the second quarter 2008, groundwater samples were analyzed for the presence of BTEX by Environmental Protection Agency (EPA) Method 8260B, TPH-G by the Washington DOE Method NWTPH-Gx, and TPH-D and TPH-O by Washington DOE Method NWTPH-Dx, with silica gel cleanup for TPH-D. Current groundwater analytical results are summarized in Table 1, along with the analytical results from the previous three quarters. Historical analytical results are summarized in Table 2. Analytical results for TPH-G, TPH-D, TPH-O, and BTEX are included on Figure 3 for the current quarter and the three previous quarters. A summary of the analytical results includes the following:

- TPH-G was reported in groundwater samples collected from wells MW-6A, MW-11, MW-12, and MW-13 at concentrations of 840 micrograms per liter ($\mu\text{g}/\text{L}$), 98 $\mu\text{g}/\text{L}$, 350 $\mu\text{g}/\text{L}$, and 160 $\mu\text{g}/\text{L}$, respectively. The reported concentration of TPH-G in sample MW-6A was

below the Model Toxics Control Act (MTCA) Method A cleanup level of 1,000 µg/L for TPH-G (no benzene was detected in this sample). All other sample concentrations did not exceed the respective MTCA Method A cleanup levels of 800 or 1,000 µg/L for TPH-G.

- TPH-D was reported in the groundwater sample collected from well MW-6A at a concentration of 140 µg/L. This concentration did not exceed the MTCA Method A cleanup level of 500 µg/L for TPH-D.
- Benzene was reported in groundwater sample MW-11 at a concentration of 4 µg/L. This concentration did not exceed the MTCA Method A cleanup level of 5 µg/L for benzene.
- The remaining BTEX compounds (toluene, ethylbenzene, and xylenes) were reported in wells MW-6A (1 µg/L toluene and 0.7 µg/L ethylbenzene) and MW-12 (1 µg/L ethylbenzene): These concentrations did not exceed the MTCA Method A cleanup levels of 1,000 µg/L for toluene, 700 µg/L for ethylbenzene, and 1,000 µg/L for xylenes.
- The remaining groundwater samples did not contain hydrocarbon concentrations above the laboratory reporting limits.

A copy of the certified laboratory analytical report and chain of custody documentation from Lancaster Laboratories are included as Attachment 3.

Laboratory Quality Control

The laboratory report from Lancaster Laboratories did not report quality assurance/quality control (QA/QC) issues. The analytical data can be considered valid.

WASTE DISPOSAL

Purge and rinsate water generated during the monitoring and sampling event was temporarily stored onsite in a DOT approved, labeled 55-gallon steel drum. On June 27, 2008 the 55-gallon drum was removed by General Environmental Management, Inc. for proper disposal. The manifest for the disposal of this drum will be submitted under separate cover.

CONCLUSIONS

Between the first quarter 2008 and the second quarter 2008 TPH-G, TPH-D, and benzene concentrations either decreased or remained below laboratory RLs in site groundwater monitoring wells. This is consistent with a general trend of decreasing dissolved phase

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Quarterly Groundwater Monitoring Report - Second Quarter 2008

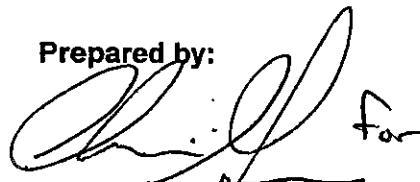
November 7, 2008

hydrocarbon concentrations over time. Figures 4 through 6 illustrate hydrocarbon concentrations and depth to water versus time for selected wells.

LIMITATIONS

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of ConocoPhillips Company for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third party information, but Stantec cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied, are made by Stantec.

Prepared by:



for

Matthew Battin
Project Scientist

Reviewed by:


Jeffrey S. Thompson, L.G., L.E.G.
Principal Geologist



JEFFREY S. THOMPSON

ATTACHMENTS

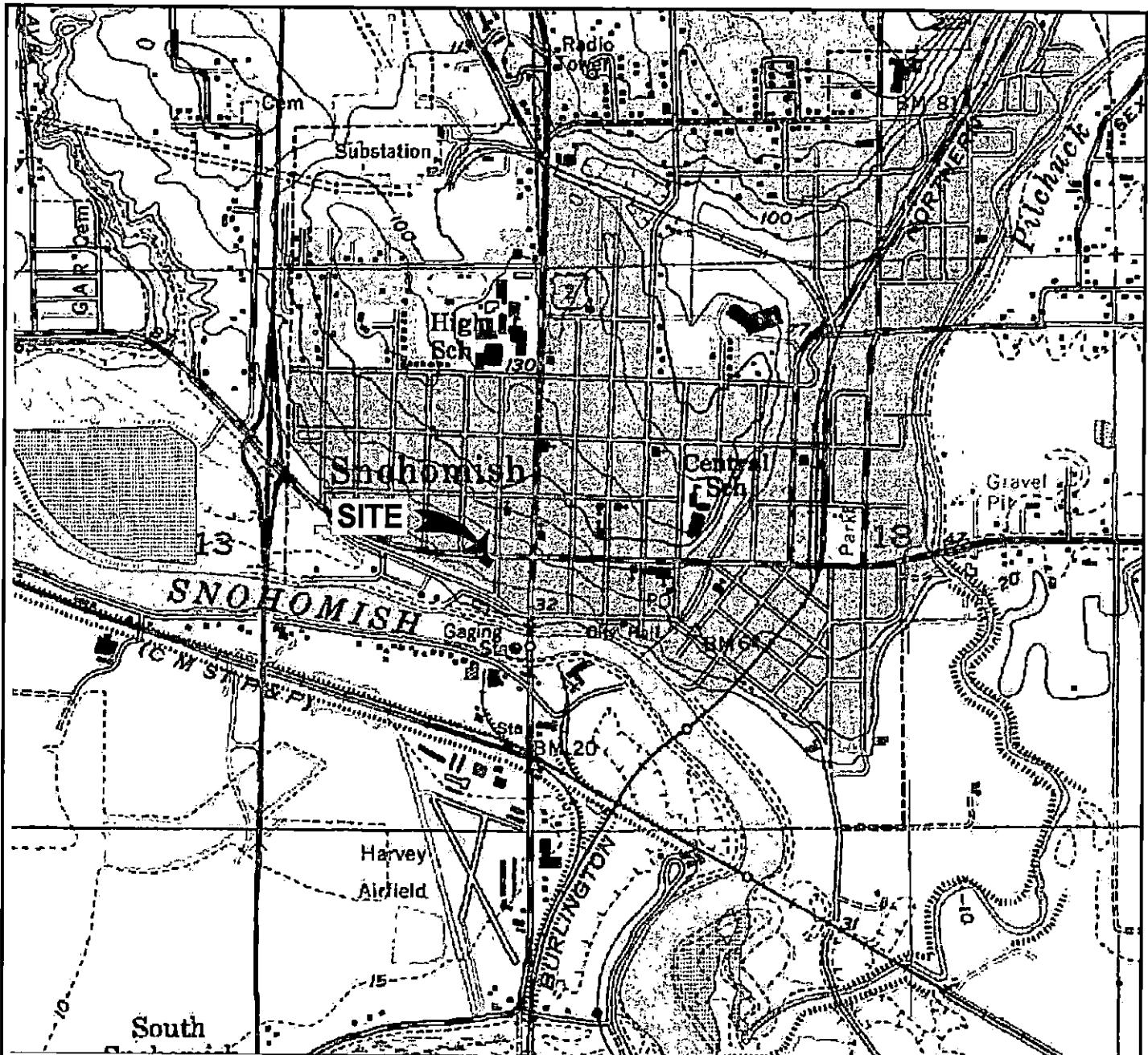
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map
- Figure 3 Recent Groundwater Concentration Map
- Figure 4 Well MW-6A TPH-G Concentration and Depth to Water Versus Time
- Figure 5 Well MW-11 Benzene Concentration and Depth to Water Versus Time
- Figure 6 Well MW-12 TPH-G and TPH-D Concentrations and Depth to Water Versus Time

- Table 1 Recent Groundwater Elevations and Sample Analytical Results
- Table 2 Historical Groundwater Elevations and Sample Analytical Results

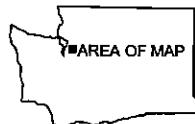
- Attachment 1 Field and Laboratory Procedures
- Attachment 2 Field Data Sheets
- Attachment 3 Certified Laboratory Analytical Report and Chain of Custody Documentation

cc: Mr. Michael D. Noll, ConocoPhillips Company (via electronic upload)
Ms. Mary Murphy, City of Snohomish, 116 Union Avenue, Snohomish, WA 98290

Figures



North



1 1/2 0 1

SCALE (MILES)

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE (FEET)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE: SNOHOMISH, WASHINGTON, 1992



Stantec

12034 134th COURT NE, SUITE 102
REDMOND, WASHINGTON
PH (425) 372-1600/FAX (425) 372-1650

FOR:

ConocoPhillips

FACILITY NO. 254165 (RM&R 1234)
202 AVENUE D
SNOHOMISH, WASHINGTON

JOB NUMBER:
01CP.01234.42

DRAWN BY:
DJH

SITE LOCATION MAP

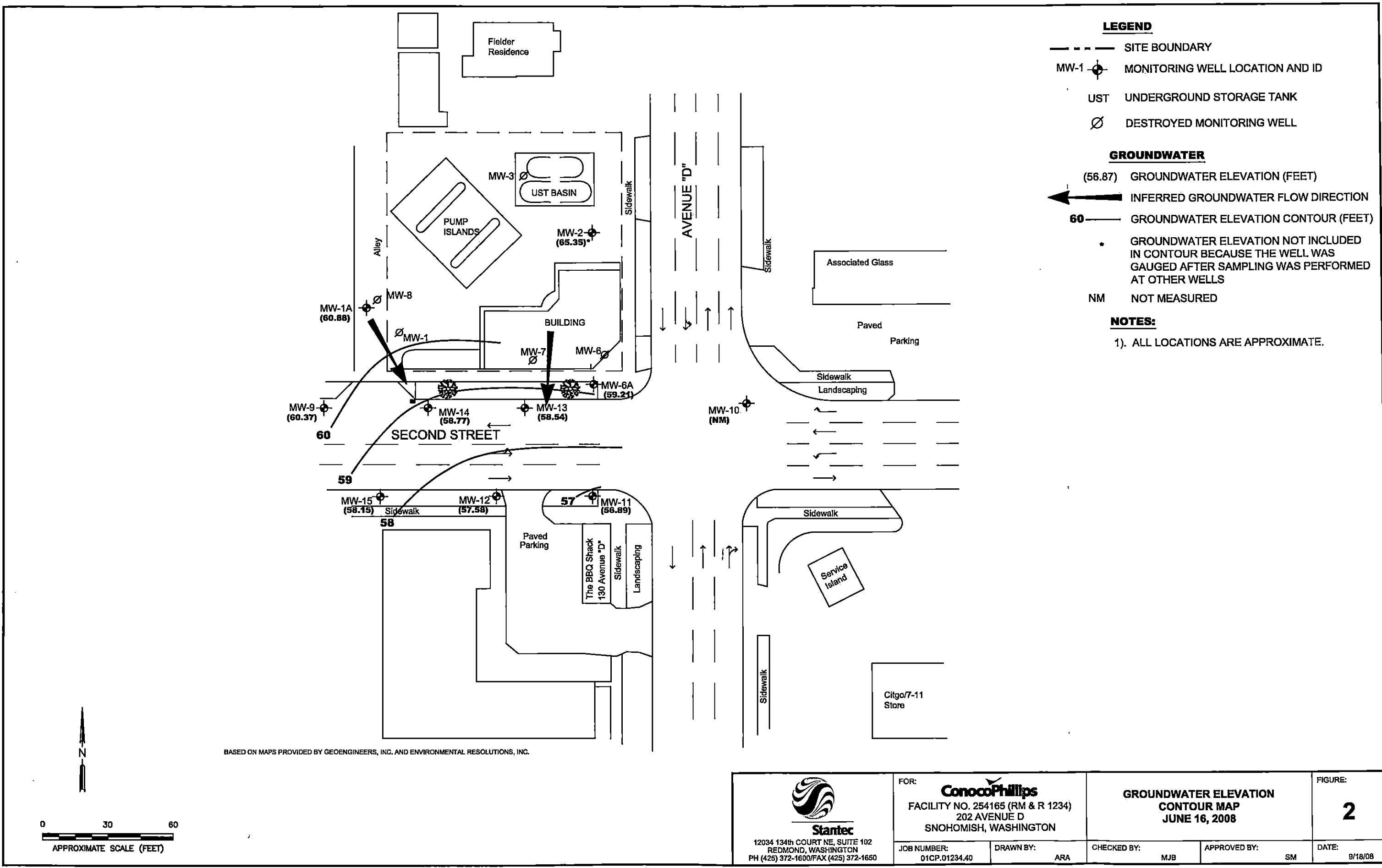
FIGURE:

1

CHECKED BY:
TP

APPROVED BY:
JR

DATE:
11/03/08



MW-2	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	<50	<50	-	<50
TPH-D	<79	<77	-	<76
TPH-O	<98	<96	-	<95
B	<0.5	<0.5	-	<0.5
T	<0.7	<0.7	-	<0.5
E	<0.8	<0.8	-	<0.5
X	<0.8	<0.8	-	<0.5
MTBE	--	--	-	-

MW-1A	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	<50	<50	<50	<50
TPH-D	<79	<76	<75	<76
TPH-O	120	<95	<94	<95
B	<0.5	<0.5	<0.5	<0.5
T	<0.7	<0.7	<0.7	<0.5
E	<0.8	<0.8	<0.8	<0.5
X	<0.8	<0.8	<0.8	<0.5
MTBE	--	--	<0.5	-

MW-9	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	<50	<50	<50	<50
TPH-D	110	<76	<76	<76
TPH-O	760	<95	<96	<95
B	<0.5	<0.5	<0.5	<0.5
T	<0.7	<0.7	<0.7	<0.5
E	<0.8	<0.8	<0.8	<0.5
X	<0.8	<0.8	<0.8	<0.5
MTBE	--	--	<0.5	-

MW-14	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	140	<50	<50	<50
TPH-D	<89	<77	<76	<75
TPH-O	<110	<96	<95	<94
B	<0.5	<0.5	<0.5	<0.5
T	<0.7	<0.7	<0.7	<0.5
E	<0.8	<0.8	<0.8	<0.5
X	<0.8	<0.8	<0.8	<0.5
MTBE	--	--	<0.5	-

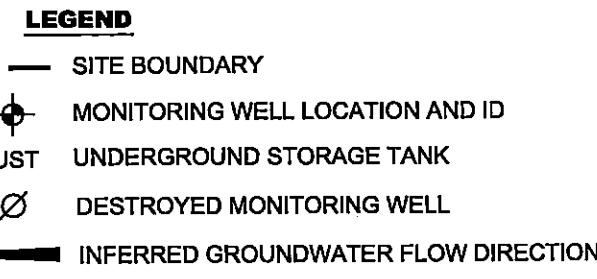
MW-13	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	170	340	230	160
TPH-D	84	<77	<78	<76
TPH-O	<100	<96	<97	<95
B	<0.5	<0.5	<0.5	<0.5
T	<0.7	<0.7	<0.7	<0.5
E	<0.8	<0.8	<0.8	<0.5
X	<0.8	<0.8	<0.8	<0.5
MTBE	--	--	2	-

MW-15	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	<50	<50	<50	<50
TPH-D	<78	<76	<77	<75
TPH-O	<97	<94	<96	<94
B	<0.5	<0.5	<0.5	<0.5
T	<0.7	<0.7	<0.7	<0.5
E	<0.8	<0.8	<0.8	<0.5
X	<0.8	<0.8	<0.8	<0.5
MTBE	--	--	<0.5	-

BASED ON MAPS PROVIDED BY GEOENGINEERS, INC. AND ENVIRONMENTAL RESOLUTIONS, INC.

MW-12	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	4000	710	1,000	350
TPH-D	4700	110	110	<75
TPH-O	1900	<94	<96	<94
B	<0.5	<0.5	<0.5	<0.5
T	<0.7	0.8	1	<0.5
E	7	3	23	1
X	1	<0.8	3	<0.5
MTBE	--	--	<0.5	-

MW-11	9/25/07	12/10/07	3/10/08	6/16/08
TPH-G	110	84	150	98
TPH-D	360	<75	<76	<76
TPH-O	300	<94	<95	<95
B	1	<0.5	5	4
T	<0.7	<0.7	<0.7	<0.5
E	<0.8	<0.8	1	<0.5
X	<0.8	<0.8	<0.8	<0.5
MTBE	--	--	<0.5	-



ANALYTES

WELL ID	
TPH-G	GASOLINE RANGE HYDROCARBONS
TPH-D	DIESEL RANGE HYDROCARBONS
TPH-O	HEAVY OIL RANGE HYDROCARBONS
B	BENZENE
T	TOLUENE
E	ETHYL BENZENE
X	TOTAL XYLENES
MTBE	METHYL TERT-BUTYL ETHER

UNITS IN MICROGRAMS PER LITER (µg/L)

- < LESS THAN LABORATORY REPORTING LIMITS
- ND NOT DETECTED AT OR ABOVE THE LABORATORY METHOD DETECTION LIMIT
- NOT ANALYZED OR NOT APPLICABLE

NOTES:

- ALL LOCATIONS ARE APPROXIMATE



FIGURE 4
WELL MW-6A
TPH-G CONCENTRATIONS AND DEPTH TO WATER VERSUS TIME
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

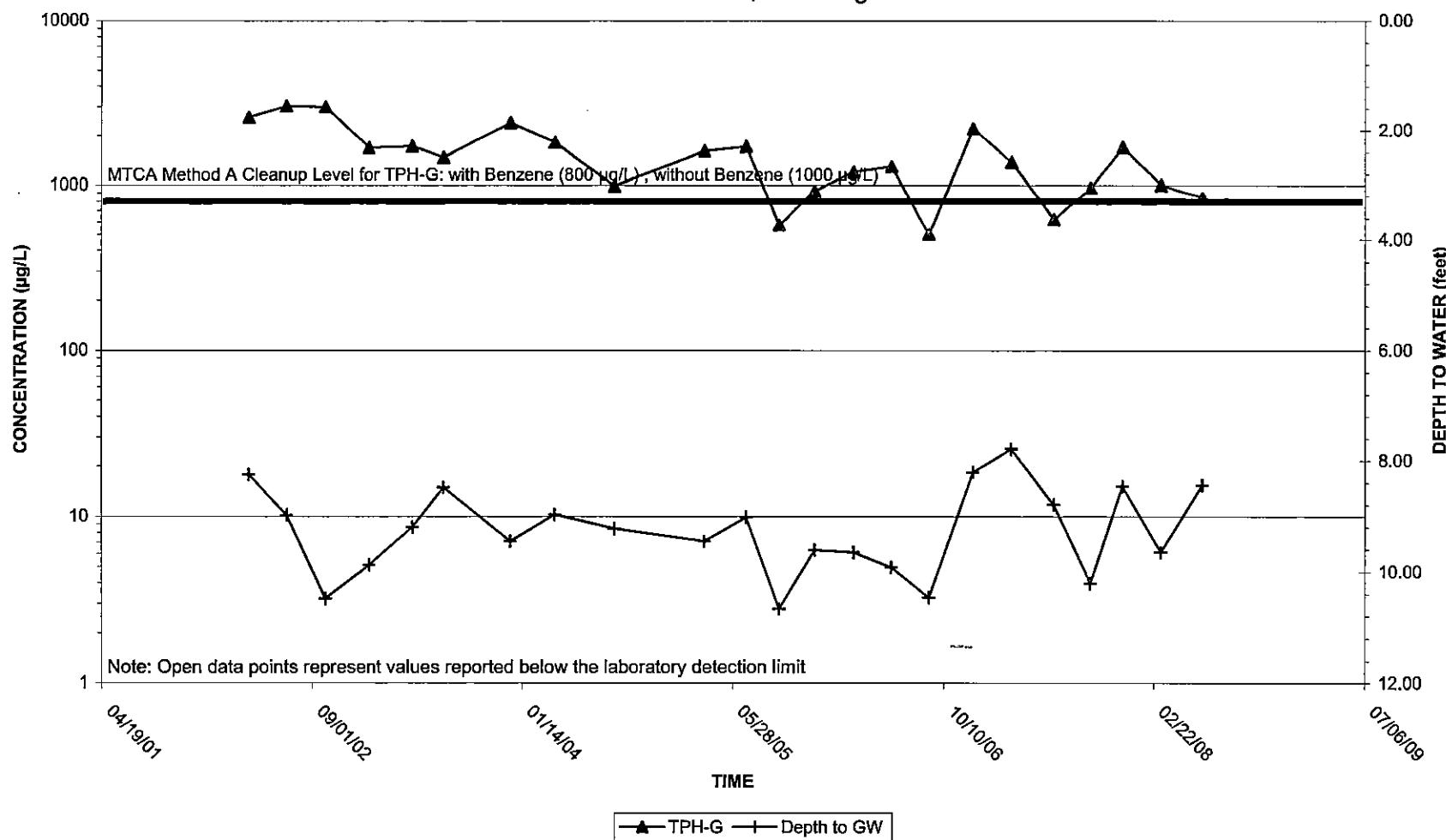


FIGURE 5
WELL MW-11
BENZENE CONCENTRATIONS AND DEPTH TO WATER VERSUS TIME
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

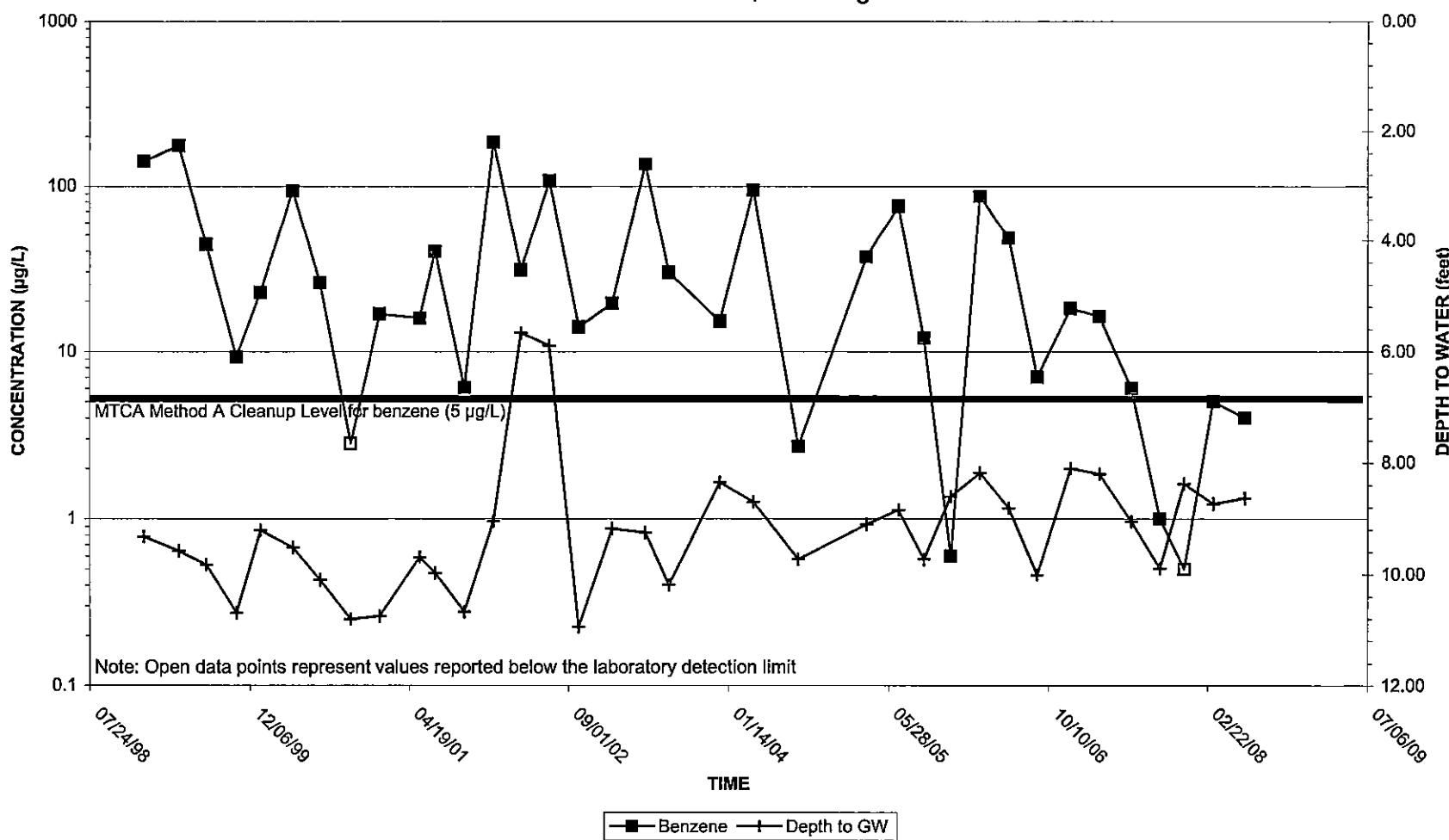
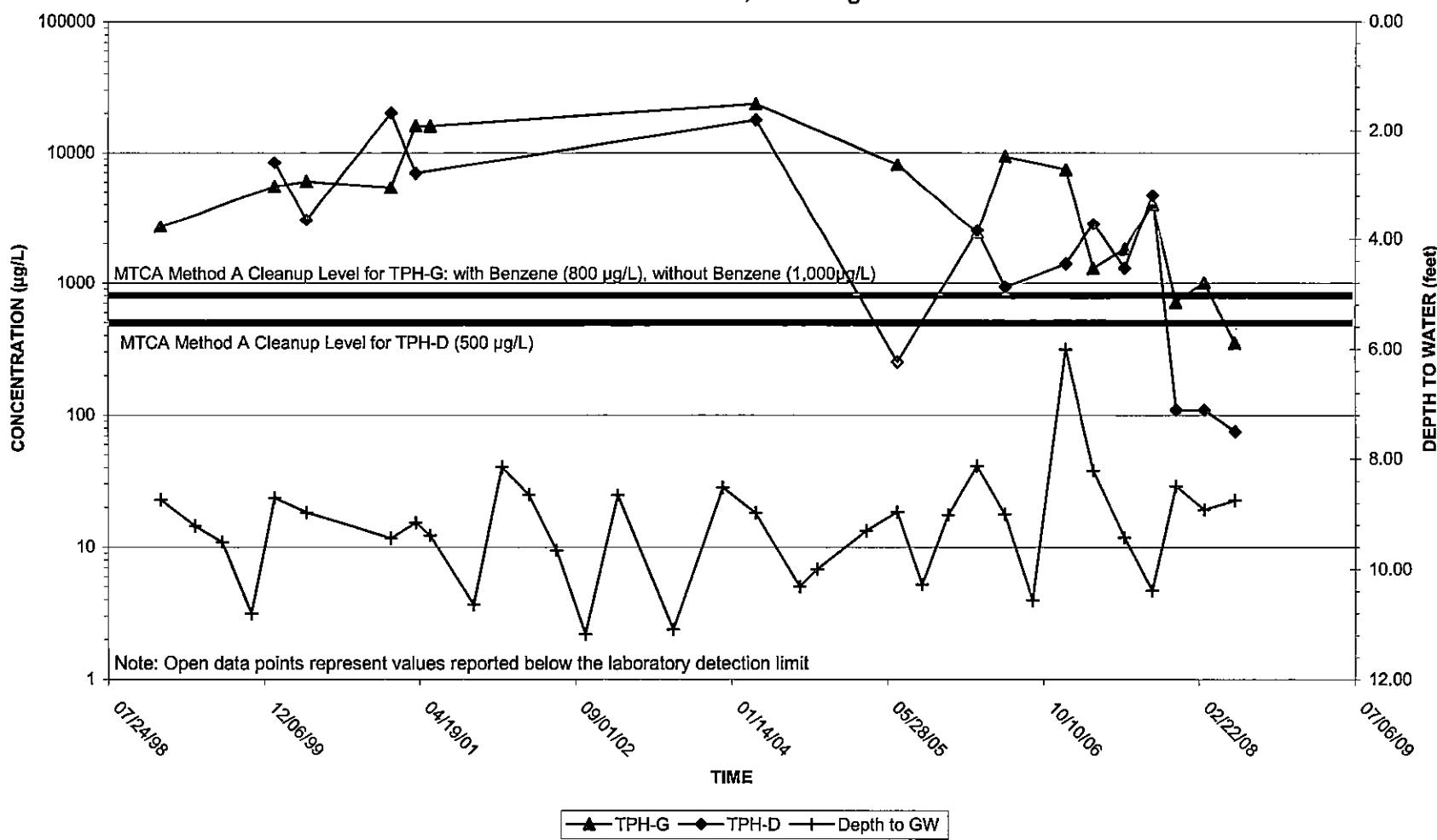


FIGURE 6
WELL MW-12
TPH-G AND TPH-D CONCENTRATIONS, AND DEPTH TO WATER VERSUS TIME
 ConocoPhillips Facility No. 254165 (RM&R #01234)
 202 Avenue D
 Snohomish, Washington



Tables

TABLE 1
RECENT GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
 ConocoPhillips Facility No. 254165 (RM&R #01234)
 202 Avenue D
 Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Alkalinity	Nitrate	Nitrite	Sulfate
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE				
MW-1A 69.32	09/25/07	69.32	11.04	0.00	58.28	<50	<79	120	<0.5	<0.7	<0.8	<0.8	--	69,000	480	--	22,300
	12/10/07	69.32	7.44	0.00	61.88	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	64,100	10,300	<15	244,000
	03/10/08	69.32	8.70	0.00	60.62	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	63,700	3,300	<15	--
	06/16/08	69.32	8.44	0.00	60.88	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-2 69.80	09/25/07	69.80	7.79	0.00	62.01	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	--	200,000	<40	--	12,300
	12/10/07	69.80	3.75	0.00	66.05	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	200,000	<2,000	<15	43,700
	03/10/08	69.80	4.76	0.00	65.04	Not sampled because well was inaccessible due to a parked car.						--	--	--	--	--	--
	06/16/08	69.80	4.45	0.00	65.35	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-6A 67.65	09/25/07	67.65	10.21	0.00	57.44	960	350	120	<0.5	<0.7	<0.8	<0.8	--	156,000	<40	--	16,800
	12/10/07	67.65	8.46	0.00	59.19	1,700	280	<94	<0.5	1	<0.8	<0.8	--	220,000	<2,000	<15	8,200
	03/10/08	67.65	9.65	0.00	58.00	1,000	130	<95	<0.5	0.9	<0.8	<0.8	<0.5	218,000	<2,000	<15	--
	06/16/08	67.65	8.44	0.00	59.21	840	140	<95	<0.5	1	0.7	<0.5	--	--	--	--	--
MW-9 67.77	09/25/07	67.77	9.65	0.00	58.12	<50	110	760	<0.5	<0.7	<0.8	<0.8	--	31,700	2,600	--	16,900
	12/10/07	67.77	6.52	0.00	61.25	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	30,800	<2,000	<15	17,700
	03/10/08	67.77	7.55	0.00	60.22	<50	<76	<96	<0.5	<0.7	<0.8	<0.8	<0.5	38,200	<2,000	<15	--
	06/16/08	67.77	7.40	0.00	60.37	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-10 67.33	09/25/07	67.33	7.43	0.04	59.90	Not sampled due to presence of SPH						--	--	136,000	<2,000	<15	21,100
	12/10/07	67.33	4.22	0.00	63.11	4,800	2,800	<970	<0.5	<0.7	11	8	--	--	--	--	--
	03/10/08	67.33	Not sampled due to dangerous traffic location.						--	--	--	--	--	--	--	--	--
	06/16/08	67.33	Not sampled due to dangerous traffic location.						--	--	--	--	--	--	--	--	--
MW-11 65.52	09/25/07	65.52	9.89	0.00	55.63	110	360	300	1	<0.7	<0.8	<0.8	--	145,000	<40	--	11,000
	12/10/07	65.52	8.37	0.00	57.15	84	<75	<94	<0.5	<0.7	<0.8	<0.8	--	124,000	<2,000	<15	78,200
	03/10/08	65.52	8.73	0.00	56.79	150	<76	<95	5	<0.7	1	<0.8	<0.5	144,000	<2,000	<15	--
	06/16/08	65.52	8.63	0.00	56.89	98	<76	<95	4	<0.5	<0.5	<0.5	--	--	--	--	--
MW-12 66.33	09/25/07	66.33	10.39	0.00	55.94	4,000	4,700	1,900	<0.5	<0.7	7	1	--	121,000	<40	--	19,700
	12/10/07	66.33	8.49	0.00	57.84	710	110	<94	<0.5	0.8	3	<0.8	--	110,000	<2,000	<15	31,800
	03/10/08	66.33	8.92	0.00	57.41	1,000	110	<96	<0.5	1	23	3	<0.5	109,000	<2,000	<15	--
	06/16/08	66.33	8.75	0.00	57.58	350	<75	<94	<0.5	<0.5	1	<0.5	--	--	--	--	--
MW-13 67.59	09/25/07	67.59	11.13	0.00	56.46	170	84	<100	<0.5	<0.7	<0.8	<0.8	--	208,000	<40	--	13,100
	12/10/07	67.59	8.76	0.00	58.83	340	<77	<96	<0.5	<0.7	<0.8	<0.8	--	200,000	<2,000	<15	17,500
	03/10/08	67.59	9.32	0.00	58.27	230	<78	<97	<0.5	<0.7	<0.8	<0.8	2	192,000	<2,000	<15	--
	06/16/08	67.59	9.05	0.00	58.54	160	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--
MW-14 67.67	09/25/07	67.67	10.96	0.00	56.71	140	<89	<110	<0.5	<0.7	<0.8	<0.8	--	84,400	<40	--	53,400
	12/10/07	67.67	7.98	0.00	59.69	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	104,000	<2,000	<15	45,000
	03/10/08	67.67	5.69	0.00	61.98	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	92,000	<2,000	<15	--
	06/16/08	67.67	8.90	0.00	58.77	<50	<75	<94	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--

TABLE 1
RECENT GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
 ConocoPhillips Facility No. 254165 (RM&R #01234)
 202 Avenue D
 Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons				Alkalinity	Nitrate	Nitrite	Sulfate		
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes						
MW-15	09/25/07	66.66	10.34	0.00	56.32	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	—	41,500	2,700	—	16,300	
66.66	12/10/07	66.66	8.34	0.00	58.32	<50	<76	<94	<0.5	<0.7	<0.8	<0.8	—	42,100	<2,000	<15	21,500	
	03/10/08	66.66	8.69	0.00	57.97	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	—	<2,000	<15	—	—
	06/16/08	66.66	8.51	0.00	58.15	<50	<75	<94	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	

MTCA Method A Cleanup Levels:

1000/800 ^a	500	500	5	1000	700	1000	20	—	—	—	—	—	—	—	—	—
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NOTES:

Concentrations are in micrograms per liter ($\mu\text{g/L}$).

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

GW Elevation = 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 = Aromatic compounds by EPA Method 8260B; previous results by 8021B or 8260B, refer to laboratory reports.

MTBE = Methyl tert-butyl ether by EPA Method 8260B

SPH = Separate phase hydrocarbons.

-- = Not Analyzed or Sampled

< = Less than the stated laboratory reporting limits

Bolded values equal or exceed Model Toxics Control Act (MTCA) Method A Cleanup Levels.

^a MTCA Method A levels for TPH-g are 1000 $\mu\text{g/L}$ when no Benzene is present and 800 $\mu\text{g/L}$ when Benzene is present.

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE					
MW-1A	04/04/02	69.32	7.21	--	62.11	73.6	<250	<500	<0.500	<0.500	<0.500	<1.00	--	3,200	61,600	886	--	47,800
69.32	07/02/02	69.32	9.30	--	60.02	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	0	42,400	<200	--	54,500
	10/02/02	69.32	11.67	--	57.65	<100	<250	<500	<0.500	<2.00	<1.00	<1.50	--	0	103,000	<200	--	50,300
	01/14/03	69.32	7.75	--	61.57	90.5	<250	<500	0.550	<0.500	<0.500	<1.00	--	--	--	--	--	--
	04/28/03	69.32	7.85	--	61.47	59.2	<250	<500	1.54	<0.500	<0.500	<1.00	--	500	64,800	300	--	30,400
	07/11/03	69.32	10.31	--	59.01	<50.0	<281	<562	<0.500	0.702	0.517	1.74	--	--	--	--	--	--
	12/17/03	69.32	7.44	0.00	61.88	<100	<129	<259	0.339	<0.5	<0.5	<1	--	--	64,000	406	--	40,900
	03/31/04	69.32	8.28	0.00	61.04	<100	<119	<237	<1	<1	<1	<2	--	--	62,000	1,010	--	30,400
	08/19/04	69.32	10.89	0.00	58.43	<100	<264	<527	<1	<1	<1	<2	--	--	66,000	800	--	35,700
	03/21/05	69.32	9.22	0.00	60.10	266	<248	<496	<1	<1	<1	<2	--	--	61,900	1,410	--	32,600
	06/28/05	69.32	8.86	0.00	60.46	<100	<259	<517	<1	<1	<1	<2	--	--	--	1,200	--	26,300
	09/15/05	69.32	10.67	0.00	58.65	<48	<160	<200	<0.5	<0.7	<0.8	<0.8	--	--	76,200	160	--	24,000
	12/08/05	--	--	--	--	<48	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	76,700	1,200	--	41,900
	03/10/06	--	--	--	--	<48	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	62,600	9,400	--	42,600
	06/08/06	69.32	8.92	0.00	60.40	<48	<82	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--
	09/05/06	69.32	11.05	0.00	58.27	<48	<78	<98	<0.5	<0.7	<0.8	<0.8	--	--	75,800	540	--	40,900
	12/19/06	69.32	6.75	0.00	62.57	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	67,400	10,500	--	65,100
	03/20/07	69.32	7.39	0.00	61.93	<48	<79	145	<0.5	<0.7	<0.8	<0.8	--	--	63,200	3,970	--	24,600
	06/28/07	69.32	9.79	0.00	59.53	<50	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	61,600	1,200	--	18,700
	09/25/07	69.32	11.04	0.00	58.28	<50	<79	120	<0.5	<0.7	<0.8	<0.8	--	--	69,000	480	--	22,300
	12/10/07	69.32	7.44	0.00	61.88	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	64,100	10,300	<15	244,000
	03/10/08	69.32	8.70	0.00	60.62	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	--	63,700	3,300	<15	--
	06/16/08	69.32	8.44	0.00	60.88	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MW-2	01/08/99	69.80	4.90	--	64.90	1,510	314	<750	20.7	<2.75	<2.50	<5.00	--	--	--	--	--	--
69.80	04/28/99	69.80	4.91	--	64.89	1,180	324	<750	16.1	<1.60	<1.32	<3.30	--	--	--	--	--	--
	07/23/99	69.80	6.29	--	63.51	805	368	<750	12.3	<1.50	<0.500	<4.00	--	--	--	--	--	--
	10/25/99	69.80	8.64	--	61.16	2,100	250	<750	<0.700	<19.6	<0.700	<1.90	--	--	--	--	--	--
	01/08/00	69.80	4.72	--	65.08	1,530	<250	<750	22.2	<2.27	<2.43	<6.44	--	--	--	--	--	--
	04/19/00	69.80	5.48	--	64.32	1,210	257	<718	<0.500	28.5	<2.55	<4.22	--	--	--	--	--	--
	07/12/00	69.80	7.55	--	62.25	888	653	<750	<1.25	4.75	<1.25	<2.50	--	--	--	--	--	--
	09/06/00	69.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/16/00	69.80	8.88	--	60.92	1,110	<358	<1,070	42.3	<4.13	<2.08	<5.00	--	--	--	--	--	--
	11/27/00	69.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/16/01	69.80	6.02	--	63.78	2,000	614	<918	<2.50	29.1	<2.50	<5.00	--	--	--	--	--	--
	04/04/01	Unable to locate																
	05/22/01	69.80	--	--	--													
	07/09/01	69.80	--	--	--													
	10/09/01	69.80	--	--	--													
	01/08/02	Obstructed by construction																
	04/04/02	69.80	3.47	--	66.33	159	<250	<500	16.3	1.25	<0.500	2.57	--	--	--	--	--	--
	07/02/02	69.80	5.49	--	64.31	387	273	<500	23.4	<0.500	<0.500	<1.00	--	3,400	148,000	<200	--	29,600
	10/02/02	69.80	7.88	--	61.92	505	<250	<500	22.5	<2.00	<1.00	<1.50	--	3,400	150,000	<200	--	41,600
MW-2	01/14/03	69.80	3.27	--	66.53	681	<250	<500	8.10	<0.500	0.515	2.49	--	--	--	--	--	--
	04/28/03	69.80	4.05	--	65.75	269	<250	<500	3.51	<0.500	<0.500	1.45	--	2,600	276,000	<200	--	26,800

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE					
	07/11/03	69.80	6.92	--	62.88	358	<291	<581	5.64	0.557	0.792	3.04	--	--	--	--	--	
	12/17/03	69.80	3.65	0.00	66.15	124	<129	<259	<0.25	<0.5	<0.5	<1.00	--	--	310,000	<15	--	
	03/31/04	69.80	4.60	0.00	65.20	<100	123	<237	9.05	<1	<1	1.12	--	--	251,000	<15	--	
	08/19/04	69.80	7.45	0.00	62.35	<100	<244	<488	<1	<1	<1	<2	--	--	208,000	200	--	
	03/21/05	69.80	5.52	0.00	64.28	<100	<251	<502	5.07	<1	<1	<2	--	--	205,000	<15	--	
	06/28/05	69.80	5.26	0.00	64.54	<100	344	568	<1	<1	<1	<2	--	--	--	<15	--	
	09/15/05	69.80	7.32	0.00	62.48	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	209,000	<40	--	
	12/08/05	69.80	4.06	0.00	65.74	85	97	160	<0.5	<0.7	<0.8	<0.8	--	--	274,000	<40	--	
	03/10/06	69.80	3.50	0.00	66.30	160	<79	100	<0.5	<0.7	<0.8	<0.8	--	--	205,000	<40	--	
	06/08/06	69.80	5.06	0.00	64.74	<48	<79	290	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	
	09/05/06	69.80	7.93	0.00	61.87	<48	<79	150	<0.5	<0.7	<0.8	<0.8	--	--	225,000	<40	--	
	12/19/06	Obstructed by a parked vehicle																
	03/20/07	69.80	3.33		66.47	68.5	<80	<100	1.64	<0.7	<0.8	<0.8	--	--	163,000	<40	--	
	06/28/07	69.80	6.41		63.39	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	193,000	<40	--	
	09/25/07	69.80	7.79		62.01	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	200,000	<40	--	
	12/10/07	69.80	3.75		66.05	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	200,000	<2,000	<15	
	03/10/08	69.80	4.76	0.00	65.04	Not sampled because well was inaccessible due to a parked car.												
	06/16/08	69.80	4.45	0.00	65.35	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	
MW-6A	04/04/02	67.65	8.25	--	59.40	2,570	665	<500	2.99	3.16	2.25	7.27	--	--	--	--	--	
67.65	07/02/02	67.65	8.98	--	58.67	3,000	613	<500	4.70	4.51	3.42	9.81	--	--	--	--	--	
	10/02/02	67.65	10.48	--	57.17	2,970	384	<500	32.4	6.38	8.44	9.75	--	--	--	--	--	
	01/14/03	67.65	9.88	--	57.77	1,680	<250	<500	6.69	2.24	1.60	13.4	--	--	--	--	--	
	04/28/03	67.65	9.20	--	58.45	1,720	288	<562	1.65	2.20	2.99	12.6	--	2,800	203,000	<200	--	
	07/11/03	67.65	8.48	--	59.17	1,470	<281	<562	2.13	2.45	3.23	6.92	--	--	--	--	--	
	12/17/03	67.65	9.45	0.00	58.20	2,380	457	<265	0.875	1.75	0.941	<1	--	--	87,000	442	--	
	03/31/04	67.65	8.97	0.00	58.68	1,810	682	<247	<5	<5	<5	<10	--	--	230,000	<15	--	
	08/19/04	67.65	9.22	0.00	58.43	988	347	<476	<1	<1	<1	<2	--	--	205,000	200	--	
	03/21/05	67.65	9.45	0.00	58.20	1,610	349	<501	<0.5	4.58	4.95	4.71	--	--	201,000	<15	--	
	06/28/05	67.65	9.02	0.00	58.63	1,710	533	<490	<1	1.3	<1	<2	--	--	--	<15	--	
	09/15/05	67.65	10.67	0.00	56.98	570	220	120	<0.5	0.9	0.9	<0.8	--	--	178,000	<40	--	
	12/08/05	67.65	9.61	0.00	58.04	920	2,805	170	<0.5	0.9	<0.8	<0.8	--	--	225,000	<40	--	
	03/10/06	67.65	9.65	0.00	58.00	1,200	180	<100	<0.5	0.8	<0.8	<0.8	--	--	210,000	<40	--	
	06/08/06	67.65	9.92	0.00	57.73	1,300	210	260	<0.5	0.9	<0.8	<0.8	--	--	--	--	--	
	09/05/06	67.65	10.46	0.00	57.19	500	140	130	<0.5	<0.7	<0.8	<0.8	--	--	163,000	<40	--	
	12/19/06	67.65	8.21	Sheen	59.44	2,200	910	350	0.6	2.0	<0.8	<0.8	--	--	230,000	<40	--	
	03/20/07	67.65	7.79	0.00	59.86	1,380	332	<100	<0.5	0.855	<0.8	<0.8	--	--	216,000	<100	--	
	06/28/07	67.65	8.79	0.00	58.86	620	210	<100	<0.5	<0.7	<0.8	<0.8	--	--	185,000	<40	--	
	09/25/07	67.65	10.21	0.00	57.44	960	350	120	<0.5	<0.7	<0.8	<0.8	--	--	156,000	<40	--	
	12/10/07	67.65	8.46	0.00	59.19	1,700	280	<94	<0.5	1	<0.8	<0.8	--	--	220,000	<2,000	<15	
	03/10/08	67.65	9.65	0.00	58.00	1,000	130	<95	<0.5	0.9	<0.8	<0.8	<0.5	--	218,000	<2,000	<15	
	06/16/08	67.65	8.44	0.00	59.21	840	140	<95	<0.5	1	0.7	<0.5	--	--	--	--	--	
MW-9	01/08/99	68.66	6.50	--	62.16	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
67.77	04/28/99	68.66	7.28	--	61.38	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
	07/23/99	68.66	7.97	--	60.69	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons				Aromatic Hydrocarbons				Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate	
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Total Xylenes						
	10/25/99	68.66	--	--	--													
	01/08/00	68.66	6.76	--	61.90	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
	04/19/00	68.66	--	--	--													
	07/12/00	68.66	8.65	--	60.01	<50.0	<249	<745	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
	09/06/00	68.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/16/00	68.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	11/27/00	68.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	01/16/01	68.66	8.08	--	60.58	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
	04/04/01	68.66	7.78	--	60.88	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	
	05/22/01	68.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	07/09/01	68.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	10/09/01	68.66	9.70	--	58.96	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	0.0	33,000	3,050	--	13,500
	01/08/02	68.66	6.16	--	62.50	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	0.0	32,600	1,780	--	13,100
	04/04/02	68.66	6.54	--	62.12	<50.0	<250	<500	<0.500	0.593	<0.500	<1.00	--	0.0	29,800	2,490	--	12,600
	07/02/02	68.66	8.49	--	60.17	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	0.0	28,600	2,020	--	11,200
	10/02/02	68.66	10.13	--	58.53	144	<250	<500	3.15	<2.00	7.22	2.25	--	0.0	32,400	2,490	--	10,400
	01/14/03	68.66	7.28	--	61.38	<50.0	<284	<568	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--
	04/28/03	68.66	6.93	--	61.73	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	0.0	33,400	1,280	--	17,300
	07/11/03	68.66	8.91	--	59.75	<50.0	<329	<658	<0.500	<0.500	<0.500	1.20	--	--	--	--	--	--
	12/23/03	68.66	6.81	0.00	61.85	<100	<126	<253	<0.25	<0.5	<0.5	<1	--	--	32,000	2,710	--	14,400
	03/31/04	68.66	7.34	0.00	61.32	<100	<118	<237	<1	<1	<1	<2	--	--	30,000	1,880	--	14,900
	08/19/04	68.66	9.53	0.00	59.13	<100	<256	<512	<1	<1	<1	<2	--	--	29,000	2,500	--	13,200
	03/21/05	67.77	8.11	0.00	59.66	<100	<247	<494	<1	<1	<1	<2	--	--	32,500	1,920	--	14,300
	06/28/05	67.77	7.82	0.00	59.95	<100	<258	<516	<1	<1	<1	<2	--	--	--	1,790	--	15,100
	09/15/05	67.77	9.54	0.00	58.23	<48	<77	260	<0.5	<0.7	<0.8	<0.8	--	--	29,800	2,300	--	13,400
	12/08/05	67.77	7.42	0.00	60.35	<48	170	470	<0.5	<0.7	<0.8	<0.8	--	--	31,400	2,400	--	13,600
	03/10/06	67.77	6.53	0.00	61.24	<48	<78	100	<0.5	<0.7	<0.8	<0.8	--	--	34,400	3,900	--	14,600
	06/08/06	67.77	7.80	0.00	59.97	<48	<80	180	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--
	09/05/06	67.77	9.78	0.00	57.99	<48	<78	330	<0.5	<0.7	<0.8	<0.8	--	--	32,800	3,100	--	15,300
	12/19/06	67.77	5.98	0.00	61.79	<48	<77	300	<0.5	<0.7	<0.8	<0.8	--	--	37,100	4,500	--	15,900
	03/20/07	67.77	6.73	0.00	61.04	<48	<79	170	<0.5	<0.7	<0.8	<0.8	--	--	35,600	3,290	--	16,200
	06/28/07	67.77	8.65	0.00	59.12	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	32,900	3,000	--	16,000
	09/25/07	67.77	9.65	0.00	58.12	<50	110	760	<0.5	<0.7	<0.8	<0.8	--	--	31,700	2,600	--	16,900
	12/10/07	67.77	6.52	0.00	61.25	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	--	--	30,800	<2,000	<15	17,700
	03/10/08	67.77	7.55	0.00	60.22	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	--	38,200	<2,000	<15	--
	06/16/08	67.77	7.40	0.00	60.37	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MW-10	01/08/99	67.33	4.91	--	62.42	331	266	<750	2.30	<0.500	<1.50	<2.50	--	--	--	--	--	--
67.33	04/28/99	67.33	5.04	--	62.29	280	<250	<750	2.99	<0.800	<1.10	<3.00	--	--	--	--	--	--
	07/23/99	67.33	5.44	--	61.89	529	<250	<750	2.34	<2.60	2.81	9.37	--	--	--	--	--	--
MW-10	10/25/99	67.33	7.00	--	60.33	519	251	<750	<0.800	<5.65	<2.75	<8.65	--	--	--	--	--	--
	01/08/00	67.33	4.64	--	62.69	504	<250	<750	<1.22	<0.828	<3.27	<7.59	--	--	--	--	--	--
	04/19/00	67.33	5.02	--	62.31	332	<250	<750	<0.610	<4.43	<2.84	<6.91	--	--	--	--	--	--
	07/12/00	67.33	8.27	--	59.06	498	<250	<750	<0.500	4.02	<3.52	<7.18	--	--	--	--	--	--
	09/06/00	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/16/00	67.33	7.41	--	59.92	770	616	<1,330	<4.17	<3.47	<2.69	<8.05	--	--	--	--	--	--

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE					
	11/27/00	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/16/01	67.33	4.39	--	62.94	209	299	<859	<0.500	2.33	0.980	2.65	--	--	--	--	--	--
	04/04/01	67.33	5.00	--	62.33	198	<250	<750	<0.500	<0.500	1.03	2.71	--	--	--	--	--	--
	05/22/01	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	07/09/01	67.33	6.03	--	61.30	311	334	<853	<0.500	1.97	0.949	1.07	--	--	--	--	--	--
	10/09/01	67.33	7.15	--	60.18	675	291	<581	2.16	0.678	0.777	4.67	--	4,600	132,000	<100	--	19,400
	01/08/02	67.33	4.61	--	62.72	258	675	<500	0.837	0.722	1.48	2.71	--	4,200	168,000	<100	--	13,500
	04/04/02	67.33	4.48	--	62.85	208	392	<500	<0.500	<0.500	<0.500	1.33	--	2,000	170,000	<200	--	13,200
	07/02/02	67.33	6.00	--	61.33	201	250	<500	0.552	<0.500	<0.500	1.16	--	2,200	133,000	<200	--	20,300
	10/02/02	67.33	7.96	--	59.37	811	326	<500	3.90	<2.00	4.12	4.63	--	2,200	129,000	<200	--	21,300
	01/14/03	67.33	4.25	--	63.08	280	<309	<617	0.549	0.844	<0.500	1.76	--	--	--	--	--	--
	04/28/03	67.33	4.71	--	62.62	270	<250	<500	0.842	<0.500	<0.500	2.29	--	2,400	162,000	<200	--	15,700
	07/11/03	67.33	6.40	--	60.93	548	<284	<568	0.928	<0.500	3.19	4.18	--	--	--	--	--	--
	12/17/03	Inaccessible; buried under gravel from recent road construction																
	03/31/04	67.33	4.28	0.00	63.05	390	308	<237	<1	<1	<1	<2	--	--	141,000	<15	--	17,600
	08/19/04	67.33	6.84	0.00	60.49	244	<251	<501	<1	<1	<1	<2	--	--	127,000	200	--	22,700
	03/21/05	67.33	4.71	0.00	62.62	396	<247	<494	<1	<1	1.93	<2	--	--	154,000	<15	--	15,100
	06/28/05	67.33	4.77	0.00	62.56	624	746	<504	<1	<1	<1	<2	--	--	--	<15	--	18,600
	09/15/05	67.33	7.03	0.00	60.30	290	110	120	<0.5	<0.7	<0.8	<0.8	--	--	110,000	<40	--	19,800
	12/08/05	67.33	4.23	0.00	63.10	540	<82	<100	<0.5	<0.7	6.0	2.0	--	--	137,000	<40	--	21,500
	03/10/06	67.33	3.41	0.00	63.92	3,100	290	220	<0.5	<0.7	9.0	8.0	--	--	119,000	<100	--	17,400
	06/08/06	67.33	4.83	0.00	62.50	290	<79	120	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--
	09/05/06	67.33	7.51	0.00	59.82	290	100	130	<0.5	<0.7	<0.8	<0.8	--	--	111,000	<40	--	20,400
	12/19/06	67.33	2.57	0.00	64.76	2,600	390	470	0.6	<0.7	11.0	8.0	--	--	161,000	<40	--	25,100
	03/20/07	67.33	3.04	0.00	64.29	4,144	665	162	0.527	<0.7	25.0	18.1	--	--	117,000	1,740	--	6,940
	06/28/07	67.33	5.18	0.00	62.15	1,700	430	<97	<0.5	<0.7	5	3	--	--	137,000	<40	--	12,000
	09/25/07	67.33	7.43	0.04	59.93	Not sampled due to presence of SPH												
	12/10/07	67.33	4.22	0.00	63.11	4,800	2,800	<970	<0.5	<0.7	11	8	--	--	136,000	<2,000	<15	21,100
	03/10/08	67.33	Not sampled due to dangerous traffic location.															
	06/16/08	67.33	Not sampled due to dangerous traffic location.															

MW-11	01/08/99	66.37	9.32	--	57.05	371	--	--	141	4.95	10.8	6.66	--	--	--	--	--	--
	04/28/99	66.37	9.58	--	56.79	782	<250	<750	175	<11.0	26.1	29.9	--	--	--	--	--	--
	07/23/99	66.37	9.83	--	56.54	474	<250	<750	43.7	<2.70	3.40	8.32	--	--	--	--	--	--
	10/25/99	66.37	10.69	--	55.68	845	<250	<750	9.22	<2.90	<3.75	<6.20	--	--	--	--	--	--
	01/08/00	66.37	9.21	--	57.16	133	<250	<750	22.5	<1.03	1.11	3.34	--	--	--	--	--	--
	04/19/00	66.37	9.52	--	56.85	869	<250	<750	92.8	8.15	9.25	20.2	--	--	--	--	--	--
	07/12/00	66.37	10.10	--	56.27	581	387	<896	25.6	2.32	<2.31	<7.94	--	--	--	--	--	--
MW-11	09/06/00	66.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/16/00	66.37	10.80	--	55.57	322	<250	<750	<2.80	<0.640	<0.860	<4.20	--	--	--	--	--	--
	11/27/00	66.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/16/01	66.37	10.75	--	55.62	725	311	<866	16.7	2.41	4.46	7.09	--	--	--	--	--	--
	04/04/01	66.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/22/01	66.37	9.69	--	56.68	385	--	--	15.8	2.37	2.47	4.37	--	--	--	--	--	--
	07/09/01	66.37	9.98	--	56.39	439	<310	<931	39.6	2.63	1.72	3.71	--	--	--	--	--	--
	10/09/01	66.37	10.67	--	55.70	410	333	<500	6.04	1.08	1.74	4.40	--	3,200	158,000	<100	--	9,410

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
 ConocoPhillips Facility No. 254165 (RM&R #01234)
 202 Avenue D
 Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate	
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE						
	01/08/02	66.37	9.05	--	57.32	1,280	572	<500	184	10.6	35.7	21.9	--	3,200	186,000	<100	--	6,550	
	04/04/02	66.37	5.67	--	60.70	757	366	<500	30.6	2.20	2.81	5.72	--	5,400	203,000	<200	--	2,190	
	07/02/02	66.37	5.90	--	60.47	1,060	384	<500	107	8.73	24.2	15.5	--	4,000	203,000	<200	--	2,930	
	10/02/02	66.37	10.94	--	55.43	785	<250	<500	13.9	<2.00	4.96	3.59	--	4,000	169,000	<200	--	4,040	
	01/14/03	66.37	9.18	--	57.19	570	<305	<610	19.3	1.12	1.96	3.82	--	--	--	--	--	--	
	04/28/03	66.37	9.25	--	57.12	1,100	<287	<575	135	10.7	34.1	20.1	--	4,000	208,000	<200	--	3,320	
	07/11/03	66.37	10.19	--	56.18	684	<250	<500	29.7	3.20	10.0	9.17	--	--	--	--	--	--	
	12/17/03	66.37	8.35	0.00	58.02	673	215	<265	15.1	0.569	<0.5	<1	--	--	170,000	<150	--	--	73,200
	03/31/04	66.37	8.70	0.00	57.67	409	<127	<253	93.9	5.02	10.4	5.39	--	--	218,000	<15	--	--	30,100
65.52	08/19/04	65.52	9.73	0.00	55.79	289	<240	<480	2.69	<1	<1	<2	--	--	167,000	200	--	--	10,600
	03/21/05	65.52	9.10	0.00	56.42	564	<244	<488	36.8	4.18	9.48	7.34	--	--	189,000	<15	--	--	34,800
	06/28/05	65.52	8.84	0.00	56.68	653	13,300	5,650	74.8	4.9	11.20	6.41	--	--	--	<15	--	--	26,100
	09/15/05	65.52	9.73	0.00	55.79	280	89	170	12.0	0.7	<0.8	1.0	--	--	150,000	<40	--	--	11,300
	12/08/05	65.52	8.60	0.00	56.92	480	130	230	0.6	<0.7	<0.8	0.9	--	--	157,000	<40	--	--	114,000
	03/10/06	65.52	8.18	0.00	57.34	1,600	420	<98	86	6.0	33	8.0	--	--	164,000	<40	--	--	31,500
	06/08/06	65.52	8.81	0.00	56.71	940	230	170	48	3.0	8.0	4.0	--	--	--	--	--	--	--
	09/05/06	65.52	10.01	0.00	55.51	330	180	210	7.0	<0.7	<0.8	<0.8	--	--	157,000	<40	--	--	13,200
	12/19/06	65.52	8.10	0.00	57.42	340	140	190	18.0	0.8	4.0	<0.8	--	--	166,000	<40	--	--	33,800
	03/20/07	65.52	8.20	0.00	57.32	158	372	291	16.2	0.774	3.38	<0.8	--	--	159,000	<1,000	--	--	36,500
	06/28/07	65.52	9.05	0.00	56.47	290	390	<97	6	<0.7	2	<0.8	--	--	156,000	<40	--	--	13,200
	09/25/07	65.52	9.89	0.00	55.63	110	360	300	1	<0.7	<0.8	<0.8	--	--	145,000	<40	--	--	11,000
	12/10/07	65.52	8.37	0.00	57.15	84	<75	<94	<0.5	<0.7	<0.8	<0.8	--	--	124,000	<2,000	<15	--	78,200
	03/10/08	65.52	8.73	0.00	56.79	150	<76	<95	5	<0.7	1	<0.8	<0.5	--	144,000	<2,000	<15	--	--
	06/16/08	65.52	8.63	0.00	56.89	98	<76	<95	4	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-12	01/08/99	66.40	8.74	--	57.66	2,670	--	--	21.1	<5.00	40.1	48.1	--	--	--	--	--	--	--
66.40	04/28/99	66.40	9.22	0.03	57.20	Not sampled due to presence of SPH													
	07/23/99	66.40	9.51	0.01	56.90	Not sampled due to presence of SPH													
	10/25/99	66.40	10.81	0.29	55.82	Not sampled due to presence of SPH													
	01/06/00	66.40	8.71	--	57.69	5,480	8,380	<8,250	<15.6	<10.2	53.2	47.8	--	--	--	--	--	--	--
	04/19/00	66.40	8.97	--	57.43	5,980	3,060	<3,750	<2.60	<21.5	66.6	<63.5	--	--	--	--	--	--	--
	07/12/00	66.40	--	0.20	--	Not sampled due to presence of SPH													
	09/06/00	66.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/16/00	66.40	--	0.25	--	Not sampled due to presence of SPH													
	11/27/00	66.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/16/01	66.40	9.44	--	56.96	5,360	20,100	<8,250	<5.00	12.9	72.0	63.8	--	--	--	--	--	--	--
MW-12	04/06/01	66.40	9.16	--	57.24	15,900	6,950	2,280	17.6	9.04	219	131	--	--	--	--	--	--	--
	05/22/01	66.40	9.39	--	57.01	15,800	--	--	<10.0	10.3	307	142	--	--	--	--	--	--	--
	07/09/01	66.40	--	0.30	--	Not sampled due to presence of SPH													
	10/09/01	66.40	10.65	0.20	55.91	Not sampled due to presence of SPH													
	01/08/02	66.40	8.15	0.08	58.31	Not sampled due to presence of SPH													
	04/04/02	66.40	8.65	0.15	57.87	Not sampled due to presence of SPH													
	07/02/02	66.40	9.66	0.36	57.03	Not sampled due to presence of SPH													
	10/02/02	66.40	11.18	0.60	55.70	Not sampled due to presence of SPH													
	01/14/03	66.40	8.66	0.10	57.82	Not sampled due to presence of SPH													
	04/28/03	66.40	--	0.25	--	Not sampled due to presence of SPH													

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
 ConocoPhillips Facility No. 254165 (RM&R #01234)
 202 Avenue D
 Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate					
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE										
	07/11/03	66.40	11.10	0.04	55.33	Not sampled due to presence of SPH																	
	12/17/03	66.40	8.52	0.01	57.89	Not sampled due to presence of SPH																	
	03/31/04	66.40	8.98	Sheen	57.42	23,400	17,800	2,200	<50	<50	<50	<100	--	--	129,000	<15	--	37,500					
66.33	08/19/04	66.33	10.32	0.14	56.12	Not sampled due to presence of SPH																	
	10/14/04	66.33	10.00	Sheen	56.33	--	--	--	--	--	--	--	--	--	--	--	--	--					
	03/21/05	66.33	9.30	0.01	57.04	Not sampled due to presence of SPH																	
	06/28/05	66.33	8.96	Sheen	57.37	8,030	<252	<503	<5	<5	30.20	<10	--	--	--	<75	--	51,200					
	09/15/05	66.33	10.28	0.12	56.15	Not sampled due to presence of SPH																	
	12/08/05	66.33	9.02	0.13	57.41	Not sampled due to presence of SPH																	
	03/10/06	66.33	8.13	0.00	58.20	2,400	2,500	1,100	<0.5	<0.7	4.0	3.0	--	--	116,000	150	--	95,800					
	06/08/06	66.33	9.00	0.00	57.33	9,300	930	420	1.0	2.0	20	4.0	--	--	--	--	--	--					
	09/05/06	66.33	10.56	0.05	55.81	Not sampled due to presence of SPH																	
	12/19/06	66.33	6.01	Sheen	60.32	7,300	1,400	580	<0.5	<0.7	4.0	<0.8	--	--	111,000	<40	--	65,900					
	03/20/07	66.33	8.21	0.00	58.12	1,291	2,837	1,947	<0.5	<0.7	4.25	0.853	--	--	116,000	1,190	--	35,900					
	06/28/07	66.33	9.42	0.00	56.91	1,800	1,300	540	<0.5	<0.7	4	<0.8	--	--	123,000	<40	--	27,600					
	09/25/07	66.33	10.39	0.00	55.94	4,000	4,700	1,900	<0.5	<0.7	7	1	--	--	121,000	<40	--	19,700					
	12/10/07	66.33	8.49	0.00	57.84	710	110	<94	<0.5	0.8	3	<0.8	--	--	110,000	<2,000	<15	31,800					
	03/10/08	66.33	8.92	0.00	57.41	1,000	110	<96	<0.5	1	23	3	<0.5	--	109,000	<2,000	<15	--					
	06/16/08	66.33	8.75	0.00	57.58	350	<75	<94	<0.5	<0.5	1	<0.5	--	--	--	--	--	--					
MW-13	03/21/05	67.59	9.72	0.00	57.87	424	<239	<478	2.84	1.71	5.21	1.86	--	--	229,000	<15	--	13,800					
67.59	06/28/05	67.59	9.43	0.00	58.16	402	<244	<487	<1	<1	<1	<2	--	--	--	<15	--	16,600					
	09/15/05	67.59	10.87	0.00	56.72	260	81	<98	<0.5	<0.7	<0.8	<0.8	--	--	225,000	<40	--	11,100					
	12/08/05	67.59	9.34	0.00	58.25	230	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	228,000	<40	--	13,800					
	03/10/06	67.59	8.46	0.00	59.13	400	<78	<97	22	<0.7	2.0	<0.8	--	--	229,000	<1000	--	18,500					
	06/08/06	67.59	9.41	0.00	58.18	380	<81	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--					
	09/05/06	67.59	11.28	0.00	56.31	240	<80	<99	<0.5	<0.7	<0.8	<0.8	--	--	218,000	<40	--	13,700					
	12/19/06	67.59	8.30	0.00	59.29	430	100	220	<0.5	<0.7	<0.8	<0.8	--	--	191,000	<40	--	23,700					
	03/20/07	67.59	8.50	0.00	59.09	391	<78	<97	14.3	<0.7	3.65	2.81	--	--	199,000	<1000	--	16,400					
	06/28/07	67.59	9.93	0.00	57.66	270	<79	<99	<0.5	<0.7	<0.8	<0.8	--	--	209,000	<40	--	14,400					
	09/25/07	67.59	11.13	0.00	56.46	170	84	<100	<0.5	<0.7	<0.8	<0.8	--	--	208,000	<40	--	13,100					
	12/10/07	67.59	8.76	0.00	58.83	340	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	200,000	<2,000	<15	17,500					
	03/10/08	67.59	9.32	0.00	58.27	230	<78	<97	<0.5	<0.7	<0.8	<0.8	2	--	192,000	<2,000	<15	--					
	06/16/08	67.59	9.05	0.00	58.54	160	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--					

TABLE 2
HISTORICAL GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Facility No. 254165 (RM&R #01234)
202 Avenue D
Snohomish, Washington

Well Name	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons				Ferrous Iron	Alkalinity	Nitrate	Nitrite	Sulfate	
		Top of Casing Elevation	Depth to Water	SPH Thickness	GW Elevation	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethyl-benzene	Total Xylenes						
MW-14	03/21/05	67.67	9.17	0.00	58.50	<100	<245	<489	<1	<1	<1	<2	--	97,400	29	--	46,200	
67.67	06/28/05	67.67	8.87	0.00	58.80	197	<244	<488	<1	<1	<1	<2	--	--	--	<75	--	52,700
	09/15/05	67.67	10.68	0.00	56.99	66	130	170	<0.5	<0.7	<0.8	<0.8	--	--	96,100	<40	--	43,100
	12/08/05	67.67	8.79	0.00	58.88	74	140	180	<0.5	<0.7	<0.8	<0.8	--	--	97,300	<40	--	45,000
	03/10/06	67.67	7.74	0.00	59.93	55	<77	<97	<0.5	<0.7	<0.8	<0.8	--	--	104,000	<1,000	--	54,800
	06/08/06	67.67	8.92	0.00	58.75	<48	<81	150	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--
	09/05/06	67.67	11.15	0.00	56.52	140	89	<100	<0.5	<0.7	<0.8	<0.8	--	--	89,700	<40	--	49,500
	12/19/06	67.67	7.40	0.00	60.27	<48	<76	96	<0.5	<0.7	<0.8	<0.8	--	--	96,900	<40	--	44,400
	03/20/07	67.67	7.60	0.00	60.07	52.9	<80	119	<0.5	<0.7	<0.8	<0.8	--	--	109,000	<40	--	48,900
	06/28/07	67.67	9.60	0.00	58.07	240	82	<97	<0.5	<0.7	<0.8	<0.8	--	--	89,600	<40	--	52,300
	09/25/07	67.67	10.96	0.00	56.71	140	<89	<110	<0.5	<0.7	<0.8	<0.8	--	--	84,400	<40	--	53,400
	12/10/07	67.67	7.98	0.00	59.69	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	104,000	<2,000	<15	45,000
	03/10/08	67.67	5.69	0.00	61.98	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	<0.5	92,000	<2,000	<15	--	
	06/16/08	67.67	8.90	0.00	58.77	<50	<75	<94	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
MW-15	03/21/05	66.66	9.02	0.00	57.64	<100	<248	<497	<1	1.5	<1	<2	--	--	54,100	2,040	--	21,000
66.66	06/28/05	66.66	8.64	0.00	58.02	<100	<247	<493	<1	<1	<1	<2	--	--	--	2,420	--	19,000
	09/15/05	66.66	10.19	0.00	56.47	<48	140	230	<0.5	<0.7	<0.8	<0.8	--	--	39,800	2,600	--	14,600
	12/08/05	66.66	8.60	0.00	58.06	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	40,400	2,200	--	18,800
	03/10/06	66.66	7.99	0.00	58.67	<48	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	41,800	2,500	--	28,500
	06/08/06	66.66	8.74	0.00	57.92	<48	<78	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--
	09/05/06	66.66	10.45	0.00	56.21	<48	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	39,200	2,900	--	15,200
	12/19/06	66.66	6.00	0.00	60.66	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	43,300	2,100	--	21,100
	03/20/07	66.66	7.70	0.00	58.96	<48	<80	110	<0.5	<0.7	<0.8	<0.8	--	--	10,500	554	--	12,400
	06/28/07	66.66	9.30	0.00	57.36	<50	<82	<100	<0.5	<0.7	<0.8	<0.8	--	--	45,400	3,300	--	16,200
	09/25/07	66.66	10.34	0.00	56.32	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	--	--	41,500	2,700	--	16,300
	12/10/07	66.66	8.34	0.00	58.32	<50	<76	<94	<0.5	<0.7	<0.8	<0.8	--	--	42,100	<2,000	<15	21,500
	03/10/08	66.66	8.69	0.00	57.97	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	92,000	<2,000	<15	--	
	06/16/08	66.66	8.51	0.00	58.15	<50	<75	<94	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--

MTCA Method A Cleanup Levels:	1,000/800 ^a	500	500	5	1,000	700	1,000	20	--	--	--	--	--	--	--	--	--
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NOTES:

Concentrations are in micrograms per liter ($\mu\text{g/L}$).

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

GW Elevation = 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 = Aromatic compounds by EPA Method 8260B; previous results by 8021B or 8260B, refer to laboratory reports.

MTBE = Methyl tert-butyl ether by EPA Method 8260B

SPH = Separate phase hydrocarbons.

-- = Not Analyzed or Sampled

< = Less than the stated laboratory reporting limits.

Bolded values equal or exceed Model Toxics Control Act (MTCA) Method A Cleanup Levels.

^a MTCA Method A levels for TPH-g are 1,000 $\mu\text{g/L}$ when no Benzene is present and 800 $\mu\text{g/L}$ when Benzene is present.

ATTACHMENT 1
FIELD AND LABORATORY PROCEDURES

STANTEC 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 Purgung/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.

**ATTACHMENT 2
FIELD DATA SHEETS**

SITE VISITATION REPORT
2Q08 - CP RM&R 1234 Snohomish, Washington

Name(s) M. Tolley, M. Jenkins Date: 6/16/2008 Time of Arrival Call-In: 0833
Arrival Time: 0833 Departure Time: 1515 Time of Departure Call-In: 1515
Who did you call? Tammy P.

DRUM INVENTORY

WATER	CARBON	TOTAL OPEN TOP	1
SOIL	EMPTY	TOTAL BUNG TOP	

HEALTH AND SAFETY ASSESSMENT

Traffic Concessions — TCS used for street well sampling

- Block appropriate lanes, sample efficiently

, wait sample on Tuesdays = an open law ent ribs @ BBQ shack

DESCRIPTION OF ACTIVITIES ONSITE AND NOTES

0833 - Arrived on site (M. Tolley + M. Jenkins)

- Checked in w/ gas station attendant

0900 - Tailgate meeting w/ Tracy from TCS (arrive @ 8:55)

0915 - Begin gauging MW-1A (TCS prepared traffic control)

1010 - Set-up for sampling MW-13 in street

1220 - TCS off site

- Continued to gauge and sample remaining wells

200

1400 - Brief tailgate meeting before sampling wells across street

1510 - checked out w/ store clerk

1515 - Stantec personnel depart site

- MW-6A needs re-tapping

- Retapped MW-2

7/1/08 - edits made by Amanda Mayee, Stantec (JMF)

STANTEC
HYDROLOGIC DATA SHEET

Gauge Date: June 16, 2008

Project Name: CP RM&R 1234 Snohomish

Field Technician: M. Tolley, M. Jenkins

Project Number: 01CP.01234.40.8504

DTP = Depth to Free Product (FP or NAPL) Below TOC
DTW = Depth to Groundwater Below TOC
DTB = Depth to Bottom of Well Casing Below TOC

Flow through cell calibrated Y _____ N _____

Wells checked for product and gauged prior to commencement of bailing or purging the wells Y _____ N _____

STANTEC
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 01CP.01234.40.8504 PURGED BY: M. Tolley, M. Jenkins WELL I.D.: MW-1A
CLIENT NAME: Mike Nall / CP SAMPLED BY: M. Tolley, M. Jenkins SAMPLE I.D.: MW-1A
LOCATION: 202 Avenue D, Snohomish, WA - Site #4165 RM&R 1234

DATE PURGED 6/16/08 START (2400hr) 1142 END (2400hr) 12:05
 DATE SAMPLED 6/16/08 SAMPLE TIME (2400hr) 1154 LOW-FLOW USED Y
 SAMPLE TYPE: Groundwater X Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER: 2" X 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____
 Casing Volume: (liters per foot) (0.64) (1.44) (2.45) (3.86) (5.68) (9.84) (

DEPTH TO BOTTOM (feet) = 14.73
DEPTH TO WATER (feet) = 9.03 $\frac{1}{8}$
WATER COLUMN HEIGHT (feet) = 5.70 ACTUAL PURGE (L) = 0.53 \odot 0.45

FIELD MEASUREMENTS

Calculated Variance of Final Three Samples:

Acceptable Variance Limits: 10% 3% 0.1

DEPTH TO PURGE INTAKE DURING PURGE: SAMPLE DTW: 8.50

ANTICIPATED PURGE INTAKE DEPTH: _____ ANALYSES: TPH-g _____

SAMPLE VESSEL / PRESERVATIVE: _____

PURGING EQUIPMENT: _____

High-Water-Quality Monitor Resistatic Pump

Water Quality Monitor Peristaltic Pump
OTR Interface Probe

Flow Through Cell Disconnected Prior to Sample Collection? YES NO

WELL PAD CONDITION: Fair

WELL CASING CONDITION: poor

Horiba Water Quality Monitor
DTW/DTP Interface Probe

Resistive Dynamics

WELL PAD CONDITION: Fair

WELL CASING CONDITION: PERF

WELL VACUUM CONDITION: FAIR

SEAL PRESENT? Yes

BOI TS PRESENT? Yes

REMARKS:

Page 1 of 1

STANTEC

WATER SAMPLE FIELD DATA SHEET

PROJECT # 01CP.01234.40.B504

PURGED BY: M. Tolley, M. Jenkins

WELL I.D.: MW-15

CLIENT NAME: Mike Noll / CP

SAMPLED BY: M. Tolley, M. Jenkins

SAMPLE I.D.: MW-15

LOCATION: 202 Avenue D, Snohomish, WA -- Site #4165 RM&R 1234

DATE PURGED 6/16/08

START (2400hr) 10:15

END (2400hr) 10:40

DATE SAMPLED 6/16/08

SAMPLE TIME (2400hr) 10:30

LOW-FLOW USED Y

SAMPLE TYPE: Groundwater X

Surface Water

Treatment Effluent

Other

CASING DIAMETER: 2"

X

3"

(1.44)

4"

(2.45)

5"

(3.86)

6"

(5.66)

8"

(9.84)

Other

Casing Volume: (liters per foot)

(0.64)

DEPTH TO BOTTOM (feet) = 15.30

DEPTH TO WATER (feet) = 9.05

WATER COLUMN HEIGHT (feet) = 6.25

ACTUAL PURGE (L) = 0.90 L

FIELD MEASUREMENTS

DATE	TIME (2400hr)	VOLUME ML	TEMP. (degrees F)	CONDUCTIVITY (umhos/cm)	pH (units)	COLOR (visual)
10-20			74	41	8.13	
6/16/08	10:20	400 ml	61-62	41	8.13	CLEAN
6/16/08	10:23	250 ml	74-41	40	8.11	CLEAN
6/16/08	11:26	250 ml	74-42	40	8.17	CLEAN
<i>MJ</i>						
<i>MJ</i>						

Calculated Variance of Final Three Samples:

Acceptable Variance Limits:

≤ 10%

≤ 3%

≤ 0.1

DEPTH TO PURGE INTAKE DURING PURGE:

SAMPLE DTW: 9.25

ANTICIPATED PURGE INTAKE DEPTH:

ANALYSES: TPH-g

TPH-d

BTEX

SAMPLE VESSEL / PRESERVATIVE: CMAV / AVVERN.

PURGING EQUIPMENT:

Same

SAMPLING EQUIPMENT:

Horiba Water Quality Monitor
DTW/DTP Interface Probe

Flow Through Cell Disconnected Prior to Sample Collection?

YES X

NO

WELL PAD CONDITION: FAIR

WELL CASING CONDITION:

WELL VAULT CONDITION: FAIR

SEAL PRESENT? YES

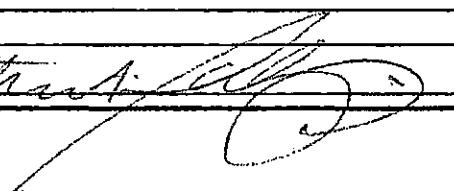
BOLTS PRESENT? YES

WELL INTEGRITY: FAIR

WELL TAG: YES

LOCK#: YES

REMARKS: Recently re-tapped. New bulk

SIGNATURE: 

Page 4 of 10

STANTEC

PROJECT #: 01CP.01234.40.8504 PURGED BY: M. Tolley, M. Jenkins WELL I.D.: MW - 14
CLIENT NAME: Mike Noll / CP SAMPLED BY: M. Tolley, M. Jenkins SAMPLE I.D.: MW-14
LOCATION: 202 Avenue D, Snohomish, WA - Site #4165 RM&R 1234

DATE PURGED	<u>6/16/08</u>	START (2400hr)	<u>10:43</u>	END (2400hr)	<u>11:00</u>		
DATE SAMPLED	<u>6/16/08</u>	SAMPLE TIME (2400hr)	<u>10:55</u>	LOW-FLOW USED	<u>Y</u>		
SAMPLE TYPE:	Groundwater X	Surface Water		Treatment Effluent			
CASING DIAMETER:	2" <u>X</u>	3" <u>(0.64)</u>	4" <u>(2.45)</u>	5" <u>(3.86)</u>	6" <u>(5.68)</u>	8" <u>(9.84)</u>	Other <u>()</u>
Casing Volume: (liters per foot)							

DEPTH TO BOTTOM (feet) = 14.70

DEPTH TO WATER (feet) = 8.40

WATER COLUMN HEIGHT (feet) = 6.30 ACTUAL PURGE (L) = + 95

FIELD MEASUREMENTS

Calculated Variance of Final Three Samples:

Acceptable Variance Limits: $\leq 10\%$ $\leq 3\%$ ≤ 0.1

DEPTH TO PURGE INTAKE DURING PURGE: SAMPLE DTW: 8-7-1

ANTICIPATED PURGE INTAKE DEPTH: _____ ANALYSES: TPH-g
TPH-d
BTEX

SAMPLE VESSEL / PRESERVATIVE:

PURGING EQUIPMENT:	SAMPLING EQUIPMENT:
SA1, SA2	Horiba Water Quality Monitor DTW/DTP Interface Probe Peristaltic Pump

Flow Through Cell Disconnected Prior to Sample Collection? YES NO

WELL PAD CONDITION: **Good** WELL CASING CONDITION:

WELL VACUUM CONDITION: S-1112 SEAL PRESENT?: YES BOLTS PRESENT?: YES

WELL VACUUM CONDITION: GOOD SEAL PRESENT?: yes BOLTS PRESENT?: yes

WELL INTEGRITY: Good WELL TAG: 78 LOCK#: 42
REMARKS: WEI IN GOOD SHAPE. SOME SEDIMENT.

www.english-test.net

SIGNATURE: Page 15 of 16

STANTEC
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 01CP.01234.40.8504 PURGED BY: M. Tolley, M. Jenkins WELL I.D.: MW - 15
CLIENT NAME: Mike Null / CP SAMPLED BY: M. Tolley, M. Jenkins SAMPLE I.D.: MW - 15
LOCATION: 202 Avenue D, Snohomish, WA – Site #4165 RM&R 1234

DATE PURGED 29 6/16/08 START (2400hr) 13:27 END (2400hr) 13:50
 DATE SAMPLED 6/16/08 SAMPLE TIME (2400hr) 13:40 LOW-FLOW USED Y
 SAMPLE TYPE: Groundwater X Surface Water _____ Treatment Effluent _____ Other _____
 CASING DIAMETER: 2" X 3" _____ 4" _____ 5" _____ 6" _____ 8" _____ Other _____
 Casing Volume: (liters per foot) (0.64) (1.44) (2.45) (3.86) (5.68) (9.84) ()

DEPTH TO BOTTOM (feet) = 15 - 20

DEPTH TO WATER (feet) = 8 - 5 /

WATER COLUMN HEIGHT (feet) = 6.64 ACTUAL PURGE (L) = 9 1

FIELD MEASUREMENTS

Calculated Variance of Final Three Samples:

Acceptable Variance Limits: 10% 3% 1

DEPTH TO PURGE INTAKE DURING PURGE: _____ SAMPLE DTW: 8-60
ANTICIPATED PURGE INTAKE DEPTH: _____ ANALYSES: TPH-g

TPH-d

BTEX

SAMPLE VESSEL PRESERVATIVE: LIAKES LABORATORY: LA 262

Flow Through Cell Disconnected Prior to Sample Collection? YES NO

WELL PAD CONDITION: Good WELL CASING CONDITION:

WELL VAULT CONDITION: Good SEAL PRESENT?: Yes BOLTS PRESENT?: Yes

WELL INTEGRITY: green WELL TAG: 100 LOCK#: 115

REMARKS: Init. 10-12-1912

SIGNATURE: M. J. Page 6 of 16

STANTEC
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 01CP.01234.40.8504 PURGED BY: M. Tolley, M. Jenkins WELL I.D.: MW - 6A
CLIENT NAME: Mike Null/CP SAMPLED BY: M. Tolley, M. Jenkins SAMPLE I.D.: MW - 6A
LOCATION: 202 Avenue D, Snohomish, WA – Site #4165 RM&R 1234

DATE PURGED 6/16/08 START (2400hr) 1249 END (2400hr) 1312
 DATE SAMPLED 6/16/08 SAMPLE TIME (2400hr) 1301 LOW-FLOW USED Y
 SAMPLE TYPE: Groundwater X Surface Water Treatment Effluent Other
 CASING DIAMETER: 2" X 3" 4" 5" 6" 8" Other
 Casing Volume: (liters per foot) (0.64) (1.44) (2.45) (3.86) (5.68) (9.84) ()

DEPTH TO BOTTOM (feet) = 19.10

DEPTH TO WATER (feet) = 8.75 8.44

WATER COLUMN HEIGHT (feet) = 10.75 ACTUAL PURGE (L) = -0.31 0.65 L

FIELD MEASUREMENTS

Calculated Variance of Final Three Samples:

Acceptable Variance Limits: ≤ 10% ≤ 3% ≤ 0.1

DEPTH TO PURGE INTAKE DURING PURGE: _____ SAMPLE DTW: 8.75
ANTICIPATED PURGE INTAKE DEPTH: _____ ANALYSES: TRM -

SAMPLE VESSEL / PRESERVATIVE: _____

PURGING EQUIPMENT: _____ SAMPLING EQUIPMENT: _____

Horiba Water Quality Monitor
DTW/DTP Interface Probe

Flow Through Cell Disconnected Prior to Sample Collection? YES NO

WELL PAD CONDITION: FAIR

WELL CASING CONDITION:

WELL VAULT CONDITION: FAIR

IS IT A PRESENT?: YES

BOLTS PRESENT?

WELL INTEGRITY: **6A**

WELL TAG: YES

REVIEWERS: *John Keeler* (left) and *John C. Sauer* (right)

1. *Monographia* 6. *Index*

REVIEWED BY: DR. JAMES R. HARRIS / DATE: 10-10-2011

(REMARKS) _____

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REMARKS: NEEDS TO BE RE-TAPED / Don't have right sea.

SIGNATURE:

STANTEC
WATER SAMPLE FIELD DATA SHEET

PROJECT #: 01CP.01234.40.8504 PURGED BY: M. Tolley, M. Jenkins WELL I.D.: MW-12
CLIENT NAME: Mike Noll/CP SAMPLED BY: M. Tolley, M. Jenkins SAMPLE I.D.: MW-12
LOCATION: 202 Avenue D, Snohomish, WA - Site #4165 RM&R 1234

DATE PURGED	<u>6/16/04</u>	START (2400hr)	<u>13:57</u>	END (2400hr)	<u>14:23</u>		
DATE SAMPLED	<u>6/16/04</u>	SAMPLE TIME (2400hr)	<u>14:10</u>	LOW-FLOW USED	<u>Y</u>		
SAMPLE TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water		Treatment Effluent		Other	
CASING DIAMETER:	2" <input checked="" type="checkbox"/>	3" <input type="checkbox"/>	4" <input type="checkbox"/>	5" <input type="checkbox"/>	6" <input type="checkbox"/>	8" <input type="checkbox"/>	Other <input type="checkbox"/>
Casing Volume: (liters per foot)	(0.64)	(1.44)	(2.45)	(3.86)	(5.68)	(9.84)	()

DEPTH TO BOTTOM (feet) = 14.00

DEPTH TO WATER (feet) = 8.75

WATER COLUMN HEIGHT (feet) = 7.25 ACTUAL PURGE (L) = 1.0 L

FIELD MEASUREMENTS

DEPTH TO PURGE INTAKE DURING PURGE: _____ SAMPLE DTW: 8-82

ANTICIPATED PURGE INTAKE DEPTH: _____ ANALYSES: TPH-g
TPH-d
BTEX

SAMPLE VESSEL / PRESERVATIVE: _____

PURGING EQUIPMENT:	SAMPLING EQUIPMENT:
	Horiba Water Quality Monitor DTW/DTP Interface Probe Peristaltic Pump

Flow Through Cell Disconnected Prior to Sample Collection? YES NO

WELL PAD CONDITION: FAIR WELL CASING CONDITION: FAIR

WELL VULUT CONDITION: F A I R SEAL PRESENT?: YES BOLTS PRESENT?: NO

WELL VACUUM CONDITION: FAIR WELL FREQUENCY: 10 LOCK #: YES

REMARKS: *D well T&G*

* well in landscape, near BBQ Shack / sampled 2nd best.

For more information about the study, please contact Dr. John Smith at (555) 123-4567 or via email at john.smith@researchinstitute.org.

SIGNATURE: Page 10 of

ConocoPhillips Analysis Request/Chain of Custody



For Lancaster Labs Use ONLY Acct. #: _____ Group #: _____ Sample#: _____ SCR#: _____

910823

Site #: 354165 AOC#: _____
Site City: Snohomish State: WA
Enfos PO# 4509112202
ConocoPhillips PM: Mike Noll
Samplers Name: MATT Tolley, MATT Jenkins

Sample Identification	Date Collected	Time Collected	Grab	Compos.	Soil	Water	<input type="checkbox"/> Oil	<input type="checkbox"/> TPH -	<input type="checkbox"/> TPH -	<input type="checkbox"/> STC	Remarks
MW - 1A	6/16/08	1154	X		X	X	X	X	X		
MW - 2	6/16/08	1235	X		X		X	X	X		
MW - 5A	6/16/08	1301	X		X		X	X	X		
MW - 4	6/16/08	1130	X		X		X	X	X		
MW - 10	6/16/08		X		X		X	X	X		UNSAFE TO SAMPLE
MW - 11	6/16/08	1435	X		X		X	X	Y		
MW - 12	6/16/08	1410	X		X		X	X	X		
MW - 13	6/16/08	1030	X		X		X	X	X		
MW - 14	6/16/08	1055	X		X		X	X	Y		
MW - 15	6/16/08	1340	X		X		X	X	X		

Consultant Information:

Office City: Richmond State: VA

Project Manager: Amanda Mucci

Phone Number: (435) 372-1600 Fax: (435) 372-1650

Email: Amanda.Wilcox@State.RI.gov

Electronic Data Deliverables (Circle One) Yes / No Form

Reporting Requirements (Circle One)

Standard Reports/QC Summary		Full Validation (LLI Type I)			
NJ Regulatory	NJ Reduced	NY ASP-A	NY ASP-B	Other	

		Analyses Requested										Preservation Codes		Preservative Codes	
		List total number of containers in the Analyses Requested box under each analysis.													
Matrix		Preservation Codes										Remarks			
		H	H	H											
Composite Soil	Water <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Oil <input type="checkbox"/> Air	X	X	X								UNSAFE TO SAMPLE		H = HCl	T = Thiosulfate
		X	X	X										N = HNO ₃	B = NaOH
		X	X	X										S = H ₂ SO ₄	O = Other
		X	X	X											
		X	X	X											
		X	X	X											
		X	X	X											
		X	X	X											
		X	X	X											
		X	X	X											
Turnaround Time Requested in Business Days (TAT) (Circle One):															
STD	5 day	48 hour	24 hour	Other _____											
Relinquished by: <i>M. Jenkins</i>				Date	Time	Received by:						Date	Time		
Relinquished by:				Date	Time	Received by:						Date	Time		
Relinquished by:				Date	Time	Received by:						Date	Time		
Relinquished by Commercial Carrier:															
UPS _____ FedEx _____ Other _____				Temperature Upon Receipt _____						C°					

ATTACHMENT 3
CERTIFIED LABORATORY ANALYTICAL REPORT
AND CHAIN OF CUSTODY DOCUMENTATION



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

Analysis Report

ANALYTICAL RESULTS

Prepared for:

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

Prepared by:

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

SAMPLE GROUP

The sample group for this submittal is 1096424. Samples arrived at the laboratory on Tuesday, June 17, 2008. The PO# for this group is 4509112202 and the release number is NOLL.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
MW-1A Grab Water Sample	5391534
MW-2 Grab Water Sample	5391535
MW-6A Grab Water Sample	5391536
MW-9 Grab Water Sample	5391537
MW-11 Grab Water Sample	5391538
MW-12 Grab Water Sample	5391539
MW-13 Grab Water Sample	5391540
MW-14 Grab Water Sample	5391541
MW-15 Grab Water Sample	5391542
Trip Blank Water Sample	5391543

ELECTRONIC	Stantec	Attn: Alice Larsen
COPY TO		
ELECTRONIC	Stantec	Attn: Tammy Parise
COPY TO		
ELECTRONIC	ConocoPhillips	Attn: Amanda Magee
COPY TO		



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Analysis Report

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

Respectfully Submitted,

A handwritten signature in black ink that reads "Michele M. Turner".

Michele M. Turner
Director



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Analysis Report

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Lancaster Laboratories Sample No. WW5391534

Group No. 1096424

MW-1A Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 11:54 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

Reported: 06/26/2008 at 22:49

Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

SMW1A

CAT No.	Analysis Name	CAS Number	As Received		Method Detection Limit	Units	Dilution Factor
			Result				
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.	50.	ug/l	1	
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1	
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1	
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1	
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/23/2008 01:31	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/19/2008 14:18	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/24/2008 15:15	Anita M Dale	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/19/2008 14:18	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/24/2008 15:15	Anita M Dale	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 01:20	Roman Kuropatkin	1



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Analysis Report

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Lancaster Laboratories Sample No. WW5391535

Group No. 1096424

MW-2 Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 12:35 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

ConocoPhillips

Reported: 06/26/2008 at 22:49

5528 NW Doane Ave.

Discard: 07/27/2008

Portland OR 97210

DSMW2

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			Result	Method Detection Limit		
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.	50.	ug/l	1
02300	GC/MS Volatiles					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/23/2008 01:50	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/19/2008 14:51	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/24/2008 15:36	Anita M Dale	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/19/2008 14:51	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/24/2008 15:36	Anita M Dale	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-DX 06/97	1	06/20/2008 01:20	Roman Kuropatkin	1



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Lancaster Laboratories Sample No. WW5391536

Group No. 1096424

MW-6A Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 13:01 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

ConocoPhillips

Reported: 06/26/2008 at 22:49

5528 NW Doane Ave.

Discard: 07/27/2008

Portland OR 97210

SMW6A

CAT No.	Analysis Name	CAS Number	As Received		Method Detection Limit	Units	Dilution Factor
			Result				
02211	TPH by NWTPH-Dx(water) w/SiGel						
02095	Diesel Range Organics	n.a.	140.	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.	840.	50.	ug/l	1	
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1	
05407	Toluene	108-88-3	1.	0.5	ug/l	1	
05415	Ethylbenzene	100-41-4	0.7	0.5	ug/l	1	
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/23/2008 02:10	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/19/2008 15:57	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/24/2008 15:57	Anita M Dale	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/19/2008 15:57	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/24/2008 15:57	Anita M Dale	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 01:20	Roman Kuropatkin	1



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Analysis Report

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Lancaster Laboratories Sample No. WW5391537

Group No. 1096424

MW-9 Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 11:30 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

Reported: 06/26/2008 at 22:49

Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

DSMW9

CAT No.	Analysis Name	CAS Number	As Received		Method Detection Limit	Units	Dilution Factor
			Result				
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.	50.	ug/l	1	
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1	
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1	
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1	
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/22/2008 16:42	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/19/2008 15:24	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 05:15	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/19/2008 15:24	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 05:15	Florida A Cimino	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 09:35	Darin P Wagner	1



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Analysis Report

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Lancaster Laboratories Sample No. WW5391538

Group No. 1096424

MW-11 Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 14:35 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

Reported: 06/26/2008 at 22:49

Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

SMW11

CAT No.	Analysis Name	CAS Number	As Received		Method Detection Limit	Units	Dilution Factor
			Result				
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.	98.	50.	ug/l	1	
02300	GC/MS Volatiles						
05401	Benzene	71-43-2	4.	0.5	ug/l	1	
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1	
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1	
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/22/2008 17:02	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/20/2008 19:09	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 05:41	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/20/2008 19:09	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 05:41	Florida A Cimino	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 09:35	Darin P Wagner	1



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Analysis Report

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Lancaster Laboratories Sample No. WW5391539

Group No. 1096424

MW-12 Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 14:10 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

Reported: 06/26/2008 at 22:49

Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

SMW12

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			Result	Method Detection Limit		
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.	350.	50.	ug/l	1
02300	GC/MS Volatiles					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	1.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/22/2008 19:58	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/20/2008 19:43	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 06:09	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/20/2008 19:43	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 06:09	Florida A Cimino	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 09:35	Darin P Wagner	1



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Lancaster Laboratories Sample No. WW5391540

Group No. 1096424

MW-13 Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 10:30 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

Reported: 06/26/2008 at 22:49

Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

SMW13

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			Result	Method Detection Limit		
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.	160.	50.	ug/l	1
02300	GC/MS Volatiles					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/22/2008 17:21	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/20/2008 20:16	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 06:35	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/20/2008 20:16	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 06:35	Florida A Cimino	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 09:35	Darin P Wagner	1



Analysis Report

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Lancaster Laboratories Sample No. WW5391541

Group No. 1096424

MW-14 Grab Water Sample

Site# 1234 (254165)

202 Avenue D-Snohomish, WA

Collected: 06/16/2008 10:55 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40

Reported: 06/26/2008 at 22:49

Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

SMW14

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			Result	Method Detection Limit		
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.	50.	ug/l	1
02300	GC/MS Volatiles					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/22/2008 17:41	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/20/2008 20:49	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 07:02	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/20/2008 20:49	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 07:02	Florida A Cimino	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 09:35	Darin P Wagner	1



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Analysis Report

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Lancaster Laboratories Sample No. WW5391542

Group No. 1096424

MW-15 Grab Water Sample
Site# 1234 (254165)
202 Avenue D-Snohomish, WA

Collected: 06/16/2008 13:40 by MT

Account Number: 11817

Submitted: 06/17/2008 09:40
Reported: 06/26/2008 at 22:49
Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

SMW15

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			Result	Method Detection Limit		
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.	50.	ug/l	1
02300	GC/MS Volatiles					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	06/22/2008 18:01	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/20/2008 21:23	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 07:29	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/20/2008 21:23	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 07:29	Florida A Cimino	1
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	06/20/2008 09:35	Darin P Wagner	1



Analysis Report

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Lancaster Laboratories Sample No. WW5391543

Group No. 1096424

Trip Blank Water Sample
Site# 1234 (254165)
202 Avenue D-Snohomish, WA
Collected: 06/16/2008

Account Number: 11817

Submitted: 06/17/2008 09:40
Reported: 06/26/2008 at 22:49
Discard: 07/27/2008

ConocoPhillips
5528 NW Doane Ave.
Portland OR 97210

DSTB-

CAT No.	Analysis Name	CAS Number	As Received		Units	Dilution Factor
			Result	Method Detection Limit		
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	50.	ug/l	1
02300	GC/MS Volatiles					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	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	
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	06/20/2008 18:03	Patrick N Evans	1
02300	GC/MS Volatiles	SW-846 8260B	1	06/26/2008 07:55	Florida A Cimino	1
01146	GC VOA Water Prep	SW-846 5030B	1	06/20/2008 18:03	Patrick N Evans	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	06/26/2008 07:55	Florida A Cimino	1



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Analysis Report

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Quality Control Summary

Client Name: ConocoPhillips
Reported: 06/26/08 at 10:49 PM

Group Number: 1096424

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

<u>Analysis Name</u>	<u>Blank Result</u>	<u>Blank MDL</u>	<u>Report Units</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>LCS/LCSD Limits</u>	<u>RPD</u>	<u>RPD Max</u>
Batch number: 081710013A Diesel Range Organics Heavy Range Organics	N.D.	80.	ug/l	74	76	61-106	3	20
	N.D.	100.	ug/l					
Batch number: 081710018A Diesel Range Organics Heavy Range Organics	N.D.	80.	ug/l	68	70	61-106	4	20
	N.D.	100.	ug/l					
Batch number: 08171A51A TPH by NWTPH-Gx waters	N.D.	50.	ug/l	89	89	75-135	0	30
Batch number: 08172A51A TPH by NWTPH-Gx waters	N.D.	50.	ug/l	88	90	75-135	1	30
Batch number: F081761AA Benzene Toluene Ethylbenzene Xylene (Total)	N.D.	0.5	ug/l	97	99	78-119	2	30
	N.D.	0.5	ug/l	96	97	85-115	0	30
	N.D.	0.5	ug/l	94	97	82-119	3	30
	N.D.	0.5	ug/l	93	96	83-113	3	30
Batch number: P081774AA Benzene Toluene Ethylbenzene Xylene (Total)	N.D.	0.5	ug/l	100	100	78-119	0	30
	N.D.	0.5	ug/l	95	97	85-115	3	30
	N.D.	0.5	ug/l	95	96	82-119	1	30
	N.D.	0.5	ug/l	93	96	83-113	3	30

Sample Matrix Quality Control

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

<u>Analysis Name</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>MS/MSD Limits</u>	<u>RPD MAX</u>	<u>BKG Conc</u>	<u>DUP Conc</u>	<u>DUP RPD</u>	<u>Dup RPD Max</u>
Batch number: 08171A51A TPH by NWTPH-Gx waters	92		Sample number(s): 5391534-5391537 UNSPK: P389346 63-154					
Batch number: 08172A51A TPH by NWTPH-Gx waters	98		Sample number(s): 5391538-5391543 UNSPK: 5391538 63-154					
Batch number: F081761AA Benzene Toluene Ethylbenzene Xylene (Total)	107		Sample number(s): 5391534-5391536 UNSPK: P390932 83-128					
	103			83-127				
	102			82-129				
	100			82-130				

*- Outside of specification

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



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Analysis Report

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Quality Control Summary

Client Name: ConocoPhillips
Reported: 06/26/08 at 10:49 PM

Group Number: 1096424

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	BKG MAX	DUP Conc	DUP RPD	Dup RPD Max
Batch number: P081774AA			Sample number(s): 5391537-5391543 UNSPK: P392682					
Benzene	107		83-128					
Toluene	102		83-127					
Ethylbenzene	102		82-129					
Xylene (Total)	100		82-130					

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-Dx(water) w/SiGel
Batch number: 081710013A
Orthoterphenyl

5391534 86
5391535 94
5391536 88
Blank 92
LCS 105
LCSD 107

Limits: 50-150

Analysis Name: TPH by NWTPH-Dx(water) w/SiGel
Batch number: 081710018A
Orthoterphenyl

5391537 92
5391538 95
5391539 100
5391540 108
5391541 99
5391542 90
Blank 95
LCS 105
LCSD 110

Limits: 50-150

Analysis Name: TPH by NWTPH-Gx waters
Batch number: 08171A51A
Trifluorotoluene-F

5391534 112
5391535 109
5391536 88
5391537 112
Blank 113
LCS 105

*- Outside of specification

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



Analysis Report

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Quality Control Summary

Client Name: ConocoPhillips
Reported: 06/26/08 at 10:49 PM

Group Number: 1096424

Surrogate Quality Control

LCSD	97
MS	97

Limits: 63-135

Analysis Name: TPH by NWTPH-Gx waters
Batch number: 08172A51A
Trifluorotoluene-F

5391538	107
5391539	100
5391540	106
5391541	104
5391542	108
5391543	110
Blank	109
LCS	97
LCSD	102
MS	102

Limits: 63-135

Analysis Name: GC/MS Volatiles
Batch number: F081761AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5391534	90	92	89	89
5391535	91	88	87	87
5391536	91	90	89	112
Blank	94	91	90	88
LCS	89	86	85	90
LCSD	91	88	86	90
MS	90	90	84	90

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

Analysis Name: GC/MS Volatiles
Batch number: P081774AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5391537	99	95	98	86
5391538	95	97	98	86
5391539	95	95	97	91
5391540	97	97	97	88
5391541	98	95	98	86
5391542	96	94	97	84
5391543	97	97	98	84
Blank	99	99	97	86
LCS	99	99	95	90
LCSD	97	95	95	88
MS	99	100	96	90

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 unspiked result was more than four times the spike added.

ConocoPhillips Analysis Request/Chain of Custody



For Lancaster Labs Use ONLY Acct. #: 1181

For Lancaster Labs Use ONLY Acct. #: 181 Group #: 1046424 Sample #: 551-337-25 SCR#:

Group # 1096424

Sample

lett: 5391534-43 SCR#:

010823

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

4531.02

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 \geq 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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