



**Stantec Consulting Corporation**  
12034 134<sup>th</sup> Court NE, Suite 102  
Redmond, WA 98052  
Tel: (425) 298-1000  
Fax: (425) 298-1020

RECEIVED UNOCAL Station 4165  
Shoshomish  
JAN 11 2010  
DEPT. OF ECOLOGY  
TCP-NWRO ~~1995~~  
Release 1995

**Quarterly Groundwater Monitoring Report - Fourth Quarter 2009**  
**ConocoPhillips Facility No. 254165 (RM&R #01234)**  
**Washington Department of Ecology**  
**Leaking Underground Storage Tank Program ID #NW8443**  
**202 Avenue D**  
**Snohomish, Washington**

**Stantec Project No.:**  
**212301492**

**Submitted to:**  
**LUST Coordinator**  
**Washington State Department of Ecology**  
**3190 160<sup>th</sup> Avenue SE**  
**Bellevue, WA 98008-5452**

**Submitted by:**  
**Stantec Consulting Corporation**  
**12034 134<sup>th</sup> Court NE, Suite 102**  
**Redmond, WA 98052**

**Prepared on behalf of:**  
**ConocoPhillips Company**

**January 7, 2010**

**Stantec****Quarterly Groundwater Monitoring Report Fourth Quarter 2009**

January 7, 2010

Dear LUST Coordinator:

Stantec Consulting Corporation (Stantec) is pleased to present this quarterly groundwater monitoring report to the Washington State Department of Ecology (DOE) Leaking Underground Storage Tank (LUST) Program on behalf of the ConocoPhillips Company (ConocoPhillips). This report describes the results of groundwater monitoring activities performed by Stantec during the Fourth Quarter of 2009 (the reporting period) at ConocoPhillips Facility No. 254165 (RM&R #01234; LUST #NW8443) located at 202 Avenue D in Snohomish, Washington (the Site).

**GROUNDWATER MONITORING ACTIVITIES**

Groundwater monitoring activities during the reporting period were performed on December 7, 2009. Groundwater monitoring activities were performed in accordance with Stantec's protocols for groundwater monitoring events (Appendix A).

Five groundwater monitoring wells were gauged (MW-1A, MW-2, MW-6A, MW-11, and MW-12) and three groundwater monitoring wells (MW-6A, MW-11, and MW-12) were sampled. Well MW-10 has been removed from the groundwater gauging and sampling program due to safety concerns with respect to traffic patterns in the intersection. Wells MW-9, MW-10, and MW-13 through MW-15 were not included in the sampling schedule this reporting period. Monitoring activities are described below.

**Monitoring Well Gauging**

Five groundwater monitoring wells were gauged: MW-1A, MW-2, MW-6A, MW-11, and MW-12. Monitoring wells were gauged for the presence of liquid phase hydrocarbons (LPH) and depth-to-groundwater prior to purging and sampling. LPH was not measured in the groundwater monitoring wells at thicknesses greater than or equal to 0.01 feet. The depth to groundwater ranged from 4.02 feet (MW-2) to 8.53 feet (MW-12) below the top of casing (TOC). Depth-to-groundwater data was used to calculate the groundwater elevation in each well and evaluate the groundwater flow direction and gradient. Historical groundwater gauging data and gauging data from the reporting period are summarized in Table 1. Well locations and groundwater flow direction are shown on Figure 1. Based on these data, the inferred groundwater flow direction was to the south at an approximate gradient of 0.07 feet per foot (ft/ft).

**Monitoring Well Purgung**

Wells intended to be sampled were purged after gauging. Groundwater was purged from the wells using low-flow methods, which included using a peristaltic pump and dedicated polyethylene tubing. Water quality parameters were measured during purging and recorded on

field data sheets (Appendix B). Purged groundwater and rinsate/decontamination water were stored on site in a Department of Transportation (DOT)-approved, steel drum pending laboratory characterization and off site disposal.

### **Monitoring Well Sampling**

Following purging operations, groundwater samples were collected using a peristaltic pump and placed directly into pre-cleaned sample containers provided by an independent laboratory.

Once the sample containers were filled and sealed, they were labeled with the pertinent sampling information, and placed on ice in an insulated cooler for delivery under chain-of-custody documentation to an independent laboratory.

## **CHEMICAL ANALYSES AND RESULTS**

### **Chemical Analyses**

Groundwater samples collected during the reporting period were submitted to Pace Analytical Services, Inc. (Pace) in Seattle, Washington for the following chemical analyses:

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) using Environmental Protection Agency (EPA) Method 8260B; and
- Total petroleum hydrocarbons (TPH) gasoline range organics (TPH-G) using DOE Northwest Method NWTPH-Gx.

Chemical analyses results are described below. A copy of the certified laboratory analytical report and chain-of-custody documentation from Pace are included in Appendix C.

### **Chemical Analyses Results**

Historical chemical analyses results and those from the reporting period are summarized in Table 1. Analytical results for TPH-G and BTEX are illustrated on Figure 2.

A summary of the analytical results exceeding Model Toxics Control Act (MTCA) Method A cleanup levels is provided below. Analytical results not described below did not exceed MTCA Method A cleanup levels.

- TPH-G was detected in groundwater from MW-6A at a concentration of 1,990 micrograms per liter ( $\mu\text{g}/\text{L}$ ), which exceeds the MTCA Method A cleanup level of 1,000  $\mu\text{g}/\text{L}$ . The detected concentration is relatively consistent with recent sampling events.

- Benzene was detected in groundwater from MW-11 at a concentration of 8.5 µg/L, which exceeds the MTCA Method A cleanup level of 5 µg/L. The detected concentration is relatively consistent with recent sampling events.

**Laboratory Quality Assurance/Quality Control (QA/QC)**

A copy of the analytical report for the samples collected during the reporting period is included in Appendix C. Please refer to the analytical report for a description of QA/QC methods and potential concerns (if any) that were identified during chemical analysis. No potential QA/QC concerns appear to have been identified in the analytical report.

**WASTE DISPOSAL**

Purge and rinsate water generated during the monitoring and sampling event were temporarily stored on site in a labeled, DOT-approved, steel drum. The drum and its contents will be transported off-site to a licensed disposal or recycling facility by a licensed ConocoPhillips-approved vendor. A copy of the signed waste manifest or other disposal documentation will be provided under a separate cover.

**CONCLUSIONS**

The concentrations of TPH-G in MW-6A and benzene in MW-11 exceeded MTCA Method A cleanup levels. The reported concentrations are relatively consistent with other recent sampling events at the Site.

**LIMITATIONS AND CERTIFICATIONS**

This report was prepared in accordance with the scope of work outlined in Stantec's contract and with generally accepted professional engineering and 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 investigations. No other warranties, expressed or implied are made by Stantec.

**Stantec**

**Quarterly Groundwater Monitoring Report Fourth Quarter 2009**

January 7, 2010

---

**Prepared by:**

Tammy Parise

Tammy Parise

Staff Scientist

**Reviewed by:**

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

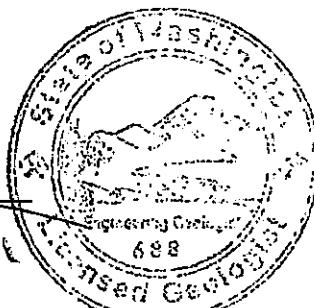


Figure 1 Site Plan with Groundwater Elevations (December 7, 2009)

Figure 2 Site Plan with Analytical Results (December 7, 2009)

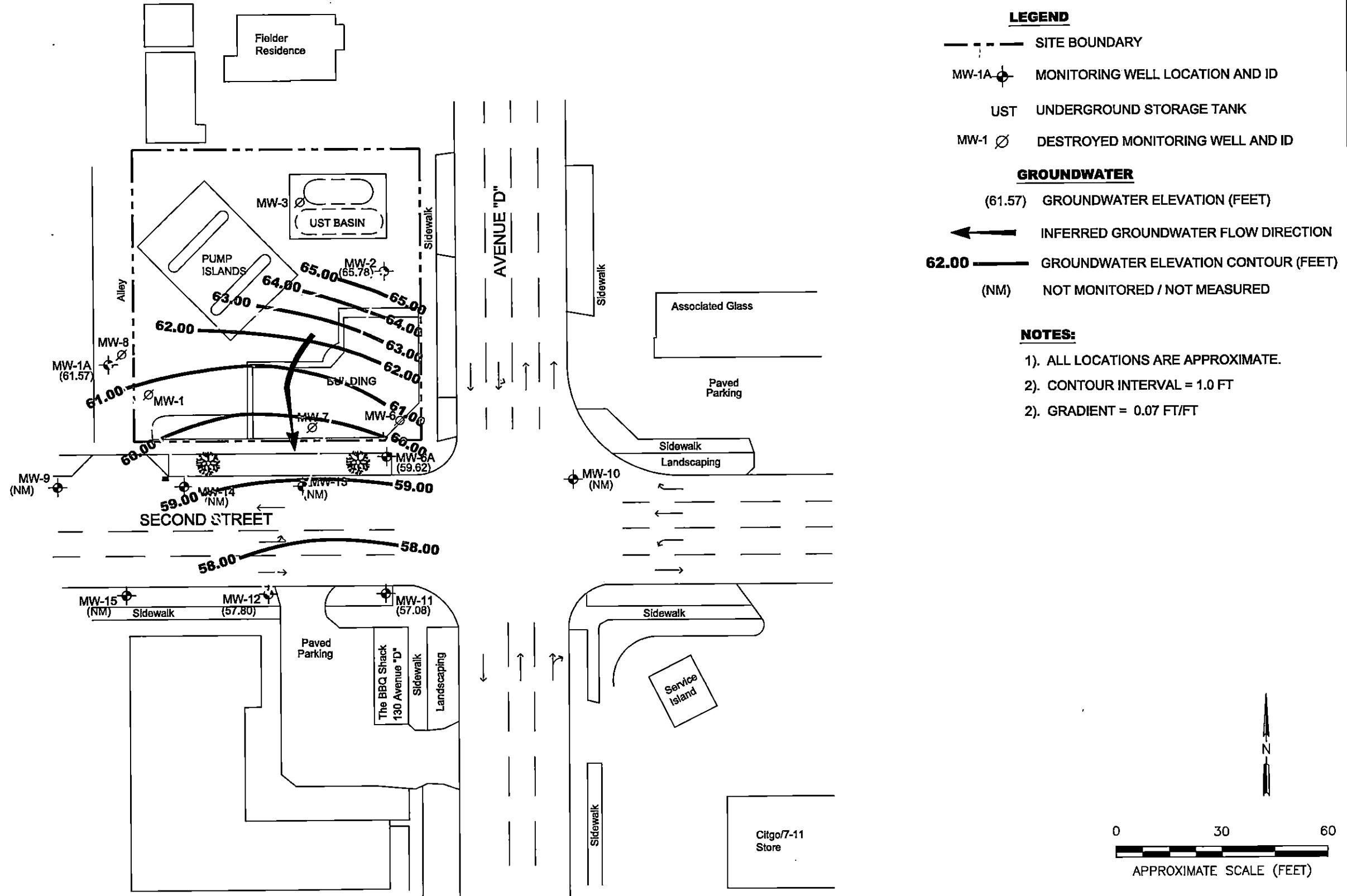
Table 1 Cumulative Summary of Groundwater Elevations and Sample Analytical Results

Appendix A Field and Laboratory Procedures

Appendix B Field Data Sheets

Appendix C Certified Laboratory Analytical Report and Chain-of-Custody Documentation

## **FIGURES**



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

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of data and/or information.

 12034 134th COURT NE, SUITE 102 REDMOND, WASHINGTON PH (425) 288-1000/FAX (425) 288-1020	FOR: <b>ConocoPhillips</b>		SITE PLAN WITH GROUNDWATER ELEVATIONS (DECEMBER 7, 2009)		FIGURE: <b>1</b>
	JOB NUMBER: 212301492 (1234)	DRAWN BY: DJH	CHECKED BY: TP	APPROVED BY: CG	DATE: 12/16/09

**LEGEND**

- - - SITE BOUNDARY
- MW-1A MONITORING WELL LOCATION AND ID
- UST UNDERGROUND STORAGE TANK
- MW-1 Ø DESTROYED MONITORING WELL AND ID
- ← INFERRED GROUNDWATER FLOW DIRECTION

**ANALYTES**

WELL ID	ANALYTES
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 ( $\mu\text{g/L}$ )

- < LESS THAN LABORATORY REPORTING LIMITS
- BOLD** ANALYTES DETECTED ABOVE THE METHOD "A" CLEANUP LEVEL
- NOT ANALYZED OR NOT APPLICABLE

**NOTES:**

- ALL LOCATIONS ARE APPROXIMATE

MW-2	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	<50.0	-	-
TPH-D	<82	<78	-	-
TPH-O	<410	<390	-	-
B	<1.0	<1.0	-	-
T	<1.0	<1.0	-	-
E	<1.0	<1.0	-	-
X	<1.0	<3.0	-	-
MTBE	<1.0	<1.0	-	-

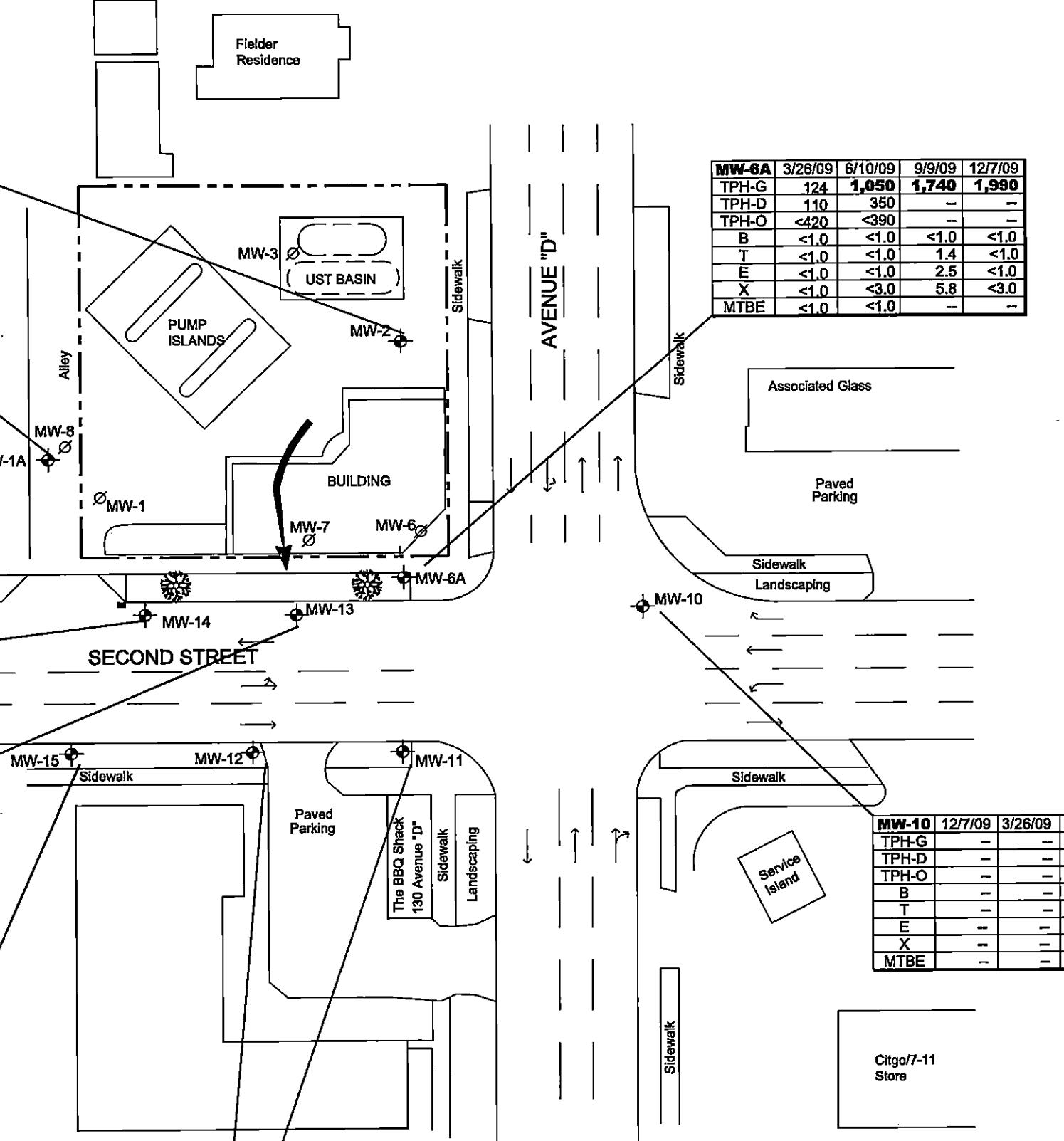
MW-1A	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	<50.0	-	-
TPH-D	<82	<78	-	-
TPH-O	<410	<390	-	-
B	<1.0	<1.0	-	-
T	<1.0	<1.0	-	-
E	<1.0	<1.0	-	-
X	<1.0	<3.0	-	-
MTBE	<1.0	<1.0	-	-

MW-9	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	<50.0	-	-
TPH-D	<83	<78	-	-
TPH-O	<420	<390	-	-
B	<1.0	<1.0	-	-
T	<1.0	<1.0	-	-
E	<1.0	<1.0	-	-
X	<1.0	<3.0	-	-
MTBE	<1.0	<1.0	-	-

MW-14	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	<50.0	191	-
TPH-D	<82	100	-	-
TPH-O	<410	<390	-	-
B	<1.0	<1.0	<1.0	-
T	<1.0	<1.0	<1.0	-
E	<1.0	<1.0	<1.0	-
X	<1.0	<3.0	<3.0	-
MTBE	<1.0	<1.0	-	-

MW-13	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	271	165	173	-
TPH-D	<83	89	-	-
TPH-O	<410	<39	-	-
B	<1.0	<1.0	<1.0	-
T	<1.0	<1.0	<1.0	-
E	<1.0	<1.0	<1.0	-
X	<1.0	<3.0	<3.0	-
MTBE	2.2	1.9	-	-

MW-15	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	<50.0	-	-
TPH-D	<83	<78	-	-
TPH-O	<420	<390	-	-
B	<1.0	<1.0	-	-
T	<1.0	<1.0	-	-
E	<1.0	<1.0	-	-
X	<1.0	<3.0	-	-
MTBE	<1.0	<1.0	-	-



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

MW-12	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	514	709	938
TPH-D	<82	170	-	-
TPH-O	<410	<380	-	-
B	<1.0	<1.0	<1.0	<1.0
T	<1.0	<1.0	<1.0	<1.0
E	<1.0	1.3	<1.0	2.6
X	<1.0	<3.0	<3.0	<3.0
MTBE	<1.0	<1.0	-	-

MW-11	3/26/09	6/10/09	9/9/09	12/7/09
TPH-G	<50.0	321	224	119
TPH-D	<82	94	-	-
TPH-O	<410	<390	-	-
B	<1.0	<b>5.9</b>	1.1	<b>8.5</b>
T	<1.0	<1.0	<1.0	<1.0
E	<1.0	<1.0	<1.0	<1.0
X	<1.0	<3.0	<3.0	<3.0
MTBE	<1.0	<1.0	-	-

MW-10	12/7/09	3/26/09	6/10/09	9/9/09
TPH-G	-	-	-	-
TPH-D	-	-	-	-
TPH-O	-	-	-	-
B	-	-	-	-
T	-	-	-	-
E	-	-	-	-
X	-	-	-	-
MTBE	-	-	-	-

No warranty is made by Stantec as to the accuracy, reliability, or completeness of these data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed electronically, and may be updated without notification. Any reproduction may result in a loss of scale and/or information.



FOR: **ConocoPhillips**  
FACILITY NO. 254165 (RM&R 1234)  
202 AVENUE D  
SNOHOMISH, WASHINGTON  
12034 134th COURT NE, SUITE

**TABLE**

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

Well ID	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Metals			Alkalinity (µg/L)	Nitrate (µg/L)	Nitrite (µg/L)	Sulfate (µg/L)		
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethy-benzenes (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Dissolved Lead (µg/L)	Total Lead (µg/L)	Ferrous Iron (µg/L)			
MW-1A	04/04/02	69.32	7.21	—	62.11	73.6	<250	<500	<0.500	<0.500	<1.00	—	—	—	—	3,200	61,600	686	—	47,800	
69.32	07/02/02	69.32	9.30	—	60.02	<50.0	<250	<500	<0.500	<0.500	<1.00	—	—	—	—	0	42,400	<200	—	54,500	
10/02/02	69.32	11.67	—	57.85	<100	<250	<500	<0.500	<2.00	<1.00	<1.50	—	—	—	—	0	103,000	<200	—	50,500	
01/14/03	69.32	7.75	—	81.57	90.5	<250	<500	<0.500	<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	—	—	—	—	—	—	—	—	—	
07/11/03	69.32	10.31	—	59.01	<50.0	<261	<562 <sup>b</sup>	<0.500	0.702	0.517	1.74	—	—	—	—	500	64,800	300	—	30,400	
12/17/03	69.32	7.44	0.00	61.88	<100	<128	<58	0.339	<0.5	<0.5	<1	—	—	—	—	—	—	—	—	—	
03/01/04	69.32	8.28	0.00	61.04	<100	<118	<237	<1	<1	<1	<2	—	—	—	—	—	64,000	406	—	40,800	
08/18/04	69.32	10.89	0.00	58.43	<103	<264	<527 <sup>b</sup>	<1	<1	<1	<2	—	—	—	—	—	62,000	1,010	—	30,400	
03/21/05	69.32	9.22	0.00	60.10	288	<248	<490	<1	<1	<1	<2	—	—	—	—	—	68,000	850	—	35,700	
06/28/05	69.32	8.86	0.00	60.48	<100	<259	<517 <sup>b</sup>	<1	<1	<1	<2	—	—	—	—	—	81,600	1,410	—	32,600	
09/15/05	69.32	10.67	0.00	58.65	<18	<150	<200	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	1,200	26,300	—	—	
12/08/05	—	—	—	—	<46	<78	<97	<0.5	<0.7	<0.8	<0.6	—	—	—	—	—	78,200	160	—	24,000	
03/10/06	—	—	—	—	<48	<79	<98	<0.5	<0.7	<0.8	<0.6	—	—	—	—	—	76,700	1,200	—	41,500	
06/08/06	69.32	8.92	0.00	60.40	<48	<82	<100	<0.5	<0.7	<0.8	<0.5	—	—	—	—	—	62,500	9,400	—	42,800	
09/05/06	69.32	11.05	0.00	58.27	<18	<78	<98	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	—	—	—	
12/19/06	69.32	8.75	0.00	62.57	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	75,800	540	—	40,800	
03/20/07	69.32	7.39	0.00	61.63	<48	<78	145	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	67,400	10,500	—	65,100	
06/28/07	69.32	9.79	0.00	59.53	<50	<79	<99	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	63,200	3,970	—	24,600	
09/25/07	69.32	11.04	0.00	58.28	<50	<78	120	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	61,600	1,200	—	16,700	
12/10/07	69.32	7.44	0.00	61.88	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	69,000	480	—	22,300	
03/01/08	69.32	8.70	0.00	60.62	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	<0.5	—	—	—	—	—	64,100	10,300	<15	24,600
06/15/08	69.32	8.44	0.00	60.88	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	63,700	3,300	<15	—	
09/22/08	69.32	10.80	0.00	58.52	<50	<76	<95	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	—	—	—	
12/08/08	69.32	Removed from sampling schedule AQC8.					—	—	—	—	—	—	—	—	—	—	—	—	—	—	
03/26/09	69.32	7.69	0.00	61.43	<50.0	<82	<410	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	—	—	—	—	
06/10/09	69.32	9.47	0.00	59.85	<50.0	<76	<390	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<0.10	<1.0	<1.0	<1.0	—	—	—	
08/09/09	69.32	10.91	0.00	58.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
12/07/09	69.32	7.75	0.00	81.57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Gauge only this quarter.																					
MW-2	01/08/99	69.80	4.90	—	64.90	1,510	314	<750 <sup>b</sup>	20.7	<2.75	<2.50	<5.00	—	—	—	—	—	—	—	—	
69.80	04/25/99	69.80	4.91	—	64.89	1,163	324	<750 <sup>b</sup>	16.1	<1.60	<1.32	<3.30	—	—	—	—	—	—	—	—	
07/23/99	69.80	6.29	—	63.51	805	368	<750 <sup>b</sup>	12.3	<1.50	<0.500	<4.00	—	—	—	—	—	—	—	—		
10/25/99	69.80	8.64	—	61.18	2,100	250	<750 <sup>b</sup>	<0.700	<19.6	<0.700	<1.80	—	—	—	—	—	—	—	—		
01/08/00	69.80	4.72	—	65.08	1,630	<250	<750 <sup>b</sup>	22.2	<2.27	<2.43	<6.44	—	—	—	—	—	—	—	—		
04/16/00	69.80	5.43	—	64.32	1,210	257	<718 <sup>b</sup>	<0.500	28.5	<2.55	<4.22	—	—	—	—	—	—	—	—		
07/12/00	69.80	7.55	—	62.25	888	653	<750 <sup>b</sup>	<1.25	4.75	<1.25	<2.50	—	—	—	—	—	—	—	—		
09/06/00	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10/16/00	69.80	8.68	—	60.92	1,110	<158	<1,070 <sup>b</sup>	42.3	<4.13	<2.08	<5.00	—	—	—	—	—	—	—	—		
11/27/00	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
01/16/01	69.80	8.02	—	63.78	2,000	614	<918 <sup>b</sup>	<2.50	29.1	<2.50	<5.00	—	—	—	—	—	—	—	—		
04/04/01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
05/22/01	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
07/09/01	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
10/05/01	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
01/08/02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
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	—	
10/02/02	69.80	7.88	—	61.92	505	<250	<500	22.6	<2.00	<1.00	<1.50	—	—	—	—	—	3,400	150,000	<200	—	
04/16/02	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
04/16/03	69.80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

**TABLE 1**  
**CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**  
 ConocoPhillips Facility No. 254165 (RMSR #01234)  
 202 Avenue D  
 Snohomish, Washington

Well ID TOC Elevation	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Metals			Alkalinity ( $\mu\text{g/L}$ )	Nitrate ( $\mu\text{g/L}$ )	Nitrite ( $\mu\text{g/L}$ )	Sulfate ( $\mu\text{g/L}$ )		
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	TPH-O ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethy- benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Ferrous Iron ( $\mu\text{g/L}$ )			
MW-2	01/14/03	69.80	3.27	--	68.53	881	<500	<500	8.10	<0.500	0.515	2.49	--	--	--	2,600	276,000	<200	--		
	04/28/03	69.80	4.05	--	65.75	269	<500	<500	3.51	<0.500	<0.500	1.45	--	--	--	--	--	26,800	--		
	07/11/03	69.80	8.92	--	62.88	358	<50	<50	<581 <sup>a</sup>	5.64	0.557	0.782	3.04	--	--	--	--	--	--	--	
	12/17/03	69.80	3.65	0.00	68.15	124	<120	<120	<59	<0.25	<0.5	<1.00	--	--	--	--	--	310,000	<15		
	03/31/04	69.80	4.60	0.00	65.20	<100	123	<27	9.05	<1	<1	1.12	--	--	--	--	--	251,000	<15		
	06/19/04	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	84.28	<100	<251	<502 <sup>a</sup>	6.07	<1	<1	<2	--	--	--	--	--	205,000	<15		
	06/28/05	69.80	5.26	0.00	64.54	<100	344	568	<1	<1	<1	<2	--	--	--	--	--	26,800	--		
	05/15/05	69.80	7.32	0.00	62.48	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	209,000	<40		
	12/20/05	69.80	4.06	0.00	65.74	85	97	160	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	18,100	--		
	03/10/06	69.80	3.50	0.00	66.30	160	<70	100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	274,000	<40		
	06/08/06	69.80	5.08	0.00	64.74	<48	<79	290	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	205,000	<40		
	09/05/06	69.80	7.03	0.00	61.67	<48	<79	150	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	15	20,800		
	12/15/06												Obstructed by a parked vehicle						225,000	<40	
	03/21/07	69.80	3.33		68.47	68.5	<80	<100	1.64	<0.7	<0.8	<0.8	--	--	--	--	--	153,000	<40		
	06/21/07	69.80	6.41		63.39	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	26,700	--		
	09/21/07	69.80	7.78		62.01	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	103,000	<40		
	12/10/07	69.80	3.75		66.05	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	200,000	<40		
	03/14/08	69.80	4.76	0.00	65.04								Not sampled because well was inaccessible due to a parked car.						200,000	<2,000	
	06/16/08	69.80	4.45	0.00	65.35	<50	<76	<95	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	15,700	--		
	08/22/08	69.80	7.56	0.00	62.24	<50	<78	<95	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	25,900	--		
	12/08/08	69.80											Removed from sampling schedule Q008						12,300	--	
	03/26/09	69.80	3.61	0.00	66.19	<50.0	<82	<410	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	
	06/10/09	69.80	6.33	0.00	63.47	<50.0	<78	<390	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<0.01	<1.0	<1.0	<1.0	<1.0	--	
	05/09/09	69.80	7.84	0.00	61.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	12/07/09	69.80	4.02	0.00	65.78								Gauge only this quarter.						--	--	--
MW-6A	04/04/02	67.65	8.25	--	59.40	2,570	685	<500	2.98	3.18	2.25	7.27	--	--	--	--	--	--	--	--	
67.65	07/02/02	67.65	8.98	--	58.67	3,000	513	<500	4.70	4.51	3.42	9.81	--	--	--	--	--	--	--	--	
	10/02/02	67.65	10.48	--	57.17	2,070	384	<500	32.4	6.36	6.44	9.75	--	--	--	--	--	--	--	--	
	01/14/03	67.65	9.88	--	57.77	1,880	<50	<500	6.69	2.24	1.60	13.4	--	--	--	--	--	--	--	--	
	04/26/03	67.65	9.20	--	58.45	1,720	288	<562 <sup>a</sup>	1.65	2.20	2.99	12.6	--	--	--	--	2,600	203,000	<200	--	
	07/11/03	67.65	8.43	--	59.17	1,470	<281	<562 <sup>b</sup>	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	1.76	0.941	<1	--	--	--	--	--	87,000	442	38,600	
	03/31/04	67.65	8.87	0.00	58.68	1,810	682	<247	<5	<5	<5	<10	--	--	--	--	--	230,000	<15	5,560	
	08/19/04	67.65	0.22	0.00	58.43	0.98	347	<478	<1	<1	<1	<2	--	--	--	--	--	205,000	200	9,480	
	03/21/05	67.65	9.45	0.00	58.20	1,810	348	<501 <sup>a</sup>	<0.5	4.58	4.95	4.71	--	--	--	--	--	201,000	<15	11,300	
	06/08/05	67.65	8.02	0.00	58.63	1,710	533	<490	<1	1.3	<1	<2	--	--	--	--	--	<15	3,820		
	09/15/05	67.65	10.67	0.00	58.98	570	220	120	<0.5	0.9	0.9	<0.8	--	--	--	--	--	178,000	<40	14,000	
	12/08/05	67.65	9.61	0.00	58.04	920	2,805	170	<0.5	0.9	0.9	<0.8	--	--	--	--	--	225,000	<40	7,400	
	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	9,700	
	06/08/06	67.65	9.92	0.00	57.73	1,300	210	260	<0.5	0.9	0.9	<0.8	--	--	--	--	--	--	--		
	09/05/06	67.65	10.45	0.00	57.19	500	140	130	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	183,000	<40	--	
	12/19/06	67.65	8.21	Sheen	59.44	2,200	910	350	0.8	2.0	0.8	<0.8	--	--	--	--	--	230,000	<40	8,400	
	03/21/07	67.65	7.78	0.00	59.89	1,380	332	<100	<0.5	0.855	0.85	<0.8	--	--	--	--	--	216,000	<100	16,900	
	06/28/07	67.65	8.78	0.00	58.88	620	210	<100	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	165,000	<40	18,000	
	09/25/07	67.65	10.21	0.00	57.44	960	350	120	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	158,000	<40	16,800	
	12/10/07	67.65	8.48	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	9.85	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	<0.6	<0.5	--	--	--	--	--	--	--	
	09/27/08	67.65	9.87	0.00	57.78	1,800	96	<95	<0.5	1	0.8	<0.8	<0.8	--	--	--	--	--	183,000	<40	
	12/08/08	67.65	9.50	0.00	58.15	1,800	130	<69	<0.5	1	<0.6	<0.8	<0.8	--	--	--	--	--	183,000	<40	

<sup>a</sup>Estimated Detection Limit

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

Well ID	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons				Metals			Alkalinity (µg/L)	Nitrate (µg/L)	Nitrite (µg/L)	Sulfate (µg/L)				
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G (µg/L)	TPH-D (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Dissolved Lead (µg/L)	Total Lead (µg/L)	Ferrous Iron (µg/L)				
	03/26/09	67.65	7.00	0.00	59.75	124	110	<20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	—	—	—	—	—	—	—	
	08/10/09	67.65	8.32	0.00	59.33	350	430	<20	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<0.01	<1.0	<1.0	<1.0	—	—	—	
	09/09/09	67.65	10.32	0.00	57.33	1,749	—	—	<1.0	1.4	2.5	5.8	—	—	—	—	—	—	—	—	—	
	12/07/09	67.65	8.03	0.00	59.62	1,890	—	—	<1.0	<1.0	<1.0	<3.0	—	—	—	—	—	—	—	—	—	
MW-6	01/09/09	68.65	8.50	—	62.16	<50.0	<250	<750 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
67.77	04/28/09	68.65	7.28	—	61.38	<50.0	<250	<750 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
	07/23/09	68.65	7.97	—	60.69	<50.0	<250	<750 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
	10/25/09	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	01/08/00	68.65	6.76	—	61.80	<50.0	<250	<750 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
	04/19/00	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	07/21/00	68.65	8.65	—	60.01	<50.0	<249	<745 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
	09/06/00	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	10/16/00	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	11/27/00	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	01/16/01	68.65	8.08	—	60.58	<50.0	—	—	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
	04/04/01	68.65	7.78	—	60.88	<50.0	<250	<750 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	
	05/22/01	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	07/09/01	68.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	10/08/01	68.65	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	68.65	0.16	—	62.50	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	—	—	—	—	0.0	32,600	1,760	—	13,100	—
	04/04/02	68.65	8.54	—	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	68.65	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	68.65	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	68.65	7.28	—	61.38	<50.0	<284	<588 <sup>b</sup>	<0.500	<0.500	<0.500	<1.00	—	—	—	—	—	—	—	—	—	—
	04/28/03	68.65	6.03	—	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	68.65	8.91	—	59.75	<50.0	<329	<658 <sup>b</sup>	<0.500	<0.500	<0.500	1.20	—	—	—	—	—	—	—	—	—	—
	12/23/03	68.65	8.81	0.00	61.85	<100	<126	<253	<0.25	<0.5	<0.5	<1	—	—	—	—	32,000	2,710	—	14,400	—	
	03/31/04	68.65	7.34	0.00	61.22	<100	<118	<237	<1	<1	<1	<2	—	—	—	—	30,000	1,880	—	14,800	—	
	08/5/04	68.65	9.53	0.00	59.13	<100	<256	<512 <sup>b</sup>	<1	<1	<1	<2	—	—	—	—	29,000	2,500	—	13,200	—	
	03/21/05	67.77	6.11	0.00	58.88	<100	<247	<494	<1	<1	<1	<2	—	—	—	—	32,500	1,920	—	14,300	—	
	06/29/05	67.77	7.82	0.00	58.95	<100	<258	<516 <sup>b</sup>	<1	<1	<1	<2	—	—	—	—	—	1,790	—	15,100	—	
	09/5/05	67.77	9.54	0.00	58.23	<48	<77	260	<0.5	<0.7	<0.8	<0.8	—	—	—	—	29,620	2,300	—	13,400	—	
	12/05/05	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	<76	100	<0.5	<0.7	<0.8	<0.8	—	—	—	—	34,400	3,900	—	14,600	—	
	06/08/06	67.77	7.80	0.00	59.87	<48	<80	160	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	—	—	—	
	08/05/06	67.77	9.78	0.00	57.09	<48	<76	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	320	<0.5	<0.7	<0.8	<0.8	—	—	—	—	37,100	4,500	—	15,900	—	
	02/07/07	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	—	
	06/26/07	67.77	8.65	0.00	59.12	<50	<79	<98	<0.5	<0.7	<0.8	<0.8	—	—	—	—	32,900	3,000	—	15,000	—	
	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	—	15,900	—	
	12/14/07	67.77	6.52	0.00	61.25	<50	<79	<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	<78	<95	<0.5	<0.7	<0.8	<0.8	<0.5	—	—	—	38,200	<2,000	<15	—	—	
	06/18/08	67.77	7.40	0.00	60.37	<50	<78	<95	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—	—	—	
	09/22/08	67.77	9.60	0.00	58.17	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	—	—	—	
	12/08/08	67.77	—	Removed from sampling schedule 4Q08.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	03/26/09	67.77	7.43	0.00	60.34	<50.0	<83	<420	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<1.0	<1.0	<1.0	<1.0	<1.0	—	
	08/10/09	67.77	8.12	0.00	59.65	<50.0	<78	<350	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<0.010	<1.0	<1.0	<1.0	<1.0	<1.0	—	
	09/09/09	67.77	—	Removed from sampling schedule 3Q09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	12/07/09	67.77	—	Removed from sampling schedule 4Q09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

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

Well ID TOC Elevation	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons						Metals			Alkalinity (µg/L)	Nitrate (µg/L)	Nitrite (µg/L)	Sulfate (µg/L)	
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G (µg/L)	TPH-D (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethy- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Dissolved Lead (µg/L)	Total Lead (µg/L)	Ferrous Iron (µg/L)				
MW-19	01/08/89	67.33	4.91	--	62.42	331	268	<750 <sup>b</sup>	2.30	<0.500	<1.50	<2.50	--	--	--	--	--	--	--	--	--
67.33	04/28/99	67.33	5.04	--	62.29	265	<750 <sup>b</sup>	2.09	<0.800	<1.10	<3.00	--	--	--	--	--	--	--	--	--	--
07/22/99	67.33	5.44	--	61.89	525	<250	<750 <sup>b</sup>	2.34	<2.80	2.61	9.37	--	--	--	--	--	--	--	--	--	--
10/25/99	67.33	7.00	--	60.33	515	251	<750 <sup>b</sup>	<0.800	<5.65	<2.75	<8.65	--	--	--	--	--	--	--	--	--	--
01/03/00	67.33	4.64	--	62.69	504	<250	<750 <sup>b</sup>	<1.22	<0.828	<3.27	<7.59	--	--	--	--	--	--	--	--	--	--
04/19/00	67.33	5.02	--	62.31	332	<250	<750 <sup>b</sup>	<0.610	<4.43	<2.84	<6.91	--	--	--	--	--	--	--	--	--	--
07/12/00	67.33	8.27	--	59.06	498	<250	<750 <sup>b</sup>	<0.500	4.02	<3.52	<7.18	--	--	--	--	--	--	--	--	--	--
09/06/00	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/18/00	67.33	7.41	--	58.92	770	618	<1,330 <sup>b</sup>	<4.17	<3.47	<2.69	<8.05	--	--	--	--	--	--	--	--	--	--
11/27/00	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01/16/01	67.33	4.39	--	62.94	209	299	<850 <sup>b</sup>	<0.500	2.33	0.980	2.65	--	--	--	--	--	--	--	--	--	--
04/04/01	67.33	5.00	--	62.33	198	<250	<750 <sup>b</sup>	<0.500	1.03	2.71	--	--	--	--	--	--	--	--	--	--	--
05/22/01	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
07/09/01	67.33	6.03	--	61.30	311	334	<850 <sup>b</sup>	<0.500	1.97	0.949	1.07	--	--	--	--	--	--	--	--	--	--
10/09/01	67.33	7.15	--	60.18	675	291	<560 <sup>b</sup>	2.16	0.678	0.777	4.67	--	--	--	--	--	4,600	132,000	<100	--	19,400
01/09/02	67.33	4.61	--	62.72	258	675	<500	0.837	0.722	1.48	2.71	--	--	--	--	--	4,200	166,000	<100	--	13,600
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	7.06	--	59.37	811	326	<500	3.60	<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 <sup>b</sup>	0.549	0.844	<0.500	1.78	--	--	--	--	--	2,400	162,000	<200	--	15,700
04/26/03	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	<560 <sup>b</sup>	0.929	<0.500	3.19	4.18	--	--	--	--	--	116,000	<100	--	--	17,400
12/17/03																					
03/31/04	67.33	4.28	0.00	63.05	390	308	<237	<1	<1	<1	<2	--	--	--	--	--	141,000	<15	--	17,600	
05/19/04	67.33	6.64	0.00	60.49	244	<251	<501 <sup>b</sup>	<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	1.63	<2	--	--	--	--	--	154,000	<15	--	15,100	
06/29/05	67.33	4.77	0.00	62.56	624	748	<504 <sup>b</sup>	<1	<1	<1	<2	--	--	--	--	--	110,000	<40	--	19,600	
09/15/05	67.33	7.03	0.00	60.30	260	110	120	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	137,000	<40	--	21,500	
12/08/05	67.33	4.23	0.05	63.10	540	<82	<100	<0.5	<0.7	8.0	2.0	--	--	--	--	--	116,000	<100	--	17,400	
03/10/06	67.33	3.41	0.00	63.92	3,100	290	<20	<0.5	<0.7	9.0	8.0	--	--	--	--	--	Not sampled due to presence of LPH				
06/08/06	67.33	4.63	0.00	62.50	290	<79	120	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	Not sampled due to dangerous traffic location.				
09/05/06	67.33	7.51	0.00	59.82	265	100	130	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	111,000	<40	--	29,400	
12/19/06	67.33	2.57	0.00	64.78	2,600	390	470	0.8	<0.7	11.0	8.0	--	--	--	--	--	161,000	<40	--	25,100	
03/20/07	67.33	3.04	0.00	64.20	4,144	665	162	0.577	<0.7	25.0	18.1	--	--	--	--	--	117,000	1,740	--	6,040	
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	
08/29/07	67.33	7.43	0.04	59.93	--	--	--	--	--	--	--	--	--	--	--	--	Removed from sampling schedule 3Q09				
12/10/07	67.33	4.22	0.00	63.11	4,800	2,800	<670 <sup>b</sup>	<0.5	<0.7	11	8	--	--	--	--	--	138,000	<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.				
09/22/08	67.33	6.35	0.00	60.95	1,200	62	<85	<0.5	<0.7	3	3	--	--	--	--	--	Removed from sampling schedule 4Q08				
12/08/08	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Not sampled due to dangerous traffic location.				
03/26/09	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Removed from sampling schedule 2Q09				
09/01/09	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Removed from sampling schedule 3Q09				
12/07/09	67.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Removed from sampling schedule 4Q09				

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

Well ID TOC Elevation	Sample Date	Elevation Data (feet)				Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Metals							
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	TPH-O ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethy- benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Ferrous Iron ( $\mu\text{g/L}$ )	Alkalinity ( $\mu\text{g/L}$ )	Nitrate ( $\mu\text{g/L}$ )	Nitrite ( $\mu\text{g/L}$ )
MW-11	01/05/99	68.37	8.32	--	57.05	371	--	--	141	4.85	10.8	6.68	--	--	--	--	--	--	--	--	
68.37	04/26/99	68.37	0.58	--	58.79	782	<250	<750 <sup>a</sup>	175	<11.0	28.1	29.9	--	--	--	--	--	--	--	--	
07/23/99	68.37	9.83	--	58.54	474	<250	<750 <sup>a</sup>	43.7	<2.70	3.40	8.32	--	--	--	--	--	--	--	--	--	
10/25/99	68.37	10.68	--	58.68	845	<250	<750 <sup>a</sup>	9.22	<2.80	<3.75	<6.20	--	--	--	--	--	--	--	--	--	
01/08/00	68.37	9.21	--	57.18	133	<250	<750 <sup>a</sup>	22.8	<1.03	1.11	3.34	--	--	--	--	--	--	--	--	--	
04/19/00	68.37	9.52	--	58.85	858	<250	<750 <sup>a</sup>	92.8	8.15	9.25	20.2	--	--	--	--	--	--	--	--	--	
07/11/00	68.37	10.10	--	56.27	581	387	<606 <sup>a</sup>	28.6	2.32	<2.31	<7.94	--	--	--	--	--	--	--	--	--	
09/06/00	68.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/16/00	68.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/17/00	68.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/16/01	68.37	10.75	--	55.62	725	311	<666 <sup>a</sup>	16.7	2.41	4.46	7.08	--	--	--	--	--	--	--	--	--	
04/04/01	68.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/22/01	68.37	9.69	--	58.68	385	--	--	15.8	2.37	2.47	4.37	--	--	--	--	--	--	--	--	--	
07/09/01	68.37	9.06	--	58.38	439	<310	<931 <sup>a</sup>	39.6	2.63	1.72	3.71	--	--	--	--	--	--	--	--	--	
10/09/01	68.37	10.87	--	55.70	410	333	<500	6.04	1.08	1.74	4.40	--	--	--	--	--	--	--	--	--	
01/03/02	68.37	9.05	--	57.32	1,280	572	<500	184	10.6	35.7	21.8	--	--	--	--	3,200	158,000	<100	--	8,410	
04/04/02	68.37	5.67	--	60.70	757	366	<500	39.8	2.20	2.81	5.72	--	--	--	--	3,200	185,000	<100	--	6,550	
07/07/02	68.37	5.80	--	60.47	1,060	384	<500	107	8.73	24.2	15.5	--	--	--	--	5,400	203,000	<200	--	2,190	
10/02/02	68.37	10.84	--	55.43	785	<250	<500	13.8	<2.00	4.98	3.59	--	--	--	--	4,000	203,000	<200	--	2,630	
01/14/03	68.37	8.18	--	57.19	570	<105	<610 <sup>a</sup>	16.3	1.12	1.96	3.82	--	--	--	--	4,000	169,000	<200	--	4,040	
04/21/03	68.37	9.25	--	57.12	1,100	<287	<375 <sup>a</sup>	135	10.7	34.1	20.1	--	--	--	--	4,000	206,000	<200	--	3,320	
07/11/03	68.37	10.10	--	58.18	884	<250	<500	29.7	3.20	10.0	9.17	--	--	--	--	--	--	--	--	--	
12/17/03	68.37	8.35	0.00	58.02	673	215	<265	15.1	0.569	<0.5	<1	--	--	--	--	170,000	<150	--	--	73,200	
03/31/04	68.37	8.70	0.00	57.67	409	<127	<253	0.39	5.02	10.4	5.39	--	--	--	--	218,000	<15	--	--	30,100	
05.52	08/19/04	65.52	9.73	0.00	55.79	299	<240	<480	2.89	<1	<1	<2	--	--	--	--	167,000	200	--	--	10,000
03/21/05	65.52	9.10	0.00	58.42	564	<244	<488	38.8	4.18	8.48	7.34	--	--	--	--	169,000	<15	--	--	34,800	
06/21/05	65.52	8.84	0.00	58.68	853	13,300	5,850	74.8	4.9	11.20	6.41	--	--	--	--	--	<15	--	--	--	26,100
09/15/05	65.52	9.73	0.00	55.79	280	69	170	12.0	0.7	<0.8	1.0	--	--	--	--	150,000	<40	--	--	11,300	
12/03/05	65.52	8.80	0.00	58.82	480	130	230	0.6	<0.7	<0.8	0.8	--	--	--	--	157,000	<40	--	--	114,000	
03/10/06	65.52	8.16	0.00	57.34	1,890	420	<98	86	8.0	33	6.0	--	--	--	--	164,000	<40	--	--	31,500	
08/08/06	65.52	8.01	0.00	56.71	940	230	170	48	3.0	6.0	4.0	--	--	--	--	--	--	--	--	--	
09/05/06	65.52	10.01	0.00	55.51	330	160	210	7.0	<0.7	<0.8	<0.8	--	--	--	--	157,000	<40	--	--	13,200	
12/18/06	65.52	8.10	0.00	57.42	340	140	190	18.0	0.6	4.0	<0.6	--	--	--	--	166,000	<40	--	--	33,800	
03/20/07	65.52	8.20	0.00	57.32	158	372	291	18.2	0.774	3.38	<0.8	--	--	--	--	159,000	<1,000	--	--	35,500	
06/26/07	65.52	9.05	0.00	58.47	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	--	76,200	
03/10/08	65.52	8.73	0.00	56.79	150	<78	<95	6	<0.7	1	<0.8	<0.5	--	--	--	144,000	<2,000	<15	--	--	
06/16/08	65.52	8.63	0.00	58.89	88	<78	<95	4	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	
08/22/08	65.52	9.73	0.00	55.79	380	<75	<94	6	<0.7	1	<0.8	--	--	--	--	--	--	--	--	--	
12/08/08	65.52	8.65	0.00	56.87	<50	<29	<99	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	--	--	
03/20/08	65.52	8.37	0.00	57.15	<50.0	<82	<410	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--	--	--	
08/10/09	65.52	9.04	0.00	56.48	321	94	<390	5.9	<1.0	<1.0	<3.0	<1.0	<0.10	<0.10	<1.0	<1.0	<1.0	<1.0	<1.0	--	
09/09/09	65.52	9.90	0.00	55.62	224	--	--	1.1	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--	--	
12/07/09	65.52	8.44	0.00	57.08	118	--	--	8.6	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--	--	

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

Well ID TOC Elevation	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Metals			Alkalinity ( $\mu\text{g/L}$ )	Nitrate ( $\mu\text{g/L}$ )	Nitrite ( $\mu\text{g/L}$ )	Sulfate ( $\mu\text{g/L}$ )	
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	TPH-O ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethyl- benzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Ferrous Iron ( $\mu\text{g/L}$ )		
MW-12	01/08/99	66.40	8.74	--	57.68	2,670	--	--	21.1	<5.00	40.1	49.1	--	--	--	--	--	--	--	
66.40	04/28/00	66.40	9.22	0.03	57.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/23/99	66.40	9.51	0.01	--	56.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/25/99	66.40	10.61	0.29	--	55.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/08/00	66.40	8.71	--	--	57.69	5,480	8,380	<6,250 <sup>a</sup>	<15.8	<10.2	53.2	47.8	--	--	--	--	--	--	--	
04/19/00	66.40	8.87	--	--	57.43	5,880	3,060	<3,750 <sup>b</sup>	<2.60	<21.5	66.6	<83.5	--	--	--	--	--	--	--	
07/12/00	66.40	--	0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
09/06/00	66.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/16/00	66.40	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
11/27/00	66.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/15/01	66.40	8.44	--	--	58.96	5,380	20,100	<6,250 <sup>b</sup>	<5.00	12.9	72.0	63.8	--	--	--	--	--	--	--	
04/08/01	66.40	9.18	--	--	57.24	15,850	5,850	2,280	17.8	8.04	219	131	--	--	--	--	--	--	--	
05/22/01	66.40	9.39	--	--	57.01	16,800	--	--	<10.0	10.3	307	142	--	--	--	--	--	--	--	
07/09/01	66.40	--	0.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/09/01	66.40	10.65	0.28	--	55.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/08/02	66.40	8.15	0.08	--	58.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/04/02	66.40	8.65	0.15	--	57.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/02/02	66.40	9.66	0.38	--	57.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/02/02	66.40	11.18	0.60	--	55.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/14/03	66.40	8.66	0.10	--	57.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
04/28/03	66.40	--	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
07/11/03	66.40	11.10	0.04	--	55.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/17/03	66.40	8.52	0.01	--	57.89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/31/04	66.40	8.98	Sheen	--	57.42	23,400	17,800	2,200	<50	<50	<50	<100	--	--	--	--	120,000	<15	--	
66.33	08/19/04	66.33	10.32	0.14	56.12	--	--	--	--	--	--	--	--	--	--	--	--	37,500	--	
10/14/04	66.33	10.00	Sheen	--	56.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
03/21/05	66.33	9.30	0.01	--	57.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/23/05	66.33	8.98	Sheen	--	57.37	8,030	<252	<503 <sup>b</sup>	<5	<5	30.20	<10	--	--	--	--	<75	--	51,200	
03/15/05	66.33	10.28	0.12	--	56.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/08/05	66.33	9.02	0.13	--	57.41	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	--	
06/09/06	66.33	9.00	0.00	--	57.33	9,300	930	420	1.0	2.0	20	4.0	--	--	--	--	--	--	--	
08/05/06	66.33	10.58	0.05	--	55.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
12/19/06	66.33	8.01	Sheen	--	60.32	7,300	1,400	580	<0.5	<0.7	4.0	<0.8	--	--	--	--	--	111,000	<40	--
03/21/07	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	--
06/21/07	66.33	8.42	0.00	--	56.81	1,000	1,300	540	<0.5	<0.7	4	<0.8	--	--	--	--	--	123,000	<40	--
09/23/07	66.33	10.39	0.00	--	55.94	4,000	4,700	1,900	<0.5	<0.7	7	1	--	--	--	--	--	121,000	<40	--
12/10/07	66.33	8.49	0.00	--	57.84	710	110	<84	<0.5	0.8	3	<0.8	--	--	--	--	--	110,000	<2,000	<15
03/10/08	66.33	8.82	0.00	--	57.41	1,000	110	<98	<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	<84	<0.5	<0.5	1	<0.5	--	--	--	--	--	--	--	--
09/22/08	66.33	10.17	0.00	--	58.18	1,600	380	140	<0.5	<0.7	0.8	<0.8	--	--	--	--	--	--	--	--
12/08/08	66.33	8.75	0.00	--	57.58	<50	<29	<68	<0.5	<0.7	<0.8	<0.8	--	--	--	--	--	--	--	--
03/25/09	66.33	8.40	0.00	--	57.83	<50.0	<82	<410	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
06/10/09	66.33	9.24	0.00	--	57.09	514	170	<380	<1.0	<1.0	1.3	<3.0	<1.0	<0.10	<1.0	<1.0	<1.0	<1.0	--	--
09/09/09	66.33	10.40	0.00	--	65.93	708	--	--	<1.0	<1.0	<1.0	<3.0	--	--	--	--	--	--	--	--
12/07/09	66.33	8.53	0.00	--	57.80	938	--	--	<1.0	<1.0	2.6	<3.0	--	--	--	--	--	--	--	--

**TABLE 1**  
**CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**  
 ConocoPhillips Facility No. 254165 (RMR #01234)  
 202 Avenue D  
 Snohomish, Washington

Well ID TOC Elevation	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons					Metals									
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G ( $\mu\text{g/L}$ )	TPH-D ( $\mu\text{g/L}$ )	TPH-O ( $\mu\text{g/L}$ )	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	Ethylbenzene ( $\mu\text{g/L}$ )	Total Xylenes ( $\mu\text{g/L}$ )	MTBE ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )	EDC ( $\mu\text{g/L}$ )	Dissolved Lead ( $\mu\text{g/L}$ )	Total Lead ( $\mu\text{g/L}$ )	Ferrous Iron ( $\mu\text{g/L}$ )	Alkalinity ( $\mu\text{g/L}$ )	Nitrate ( $\mu\text{g/L}$ )	Nitrite ( $\mu\text{g/L}$ )	Sulfate ( $\mu\text{g/L}$ )
MW-13	03/21/05	67.59	9.72	0.00	57.87	424	<233	<478	2.84	1.71	5.21	1.89	—	—	—	—	—	229,000	<15	—	13,800	
67.59	06/23/05	67.59	9.43	0.00	58.18	402	<244	<467	<1	<1	<1	<2	—	—	—	—	—	—	<15	—	16,600	
	09/15/05	67.59	10.87	0.00	56.72	260	61	<98	<0.5	<0.7	<0.8	<0.8	<0.8	—	—	—	—	—	—	225,000	<40	—
	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	—	
	03/10/06	67.59	8.48	0.00	58.13	400	<78	<97	22	<0.7	2.0	<0.8	—	—	—	—	—	—	228,000	<1000	—	
	06/08/06	67.59	9.41	0.00	58.18	380	<81	<100	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	216,000	<40	—	
	09/05/06	67.59	11.28	0.00	56.31	240	<80	<88	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	191,000	<40	—	
	12/19/06	67.59	8.30	0.00	58.29	430	100	220	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	191,000	<40	—	
	03/20/07	67.59	8.50	0.00	59.08	391	<78	<97	14.3	<0.7	3.65	2.61	—	—	—	—	—	—	199,000	<1000	—	
	06/28/07	67.59	9.83	0.00	57.66	270	<78	<99	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	209,000	<40	—	
	09/25/07	67.59	11.13	0.00	58.48	170	84	<100	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	208,000	<40	—	
	12/10/07	67.59	9.76	0.00	58.83	340	<77	<98	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	200,000	<2,000	<15	
	03/10/08	67.59	9.32	0.00	58.27	230	<78	<97	<0.5	<0.7	<0.8	<0.8	2	—	—	—	—	—	182,000	<2,000	<15	
	06/18/08	67.59	9.05	0.00	58.54	160	<76	<85	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—	—	—	
	09/22/08	67.59	10.91	0.00	58.88	250	<78	<85	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	—	—	—	
	12/05/08	67.59	—	—	Removed from sampling schedule 4Q08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	03/28/09	67.59	8.75	0.00	58.84	271	<83	<410	<1.0	<1.0	<1.0	<1.0	2.2	—	—	—	—	—	—	—	—	—
	06/10/09	67.59	9.72	0.00	57.87	165	89	<38	<1.0	<1.0	<1.0	<1.0	3.0	1.9	<0.010	<1.0	<1.0	<1.0	—	—	—	—
	09/08/09	67.59	11.11	0.00	56.48	173	—	—	<1.0	<1.0	<1.0	<1.0	3.0	—	—	—	—	—	—	—	—	—
	12/07/09	67.59	—	—	Removed from sampling schedule 4Q09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
MW-14	03/21/05	67.67	9.17	0.00	58.50	<100	<245	<489	<1	<1	<1	<2	—	—	—	—	—	—	97,400	29	—	
67.67	06/29/05	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	58.99	66	130	170	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	86,100	<40	—	
	12/08/05	67.67	8.78	0.00	58.86	74	140	<180	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	97,300	<40	—	
	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	—	
	06/08/06	67.67	8.82	0.00	58.75	<48	<81	150	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	98,500	<40	—	
	09/05/06	67.67	11.15	0.00	56.52	140	69	<100	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	89,700	<40	—	
	12/19/06	67.67	7.40	0.00	60.27	<48	<78	<96	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	95,900	<40	—	
	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	—	
	06/28/07	67.67	9.60	0.00	58.07	240	62	<97	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	89,600	<40	—	
	09/25/07	67.67	10.98	0.00	58.71	140	<89	<110	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	84,400	<40	—	
	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	
	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
	06/18/08	67.67	8.90	0.00	58.77	<50	<75	<94	<0.5	<0.5	<0.5	<0.5	—	—	—	—	—	—	—	—	—	
	09/22/08	67.67	10.68	0.00	58.99	190	<76	<94	<0.5	<0.7	<0.8	<0.8	—	—	—	—	—	—	—	—	—	
	12/03/08	67.67	—	—	Removed from sampling schedule 4Q08.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	03/28/09	67.67	7.75	0.00	58.02	<50.0	<82	<410	<1.0	<1.0	<1.0	<1.0	1.0	—	—	—	—	—	—	—	—	
	06/10/09	67.67	9.23	0.00	58.44	<50.0	100	<390	<1.0	<1.0	<1.0	<1.0	3.0	<1.0	<0.010	<1.0	<1.0	<1.0	—	—	—	—
	09/08/09	67.67	10.95	0.00	56.72	191	—	—	<1.0	<1.0	<1.0	<1.0	3.0	—	—	—	—	—	—	—	—	—
	12/07/09	67.67	—	—	Removed from sampling schedule 4Q09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

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

Well ID TOC Elevation	Sample Date	Elevation Data (feet)			Total Petroleum Hydrocarbons			Aromatic Hydrocarbons			Metals			Alkalinity (µg/L)	Nitrate (µg/L)	Nitrite (µg/L)	Sulfate (µg/L)				
		Top of Casing Elevation	DTW	LPH Thickness	GW Elevation	TPH-G (µg/L)	TPH-O (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethy- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	EDB (µg/L)	EDC (µg/L)	Dissolved Lead (µg/L)	Total Lead (µg/L)	Ferrous Iron (µg/L)				
MW-16	03/21/05	68.66	8.02	0.00	57.64	<100	<248	<497	<1	1.5	<1	~	~	~	~	~	54,100	2,040	~	21,000	
68.66	06/28/05	68.64	0.00	58.02	<100	<247	<493	<1	<1	<1	<2	~	~	~	~	~	~	~	2,420	~	10,000
68.66	09/15/05	68.66	10.19	0.00	58.47	<48	140	230	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	39,800	2,600	~	14,600
68.66	12/08/05	68.65	6.60	0.00	58.06	<48	<80	<100	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	40,450	2,200	~	18,800
68.66	03/10/06	68.66	7.89	0.00	58.67	<49	<77	<98	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	41,800	2,500	~	28,500
68.66	06/08/06	68.66	8.74	0.00	57.92	<49	<78	<98	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	~	~	~	~
68.66	09/05/06	68.66	10.45	0.00	58.21	<48	<78	<98	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	39,200	2,900	~	15,200
68.66	12/19/06	68.66	6.00	0.00	58.68	<40	<60	<100	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	43,300	2,100	~	21,100
68.66	03/20/07	68.66	7.70	0.00	58.98	<19	<80	110	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	10,500	554	~	12,400
68.66	06/25/07	68.66	8.30	0.00	57.38	<50	<62	<100	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	45,400	3,300	~	16,200
68.66	09/25/07	68.66	10.34	0.00	58.32	<50	<78	<97	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	41,500	2,700	~	16,300
68.66	12/10/07	68.66	8.34	0.00	58.32	<50	<76	<94	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	42,100	<2,000	<15	21,500
68.66	03/10/08	68.66	8.69	0.00	57.97	<50	<77	<96	<0.5	<0.7	<0.8	<0.8	<0.5	~	~	~	~	~	<2,000	<15	~
68.66	06/16/08	68.66	8.51	0.00	58.15	<50	<75	<94	<0.5	<0.5	<0.5	<0.5	~	~	~	~	~	~	~	~	
68.66	09/22/08	68.66	10.22	0.00	58.44	<50	<75	<94	<0.5	<0.7	<0.8	<0.8	~	~	~	~	~	~	~	~	
68.66	12/09/08	68.66	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	
68.66	03/26/09	68.66	8.34	0.00	58.32	<50.0	<83	<420	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	~
68.66	06/10/09	68.66	8.89	0.00	57.67	<50.0	<78	<390	<1.0	<1.0	<1.0	<1.0	<3.0	<1.0	<0.010	<1.0	<1.0	<1.0	<1.0	<1.0	~
68.66	09/09/09	68.66	10.35	0.00	58.31	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
68.66	12/07/09	68.66	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~	

MTCA Method A Cleanup Levels:

1,000/800\* 500 500 5 1,000 700 1,000 20 0.01 5 15 15 ~

Concentrations are in micrograms per liter (µg/L).

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

TOC = Top-of-casing elevation in feet.

GW Elevation = Groundwater elevation in feet relative to top-of-casing elevation.

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

TPH-D and TPH-O = Diesel and oil range hydrocarbons, respectively, by Ecology Method NWTPH-Dx.

BTEx = Benzene, Toluene, Ethylbenzene, Total Xylenes by EPA Method 8260B; previous results by 8221B or 8260B, refer to laboratory reports.

MTBE = Methyl tert-butyl ether by EPA Method 626B.

LPH = Liquid 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.

\* MTCA Method A levels for TPH-g are 1,000 µg/L when no Benzene is present and 800 µg/L when Benzene is present.

^ The laboratory reporting limit is greater than the MTCA Method A cleanup level.

**APPENDIX A**  
**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.

**APPENDIX B**  
**FIELD DATA SHEETS**

**SITE VISITATION REPORT**  
**4Q09 - CP 254165 (RM&R 01234) Snohomish, Washington**

Name(s) D. Reitz Date: 12/ 7 / 09 Time of Arrival Call-In: 0900  
Arrival Time: 0900 Departure Time: 1330 Time of Departure Call-In 1330  
Who did you call? C. Gdak

**DRUM INVENTORY**

<u>1</u>	WATER	CARBON	TOTAL OPEN TOP	<u>1</u>
		EMPTY	TOTAL BUNG TOP	

**HEALTH AND SAFETY ASSESSMENT**

Day P. P. E  
Review WASP & A.S.A.  
Set-up Decon. Station

**DESCRIPTION OF ACTIVITIES ONSITE AND NOTES**

- 0900 Arriving on site. Call-in to office. Checking with site-contact & purchase ice. Don appropriate ppe.  
0910 Perform tailgate safety meeting. Set-up Decon. station. Conduct preliminary site-walk.  
0930 Initiate gauging of physical measurements at 5 qwm wells prior to 4Q09 GWM sample procedures.  
1000 Complete gauging procedures and initiate 4Q09 GWM sample procedures at 3 qwm wells.  
1215 Complete 4Q09 GWM sample procedures. Decon. equipment and storage purge water/decon. rinsates into 1 staged drum. Label drum.  
1230 Pack sample coolers & load equipment into truck.  
1250 Check-out with site-contact. Complete daily documentation.  
1330 Call-in to office. Depart job site.

D. Reitz 12/ 7 / 09

**STANTEC Consulting Corporation**  
HYDROLOGIC DATA SHEET

Gauge Date: December 7, 2009

Project Name: CP RM&R 01234

**Field Technician:** David Reitz

**Project Number:** 212301492

DTP = Depth to Free Product (FP or NAPH) 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 balling or purging the wells** Y  N







# Chain Of Custody Record

<b>PACE Analytical Laboratory</b> 940 S. Harney Street, Seattle, WA (206) 767-5060			<b>INVOICE REMITTANCE ADDRESS:</b> Stantec Attn: Chris Gdak 12034 134th CT; Suite 102 Redmond, WA 98052					Purchase Order #		DATE: <u>12/07/09</u> PAGE: <u>1</u> of <u>1</u>						
								ConocoPhillips AOC#								
								01234								
<b>SAMPLING COMPANY:</b> <b>STANTEC</b>			<b>Valid Value ID:</b> AOC 01234		<b>CONOCOPHILLIPS SITE NUMBER</b> AOC 01234					<b>GLOBAL ID NO.:</b> AOC 01234						
<b>ADDRESS:</b> 12034 134th Court NE, Redmond, WA 98052			<b>SITE ADDRESS (Street and City):</b> 202 Avenue D, Snohomish, WA 98290					<b>ConocoPhillips Manager:</b> Myron Smith								
<b>PROJECT CONTACT (Hardcopy or PDF Report to):</b> Chris Gdak			<b>EDD DELIVERABLE TO (RP or Designee):</b> (None)					<b>PHONE NO.:</b> (None)		<b>E-MAIL:</b> (None)						
<b>TELEPHONE:</b> (425) 298-1023			<b>FAX:</b> (425) 298-1020		<b>E-MAIL:</b> chris.gdak@stantec.com							<b>FLAG USE ONLY:</b> (None)				
<b>SAMPLER NAME(S) (Print):</b> David Reitz			<b>CONSULTANT PROJECT NUMBER</b> 212301492					<b>REQUESTED ANALYSES</b>								
<b>TURNAROUND TIME (CALENDAR DAYS):</b> <input checked="" type="checkbox"/> 14 DAYS <input type="checkbox"/> 7 DAYS <input type="checkbox"/> 72 HOURS <input type="checkbox"/> 48 HOURS <input type="checkbox"/> 24 HOURS <input type="checkbox"/> LESS THAN 24 HOURS																
<b>SPECIAL INSTRUCTIONS OR NOTES:</b> (None)			<b>CHECK BOX IF EDD IS NEEDED</b> <input checked="" type="checkbox"/>													
<b>FIELD NOTES:</b> Container/Preservative or PID Readings or Laboratory Notes																
<small>* Field Point name only required if different from Sample ID</small>																
<b>ABUSE</b> (None)	<b>Field Point Name</b>	<b>Sample ID</b>	<b>SAMPLING</b>		<b>MATRIX</b>	<b>NO. OF CONT.</b>	<b>NWTPH-Gx</b>	<b>BTEX</b>							<b>TEMPERATURE ON RECEIPT C°</b>	
			<b>DATE</b>	<b>TIME</b>												
	MW-6A	MW-6A	<u>12/07/09</u>	<u>12:00</u>	GW	6	X	X								
	MW-11	MW-11	<u>11/10</u>	<u>10:30</u>	GW	6	X	X								
	MW-12	MW-12	<u>11/10</u>	<u>11:10</u>	GW	6	X	X								
	QCTB			DI	6	X	X									
40-mL VOAs, preserved with HCl																
Received by: (Signature) <u>Jimmy Pine</u>				Received by: (Signature)					Date: <u>12/8/09</u>			Time: <u>9:00</u>				
Received by: (Signature)																
Received by: (Signature)				Received by: (Signature)					Date: <u>12/8/09</u>			Time: <u>9:00</u>				
<small>© 2005 PACE</small>																

**APPENDIX C**  
**CERTIFIED LABORATORY ANALYTICAL REPORT**  
**AND CHAIN-OF-CUSTODY DOCUMENTATION**

December 10, 2009

Chris Gdak  
Stantec  
12034 134th Ct NE, Suite 102  
Redmond, WA 98052

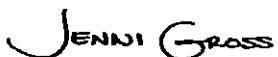
RE: Project: 01234 - 202 Ave D, Snohomish  
Pace Project No.: 252622

Dear Chris Gdak:

Enclosed are the analytical results for sample(s) received by the laboratory on December 08, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,



Jennifer Gross

jennifer.gross@pacelabs.com  
Project Manager

Enclosures

cc: Andrea Donnell, COP\_Stantec Washington  
Tammy Parise, COP\_Stantec Washington  
Linda Rawlins, COP\_Stantec Oregon

#### REPORT OF LABORATORY ANALYSIS

Page 1 of 9

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc.



## CERTIFICATIONS

Project: 01234 - 202 Ave D, Snohomish  
Pace Project No.: 252622

### Washington Certification IDs

940 South Hamey Street Seattle, WA 98108  
Washington Certification #: C1229  
Oregon Certification #: WA200007  
Alaska CS Certification #: UST-025

California Certification #: 01153CA  
Alaska Drinking Water Micro Certification #: WA01230  
Alaska Drinking Water VOC Certification #: WA01-09  
Florida/NELAP Certification #: E87617

## REPORT OF LABORATORY ANALYSIS

Page 2 of 9

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



### SAMPLE ANALYTE COUNT

Project: 01234 - 202 Ave D, Snohomish  
 Pace Project No.: 252622

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
252622001	MW-6A	NWTPH-Gx	ATH	3	PASI-S
		EPA 5030B/8260	LNH	8	PASI-S
252622002	MW-11	NWTPH-Gx	ATH	3	PASI-S
		EPA 5030B/8260	LNH	8	PASI-S
252622003	MW-12	NWTPH-Gx	ATH	3	PASI-S
		EPA 5030B/8260	LNH	8	PASI-S
252622004	QCTB	NWTPH-Gx	ATH	3	PASI-S
		EPA 5030B/8260	LNH	8	PASI-S

### REPORT OF LABORATORY ANALYSIS

Page 3 of 9

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 01234 - 202 Ave D, Snohomish  
Pace Project No.: 252622

Sample: MW-6A	Lab ID: 252622001	Collected: 12/07/09 12:00	Received: 12/08/09 11:35	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Gx GCV</b>	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	1990 ug/L		50.0	1				
a,a,a-Trifluorotoluene (S)	105 %		50-150	1			98-08-8	
4-Bromofluorobenzene (S)	119 %		50-150	1			460-00-4	
<b>8260 MSV</b>	Analytical Method: EPA 5030B/8260							
Benzene	ND ug/L		1.0	1			71-43-2	
Ethylbenzene	ND ug/L		1.0	1			100-41-4	
Toluene	ND ug/L		1.0	1			108-88-3	
Xylene (Total)	ND ug/L		3.0	1			1330-20-7	
4-Bromofluorobenzene (S)	103 %		80-120	1			460-00-4	
Dibromofluoromethane (S)	110 %		80-122	1			1868-53-7	
1,2-Dichloroethane-d4 (S)	113 %		80-124	1			17060-07-0	
Toluene-d8 (S)	109 %		80-123	1			2037-26-5	
<b>Sample: MW-11</b>	Lab ID: 252622002	Collected: 12/07/09 10:30	Received: 12/08/09 11:35	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Gx GCV</b>	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	119 ug/L		50.0	1				
a,a,a-Trifluorotoluene (S)	124 %		50-150	1			98-08-8	
4-Bromofluorobenzene (S)	111 %		50-150	1			460-00-4	
<b>8260 MSV</b>	Analytical Method: EPA 5030B/8260							
Benzene	8.5 ug/L		1.0	1			71-43-2	
Ethylbenzene	ND ug/L		1.0	1			100-41-4	
Toluene	ND ug/L		1.0	1			108-88-3	
Xylene (Total)	ND ug/L		3.0	1			1330-20-7	
4-Bromofluorobenzene (S)	94 %		80-120	1			460-00-4	
Dibromofluoromethane (S)	108 %		80-122	1			1868-53-7	
1,2-Dichloroethane-d4 (S)	110 %		80-124	1			17060-07-0	
Toluene-d8 (S)	106 %		80-123	1			2037-26-5	
<b>Sample: MW-12</b>	Lab ID: 252622003	Collected: 12/07/09 11:10	Received: 12/08/09 11:35	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Gx GCV</b>	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	938 ug/L		50.0	1				
a,a,a-Trifluorotoluene (S)	123 %		50-150	1			98-08-8	
4-Bromofluorobenzene (S)	135 %		50-150	1			460-00-4	
<b>8260 MSV</b>	Analytical Method: EPA 5030B/8260							
Benzene	ND ug/L		1.0	1			71-43-2	

Date: 12/10/2009 12:42 PM

### REPORT OF LABORATORY ANALYSIS

Page 4 of 9

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## ANALYTICAL RESULTS

Project: 01234 - 202 Ave D, Snohomish  
Pace Project No.: 252622

Sample: MW-12	Lab ID: 252622003	Collected: 12/07/09 11:10	Received: 12/08/09 11:35	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 5030B/8260							
Ethylbenzene	2.6 ug/L		1.0	1		12/09/09 16:45	100-41-4	
Toluene	ND ug/L		1.0	1		12/09/09 16:45	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/09/09 16:45	1330-20-7	
4-Bromofluorobenzene (S)	99 %		80-120	1		12/09/09 16:45	460-00-4	
Dibromofluoromethane (S)	110 %		80-122	1		12/09/09 16:45	1868-53-7	
1,2-Dichloroethane-d4 (S)	111 %		80-124	1		12/09/09 16:45	17060-07-0	
Toluene-d8 (S)	108 %		80-123	1		12/09/09 16:45	2037-26-5	
<hr/>								
Sample: QCTB	Lab ID: 252622004	Collected: 12/07/09 00:00	Received: 12/08/09 11:35	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>NWTPH-Gx GCV</b>	Analytical Method: NWTPH-Gx							
Gasoline Range Organics	ND ug/L		50.0	1		12/09/09 13:58		
a,a,a-Trifluorotoluene (S)	114 %		50-150	1		12/09/09 13:58	98-08-8	
4-Bromofluorobenzene (S)	102 %		50-150	1		12/09/09 13:58	460-00-4	
<b>8260 MSV</b>	Analytical Method: EPA 5030B/8260							
Benzene	ND ug/L		1.0	1		12/09/09 15:39	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		12/09/09 15:39	100-41-4	
Toluene	ND ug/L		1.0	1		12/09/09 15:39	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		12/09/09 15:39	1330-20-7	
4-Bromofluorobenzene (S)	93 %		80-120	1		12/09/09 15:39	460-00-4	
Dibromofluoromethane (S)	108 %		80-122	1		12/09/09 15:39	1868-53-7	
1,2-Dichloroethane-d4 (S)	110 %		80-124	1		12/09/09 15:39	17060-07-0	
Toluene-d8 (S)	105 %		80-123	1		12/09/09 15:39	2037-26-5	

Date: 12/10/2009 12:42 PM

## REPORT OF LABORATORY ANALYSIS

Page 5 of 9

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## QUALITY CONTROL DATA

Project: 01234 - 202 Ave D, Snohomish  
 Pace Project No.: 252622

QC Batch:	GCV/1364	Analysis Method:	NWTPH-Gx
QC Batch Method:	NWTPH-Gx	Analysis Description:	NWTPH-Gx GCV Water
Associated Lab Samples:	252622001, 252622002, 252622003, 252622004		

METHOD BLANK:	17077	Matrix:	Water
Associated Lab Samples:	252622001, 252622002, 252622003, 252622004		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	ug/L	ND	50.0	12/09/09 13:34	
4-Bromofluorobenzene (S)	%	103	50-150	12/09/09 13:34	
a,a,a-Trifluorotoluene (S)	%	114	50-150	12/09/09 13:34	

LABORATORY CONTROL SAMPLE:	17078					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Gasoline Range Organics	ug/L	250	322	129	50-163	
4-Bromofluorobenzene (S)	%			94	50-150	
a,a,a-Trifluorotoluene (S)	%			108	50-150	

SAMPLE DUPLICATE:	17101					
Parameter	Units	252622002 Result	Dup Result	RPD	Qualifiers	
Gasoline Range Organics	ug/L	119	110	8		
4-Bromofluorobenzene (S)	%	111	116	4		
a,a,a-Trifluorotoluene (S)	%	124	122	1		

Date: 12/10/2009 12:42 PM

## REPORT OF LABORATORY ANALYSIS

Page 6 of 9

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..



**QUALITY CONTROL DATA**

Project: 01234 - 202 Ave D, Snohomish

Pace Project No.: 252622

QC Batch:	MSV/1773	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
Associated Lab Samples:	252622001, 252622002, 252622003, 252622004		

METHOD BLANK: 17071 Matrix: Water

Associated Lab Samples: 252622001, 252622002, 252622003, 252622004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	12/09/09 12:12	
Ethylbenzene	ug/L	ND	1.0	12/09/09 12:12	
Toluene	ug/L	ND	1.0	12/09/09 12:12	
Xylene (Total)	ug/L	ND	3.0	12/09/09 12:12	
1,2-Dichloroethane-d4 (S)	%	111	80-124	12/09/09 12:12	
4-Bromofluorobenzene (S)	%	95	80-120	12/09/09 12:12	
Dibromofluoromethane (S)	%	108	80-122	12/09/09 12:12	
Toluene-d8 (S)	%	105	80-123	12/09/09 12:12	

LABORATORY CONTROL SAMPLE &amp; LCSD: 17072

17073

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	21.8	20.5	109	103	75-124	6	30	
Ethylbenzene	ug/L	20	21.2	20.1	106	100	76-124	6	30	
Toluene	ug/L	20	21.3	20.3	107	102	75-124	5	30	
Xylene (Total)	ug/L	60	67.4	64.0	112	107	76-123	5	30	
1,2-Dichloroethane-d4 (S)	%				108	108	80-124			
4-Bromofluorobenzene (S)	%				93	94	80-120			
Dibromofluoromethane (S)	%				108	109	80-122			
Toluene-d8 (S)	%				106	105	80-123			

Date: 12/10/2009 12:42 PM

**REPORT OF LABORATORY ANALYSIS**

Page 7 of 9

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc..



## QUALIFIERS

Project: 01234 - 202 Ave D, Snohomish  
Pace Project No.: 252622

---

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

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

### LABORATORIES

PASI-S Pace Analytical Services - Seattle

Date: 12/10/2009 12:42 PM

## REPORT OF LABORATORY ANALYSIS

Page 8 of 9

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, Inc.



### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 01234 - 202 Ave D, Snohomish  
 Pace Project No.: 252622

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
252622001	MW-6A	NWTPH-Gx	GCV/1364		
252622002	MW-11	NWTPH-Gx	GCV/1364		
252622003	MW-12	NWTPH-Gx	GCV/1364		
252622004	QCTB	NWTPH-Gx	GCV/1364		
252622001	MW-6A	EPA 5030B/8260	MSV/1773		
252622002	MW-11	EPA 5030B/8260	MSV/1773		
252622003	MW-12	EPA 5030B/8260	MSV/1773		
252622004	QCTB	EPA 5030B/8260	MSV/1773		

Date: 12/10/2009 12:42 PM

### REPORT OF LABORATORY ANALYSIS

Page 9 of 9

This report shall not be reproduced, except in full,  
 without the written consent of Pace Analytical Services, Inc..

