



Vcp # NW 0036

**CONOCOPHILLIPS COMPANY
GROUNDWATER MONITORING REPORT**

April 28, 2006

Site No.: <u>254165</u>	Site Address: <u>202 Avenue D, Snohomish, Washington</u>
ConocoPhillips Site Manager: <u>Brian Peters</u>	
ConocoPhillips Address: <u>P.O. Box 923, Bothell, Washington 98041</u>	
Consultant/Contact Person: <u>Delta Environmental Consultants, Inc. - Elisabeth Silver</u>	
Consultant Address: <u>4006 148th Avenue NE, Redmond, WA 98052</u>	
Primary Agency/Regulatory ID No.: <u>Washington DOE Northwest Region</u>	

WORK PERFORMED THIS QUARTER [Fourth - 2005]

- Measured depth to water in Wells MW-1A, MW-2, MW-6A, and MW-9 through MW-15 on December 8, 2005.
- Measured separate-phase hydrocarbon (SPH) thickness in Well MW-12. ✓
- Purged and sampled groundwater from Wells MW-1A, MW-2, MW-6A, MW-9, MW-10, MW-11, and MW-13 through MW-15 on December 8, 2005.
- Analyzed groundwater samples for total petroleum hydrocarbons as gasoline (TPH-G) using Northwest Method NWTPH-Gx; TPH as diesel and heavy oil (TPH-D and TPH-O) using Northwest Method NWTPH-Dx (with silica gel cleanup); benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8260B; sulfate using EPA Method 300A; nitrate using EPA Method 353.2, and alkalinity using EPA Method 310.1.
- Measured groundwater quality field parameters using a Horiba U-22 water quality meter and dissolved oxygen using a colorimetric kit in Wells MW-1A, MW-2, MW-6A, MW-9, MW-10, MW-11, and MW-13 through MW-15.

WORK PROPOSED FOR NEXT QUARTER [First - 2006]

- Measure depth to water and SPH thickness (if present) in Wells MW-1A, MW-2, MW-6A, and MW-9 through MW-15.
- Measure groundwater quality field parameters in Wells MW-1A, MW-2, MW-6A, and MW-9 through MW-15 using a Horiba U-22 or YSI 556 water quality meter and dissolved oxygen using a colorimetric kit.
- Analyze groundwater samples collected from Wells MW-1A, MW-2, MW-6A, and MW-9 through MW-15 for TPH-G using Northwest Method NWTPH-Gx, TPH-D and TPH-O using Northwest Method NWTPH-Dx, BTEX using EPA Method 8260B, sulfate using EPA Method 300A; nitrate using EPA Method 353.2, and alkalinity using EPA Method 310.1.
- Next sampling event is scheduled for March 2006.

SUMMARY

Frequency of Sampling Events:	<u>Quarterly</u> (Quarterly, etc.) ✓
Approximate Depth to Groundwater:	<u>4.06 - 9.61</u> (Measured Feet)
Groundwater Gradient:	<u>South on site, southeast to west of site, southwest to east of site.</u> (Direction)
	<u>0.03 ft/ft</u> (ft/ft)



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Maximum Benzene Concentration: 0.6 (MW-11) (µg/L)
Measurable Free Product Detected: Yes (MW-12) (Yes - ID well(s)/No)
Free Product Recovered This Quarter: None (gallons)
Cumulative Free Product Recovered to Date: Unknown (gallons)
Water Wells or Surface Waters w/in a 2000' Snohomish River
Radius and Respective Direction: 800 ft South (Distance and Direction)
Current Remedial Action: Not Applicable (SVE/AS/P&T/DVE/
Product Removal/Bio/etc.)
Permits for Discharge: Not Applicable (NPDES, POTW, etc.)

DISCUSSION

- SPH were detected in Well MW-12 at a thickness of 0.13 foot. ✓
- TPH-G was detected above the Washington State Model Toxics Control Act (MTCA) Method A cleanup level in the groundwater sample collected from Well MW-6A at a concentration of 920 micrograms per liter (µg/L).
- TPH-G was detected below the MTCA Method A cleanup level in groundwater samples collected from Wells MW-2, MW-10, MW-11, MW-13, and MW-14 at concentrations ranging from 74 µg/L (MW-14) to 540 µg/L (MW-10).
- TPH-D was detected below the MTCA Method A cleanup level in the groundwater samples collected from Wells MW-2, MW-6A, MW-9, MW-11, and MW-14 at concentrations ranging from 97 µg/L (MW-2) to 280 µg/L (MW-6A).
- TPH-O was detected below the MTCA Method A cleanup level in the groundwater samples collected from Wells MW-2, MW-6A, MW-9, MW-11, and MW-14 at concentrations ranging from 160 µg/L (MW-2) to 470 µg/L (MW-9).
- Benzene was not detected above the MTCA Method A cleanup level in any of the groundwater samples collected during this monitoring event. Benzene was detected below the MTCA Method A cleanup level in Well MW-11 at a concentration of 0.6 µg/L. Benzene was not detected above the laboratory reporting limit in groundwater samples collected from Wells MW-1A, MW-2, MW-6A, MW-9, MW-10, MW-13, MW-14, and MW-15.
- Toluene was not detected above the laboratory reporting limit in groundwater samples collected from Wells MW-1A, MW-2, MW-9, MW-10, MW-11, and MW-13, MW-14, and MW-15. Toluene was detected below the MTCA Method A cleanup level in the groundwater sample collected from Well MW-6A at a concentration of 0.9 µg/L.
- Ethylbenzene was not detected above the laboratory reporting limit in the groundwater samples collected from Wells MW-1A, MW-2, MW-6A, MW-9,



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MW-11, and MW-13 through MW-15. Ethylbenzene was detected below the MTCA Method A cleanup level in the groundwater sample collected from Well MW-10 at a concentration of 6 µg/L.

- Total xylenes were not detected above the laboratory reporting limit in the groundwater samples collected from Wells MW-1A, MW-2, MW-6A, MW-9, MW-11, and MW-13 through MW-15. Total xylenes were detected below the MTCA Method A cleanup level in the groundwater sample collected from Well MW-10 at a concentration of 2 µg/L.
- Natural attenuation parameters are typically monitored to assess whether bioremediation is occurring at the site. With the exception of Well MW-12 (due to the presence of SPH), field parameters were monitored at each well during this event using a Horiba U-22 water quality meter and included pH, conductivity, temperature, total dissolved solids, and oxidation-reduction potential (ORP). Dissolved oxygen (DO) was measured using a colorimetric kit. Additional parameters of alkalinity, nitrate, and sulfate were analyzed by the laboratory.
- Degradation of hydrocarbons is often indicated by decreased DO concentrations. DO concentrations were generally low in all wells during this event, ranging from 1 milligram per liter (mg/L) to 2 mg/L.
- Upon depletion of dissolved oxygen, ORP decreases and anaerobic conditions increase the availability of alternative electron receptors such as nitrate and sulfate for utilization by microorganisms, which allows for natural attenuation to continue through anaerobic processes. During this event, ORP values and nitrate and sulfate concentrations were generally lower in affected wells and were generally higher in unaffected wells.
- ORP values ranged from -82 millivolts (mV) to 8 mV in wells with hydrocarbon impacts (MW-2, MW-6A, MW-10, MW-11, and MW-13) and ranged from -15 mV to 198 mV in unaffected wells (MW-1A, MW-9, MW-14, and MW-15) during the fourth quarter 2005. Nitrate concentrations were not detected above the laboratory reporting limit in any of the impacted wells and ranged from non-detect to 2.4 mg/L in the unaffected wells. Sulfate concentrations ranged from 7.4 mg/L to 114 mg/L in the impacted wells and ranged from 13.6 mg/L to 45.0 mg/L in the unaffected wells.
- Results of monitoring water quality parameters suggest that natural attenuation by anaerobic degradation processes are occurring in the vicinity of impacted wells at the site, but that the degradation process could be slowing due to decreased availability of electron receptors.
- Analysis of groundwater elevations across the site indicates that groundwater trends towards the south.
- Purge water was stored on-site in 55 gallon drum for subsequent removal and disposal.



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LIMITATIONS

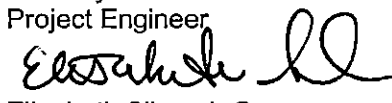
The services described in this report were performed in accordance with generally accepted professional consulting principles and practices. No other warranty, either expressed or implied, is made. These services were performed in accordance with terms established with our client. This report is solely for the use of our client and reliance on any part of this report by a third party is at such party's sole risk.

Delta appreciates the opportunity to provide environmental services for ConocoPhillips Company. Please call (425) 882-3528 if you have any questions regarding the contents of this report.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.


Carol Lybeer
Project Engineer


Elisabeth Silver, L.G.
Project Manager



ATTACHMENTS

Table 1 – Groundwater Elevations
Table 2 – Groundwater Analytical Results
Table 3 – Natural Attenuation Parameters
Figure 1 – Site Map with Groundwater Elevations and Petroleum Hydrocarbon and BTEX Concentrations
Laboratory Analytical Report and Chain-of-Custody Documentation
Groundwater Sampling Procedures and Field Sheets

ELISABETH S. SILVER

cc: Mr. Brian Sato, Washington State Dept. of Ecology – Northwest Regional Office, Bellevue, WA 98008
Ms. Mary Murphy, City of Snohomish, 116 Union Avenue, Snohomish, WA 98290

TABLE 1
GROUNDWATER ELEVATIONS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Well I.D.	Monitoring Date	TOC Elevation (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Groundwater Elevation ¹ (feet)
MW-1A	04/04/02	69.32	7.21	--	62.11
	07/02/02	69.32	9.30	--	60.02
	10/02/02	69.32	11.67	--	57.65
	01/14/03	69.32	7.75	--	61.57
	04/28/03	69.32	7.85	--	61.47
	07/11/03	69.32	10.31	--	59.01
	12/17/03	69.32	7.44	0.00	61.88
	03/31/04	69.32	8.28	0.00	61.04
	08/19/04	69.32	10.89	0.00	58.43
	03/21/05	69.32	9.22	0.00	60.10
	06/28/05	69.32	8.86	0.00	60.46
	09/15/05	69.32	10.67	0.00	58.65
	12/08/05	69.32	8.39	0.00	60.93
MW-2	01/08/99	69.80	4.90	--	64.90
	04/28/99	69.80	4.91	--	64.89
	07/23/99	69.80	6.29	--	63.51
	10/25/99	69.80	8.64	--	61.16
	01/08/00	69.80	4.72	--	65.08
	04/19/00	69.80	5.48	--	64.32
	07/12/00	69.80	7.55	--	62.25
	09/06/00	69.80	--	--	--
	10/16/00	69.80	8.88	--	60.92
	11/27/00	69.80	--	--	--
	01/16/01	69.80	6.02	--	63.78
	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
	07/02/02	69.80	5.49	--	64.31
	10/02/02	69.80	7.88	--	61.92
	01/14/03	69.80	3.27	--	66.53
	04/28/03	69.80	4.05	--	65.75
	07/11/03	69.80	6.92	--	62.88
	12/17/03	69.80	3.65	0.00	66.15
	03/31/04	69.80	4.60	0.00	65.20
	08/19/04	69.80	7.45	0.00	62.35
	03/21/05	69.80	5.52	0.00	64.28

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Well I.D.	Monitoring Date	TOC Elevation (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Groundwater Elevation ¹ (feet)
MW-2	06/28/05	69.80	5.26	0.00	64.54
(con't)	09/15/05	69.80	7.32	0.00	62.48
	12/08/05	69.80	4.06	0.00	65.74
MW-6A	04/04/02	67.65	8.25	--	59.40
	07/02/02	67.65	8.98	--	58.67
	10/02/02	67.65	10.48	--	57.17
	01/14/03	67.65	9.88	--	57.77
	04/28/03	67.65	9.20	--	58.45
	07/11/03	67.65	8.48	--	59.17
	12/17/03	67.65	9.45	0.00	58.20
	03/31/04	67.65	8.97	0.00	58.68
	08/19/04	67.65	9.22	0.00	58.43
	03/21/05	67.65	9.45	0.00	58.20
	06/28/05	67.65	9.02	0.00	58.63
	09/15/05	67.65	10.67	0.00	56.98
	12/08/05	67.65	9.61	0.00	58.04
MW-9	01/08/99	68.66	6.50	--	62.16
	04/28/99	68.66	7.28	--	61.38
	07/23/99	68.66	7.97	--	60.69
	10/25/99	68.66	--	--	--
	01/08/00	68.66	6.76	--	61.90
	04/19/00	68.66	--	--	--
	07/12/00	68.66	8.65	--	60.01
	09/06/00	68.66	--	--	--
	10/16/00	68.66	--	--	--
	11/27/00	68.66	--	--	--
	01/16/01	68.66	8.08	--	60.58
	04/04/01	68.66	7.78	--	60.88
	05/22/01	68.66	--	--	--
	07/09/01	68.66	--	--	--
	10/09/01	68.66	9.70	--	58.96
	01/08/02	68.66	6.16	--	62.50
	04/04/02	68.66	6.54	--	62.12
	07/02/02	68.66	8.49	--	60.17
	10/02/02	68.66	10.13	--	58.53
	01/14/03	68.66	7.28	--	61.38
	04/28/03	68.66	6.93	--	61.73
	07/11/03	68.66	8.91	--	59.75
	12/23/03	68.66	6.81	0.00	61.85
	03/31/04	68.66	7.34	0.00	61.32

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Well I.D.	Monitoring Date	TOC Elevation (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Groundwater Elevation ¹ (feet)
MW-9	08/19/04	68.66	9.53	0.00	59.13
(con't)	03/21/05 ⁴	67.77	8.11	0.00	59.66
	06/28/05	67.77	7.82	0.00	59.95
	09/15/05	67.77	9.54	0.00	58.23
	12/08/05	67.77	7.42	0.00	60.35
MW-10	01/08/99	67.33	4.91	--	62.42
	04/28/99	67.33	5.04	--	62.29
	07/23/99	67.33	5.44	--	61.89
	10/25/99	67.33	7.00	--	60.33
	01/08/00	67.33	4.64	--	62.69
	04/19/00	67.33	5.02	--	62.31
	07/12/00	67.33	8.27	--	59.06
	09/06/00	67.33	--	--	--
	10/16/00	67.33	7.41	--	59.92
	11/27/00	67.33	--	--	--
	01/16/01	67.33	4.39	--	62.94
	04/04/01	67.33	5.00	--	62.33
	05/22/01	67.33	--	--	--
	07/09/01	67.33	6.03	--	61.30
	10/09/01	67.33	7.15	--	60.18
	01/08/02	67.33	4.61	--	62.72
	04/04/02	67.33	4.48	--	62.85
	07/02/02	67.33	6.00	--	61.33
	10/02/02	67.33	7.96	--	59.37
	01/14/03	67.33	4.25	--	63.08
	04/28/03	67.33	4.71	--	62.62
	07/11/03	67.33	6.40	--	60.93
	12/17/03	Inaccessible; buried under gravel from recent road construction			
	03/31/04	67.33	4.28	0.00	63.05
	08/19/04	67.33	6.84	0.00	60.49
	03/21/05	67.33	4.71	0.00	62.62
	06/28/05	67.33	4.77	0.00	62.56
	09/15/05	67.33	7.03	0.00	60.30
	12/08/05	67.33	4.23	0.00	63.10

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Well I.D.	Monitoring Date	TOC Elevation (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Groundwater Elevation ¹ (feet)
MW-11	01/08/99	66.37	9.32	--	57.05
	04/28/99	66.37	9.58	--	56.79
	07/23/99	66.37	9.83	--	56.54
	10/25/99	66.37	10.69	--	55.68
	01/08/00	66.37	9.21	--	57.16
	04/19/00	66.37	9.52	--	56.85
	07/12/00	66.37	10.10	--	56.27
	09/06/00	66.37	--	--	--
	10/16/00	66.37	10.80	--	55.57
	11/27/00	66.37	--	--	--
	01/16/01	66.37	10.75	--	55.62
	04/04/01	66.37	--	--	--
	05/22/01	66.37	9.69	--	56.68
	07/09/01	66.37	9.98	--	56.39
	10/09/01	66.37	10.67	--	55.70
	01/08/02	66.37	9.05	--	57.32
	04/04/02	66.37	5.67	--	60.70
	07/02/02	66.37	5.90	--	60.47
	10/02/02	66.37	10.94	--	55.43
	01/14/03	66.37	9.18	--	57.19
	04/28/03	66.37	9.25	--	57.12
	07/11/03	66.37	10.19	--	56.18
	12/17/03	66.37	8.35	0.00	58.02
	03/31/04	66.37	8.70	0.00	57.67
	08/19/04 ²	65.52	9.73	0.00	55.79
	03/21/05	65.52	9.10	0.00	56.42
	06/28/08	65.52	8.84	0.00	56.68
	09/15/05	65.52	9.73	0.00	55.79
	12/08/05	65.52	8.60	0.00	56.92

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MW-12	01/08/99	66.40	8.74	--	57.66
	04/28/99	66.40	9.22	0.03	57.20
	07/23/99	66.40	9.51	0.01	56.90
	10/25/99	66.40	10.81	0.29	55.82
	01/08/00	66.40	8.71	--	57.69
	04/19/00	66.40	8.97	--	57.43
	07/12/00	66.40	--	0.20	--
	09/06/00	66.40	--	--	--
	10/16/00	66.40	--	0.25	--
	11/27/00	66.40	--	--	--
	01/16/01	66.40	9.44	--	56.96
	04/06/01	66.40	9.16	--	57.24
	05/22/01	66.40	9.39	--	57.01
	07/09/01	66.40	--	0.30	--
	10/09/01	66.40	10.65	0.20	55.91
	01/08/02	66.40	8.15	0.08	58.31
	04/04/02	66.40	8.65	0.15	57.87
	07/02/02	66.40	9.66	0.36	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
	08/19/04 ²	66.33	10.32	0.14	56.12
	10/14/04 ³	66.33	10.00	sheen	56.33
	03/21/05	66.33	9.30	0.01	57.04
	06/28/05	66.33	8.96	sheen	57.37
	09/15/05	66.33	10.28	0.12	56.15
	12/08/05	66.33	9.02	0.13	57.41

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MW-13	03/21/05 ⁴	67.59	9.72	0.00	57.87
	06/28/05	67.59	9.43	0.00	58.16
	09/15/05	67.59	10.87	0.00	56.72
	12/08/05	67.59	9.34	0.00	58.25
MW-14	03/21/05 ⁴	67.67	9.17	0.00	58.50
	06/28/05	67.67	8.87	0.00	58.80
	09/15/05	67.67	10.68	0.00	56.99
	12/08/05	67.67	8.79	0.00	58.88
MW-15	03/21/05 ⁴	66.66	9.02	0.00	57.64
	06/28/05	66.66	8.64	0.00	58.02
	09/15/05	66.66	10.19	0.00	56.47
	12/08/05	66.66	8.60	0.00	58.06

Notes:

TOC = Top of casing elevation, referenced to a site datum with an assumed elevation of 100.00 feet (National Geodetic Vertical Datum of 1929).

SPH = Separate-phase hydrocarbon thickness

"--" - Not measured or reported

¹ Where applicable, groundwater elevations have been corrected to account for separate-phase hydrocarbon thickness, assuming a specific gravity of 0.80 for the product.

² TOC elevations of MW-11 and MW-12 were re-surveyed on October 14, 2004 in reference to MW-6A. The well casing of MW-12 had been shortened following the March 31, 2004 monitoring event.

³ Delta monitored Well MW-12 on October 14, 2004 to measure SPH thickness in the well. No other wells were monitored at that time.

⁴ TOC elevations of MW-13 through MW-15 were surveyed on March 21, 2005 in reference to MW-6A and MW-9. In doing so, the wellhead elevation of MW-9 was observed to be approximately 0.89 foot lower than previously recorded.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
MW-1A	04/04/02	73.6	<250	<500	<0.500	<0.500	<0.500	<1.00
	07/02/02	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00
	10/02/02	<100	<250	<500	<0.500	<2.00	<1.00	<1.50
	01/14/03	90.5	<250	<500	0.550	<0.500	<0.500	<1.00
	04/28/03	59.2	<250	<500	1.54	<0.500	<0.500	<1.00
	07/11/03	<50.0	<281	<562	<0.500	0.702	0.517	1.74
	12/17/03	<100	<129	<259	0.339	<0.5	<0.5	<1
	03/31/04	<100	<119	<237	<1	<1	<1	<2
	08/19/04	<100	<264	<527	<1	<1	<1	<2
	03/21/05	266 ✓	<248	<496	<1	<1	<1	<2
	06/28/05	<100 ✓	<259	<517	<1	<1	<1	<2
	09/15/05	<48 ✓	<160	<200	<0.5	<0.7	<0.8	<0.8
	12/08/05	<48 ✓	<78	<97	<0.5	<0.7	<0.8	<0.8
MW-2	01/08/99	1,510	314	<750	20.7	<2.75	<2.50	<5.00
	04/28/99	1,180	324	<750	16.1	<1.60	<1.32	<3.30
	07/23/99	805	368	<750	12.3	<1.50	<0.500	<4.00
	10/25/99	2,100	250	<750	<0.700	<19.6	<0.700	<1.90
	01/08/00	1,530	<250	<750	22.2	<2.27	<2.43	<6.44
	04/19/00	1,210	257	<718	<0.500	28.5	<2.55	<4.22
	07/12/00	888	653	<750	<1.25	4.75	<1.25	<2.50
	09/06/00	--	--	--	--	--	--	--
	10/16/00	1,110	<358	<1,070	42.3	<4.13	<2.08	<5.00
	11/27/00	--	--	--	--	--	--	--
	01/16/01	2,000	614	<918	<2.50	29.1	<2.50	<5.00
	04/04/01	--	--	--	--	--	--	--
	05/22/01	--	--	--	--	--	--	--
	07/09/01	--	--	--	--	--	--	--
	10/09/01	--	--	--	--	--	--	--
	01/08/02	--	--	--	--	--	--	--
	04/04/02	159	<250	<500	16.3	1.25	<0.500	2.57
	07/02/02	387	273	<500	23.4	<0.500	<0.500	<1.00
	10/02/02	505	<250	<500	22.5	<2.00	<1.00	<1.50
	01/14/03	681	<250	<500	8.10	<0.500	0.515	2.49
	04/28/03	269	<250	<500	3.51	<0.500	<0.500	1.45
	07/11/03	358	<291	<581	5.64	0.557	0.792	3.04
	12/17/03	124	<129	<259	<0.25	<0.5	<0.5	<1.00
	03/31/04	<100	123	<237	9.05	<1	<1	1.12
	08/19/04	<100	<244	<488	<1	<1	<1	<2
	03/21/05	<100	<251	<502	5.07	<1	<1	<2
	06/28/05	<100	344 ²	568 ²	<1	<1	<1	<2

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW-2	09/15/05	<48	<80	<100	<0.5	<0.7	<0.8	<0.8
(cont)	12/08/05	85	97 ²	160	<0.5	<0.7	<0.8	<0.8
MW-6A	04/04/02	2,570	665	<500	2.99	3.16	2.25	7.27
	07/02/02	3,000	613	<500	4.70	4.51	3.42	9.81
	10/02/02	2,970	384	<500	32.4	6.38	8.44	9.75
	01/14/03	1,680	<250	<500	6.69	2.24	1.60	13.4
	04/28/03	1,720	288	<562	1.65	2.20	2.99	12.6
	07/11/03	1,470	<281	<562	2.13	2.45	3.23	6.92
	12/17/03	2,380	457	<265	0.875	1.75	0.941	<1
	03/31/04	1,810	682	<247	<5	<5	<5	<10
	08/19/04	988	347	<476	<1 /	<1	<1	<2
	03/21/05	1,610	349	<501	<0.5 /	4.58	4.95	4.71
	06/28/05	1,710 X	533 ³	<490	<1 /	1.3	<1	<2
	09/15/05	570	220	120	<0.5 /	0.9	0.9	<0.8
	12/08/05	920 X	280 ⁵	170	<0.5 /	0.9	<0.8	<0.8
MW-9	01/08/99	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	04/28/99	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	07/23/99	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	10/25/99	--	--	--	--	--	--	--
	01/08/00	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	04/19/00	--	--	--	--	--	--	--
	07/12/00	<50.0	<249	<745	<0.500	<0.500	<0.500	<1.00
	09/06/00	--	--	--	--	--	--	--
	10/16/00	--	--	--	--	--	--	--
	11/27/00	--	--	--	--	--	--	--
	01/16/01	<50.0	--	--	<0.500	<0.500	<0.500	<1.00
	04/04/01	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00
	05/22/01	--	--	--	--	--	--	--
	07/09/01	--	--	--	--	--	--	--
	10/09/01	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00
	01/08/02	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00
	04/04/02	<50.0	<250	<500	<0.500	0.593	<0.500	<1.00
	07/02/02	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00
	10/02/02	144	<250	<500	3.15	<2.00	7.22	2.25
	01/14/03	<50.0	<284	<568	<0.500	<0.500	<0.500	<1.00
	04/28/03	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00
	07/11/03	<50.0	<329	<658	<0.500	<0.500	<0.500	1.20
	12/23/03	<100	<126	<253	<0.25	<0.5	<0.5	<1
	03/31/04	<100	<118	<237	<1	<1	<1	<2
	08/19/04	<100	<256	<512	<1	<1	<1	<2

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW-9	03/21/05	<100	<247	<494	<1	<1	<1	<2
(con't)	06/28/05	<100	<258	<516	<1	<1	<1	<2
	09/15/05	<48	<77	260	<0.5	<0.7	<0.8	<0.8
	12/08/05	<48	170 ⁶	470	<0.5	<0.7	<0.8	<0.8
MW-10	01/08/99	331	266	<750	2.30	<0.500	<1.50	<2.50
	04/28/99	280	<250	<750	2.99	<0.800	<1.10	<3.00
	07/23/99	529	<250	<750	2.34	<2.60	2.81	9.37
	10/25/99	519	251	<750	<0.800	<5.65	<2.75	<8.65
	01/08/00	504	<250	<750	<1.22	<0.828	<3.27	<7.59
	04/19/00	332	<250	<750	<0.610	<4.43	<2.84	<6.91
	07/12/00	498	<250	<750	<0.500	4.02	<3.52	<7.18
	09/06/00	--	--	--	--	--	--	--
	10/16/00	770	616	<1,330	<4.17	<3.47	<2.69	<8.05
	11/27/00	--	--	--	--	--	--	--
	01/16/01	209	299	<859	<0.500	2.33	0.980	2.65
	04/04/01	198	<250	<750	<0.500	<0.500	1.03	2.71
	05/22/01	--	--	--	--	--	--	--
	07/09/01	311	334	<853	<0.500	1.97	0.949	1.07
	10/09/01	675	291	<581	2.16	0.678	0.777	4.67
	01/08/02	258	675	<500	0.837	0.722	1.48	2.71
	04/04/02	208	392	<500	<0.500	<0.500	<0.500	1.33
	07/02/02	201	250	<500	0.552	<0.500	<0.500	1.16
	10/02/02	811	326	<500	3.90	<2.00	4.12	4.63
	01/14/03	280	<309	<617	0.549	0.844	<0.500	1.76
	04/28/03	270	<250	<500	0.842	<0.500	<0.500	2.29
	07/11/03	548	<284	<568	0.929	<0.500	3.19	4.18
	12/17/03	Inaccessible; buried under gravel from recent road construction						
	03/31/04	390	308	<237	<1	<1	<1	<2
	08/19/04	244	<251	<501	<1	<1	<1	<2
	03/21/05	396	<247	<494	<1	<1	1.93	<2
	06/28/05	624	746 ³	<504	<1	<1	<1	<2
	09/15/05	290	110	120	<0.5	<0.7	<0.8	<0.8
	12/08/05	540	<82	<100	<0.5	<0.7	6	2

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW-11	01/08/99	371	--	--	141	4.95	10.8	6.66
	04/28/99	782	<250	<750	175	<11.0	26.1	29.9
	07/23/99	474	<250	<750	43.7	<2.70	3.40	8.32
	10/25/99	845	<250	<750	9.22	<2.90	<3.75	<6.20
	01/08/00	133	<250	<750	22.5	<1.03	1.11	3.34
	04/19/00	869	<250	<750	92.8	8.15	9.25	20.2
	07/12/00	581	387	<896	25.6	2.32	<2.31	<7.94
	09/06/00	--	--	--	--	--	--	--
	10/16/00	322	<250	<750	<2.80	<0.640	<0.860	<4.20
	11/27/00	--	--	--	--	--	--	--
	01/16/01	725	311	<866	16.7	2.41	4.46	7.09
	04/04/01	--	--	--	--	--	--	--
	05/22/01	385	--	--	15.8	2.37	2.47	4.37
	07/09/01	439	<310	<931	39.6	2.63	1.72	3.71
	10/09/01	410	333	<500	6.04	1.08	1.74	4.40
	01/08/02	1,280	572	<500	184	10.6	35.7	21.9
	04/04/02	757	366	<500	30.6	2.20	2.81	5.72
	07/02/02	1,060	384	<500	107	8.73	24.2	15.5
	10/02/02	785	<250	<500	13.9	<2.00	4.96	3.59
	01/14/03	570	<305	<610	19.3	1.12	1.96	3.82
	04/28/03	1,100	<287	<575	135	10.7	34.1	20.1
	07/11/03	684	<250	<500	29.7	3.20	10.0	9.17
	12/17/03	673	215	<265	15.1	0.569	<0.5	<1
	03/31/04	409	<127	<253	93.9	5.02	10.4	5.39
	08/19/04	289	<240	<480	2.69	<1	<1	<2
	03/21/05	564	<244	<488	36.8	4.18	9.48	7.34
	06/28/05	653	13,300 ³	5,650 ²	74.8 X	4.9	11.20	6.41
	09/15/05	280	89	170	12.0 X	0.7	<0.8	1.0
	12/08/05	480	130 ⁵	230	0.6	<0.7	<0.8	0.9

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW-12	01/08/99 ¹	2,670	--	--	21.1	<5.00	40.1	48.1
	04/28/99	Not sampled due to presence of SPH						
	07/23/99	Not sampled due to presence of SPH						
	10/25/99	Not sampled due to presence of SPH						
	01/08/00	5,480	8,380	<8,250	<15.6	<10.2	53.2	47.8
	04/19/00	5,980	3,060	<3,750	<2.60	<21.5	66.6	<63.5
	07/12/00	Not sampled due to presence of SPH						
	09/06/00	--	--	--	--	--	--	--
	10/16/00	Not sampled due to presence of SPH						
	11/27/00	--	--	--	--	--	--	--
	01/16/01	5,360	20,100	<8,250	<5.00	12.9	72.0	63.8
	04/06/01	15,900	6,950	2,280	17.6	9.04	219	131
	05/22/01	15,800	--	--	<10.0	10.3	307	142
	07/09/01	Not sampled due to presence of SPH						
	10/09/01	Not sampled due to presence of SPH						
	01/08/02	Not sampled due to presence of SPH						
	04/04/02	Not sampled due to presence of SPH						
	07/02/02	Not sampled due to presence of SPH						
	10/02/02	Not sampled due to presence of SPH						
	01/14/03	Not sampled due to presence of SPH						
	04/28/03	Not sampled due to presence of SPH						
	07/11/03	Not sampled due to presence of SPH						
	12/17/03	Not sampled due to presence of SPH						
	03/31/04	23,400	17,800	2,200	<50	<50	<50	<100
	08/19/04	Not sampled due to presence of SPH						
	03/21/05	Not sampled due to presence of SPH						
	06/28/05	8,030	<252	<503	<5	<5	30.20	<10
	09/15/05	Not sampled due to presence of SPH						
	12/08/05	Not sampled due to presence of SPH						

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	TPH-Gasoline (µg/L)	TPH-Diesel (µg/L)	TPH-Oil (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
MW-13	03/21/05	424	<239	<478	2.84	1.71	5.21	1.86
	06/28/05	402	<244	<487	<1	<1	<1	<2
	09/15/05	260	81	<98	<0.5	<0.7	<0.8	<0.8
	12/08/05	230	<80	<100	<0.5	<0.7	<0.8	<0.8
MW-14	03/21/05	<100	<245	<489	<1	<1	<1	<2
	06/28/05	197	<244	<488	<1	<1	<1	<2
	09/15/05	66	130	170	<0.5	<0.7	<0.8	<0.8
	12/08/05	74	140 ⁶	180	<0.5	<0.7	<0.8	<0.8
MW-15	03/21/05	<100	<248	<497	<1	1.5	<1	<2
	06/28/05	<100	<247	<493	<1	<1	<1	<2
	09/15/05	<48	140	230	<0.5	<0.7	<0.8	<0.8
	12/08/05	<48	<80	<100	<0.5	<0.7	<0.8	<0.8
MTCA Method A Cleanup Levels:		800⁴	500	500	5	1000	700	1000
Notes: µg/L = micrograms per liter <n = Below the detection limit "--" - Not analyzed TPH as Diesel and Oil - Analysis by Method NWTPH-Dx TPH as Gasoline (Toluene to Dodecane) - Analysis by Method NWTPH-Gx BTEX Compounds - Analysis by EPA Method 8021B SPH - Separate-phase hydrocarbon ¹ Sample collected without purging ² Analytical laboratory indicates that the result does not appear to be "typical" product. ³ Chromatogram suggests that the result might be overlap from the gasoline range. ⁴ MTCA Method A Cleanup Level for TPH-Gasoline is 1,000 µg/L if benzene is not detectable in groundwater ⁵ The laboratory reported that the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range earlier than #2 fuel and contains individual peaks eluting in the DRO range. ⁶ The laboratory reported that the observed sample pattern is not typical of #2 fuel/diesel. The reported result is due to an individual peak(s) eluting in the DRO range.								

TABLE 3
NATURAL ATTENUATION PARAMETERS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	FIELD PARAMETERS									LABORATORY ANALYSES		
		pH	Conductivity (S/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Salinity (%)	Total Dissolved Solids (g/L)	Oxidation Reduction Potential (mV)	Ferrous Iron (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)
MW-1A	10/09/01	--	--	--	--	--	--	--	--	--	--	--	--
	01/08/02	--	--	--	--	--	--	--	--	--	--	--	--
	04/04/02	4.97	0.406	999	9.56	12.2	0.0	0.26	212	3.2	61.6	0.886	47.8
	07/02/02	5.49	0.252	999	19.99	16.9	0.0	0.16	186	0.0	42.4	<0.200	54.5
	10/02/02	5.33	0.246	999	10.91	15.53	0.0	0.16	364	0.0	103	<0.200	50.3
	04/28/03	5.43	0.353	164	4.49	14.91	0.0	0.23	64	0.5	64.8	0.300	30.4
	12/17/03	4.45	0.018	10	4.15	9.1	--	0.12	253	--	64	0.406	40.9
	03/31/04	5.67	0.222	94	1.44	11.2	--	0.14	83	--	62	1.01	30.4
	08/19/04	4.59	0.022	999	3.20	20.1	--	0.14	130	--	66	0.8	35.7
	03/21/05	6.48	0.226	-5	3.00	12.07	--	0.15	43	--	61.9	1.41	32.6
	06/28/05	6.34	0.200	--	0.38	13.21	--	0.130	58.1	--	--	1.2	26.3
	09/15/05	6.34	0.228	--	0.46	15.11	--	0.148	108.7	--	76.2	0.16	24
	12/08/05 *	5.86	0.371	342	1.0	12.8	--	0.24	198	--	76.7	1.2	41.9
MW-2	10/09/01	--	--	--	--	--	--	--	--	--	--	--	--
	01/08/02	--	--	--	--	--	--	--	--	--	--	--	--
	04/04/02	--	--	--	--	--	--	--	--	--	--	--	--
	07/02/02	5.43	0.368	26.9	17.76	19.6	0.0	0.24	37	3.4	148	<0.200	29.6
	10/02/02	5.34	0.373	21.3	8.97	17.93	0.0	0.24	255	3.4	150	<0.200	41.6
	04/28/03	6.24	1.06	638	7.03	15.48	0.0	0.7	-6.5	2.6	276	<0.200	26.8
	12/17/03	4.47	0.017	9	3.85	9.5	--	0.12	252	--	310	<0.015	23
	03/31/04	6.14	0.564	80	1.62	11.3	--	0.36	-5	--	251	<0.015	23
	08/19/04	5.68	0.043	404	2.81	20.7	--	0.28	-22	--	208	0.2	8.71
	03/21/05	7.39	0.500	220	3.12	11.71	--	0.32	-47	--	205	<0.015	26.9
	06/28/05	6.85	0.478	--	0.20	15.18	--	0.311	-50.2	--	--	<0.015	20.8
	09/15/05	6.70	0.467	--	0.09	17.15	--	0.304	-63.2	--	209	<0.040	19.1
	12/08/05 *	6.43	0.855	110	1.0	12.5	--	0.55	-58	--	274	<0.040	19.4
MW-6A	10/09/01	--	--	--	--	--	--	--	--	--	--	--	--
	01/08/02	--	--	--	--	--	--	--	--	--	--	--	--
	04/04/02	--	--	--	--	--	--	--	--	--	--	--	--
	07/02/02	--	--	--	--	--	--	--	--	--	--	--	--
	10/02/02	--	--	--	--	--	--	--	--	--	--	--	--
	04/28/03	6.16	0.794	522	4.55	15.85	0.0	0.51	-92	2.8	203	<0.200	12.1
	12/17/03	4.47	0.018	9	2.97	9.6	--	0.12	250	--	87	0.442	39.6
	03/31/04	6.03	0.487	200	0.54	13.0	--	0.32	-60	--	230	<0.015	5.56
	08/19/04	5.70	0.047	673	3.92	19.9	--	0.30	-16	--	205	0.2	9.48
	03/21/05	7.35	0.471	640	2.76	13.48	--	0.31	-61	--	201	<0.015	11.3
	06/28/05	6.77	0.440	--	0.48	14.66	--	0.286	-37.3	--	--	<0.015	3.62
	09/15/05	6.69	0.429	--	0.21	15.88	--	0.279	-60.9	--	178	<0.040	14
	12/08/05 *	6.33	0.670	238	1.0	14.7	--	0.430	-82	--	225	<0.040	7.4
MW-9	10/09/01	5.16	0.135	242	8.52	16.5	0.0	0.09	313	0.0	33.0	3.05	13.5
	01/08/02	4.77	0.369	206	6.25	12.6	0.0	0.21	182	0.0	32.6	1.78	13.1
	04/04/02	5.10	0.152	278	7.54	15.2	0.0	0.10	350	0.0	29.8	2.49	12.6
	07/02/02	6.36	0.279	550	18.10	17.0	0.0	0.17	448	0.0	28.6	2.02	11.2
	10/02/02	4.90	0.128	275	10.73	17.18	0.0	0.08	498	0.0	32.4	2.49	10.4
	04/28/03	4.91	0.251	63.5	3.77	13.47	0.0	0.16	136	0.0	33.4	1.28	17.3
	12/23/03	4.53	0.018	640	4.60	11.6	--	0.10	252	--	32	2.71	14.4
	03/31/04	5.75	0.134	170	3.13	10.8	--	0.09	89	--	30	1.88	14.9
	08/19/04	3.91	0.013	999	7.64	21.8	--	0.08	283	--	29	2.5	13.2
	03/21/05	5.49	0.167	-5	4.93	11.91	--	0.11	138	--	32.5	1.92	14.3
	06/28/05	5.84	0.127	--	2.25	13.83	--	0.083	182.2	--	--	1.79	15.1
	09/15/05	5.82	0.136	--	2.14	16.8	--	0.088	100.0	--	29.8	2.3	13.4
	12/08/05 *	5.54	0.227	265	1.5	12.5	--	0.15	127	--	31.4	2.4	13.6

TABLE 3
NATURAL ATTENUATION PARAMETERS
 ConocoPhillips Site No. 254165
 202 Avenue D
 Snohomish, Washington

Sample I.D.	Sample Date	FIELD PARAMETERS									LABORATORY ANALYSES		
		pH	Conductivity (S/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C)	Salinity (%)	Total Dissolved Solids (g/L)	Oxidation Reduction Potential (mV)	Ferrous Iron (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)
MW-10	10/09/01	7.20	0.290	999	4.23	17.4	0.0	0.19	7	4.6	132	<0.100	19.4
	01/08/02	5.28	0.588	498	6.67	13.7	0.0	0.33	-107	4.2	168	<0.100	13.5
	04/04/02	5.89	0.368	349	7.81	19.1	0.0	0.24	22	2.0	170	<0.200	13.2
	07/02/02	5.86	0.339	550	19.53	23.4	0.0	0.22	21	2.2	133	<0.200	20.3
	10/02/02	5.50	0.285	162	7.72	18.02	0.0	0.18	302	2.2	129	<0.200	21.3
	04/28/03	5.82	0.592	285	3.75	14.86	0.0	0.38	-110	2.4	162	<0.200	15.7
	12/17/03	Inaccessible; buried under gravel from recent road construction									--	--	--
	03/31/04	5.87	0.313	990	0.50	11.4	--	0.20	-17	--	141	<0.015	17.6
	08/19/04	5.43	0.028	999	3.74	23.7	--	0.18	4	--	127	0.2	22.7
	03/21/05	7.63	0.319	-5	2.54	12.47	--	0.21	-60	--	154	<0.015	15.1
MW-11	06/28/05	6.64	0.270	--	0.25	16.27	--	0.175	14.1	--	--	<0.015	18.6
	09/15/05	6.63	0.267	--	0.28	18.58	--	0.174	14.6	--	110	<0.040	19.8
	12/08/05 *	6.46	0.483	384	1.0	11.8	--	0.31	-69	--	137	<0.040	21.5
	10/09/01	6.65	0.319	25.0	4.62	17.3	0.0	0.21	1	3.2	158	<0.100	9.41
	01/08/02	5.15	0.462	201	6.45	13.4	0.0	0.11	166	3.2	186	<0.100	6.55
	04/04/02	5.00	0.414	56.7	8.84	15.7	0.0	0.27	43	5.4	203	<0.200	2.19
	07/02/02	6.52	0.421	31.6	19.55	21.9	0.0	0.27	-68	4.0	203	<0.200	2.93
	10/02/02	5.85	0.346	43.1	8.75	17.01	0.0	0.22	219	4.0	169	<0.200	4.04
	04/28/03	5.97	0.734	13.9	3.56	15.12	0.0	0.47	-80	4.0	208	<0.200	3.32
	12/17/03	4.45	0.019	10	3.77	10.4	--	0.12	247	--	170	<0.15	73.2
MW-12	03/31/04	6.15	0.470	20	0.72	12.6	--	0.31	-18	--	218	<0.015	30.1
	08/19/04	5.48	0.039	937	2.39	21.4	--	0.26	-5	--	167	0.2	10.6
	03/21/05	7.69	0.429	0	2.56	13.30	--	0.28	-80	--	189	<0.015	34.8
	06/28/05	6.71	0.712	--	0.52	15.37	--	0.463	-14.6	--	--	<0.015	26.1
	09/15/05	6.63	0.379	--	0.20	17.68	--	0.246	-35.7	--	150	<0.040	11.3
	12/08/05 *	6.28	0.689	148	1.0	14.7	--	0.44	8	--	157	<0.040	11.4
	03/31/04	6.12	0.345	230	0.93	11.6	--	0.22	-58	--	129	<0.015	37.5
	08/19/04	Not measured due to presence of SPH									--	--	--
	03/21/05	Not measured due to presence of SPH									--	--	--
	06/28/05	Not measured due to obstruction in well.									--	<0.075	51.2
MW-13	06/28/05	Not measured due to presence of SPH									--	--	--
	12/08/05	Not measured due to presence of SPH									--	--	--
	03/21/05	6.97	0.507	-5	2.43	13.37	--	0.32	15	--	229	<0.015	13.8
	06/28/05	6.83	0.467	--	0.59	14.69	--	0.304	-33.9	--	--	<0.015	16.6
	09/15/05	6.66	0.467	--	0.23	15.72	--	0.304	-52.4	--	225	<0.040	11.1
	12/08/05 *	6.47	0.664	389	2.0	13.9	--	0.42	-60	--	228	<0.040	13.8
	03/21/05	6.95	0.472	150	3.68	11.34	--	0.31	35	--	97.4	0.029	46.2
	06/28/05	6.72	0.324	--	0.14	13.85	--	0.211	20.7	--	--	<0.075	52.7
	09/15/05	6.49	0.347	--	0.14	16.60	--	0.226	-5.3	--	96.1	<0.040	43.1
	12/08/05 *	6.55	0.459	338	1.0	13.8	--	0.30	-15	--	97.3	<0.040	45.0
MW-14	03/21/05	5.81	0.179	-5	3.57	12.82	--	0.12	109	--	54.1	2.04	21
	06/28/05	6.02	0.152	--	0.72	16.07	--	0.099	116.3	--	--	2.42	19
	09/15/05	5.87	0.154	--	0.64	18.45	--	0.101	94.1	--	39.8	2.6	14.6
	12/08/05 *	5.94	0.309	489	1.0	12.7	--	0.20	94	--	40.4	2.2	18.8

Notes:

Field measurements were collected using Model U-22 Horiba Probe or a YSI Model 556 water quality meter.

Total Alkalinity reported as CaCO₃ by EPA Method 310.1

Nitrate reported as Nitrogen by EPA Method 300.0

Sulfate analyzed by EPA Method 300.0

* = Dissolved oxygen reading obtained using colorimetric kit.

"--" = Not analyzed

S/cm = Siemens per centimeter

NTU = Nephelometric Turbidity Unit

mg/L = milligrams per liter

°C = degrees Celsius

g/L = grams per liter

mV = millivolts.

LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY DOCUMENTATION

Quarterly Groundwater Sampling
ConocoPhillips Site No. 254165



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Analysis Report

ANALYTICAL RESULTS

Prepared for:

ConocoPhillips
19909 120th Avenue NE
Suite 101
Bothell WA 98011

206-706-2341

Prepared by:

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

SAMPLE GROUP

The sample group for this submittal is 971038. Samples arrived at the laboratory on Wednesday, December 14, 2005. The PO# for this group is 1234DEL004 and the release number is ECKERT.

Client Description

MW-1A Composite Water Sample
MW-2 Composite Water Sample
MW-6A Composite Water Sample
MW-9 Composite Water Sample
MW-10 Composite Water Sample
MW-11 Composite Water Sample
MW-13 Composite Water Sample
MW-14 Composite Water Sample
MW-15 Composite Water Sample

Lancaster Labs Number

4669713
4669714
4669715
4669716
4669717
4669718
4669719
4669720
4669721

1 COPY TO Delta Environmental
ELECTRONIC Delta Environmental
COPY TO

Attn: Laura Brock
Attn: Elizabeth Silver



Analysis Report

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Questions? Contact your Client Services Representative
Teresa L Cunningham at (717) 656-2300

Respectfully Submitted,

A handwritten signature in cursive script that reads "Michele M. Turner". The ink is dark and the signature is fluid.

Michele M. Turner
Director



Analysis Report

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Lancaster Laboratories Sample No. WW 4669713

MW-1A Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 09:30 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

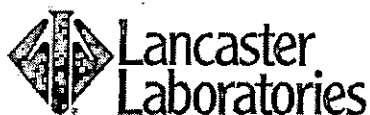
1ASNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	76,700.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	41,900.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	1,200.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	78.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	97.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/15/2005 22:09	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 15:50	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 08:35	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/16/2005 23:49	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 21:02	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/16/2005 23:49	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 21:02	Gordon A Lodde	n.a.



Analysis Report

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Lancaster Laboratories Sample No. WW 4669713

MW-1A Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 09:30 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

1ASNO

02135 Extraction - DRO Water
Special

ECY 97-602 NWTPH-Dx
06/97

1 12/16/2005 02:30 Sherry L Morrow

1



Analysis Report

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Lancaster Laboratories Sample No. WW 4669715

MW-6A Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 12:30

by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

W6ANO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	225,000.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	7,400.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	N.D.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	280.	79.	ug/l	1
02096	Heavy Range Organics	n.a.	170.	98.	ug/l	1
The observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range earlier than #2 fuel and contains individual peaks eluting in the DRO range.						
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	920.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	0.9	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/15/2005 22:38	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 15:53	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 09:23	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 00:49	Martha L Seidel	1



Analysis Report

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Lancaster Laboratories Sample No. WW 4669715

MW-5A Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 12:30 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

W6ANO

02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 21:56	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 00:49	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 21:56	Gordon A Lodde	n.a.
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	12/16/2005 02:30	Sherry L Morrow	1



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Lancaster Laboratories Sample No. WW 4669714

MW-2 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 13:00

by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

W2SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	274,000.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	19,400.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	N.D.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	97.	77.	ug/l	1
02096	Heavy Range Organics	n.a.	160.	97.	ug/l	1
The observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range earlier than #2 fuel and contains individual peaks eluting in the DRO range.						
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	85.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis Trial#	Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/15/2005 22:24	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 15:51	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 08:59	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 00:19	Martha L Seidel	1



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Lancaster Laboratories Sample No. WW 4669714

MW-2 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 13:00 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

W2SNO

02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 21:29	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 00:19	Martha I Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 21:29	Gordon A Lodde	n.a.
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	12/16/2005 02:30	Sherry L Morrow	1



Analysis Report

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Lancaster Laboratories Sample No. WW 4669716

MW-9 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 10:45 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

W9SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	31,400.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	13,600.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	2,400.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	170.	79.	ug/l	1
02096	Heavy Range Organics	n.a.	470.	98.	ug/l	1
The observed sample pattern is not typical of #2 fuel/diesel. The reported result is due to an individual peak(s) eluting in the DRO range.						
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/15/2005 22:53	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 15:54	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/19/2005 15:26	Matthew E Barton	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 01:19	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 19:27	Gordon A Lodde	1



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Lancaster Laboratories Sample No. WW 4669716

MW-9 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 10:45 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

W9SNO

01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 01:19	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 19:27	Gordon A Lodde	n.a.
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	12/16/2005 02:30	Sherry L Morrow	1



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Lancaster Laboratories Sample No. WW 4669717

MW-10 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 09:55 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

10SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	137,000.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	21,500.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	N.D.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	82.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	100.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	540.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	6.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	2.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/15/2005 23:08	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 15:55	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 09:47	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 01:50	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 19:54	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 01:50	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 19:54	Gordon A Lodde	n.a.



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Lancaster Laboratories Sample No. WW 4669717

MW-10 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 09:55 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

10SNO

02135 Extraction - DRO Water
Special

ECY 97-602 NWTPH-Dx
06/97

1 12/16/2005 02:30 Sherry L Morrow

1



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Lancaster Laboratories Sample No. WW 4669718

MW-11 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 13:25 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

11SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	157,000.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	114,000.	3,000.	ug/l	10
Matrix QC was performed on this sample for the sulfate analysis. Please see the attached QC Summary report for the parameter showing a matrix bias.						
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	N.D.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	130.	81.	ug/l	1
02096	Heavy Range Organics	n.a.	230.	100.	ug/l	1
The observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range earlier than #2 fuel and contains individual peaks eluting in the DRO range.						
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	480.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	0.6	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	0.9	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis Trial#	Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/16/2005 20:52	Shannon L Phillips	10
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 16:13	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/19/2005 15:50	Matthew E Barton	1



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Lancaster Laboratories Sample No. WW 4669718

MW-11 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 13:25 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

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11SNO

08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 02:20	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 20:21	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 02:20	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 20:21	Gordon A Lodde	n.a.
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	12/16/2005 02:30	Sherry L Morrow	1



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Lancaster Laboratories Sample No. WW 4669719

MW-13 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 10:15 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

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13SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	228,000.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	13,800.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	N.D.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	80.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	100.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	230.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 15:09	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/16/2005 00:38	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 16:16	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 10:11	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 02:51	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 20:49	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 02:51	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 20:49	Gordon A Lodde	n.a.



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Lancaster Laboratories Sample No. WW 4669719

MW-13 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 10:15 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

13SNO

02135 Extraction - DRO Water
Special

ECY 97-602 NWTPH-Dx
06/97

1 12/16/2005 02:30 Sherry L Morrow

1



Analysis Report

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Lancaster Laboratories Sample No. WW 4669720

MW-14 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 10:20 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

14SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	97,300.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	45,000.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	N.D.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	140.	79.	ug/l	1
02096	Heavy Range Organics	n.a.	180.	98.	ug/l	1
The observed sample pattern is not typical of #2 fuel/diesel. The reported result is due to an individual peak(s) eluting in the DRO range.						
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	74.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 19:22	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 19:22	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/16/2005 00:54	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 16:18	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 10:34	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 03:21	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 21:16	Gordon A Lodde	1



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Lancaster Laboratories Sample No. WW 4669720

MW-14 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 10:20 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

14SNO

01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 03:21	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 21:16	Gordon A Lodde	n.a.
02135	Extraction - DRO Water Special	ECY 97-602 NWTPH-Dx 06/97	1	12/16/2005 02:30	Sherry L Morrow	1



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Lancaster Laboratories Sample No. WW 4669721

MW-15 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 13:20

by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

15SNO

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method	Units	Dilution Factor
				Detection Limit		
00201	Alkalinity to pH 8.3	n.a.	N.D.	460.	ug/l as CaCO3	1
00202	Alkalinity to pH 4.5	n.a.	40,400.	460.	ug/l as CaCO3	1
00228	Sulfate	14808-79-8	18,800.	1,500.	ug/l	5
07882	Total Nitrite/Nitrate Nitrogen	7727-37-9	2,200.	40.	ug/l	1
02211	TPH by NWTPH-Dx(water) w/SiGel					
02095	Diesel Range Organics	n.a.	N.D.	80.	ug/l	1
02096	Heavy Range Organics	n.a.	N.D.	100.	ug/l	1
08273	TPH by NWTPH-Gx waters					
01645	TPH by NWTPH-Gx waters	n.a.	N.D.	48.	ug/l	1
02300	UST-Unleaded Waters by 8260B					
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.7	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.8	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.8	ug/l	1

State of Washington Lab Certification No. C259

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00201	Alkalinity to pH 8.3	EPA 310.1	1	12/15/2005 19:22	Geraldine C Smith	1
00202	Alkalinity to pH 4.5	EPA 310.1	1	12/15/2005 19:22	Geraldine C Smith	1
00228	Sulfate	EPA 300.0	1	12/16/2005 01:09	Shannon L Phillips	5
07882	Total Nitrite/Nitrate Nitrogen	EPA 353.2	1	12/21/2005 16:19	Kristina E Kleintop	1
02211	TPH by NWTPH-Dx(water) w/SiGel	ECY 97-602 NWTPH-Dx modified	1	12/17/2005 14:34	Tracy A Cole	1
08273	TPH by NWTPH-Gx waters	ECY 97-602 NWTPH-Gx modified	1	12/17/2005 03:51	Martha L Seidel	1
02300	UST-Unleaded Waters by 8260B	SW-846 8260B	1	12/15/2005 21:43	Gordon A Lodde	1
01146	GC VOA Water Prep	SW-846 5030B	1	12/17/2005 03:51	Martha L Seidel	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	12/15/2005 21:43	Gordon A Lodde	n.a.



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Lancaster Laboratories Sample No. WW 4669721

MW-15 Composite Water Sample

Site# 1234 (254165) Proj. # WA254-1604-1

202 Avenue D-Snohomish, WA

Collected: 12/08/2005 13:20 by BH

Account Number: 11856

Submitted: 12/14/2005 09:25

Reported: 12/23/2005 at 14:41

Discard: 01/23/2006

ConocoPhillips

19909 120th Avenue NE

Suite 101

Bothell WA 98011

15SNO

02135 Extraction - DRO Water
Special

ECY 97-602 NWTPH-Dx
06/97

1 12/16/2005 02:30 Sherry L Morrow

1

Quality Control Summary

Client Name: ConocoPhillips
Reported: 12/23/05 at 02:41 PM

Group Number: 971038

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

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 053490007A Diesel Range Organics Heavy Range Organics	Sample number(s): 4669713-4669720 N.D. N.D.	0.080 0.10	mg/l mg/l	71		51-113		
Batch number: 053490008A Diesel Range Organics Heavy Range Organics	Sample number(s): 4669721 N.D. N.D.	0.080 0.10	mg/l mg/l	78		51-113		
Batch number: 05349020201A Alkalinity to pH 4.5	Sample number(s): 4669713-4669719 100					98-103		
Batch number: 05349020202A Alkalinity to pH 4.5	Sample number(s): 4669720-4669721 99					98-103		
Batch number: 05349401102A Sulfate	Sample number(s): 4669713-4669717 N.D.	0.30	mg/l	99		90-110		
Batch number: 05349401102B Sulfate	Sample number(s): 4669718-4669721 N.D.	0.30	mg/l	99		90-110		
Batch number: 05351A54A TPH by NWTPH-Gx waters	Sample number(s): 4669713-4669721 N.D.	48.	ug/l	87	85	70-130	2	30
Batch number: 05355118101B Total Nitrite/Nitrate Nitrogen	Sample number(s): 4669713-4669717 N.D.	0.040	mg/l	101		89-110		
Batch number: 05355118102A Total Nitrite/Nitrate Nitrogen	Sample number(s): 4669718-4669721 N.D.	0.040	mg/l	101		89-110		
Batch number: P053491AA Benzene Toluene Ethylbenzene Xylene (Total)	Sample number(s): 4669713-4669715 N.D. N.D. N.D. N.D.	0.5 0.7 0.8 0.8	ug/l ug/l ug/l ug/l	103 102 107 101		85-117 85-115 82-119 83-113		
Batch number: P053492AA Benzene Toluene Ethylbenzene Xylene (Total)	Sample number(s): 4669716-4669721 N.D. N.D. N.D. N.D.	0.5 0.7 0.8 0.8	ug/l ug/l ug/l ug/l	93 101 100 97		85-117 85-115 82-119 83-113		

Sample Matrix Quality Control

*- Outside of specification

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



Analysis Report

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Page 2 of 4

Quality Control Summary

Client Name: ConocoPhillips
Reported: 12/23/05 at 02:41 PM

Group Number: 971038

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max	
Batch number: 053490007A Diesel Range Organics Heavy Range Organics	Sample number(s): 4669713-4669720					3.6 3.2	3.3 2.9	10 (1) 10 (1)	20 20	
Batch number: 053490008A Diesel Range Organics Heavy Range Organics	Sample number(s): 4669721					4.8 15.	3.3 14.	37* (1) 7 (1)	20 20	
Batch number: 05349020201A Alkalinity to pH 8.3 Alkalinity to pH 4.5	Sample number(s): 4669713-4669719					N.D. 53.5	N.D. 53.7	0 (1) 0	4 4	
Batch number: 05349020202A Alkalinity to pH 8.3 Alkalinity to pH 4.5	Sample number(s): 4669720-4669721					N.D. 78.9	N.D. 79.0	0 (1) 0	4 4	
Batch number: 05349401102A Sulfate	Sample number(s): 4669713-4669717					101 90-110	N.D.	N.D.	0 (1) 3	
Batch number: 05349401102B Sulfate	Sample number(s): 4669718-4669721					76* 90-110	114.	86.3	28* 3	
Batch number: 05351A54A TPH by NWTPH-Gx waters	Sample number(s): 4669713-4669721					89 63-154				
Batch number: 05355118101B Total Nitrite/Nitrate Nitrogen	Sample number(s): 4669713-4669717					100 90-110	0.18 0.17	5* (1)	2	
Batch number: 05355118102A Total Nitrite/Nitrate Nitrogen	Sample number(s): 4669718-4669721					101 90-110	N.D.	N.D.	0 (1) 2	
Batch number: P053491AA Benzene Toluene Ethylbenzene Xylene (Total)	Sample number(s): 4669713-4669715					(2) 104 (2) 104	(2) 105 (2) 104	83-128 83-127 82-129 82-130	1 1 0 0	30 30 30 30
Batch number: P053492AA Benzene Toluene Ethylbenzene Xylene (Total)	Sample number(s): 4669716-4669721					101 105 107 103	99 106 106 103	83-128 83-127 82-129 82-130	2 1 1 0	30 30 30 30

Surrogate Quality Control

Analysis Name: TPH by NWTPH-Dx(water) w/SiGel
Batch number: 053490007A
Orthoterphenyl

4669713	88
4669714	86
4669715	78

*- Outside of specification

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



Analysis Report

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Page 3 of 4

Quality Control Summary

Client Name: ConocoPhillips
Reported: 12/23/05 at 02:41 PM

Group Number: 971038

Surrogate Quality Control

4669716 86
4669717 82
4669718 86
4669719 85
4669720 88
Blank 62
DUP 92
LCS 96

Limits: 52-141

Analysis Name: TPH by NWTPH-Dx(water) w/SiGel
Batch number: 053490008A
Orthoterphenyl

4669721 87
Blank 95
DUP 80
LCS 107

Limits: 52-141

Analysis Name: TPH by NWTPH-Gx waters
Batch number: 05351A54A
Trifluorotoluene-F

4669713 84
4669714 86
4669715 85
4669716 86
4669717 90
4669718 87
4669719 86
4669720 85
4669721 85
Blank 85
LCS 80
LCSD 83
MS 81

Limits: 63-135

Analysis Name: UST-Unleaded Waters by 8260B
Batch number: P053491AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4669713	95	101	96	106
4669714	95	101	98	109
4669715	92	101	97	103
Blank	96	103	97	107
LCS	94	100	97	110
MS	93	103	97	110
MSD	93	103	96	111

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

Analysis Name: UST-Unleaded Waters by 8260B
Batch number: P053492AA

*- Outside of specification

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

Quality Control Summary

Client Name: ConocoPhillips
Reported: 12/23/05 at 02:41 PM

Group Number: 971038

Surrogate Quality Control

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
4669716	94	101	103	98
4669717	91	100	103	101
4669718	90	100	102	103
4669719	93	99	104	103
4669720	94	99	103	100
4669721	92	98	105	99
Blank	92	98	105	99
LCS	90	100	104	101
MS	91	99	105	100
MSD	91	99	105	101
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification

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

**Lancaster
Laboratories**

002255

Acct. #:

11856

For Lancaster Laboratories use only

Group #

971 038

Sample #

4669808

4669713-21

SCR#: 22666

Site #: <u>254165 Snohomish</u> WNO #: <u>1234DELOO4</u> Site Address: <u>202 Ave. D) Snohomish WA</u> ConocoPhillips PM: <u>Brian Peters</u> Company Code: <u>COP</u> Core Work Order#: _____ Total Lab Budget: _____ Consultant/Office: <u>Delta Environmental</u> Consultant Prj. Mgr: <u>Elisabeth Silver</u> Consultant Phone #: <u>(425) 498-7786</u> Fax #: _____ Sampler: <u>Brian H. / Laura Brock</u>				Matrix ☐ Potable ☐ NPDES ☐ Soil ☐ Water ☐ Oil ☐ Air		Preservation Codes <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>#</th><th>H</th><th>I</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th> </tr> </thead> <tbody> <tr><td>NWTPH-DX</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>NWPH-6X</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>BTEX(B260)</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Sulfate</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Nitrate</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>Alk.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>												#	H	I													NWTPH-DX															NWPH-6X															BTEX(B260)															Sulfate															Nitrate															Alk.															Preservative Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ O = Other	
#	H	I																																																																																																																										
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Sample Identification			Date Collected	Time Collected	Grab	Composite	Soil	Water	Oil	Air													Total	Remarks																																																																																																				
MW-1A			12-8-05	9:30		X	X					2	3	3	1	1	1																																																																																																											
MW-2				13:00		X	X					2	3	3	1	1	1																																																																																																											
MW-6A				12:30		X	X					2	3	3	1	1	1																																																																																																											
MW-9				10:45		X	X					2	3	3	1	1	1																																																																																																											
MW-10				9:55		X	X					2	3	3	1	1	1																																																																																																											
MW-11				13:25		X	X					2	3	3	1	1	1																																																																																																											
MW-13				10:15		X	X					2	3	3	1	1	1																																																																																																											
MW-14				12/8/05 10:20		X	X					2	3	3	1	1	1																																																																																																											
MW-15				13:20		X	X					2	3	3	1	1	1																																																																																																											

Turnaround Time Requested in Business Days (TAT) (please circle): STD. TAT 5 day 48 hour 24 hour other _____				Relinquished by: <u>[Signature]</u> Date: <u>12-8-05</u> Time: <u>8:55</u> Received by: _____ Date: _____ Time: _____			
Reporting Requirements (please circle) NJ Reduced NY ASP Cat. A Raw Data Diskette NY ASP Cat. B Full Type I Other _____				Relinquished by: <u>[Signature]</u> Date: <u>12/13/05</u> Time: <u>13:00</u> Received by: _____ Date: _____ Time: _____			
Relinquished by Commercial Carrier: UPS _____ FedEx ☒ Other _____				Temperature Upon Receipt <u>2.7, 2.9, 4.4 °C</u>			

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
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
ug	microgram(s)	mg	milligram(s)
ml	milliliter(s)	l	liter(s)
m3	cubic meter(s)	ul	microliter(s)
<	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		
J	estimated value - The result is $\geq$ the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
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. All other results are reported on an as-received basis.		

U.S. EPA CLP 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 sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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

Measurement uncertainty values, as applicable, are available upon request.

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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GROUNDWATER SAMPLING PROCEDURES AND FIELD SHEETS

Quarterly Groundwater Sampling
ConocoPhillips Site No. 254165

GROUNDWATER MONITORING AND SAMPLING

Before the sampling event, Delta measured depth to water in each groundwater monitoring well at the facility with an electronic water level meter. This information was recorded on waterproof field sheets. Groundwater elevations were measured to an accuracy of 0.01 feet. Wells were sampled after purging three casing volumes of water from the well (or until dry). After the well had recharged to approximately 80% of static level, samples were collected using a disposable polyethylene bailer and placed in the appropriate laboratory-provided container. Samples were labeled, placed into ice filled coolers, logged onto chain-of-custody forms and transported to the laboratory.

GROUNDWATER SAMPLING FIELD SHEET

DELTA PROJECT NUMBER: WA254-1604-1
SITE No./JOB No.: 254165 Snohomish
SITE ADDRESS/LOCATION: 202 Ave. D; Snohomish, WA
FIELD PERSONNEL: Brian H. / Laura B.

CLIENT: CoP
PAGE 1 of 4
DATE: 12/8/05
WEATHER: cold

Additional Field Parameters:		(Pre-Purge / Post-Purge / Low-flow Cell)

[illegible]

Measuring Device(s): Horiba, interface probe, DO colorimetric kit

Additional Comments:

GROUNDWATER SAMPLING FIELD SHEET

DELTA PROJECT NUMBER:	WA254-1604-1	CLIENT:	COP
SITE No./JOB No.:	254165 Snohomish	PAGE	2 of 4
SITE ADDRESS/LOCATION:	202 Ave. D; Snohomish, WA	DATE:	12-8-05
FIELD PERSONNEL:	Brian Hogenson / Laura Brock	WEATHER:	cold

[illegible]

System Instructions:	Remedial System On-Site (Y/N)?	Comments:
	Operational Upon Arrival (Y/N)?	Comments:
	Shut Down System 1 / 24 hours before gauging (Y/N)?	Time/Date Downed:
	Re-Start System (Y/N)?	Time/Date Restarted:
	Purge Method:	Comments:
Purge Water Disposal Method:	☐ Treated through mobile carbon treatment unit and discharged on-site ☐ Placed in drums on site ☐ Transported off-site for treatment	No. of drums: Facility/Location:
Measuring Device(s):		

Delta Environmental Consultants, Inc.
ConocoPhillips Unit Cost Groundwater Sampling

COP Site Number: 254165 Snohomish

COP Site Address: 202 Ave. D; Snohomish, WA

Delta Project Number: WA254-1604-1

Date of Service: 12-8-05

Units	Description
	Well Gauging Only
	No-Purge Well Sampling
✓	2-Inch Well Sampling / 0-30' DTW (Purge Sampling)
	2-Inch Well Sampling / 31-80' DTW (Purge Sampling)
	4-Inch Well Sampling / 0-30' DTW (Purge Sampling)
	4-Inch Well Sampling / 31-80' DTW (Purge Sampling)
✓	Drum Process-Purge Water On-Site
	Transport Purge Water for Off-Site Treatment
	Wellhead Surveying
✓	Traffic Control
✓	Horiba Water Quality Meter Use
	Enhanced Fluid Recovery (EFR)
	Mileage greater than 150 mi. roundtrip

Groundwater Monitoring Site Inspection Checklist

ConocoPhillips

Risk Management and Remediation

This form should be completed each quarter or whenever a contractor or consultant visits the site. This form must be completed in its entirety and as accurately as possible and submitted to the ConocoPhillips Site Manager with groundwater monitoring report. This form is intended for ConocoPhillips use and should NOT be submitted to a regulatory agency.

SITE NUMBER NO.: 254165 Snohomish

ADDRESS: 202 Ave. D; Snohomish, WA

DATE INSPECTED: 12-8-05

STATION/STORE STATUS OPERATING ☒ CLOSED ☐ VACANT ☐

REMEDIATION SYSTEM: NONE PRESENT ☒ OPERATING ☐ INACTIVE ☐

FENCE CONDITION: GOOD ☒ POOR ☐ NONE ☐

COMMENTS: _____

DRUMS:

☒ HOW MANY? ☐

CONTENTS:

1 - purge H₂O

COMMENTS:

stored in enclosure on-site

MONITORING WELL CONDITION:

GOOD ☒

POOR ☐

LOCKED ☐

COMMENTS: _____

OTHER: _____



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Fax 425.869.1892

RELEASE # 1995
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SNOHOMISH
UST # 8443

www.deltaenv.com

Date: April 28, 2006
Project No.: WA254-1609-1

RECEIVED
MAY 05 2006
DEPT OF ECOLOGY

To: Mr. Brian Peters
ConocoPhillips Company
P.O. Box 923
Bothell, Washington 98041

We have enclosed:

Copies	Description
<u>1</u>	<u>4Q05 GW Monitoring Report</u>
<u> </u>	<u>202 Avenue D, Snohomish, Washington</u>
<u> </u>	<u>ConocoPhillips Site No. 254165</u>

For your: ☒ Use/Files
☐ Approval
☐ Review
☐ Information

Sent Via: ☒ Regular Mail
☐ Priority Mail (USPS)
☐ Overnight (FedEx)
☐ Other _____

Comments: _____

Elisabeth Silver

cc: Mr. Brian Sato, Washington State Dept. of Ecology – NW Regional Office, Bellevue, WA 98008
Ms. Mary Murphy, City of Snohomish, 116 Union Avenue, Snohomish, WA 98290

Vep/SATO