



**CONOCOPHILLIPS COMPANY  
GROUNDWATER MONITORING REPORT**

February 2, 2005

Site No.: 255353 Site Address: 600 Westlake Avenue, Seattle, Washington  
 ConocoPhillips Site Manager: Kipp Eckert  
 Consultant/Contact Person: Delta Environmental Consultants, Inc. – Eric Larsen  
 Primary Agency/Regulatory ID No.: Washington DOE Northwest Region

**WORK PERFORMED THIS QUARTER [Fourth - 2004]**

- Replaced damaged monuments for Wells MW-35 and MW-45 and decommissioned former Well MW-2 and a former vapor extraction well on December 14, 2004.
- Measured depth to water and purged and sampled groundwater from 11 monitoring wells (MW-32A, MW-33, MW-34, MW-35, MW-37, MW-44, MW-45, MW-47, and MW-50 through MW-53) on December 29, 2004.
- 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, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8260B.

**WORK PROPOSED FOR NEXT QUARTER [First - 2005]**

- Measure depth to water and Purge and sample groundwater from 17 monitoring wells (SMW-3, MW-32A, MW-33 through MW-38, MW-40, MW-43 through MW-45, MW-47, and MW-50 through MW-53).
- Analyze groundwater samples for TPH-G using Northwest Method NWTPH-Gx, TPH-D and TPH-O using Northwest Method NWTPH-Dx, and BTEX using EPA Method 8260B.
- Re-survey top-of-casing elevation for MW-35.
- Install a new well to upgrade MW-3.
- Next sampling event is scheduled for March 2005.

**SUMMARY**

Frequency of Sampling Events:	<u>Quarterly</u> (Quarterly, etc.)
Approximate Depth to Groundwater:	<u>9.24 – 12.67</u> (Measured Feet)
Groundwater Gradient:	<u>Multi-Directional</u> (Direction)
	<u>Varies</u> (ft/ft)
Maximum Benzene Concentration:	<u>92 (MW-50)</u> (ppb)
Measurable Free Product Detected:	<u>None</u> (Yes - ID well(s)/No)
Free Product Recovered This Quarter:	<u>None</u> (gallons)
Cumulative Free Product Recovered to Date:	<u>43,632</u> (gallons)
Water Wells or Surface Waters w/in a 2000'	<u>Lake Union</u>
Radius and Respective Direction:	<u>400 ft North</u> (Distance and Direction)
Current Remedial Action:	<u>AS/SVE</u> (SVE/AS/P&T/DVE/ Product Removal/Bio/etc.)
Permits for Discharge:	<u>PSCAA No. 8905</u> (NPDES, POTW, etc.)



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### DISCUSSION

- On December 14, 2004, Delta directed Cascade Drilling Inc. of Woodinville, Washington, to replace damaged monuments for Wells MW-35 and MW-45, and decommission former Well MW-2 and an unidentified vapor extraction (VE) well.
  - The old well boxes for MW-35 and MW-45 were loosened from the concrete seal using a jack-hammer and subsequently removed. A new 8-inch diameter monument and a new 12-inch diameter monument were flush-mounted and sealed in place with concrete at MW-35 and MW-45, respectively. The casing of MW-35, which protruded out of the ground too high, had to be trimmed down so that the new lid could sit properly over the well. The new top-of-casing elevation for MW-35 has not yet been surveyed.
  - Former monitoring well MW-2 was decommissioned by drilling around the well to 15 feet below grade with a hollow-stem auger drill rig and pulling out the 2-inch PVC well casing. The hole was backfilled with bentonite chips and paved to surface grade with cement.
  - A hollow-stem auger rig was used to drill around the former VE well located immediately south of the remedial system enclosure. During drilling, Delta observed that the well had been installed in pea gravel and was not surrounded by a sand-pack or bentonite. To reduce the risk of undermining ground stability in the vicinity of the well, drilling was discontinued after advancing to 10 feet below grade. Pea gravel caved over the well upon removal of the auger and the casing could not be removed from the hole. Gravel within the hole was compacted with a rod and bentonite was packed into the hole and into voids around the sides of the hole. The hole was sealed to surface grade with concrete.
  - Drill cuttings and decontamination fluids were placed in labeled 55-gallon drums and stored on-site pending receipt of analytical data and coordination of disposal at an appropriate facility.
- Groundwater was monitored at the site on December 29, 2004. No measurable free product was present in any of the wells monitored during this event.
- TPH-G was detected above the laboratory reporting limit in groundwater samples collected from Wells MW-32A, MW-33, MW-34, MW-35, MW-37, MW-45, MW-50, MW-52, and MW-53, at concentrations ranging from 207 ppb (MW-45) to 2,860 ppb (MW-33).
- TPH-D was detected above the laboratory reporting limit in groundwater samples collected from Wells MW-32A, MW-33, MW-34, MW-50, MW-52, and MW-53 at concentrations ranging from 272 ppb (MW-52) to 795 ppb (MW-33).
- TPH-O was not detected above laboratory reporting limits in any of the groundwater samples submitted for analysis.
- Benzene was detected above the laboratory reporting limit in groundwater samples collected from Wells MW-32A, MW-33, MW-34, MW-37, MW-45, MW-50, MW-52, and MW-53, at concentrations ranging from 2.90 ppb (MW-45) to 320 ppb (MW-34).



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- Toluene was detected above the laboratory reporting limit in groundwater samples collected from Wells MW-33, MW-37, MW-50, and MW-53 at concentrations ranging from 2.27 ppb (MW-37) to 30.9 ppb (MW-33).
- Ethylbenzene was detected above the laboratory reporting limit in groundwater samples collected from Wells MW-32A, MW-33, MW-34, MW-37, MW-50, MW-52, and MW-53 at concentrations ranging from 1.08 ppb (MW-37) to 92.8 ppb (MW-53).
- Total xylenes were detected above the laboratory reporting limit in groundwater samples collected from MW-32A, MW-33, MW-34, MW-37, MW-45, MW-50, MW-52 and MW-53 at concentrations ranging from 9.04 ppb (MW-45) to 169.3 ppb (MW-33).

**LIMITATIONS**

The services described in this report were performed in accordance with generally accepted professional consulting principles and practices. No other warranty, either express 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.

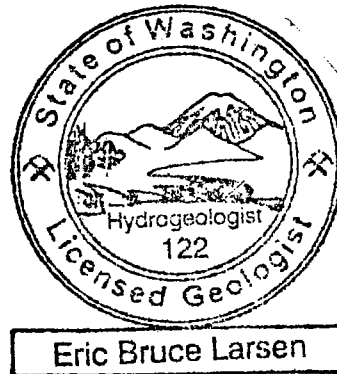
Delta appreciates the opportunity to provide environmental services for ConocoPhillips Company. Please call if you have any questions regarding the contents of this report.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Tena Seeds, E.I.T  
Project Engineer

Eric Larsen, L.H.G.  
Senior Geologist



**ATTACHMENTS**

- Table 1 – Analytical Results and Groundwater Elevations
- 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

cc: LUST Coordinator, Washington State Dept. of Ecology – Northwest Regional Office, Bellevue, WA

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

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>SMW-3</b>	06/20/00 <sup>2</sup>	<50.0	<250	<750	<0.500	0.59	<0.500	1.86	--	8.89	0.00	--
-- <sup>1</sup>	12/19/00	--	--	--	--	--	--	--	--	NM	NM	--
	06/15/01 <sup>2</sup>	<50.0	368	<866	<0.500	<0.500	<0.500	<1.00	--	7.23	0.00	--
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	<50.0	385	<571	<0.500	<0.500	<0.500	<1.00	--	9.19	0.00	--
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	<50.0	1,160	<500	<0.500	0.902	<0.500	2.78	--	8.89	0.00	--
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02	<100	<250	<500	1.83	<2.00	<1.00	<1.50	--	10.32	0.00	--
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	10.99	0.00	--
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	<50.0	<287	<575	<0.500	<0.500	<0.500	<1.00	--	11.00	0.00	--
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	<100	<119	<238	<1	<1	<1	<2	2.10	10.42	0.00	--
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	56	<242	<483	<0.50	<0.50	<0.50	<1.0	0.1	11.67	0.00	--
	12/29/04	--	--	--	--	--	--	--	--	NM	NM	--
<b>MW-3</b>	10/10/01	14,100	4,060	1,990	1,070	<25.0	1,040	292	--	10.11	0.00	--
-- <sup>1</sup>	12/28/01	3,340	1,810	<500	92.6	4.62	146	51.2	--	9.61	0.00	--
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02 <sup>3</sup>	10,500	1,820	<500	326	14.0	685	447	--	10.96	0.00	--
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	17,200	1,440	<595	86.6	38.1	434	798	--	7.87	0.00	--
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	--	--	--	--	--	--	--	--	NM	NM	--
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	3,040	1,950	<285	57.1	<5	24.3	23.57	0.79	9.90	0.00	--
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	Paved over with concrete							--	NM	NM	--

**TABLE 1  
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ConocoPhillips Site No. 255353  
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Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-32A</b>	06/20/00	--	--	--	--	--	--	--	--	11.40	0.00	9.30
20.70	12/19/00 <sup>2</sup>	7,010	1,740	<750	4,430	136	438	182	--	10.90	0.00	9.80
	06/15/01 <sup>2</sup>	13,700	2,810	<846	2,370	11.2	272	31.1	--	11.31	0.00	9.39
	06/26/01 <sup>2</sup>	15,500	1,620	<750	8,780	1,110	1,230	1,020	--	11.85	0.00	8.85
	09/07/01 <sup>2</sup>	17,100	4,220	822	5,870	19.9	684	110	--	10.81	0.00	9.89
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	12,200	4,260	711	3,570	180	537	393	--	11.29	0.00	9.41
	03/08/02	16,400	4,140	769	4,900	142	619	247	--	11.49	0.00	9.21
	06/24/02	6,850	2,040	577	2,820	7.43	221	59.1	--	11.56	0.00	9.14
	09/26/02 <sup>3</sup>	6,580	3,740	670	1,930	31.4	204	89.7	--	12.88	0.00	7.82
	12/12/02	6,750	3,530	528	1,450	55.6	229	283	--	12.72	0.00	7.98
	03/13/03	13,000	2,550	<581	1,990	222	419	806	--	10.95	0.00	9.75
	06/12/03	17,400	2,730	<500	4,830	200	745	262	--	11.92	0.00	8.78
	09/19/03	1,420	<294	<588	64.2	42.7	7.49	135	--	12.67	0.00	8.03
	01/14/04	1,580	316	<253	28.9	4.13	13.1	32.5	3.1	11.33	0.00	9.37
	03/30/04	7,310	838	<276	18.3	<10	209	122	2.43	12.39	0.00	8.31
	06/22/04	3,330	1,470	381	149	<10	72.5	43.8	0.5	12.62	0.00	8.08
	09/29/04	330	<242	<484	13	1.6	3.7	39	6.1	9.20	0.00	11.50
	12/29/04	1,500	592	<478	71	<5	30.9	31.2	1.0	12.24	0.00	8.46
<b>MW-33</b>	06/20/00	--	--	--	--	--	--	--	--	11.33	0.00	9.42
20.75	12/19/00	Inaccessible							--	NM	NM	--
	06/15/01	LPH Present							--	12.72	2.50	10.03
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01	LPH Present							--	NM	0.30	--
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	141,000	25,200	2,680	5,360	32,500	3,410	22,700	--	11.21	0.00	9.54
	03/08/02	126,000	31,400	3,420	2,660	21,600	3,420	24,800	--	11.37	0.00	9.38
	06/24/02	205,000	51,700	14,000	1,510	14,200	3,770	28,900	--	11.36	0.00	9.39
	09/26/02	LPH Present							--	12.45	0.10	8.38
	12/12/02	--	--	--	--	--	--	--	--	12.34	0.00	8.41
	03/13/03	--	--	--	--	--	--	--	--	10.59	0.00	10.16
	06/12/03	30,900	4,170	<562	396	526	474	3,890	--	11.65	Sheen	9.10
	09/19/03	125	<291	<581	0.704	<0.500	<0.500	4.30	--	6.70	0.00	14.05
	01/14/04	524	<135	<271	17	3.7	7.65	31	0.6	12.03	0.00	8.72
	03/30/04	2,680	725	<256	218	14.7	53.2	150.4	1.72	12.49	0.00	8.26
	06/22/04	3,500	1,330	443	197	12.1	99.2	217.3	1.2	12.66	0.00	8.09
	09/29/04	290	290	<511	12	1.9	5.6	22	7.2	9.60	0.00	11.15
	12/29/04	2,860	795	<491	91	30.9	49.4	169.3	0.1	12.14	0.00	8.61

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<b>MW-34</b>	06/20/00 <sup>2</sup>	25,000	<250	<750	6,360	480	2,190	3,930	--	11.68	0.00	9.74
21.42	12/19/00	--	--	--	--	--	--	--	--	NM	NM	--
	06/15/01 <sup>2</sup>	25,800	4,780	<883	5,300	90	1,930	2,190	--	11.85	0.00	9.57
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	17,800	4,510	722	3,540	44.9	1,510	2,180	--	11.86	0.00	9.56
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	19,000	8,400	752	5,320	1,200	406	1,010	--	11.46	0.00	9.96
	03/08/02	59,200	8,550	661	7,200	8,610	2,190	8,200	--	11.70	0.00	9.72
	06/24/02	12,500	4,200	614	2,140	651	659	1,160	--	11.91	0.00	9.51
	09/26/02 <sup>3</sup>	13,800	6,270	<1,160	5,840	21.8	280	87	--	12.80	0.00	8.62
	12/12/02	14,500	11,000	681	5,130	44.7	333	224	--	12.98	0.00	8.44
	03/13/03	25,600	6,480	<500	6,030	668	775	1,130	--	11.67	0.00	9.75
	06/12/03	13,000	2,880	<500	1,590	735	450	1,360	--	12.04	0.00	9.38
	09/19/03	351	<301	<602	9.91	11.7	6.48	34.6	--	12.83	0.00	8.59
	01/14/04	160	<122	<245	23.7	<0.5	2.11	<1	0.2	12.00	0.00	9.42
	03/30/04	15,100	1,120	<300	3,060	238	564	846.6	1.68	12.62	0.00	8.80
	06/22/04	6,760	1,900	<238	2,320	14.3	395	279.8	0.5	12.88	0.00	8.54
	09/29/04	310	306	<505	10	<0.50	3.5	8.2	0.4	11.38	0.00	10.04
	12/29/04	2,590	481	<504	320	<10	83.8	101.4	2.0	12.67	0.00	8.75
<b>MW-35</b>	06/20/00	Obstructed by vehicle							--	NM	NM	--
20.10	12/19/00	Obstructed by vehicle							--	NM	NM	--
	06/15/01	--	--	--	--	--	--	--	--	NM	NM	--
	06/26/01 <sup>2</sup>	504	464	<750	11.3	27.5	5.52	28.4	--	10.60	0.00	9.50
	09/04/01 <sup>2</sup>	263	903	<564	2.36	<0.500	<0.500	<1.00	--	10.54	0.00	9.56
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	691	1,160	<500	28.7	0.898	14.1	13.2	--	10.54	0.00	9.56
	03/08/02	638	1,100	<500	16.2	0.939	7.05	6.91	--	10.72	0.00	9.38
	06/24/02	Obstructed by vehicle							--	NM	NM	--
	09/26/02 <sup>b</sup>	555	1,420	<500	9.49	<2.00	1.78	<1.50	--	11.90	0.00	8.20
	12/12/02	Obstructed by vehicle							--	NM	NM	--
	03/13/03	13,500	1,430	<500	749	153	791	2,160	--	9.87	0.00	10.23
	06/12/03	3,930	973	<562	338	21.2	49.9	222	--	11.91	0.00	8.19
	09/19/03	517	<373	<746	7.29	4.32	1.86	14.6	--	12.18	0.00	7.92
	01/14/04	614	142	<256	1.45	<0.5	0.657	0.568	0.3	11.33	0.00	8.77
	03/30/04	541	196	<257	<1	<1	<1	<2	1.46	11.69	0.00	8.41
	06/22/04	526	210	<238	1.27	<1	<1	<2	1.5	11.91	0.00	8.19
	09/29/04	250	248	<487	0.50	<0.50	1.1	2.1	0.1	11.77	0.00	8.33
	12/29/04	280	<255	<510	<1	<1	<1	<2	0.1	10.64	0.00	-- <sup>4</sup>

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

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-36</b>	06/20/00 <sup>2</sup>	172	<250	<750	<0.500	0.583	1.78	11.1	--	8.47	0.00	9.33
17.80	12/19/00 <sup>2</sup>	106	<250	<750	0.529	1.51	1.08	7.14	--	9.50	0.00	8.30
	06/15/01 <sup>2</sup>	<50.0	298	<750	0.691	0.648	0.530	1.53	--	8.00	0.00	9.80
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	<50.0	<250	<500	0.897	<0.500	<0.500	<1.00	--	8.70	0.00	9.10
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	<50.0	387	<500	0.773	0.748	<0.500	1.78	--	9.57	0.00	8.23
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02	<100	<250	<500	0.735	<2.00	<1.00	<1.50	--	10.16	0.00	7.64
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	<50.0	<250	<500	0.830	<0.500	<0.500	<1.00	--	9.34	0.00	8.46
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	<50.0	<287	<575	1.44	0.561	<0.500	<1.00	--	10.23	0.00	7.57
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	<100	<133	<267	<1	<1	<1	<2	1.10	9.46	0.00	8.34
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	<50	<250	<500	0.90	<0.50	<0.50	<1.0	0.8	9.78	0.00	8.02
	12/29/04	--	--	--	--	--	--	--	--	NM	NM	--
<b>MW-37</b>	06/20/00	--	--	--	--	--	--	--	--	11.50	--	9.51
21.01	12/19/00	LPH Present							--	11.50	0.50	9.91
	06/15/01 <sup>2</sup>	LPH Present							--	11.35	0.03	9.68
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	159,000	22,100	14,600	3,420	12,600	4,440	27,000	--	11.43	0.00	9.58
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01 <sup>2</sup>	LPH Present							--	11.00	0.20	10.17
	03/08/02	LPH Present							--	11.61	0.40	9.72
	06/24/02	Inaccessible							--	NM	NM	--
	09/26/02	--	--	--	--	--	--	--	--	12.38	0.00	8.63
	12/12/02	--	--	--	--	--	--	--	--	12.35	0.00	8.66
	03/13/03	--	--	--	--	--	--	--	--	11.10	0.00	9.91
	06/12/03	1,450	474	<568	22.9	43.2	15.8	85.5	--	11.61	0.00	9.40
	09/19/03	141	<298	<595	<0.500	<0.500	<0.500	1.01	--	11.95	0.00	9.06
	01/14/04	471	<127	<255	4.56	<0.5	9.01	27.75	0.5	12.12	0.00	8.89
	03/30/04	572	180	<281	5.77	<1	<1	1.53	1.50	12.73	0.00	8.28
	06/22/04	737	487	294	3.26	3.66	1.46	14.25	1.0	12.29	0.00	8.72
	09/29/04	190	419	<496	<0.50	<0.50	0.67	1.3	2.0	10.89	0.00	10.12
	12/29/04	430	<262	<524	18.2	2.27	1.08	11.22	1.5	11.90	0.00	9.11

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

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-38</b>	06/20/00	--	--	--	--	--	--	--	--	NM	NM	--
16.52	12/19/00	--	--	--	--	--	--	--	--	NM	NM	--
	06/15/01	--	--	--	--	--	--	--	--	NM	NM	--
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01	--	--	--	--	--	--	--	--	NM	NM	--
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	<50.0	403	<500	0.636	1.33	0.554	2.59	--	8.96	0.00	7.56
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02 <sup>3</sup>	<100	282	<500	0.743	<2.00	<1.00	<1.50	--	8.87	0.00	7.65
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	7.84	0.00	8.68
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	<50.0	<250	<500	0.704	1.42	0.722	3.72	--	8.90	0.00	7.62
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	<100	<133	<266	<1	<1	<1	<2	0.90	8.09	0.00	8.43
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	Unable to locate due to road construction activities							--	NM	NM	--
	12/29/04	--	--	--	--	--	--	--	--	NM	NM	--
<b>MW-40</b>	06/20/00	--	--	--	--	--	--	--	--	NM	NM	--
20.89	12/09/00	--	--	--	--	--	--	--	--	NM	NM	--
	12/19/00	--	--	--	--	--	--	--	--	NM	NM	--
	06/15/01	--	--	--	--	--	--	--	--	NM	NM	--
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01	--	--	--	--	--	--	--	--	NM	NM	--
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	449	4,000	5,090	2.12	2.19	1.38	3.88	--	10.75	0.00	10.14
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02	331	2,810	3,470	1.92	<2.00	<1.00	<1.50	--	12.69	0.00	8.20
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	509	2,010	2,010	<0.500	<0.500	0.630	1.77	--	11.30	0.00	9.59
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	259	393	1,120	2.64	3.01	1.39	6.77	--	12.46	0.00	8.43
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	627	863	3,360	3.69	<1	<1	<2	1.71	11.55	sheen	9.34
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	390	32,800	219,000	<0.50	<0.50	<0.50	<1.0	1.4	12.03	sheen	8.86
	12/29/04	--	--	--	--	--	--	--	--	NM	NM	--



**TABLE 1  
ANALYTICAL RESULTS AND GROUNDWATER ELEVATIONS**

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-42</b>	06/20/00	--	--	--	--	--	--	--	--	NM	NM	--
20.34	12/19/00	--	--	--	--	--	--	--	--	NM	NM	--
	06/15/01	--	--	--	--	--	--	--	--	9.41	0.00	10.93
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01	--	--	--	--	--	--	--	--	9.66	0.00	10.68
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	--	--	--	--	--	--	--	--	10.28	0.00	10.06
	03/08/02	--	--	--	--	--	--	--	--	9.75	0.00	10.59
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02	--	--	--	--	--	--	--	--	10.81	0.00	9.53
	12/12/02	--	--	--	--	--	--	--	--	10.89	0.00	9.45
	03/13/03	--	--	--	--	--	--	--	--	9.77	0.00	10.57
	06/12/03	Monitoring Discontinued							--	NM	NM	--
<b>MW-43</b>	06/20/00 <sup>2</sup>	<50.0	<250	<750	3.79	<0.500	<0.500	<1.00	--	11.40	0.00	9.64
21.04	12/19/00 <sup>2</sup>	55.9	253	<749	2.97	0.948	0.730	4.78	--	11.40	0.00	9.64
	06/15/01 <sup>2</sup>	<50.0	405	<750	0.670	<0.500	<0.500	1.22	--	11.32	0.00	9.72
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	<50.0	<293	<587	<0.500	<0.500	<0.500	<1.00	--	11.46	0.00	9.58
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	52	487	<500	5.61	1.18	0.558	3.34	--	11.17	0.00	9.87
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02 <sup>3</sup>	<100	303.00	<500	0.669	<2.00	<1.00	<1.50	--	12.28	0.00	8.76
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	<50.0	<321	<641	0.883	<0.500	<0.500	<1.00	--	11.20	0.00	9.84
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	<50.0	<291	<581	1.76	<0.500	<0.500	<1.00	--	12.37	0.00	8.67
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	<100	<129	<258	<1	<1	<1	<2	1.76	11.95	0.00	9.09
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	180	<249	<499	3.6	<0.50	<0.50	<1.0	0.1	12.00	0.00	9.04
	12/29/04	--	--	--	--	--	--	--	--	NM	NM	--

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

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-44</b>	06/20/00 <sup>2</sup>	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	9.53	0.00	9.20
18.73	12/19/00 <sup>2</sup>	301	330	<750	<0.500	1.64	2.76	22.1	--	9.20	0.00	9.53
	06/15/01 <sup>2</sup>	<50.0	468	<841	<0.500	<0.500	<0.500	<1.00	--	8.44	0.00	10.29
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	10,300	4,250	849	1,050	6.97	945	51.0	--	9.48	0.00	9.25
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	90.6	823	<500	10.9	1.40	0.644	4.04	--	9.31	0.00	9.42
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02 <sup>3</sup>	<100	1,600	569	14.2	<2.00	<1.00	<1.50	--	10.79	0.00	7.94
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	196	347	<575	26.8	<0.500	<0.500	<1.00	--	11.58	0.00	7.15
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	156	<301	<602	20.2	0.997	<0.500	2.61	--	10.97	0.00	7.76
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	<100	<134	<268	<1	<1	<1	<2	1.90	10.01	0.00	8.72
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	--	--	--	--	--	--	--	--	NM	NM	--
	12/29/04	<100	<260	<520	<1	<1	<1	<2	0.30	9.24	0.00	9.49
<b>MW-45</b>	09/07/01 <sup>2</sup>	<50.0	375	<606	<0.500	<0.500	<0.500	<1.00	--	9.80	0.00	--
-- <sup>1</sup>	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	17,300	2,210	597	2,130	73.4	1,330	2,970	--	9.03	0.00	--
	03/08/02	15,500	2,380	686	2,090	38.4	1,190	1,650	--	9.12	0.00	--
	06/24/02	5,100	1,920	761	1,330	6.39	451	235	--	9.00	0.00	--
	09/26/02 <sup>3</sup>	2,420	1,190	547	394	3.41	204	106	--	10.20	0.00	--
	12/12/02	Obstructed by vehicle							--	NM	NM	--
	03/13/03	3,590	2,050	<500	219	133	99.4	368	--	8.05	0.00	--
	06/12/03	10,700	1,470	<575	1,350	10.8	954	631	--	9.16	0.00	--
	09/19/03	583	<298	<595	1.93	2.25	5.65	38.6	--	10.68	0.00	--
	01/14/04	360	<118	<236	4.97	<0.5	2.48	1.01	0.4	10.12	0.00	--
	03/30/04	303	234	<240	<1	<1	<1	<2	0.84	10.19	0.00	--
	06/22/04	151	365	358	<1	<1	<1	<2	0.7	10.34	0.00	--
	09/29/04	270	<251	<503	<0.50	1.5	0.62	7.3	0.9	10.40	0.00	--
	12/29/04	207	<249	<498	2.90	<1	<1	9.04	0.3	9.40	0.00	--

**TABLE 1  
ANALYTICAL RESULTS AND GROUNDWATER ELEVATIONS**

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-46</b>	06/20/00	--	--	--	--	--	--	--	--	NM	NM	--
16.91	12/19/00	226	277	<750	<0.500	2.18	2.53	18.0	--	12.70	0.00	4.21
	06/15/01 <sup>2</sup>	<50.0	295	<750	<0.500	<0.500	<0.500	1.39	--	7.19	0.00	9.72
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01	--	--	--	--	--	--	--	--	NM	NM	--
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	Covered by asphalt							--	NM	NM	--
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02	Unable to locate							--	NM	NM	--
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	Covered by asphalt							--	NM	NM	--
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	Covered by asphalt							--	NM	NM	--
	01/14/04	Monitoring Discontinued							--	NM	NM	--
<b>MW-47</b>	06/20/00 <sup>2</sup>	<50.0	<250	<750	<1.30	<0.500	<0.500	<1.00	--	10.94	0.00	8.89
19.83	12/19/00 <sup>2</sup>	1,310	357	<750	<0.500	6.10	10.6	77.3	--	11.20	0.00	8.63
	06/15/01	<50.0	591	<952	0.709	0.504	<0.500	1.18	--	10.98	0.00	8.85
	06/26/01	--	--	--	--	--	--	--	--	NM	NM	--
	09/07/01 <sup>2</sup>	<50.0	356	<500	<0.500	<0.500	<0.500	<1.00	--	11.14	0.00	8.69
	10/10/01	--	--	--	--	--	--	--	--	NM	NM	--
	12/28/01	181	542	<500	7.64	1.49	4.79	37.8	--	10.90	0.00	8.93
	03/08/02	--	--	--	--	--	--	--	--	NM	NM	--
	06/24/02	--	--	--	--	--	--	--	--	NM	NM	--
	09/26/02 <sup>3</sup>	106	747	<500	2.36	<2.00	<1.00	<1.50	--	11.85	0.00	7.98
	12/12/02	--	--	--	--	--	--	--	--	NM	NM	--
	03/13/03	75.5	<284	<568	<0.500	<0.500	<0.500	<1.00	--	10.91	0.00	8.92
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	76.8	<294	<588	3.41	<0.500	<0.500	1.14	--	12.05	0.00	7.78
	01/14/04	--	--	--	--	--	--	--	--	NM	NM	--
	03/30/04	272	262	980	<1	<1	<1	<2	1.21	11.81	0.00	8.02
	06/22/04	--	--	--	--	--	--	--	--	NM	NM	--
	09/29/04	200	329	735	<0.50	<0.50	<0.50	<1.0	0.2	11.87	0.00	7.96
	12/29/04	--	--	--	--	--	--	--	--	NM	NM	--

**TABLE 1  
ANALYTICAL RESULTS AND GROUNDWATER ELEVATIONS**

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-50</b>	10/10/01	8,970	2,200	<606	674	221	382	779	--	11.11	0.00	--
-- <sup>1</sup>	12/28/01	23,200	3,460	<500	1,630	3,690	991	4,480	--	10.45	0.00	--
	03/08/02	Obstructed by vehicle							--	NM	NM	--
	06/24/02	8,290	1,970	556	414	23	314	2,010	--	10.84	0.00	--
	09/26/02	Obstructed by vehicle							--	NM	NM	--
	12/12/02	Obstructed by vehicle							--	NM	NM	--
	03/13/03	12,200	1,810	<588	733	127	523	1,100	--	9.93	0.00	--
	06/12/03	6,450	1,740	<500	448	13.7	299	286	--	11.27	0.00	--
	09/19/03	4,440	<250	<500	51.7	315	26.1	462	--	12.05	0.00	--
	01/14/04	29,700	1,970	<258	308	502	312	6,180	4.1	11.81	0.00	--
	03/30/04	3,330	867	<241	21.8	<5	21.9	226.4	1.69	11.65	0.00	--
	06/22/04	2,130	874	<237	14.2	2.4	27.9	85.11	1.1	11.79	0.00	--
	09/29/04	3,600	1,330	<502	92	62	100	520	0.2	11.71	0.00	--
	12/29/04	1,570	745	<611	9.69	3.88	9.98	27.62	1.5	11.01	0.00	--
<b>MW-51</b>	10/10/01	671	11,700	2,150	10.1	10.4	7.75	16.6	--	11.68	0.00	--
-- <sup>1</sup>	12/28/01	631	2,170	3,100	37.0	75.6	30.4	81.2	--	11.20	0.00	--
	03/08/02	102	2,350	1,610	6.22	5.89	3.84	10.4	--	11.38	0.00	--
	06/24/02	57.7	2,650	1,730	1.28	1.42	0.699	2.51	--	11.60	0.00	--
	09/26/02 <sup>3</sup>	<100	1,660	875	0.848	<2.00	<1.00	<1.50	--	12.18	0.00	--
	12/12/02	<50.0	2,050	781	<0.500	<0.500	<0.500	<1.00	--	12.28	0.00	--
	03/13/03	<50.0	693	<625	<0.500	<0.500	<0.500	<1.00	--	11.05	0.00	--
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	52.4	<250	<500	1.47	1.81	0.544	3.59	--	12.42	0.00	--
	01/14/04	73.5	<139	<278	<0.25	0.804	<0.5	<1	0.4	11.79	0.00	--
	03/30/04	<100	404	401	<1	<1	<1	<2	1.56	12.22	0.00	--
	06/22/04	104	129	<237	<1	<1	<1	<2	1.2	12.10	0.00	--
	09/29/04	150	<242	<484	<0.50	<0.50	<0.50	<1.0	1.4	12.20	0.00	--
	12/29/04	<100	<257	<514	<1	<1	<1	<2	0.1	11.80	0.00	--

**TABLE 1  
ANALYTICAL RESULTS AND GROUNDWATER ELEVATIONS**

ConocoPhillips Site No. 255353  
600 Westlake Avenue N.  
Seattle, Washington

Sample I.D. TOC	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)	DO (mg/l)	DTW (feet)	SPH (feet)	GWE (feet)
<b>MW-52</b>	10/10/01	13,400	1,460	<582	1,150	<10.0	827	793	--	10.79	0.00	--
-- <sup>1</sup>	12/28/01	7,900	1,690	595	634	5.87	509	479	--	10.22	0.00	--
	03/08/02	10,100	2,790	<602	814	6.30	602	387	--	10.42	0.00	--
	06/24/02	9,820	2,810	640	1,250	<25.0	757	448	--	10.58	0.00	--
	09/26/02 <sup>3</sup>	6,600	3,530	<500	943	21.7	600	284	--	11.51	0.00	--
	12/12/02	1,170	7,350	638	120	0.822	73.9	7.30	--	11.61	0.00	--
	03/13/03	4,540	1,530	<568	272	52.7	236	210	--	9.59	0.00	--
	06/12/03	--	--	--	--	--	--	--	--	NM	NM	--
	09/19/03	Obstructed by vehicle							--	NM	NM	--
	01/14/04	905	<126	<252	16.6	0.532	39.6	2.45	0.3	11.00	0.00	--
	03/30/04	738	462	<253	16.8	<1	18.4	24.66	1.31	11.47	0.00	--
	06/22/04	1,600	593	<248	161	<10	70.1	<20	1.5	11.50	0.00	--
	09/29/04	290	<253	<507	4.9	<0.50	4.8	2.3	0.3	11.45	0.00	--
	12/29/04	844	272	<507	28.7	<1	17	9.22	0.4	10.75	0.00	--
<b>MW-53</b>	03/13/03	14,000	1,030	<625	398	143	501	1,170	--	11.17	0.00	--
-- <sup>1</sup>	06/12/03	9,700	1,370	<500	553	197	431	1,270	--	12.05	0.00	--
	09/19/03	1,470	<250	<500	29.3	6.61	28.5	111	--	12.85	0.00	--
	01/14/04	2,770	181	<264	173	3.79	91.7	127.1	0.4	11.70	0.00	--
	03/30/04	3,580	686	<237	257	49.7	125	204.8	1.28	12.26	0.00	--
	06/22/04	4,820	750	<240	363	85.2	188	425	1.1	12.23	0.00	--
	09/29/04	240	311	<509	1.9	<0.50	1.4	6.7	1.9	12.60	0.00	--
	12/29/04	2,650	655	<491	225	11.9	92.8	123.4	0.3	11.70	0.00	--

**Notes:**  
µg/l = micrograms per liter  
TOC = Top of casing elevation, provided by previous consultants  
DTW = Depth to water  
SPH = Separate-phase hydrocarbon thickness  
GWE = Groundwater table elevation relative to DTW data; corrected for SPH where applicable using a specific gravity of 0.80  
<n = Below the detection limit  
"--" = Not analyzed, sampled, or reported  
NM = Not Measured  
TPH as Gasoline - Analysis by Northwest Method NWTPH-Gx  
TPH as Diesel and Oil - Analysis by Northwest Method NWTPH-Dx  
BTEX Compounds - Analysis by EPA Method 8020A, 8021B or 8260B  
<sup>1</sup> Top of casing elevations for SM-W3, MW-3, MW-45, and MW-50 through MW-53 have not been established.  
<sup>2</sup> Well was not purged prior to sample collection.  
<sup>3</sup> TPH-D & TPH-O did not resemble chromatogram used for quantitation.  
<sup>4</sup> Well casing of MW-35 was trimmed during monument replacement on December 14, 2004. The new TOC elevation has not yet been surveyed.

MW-38	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	<100	<133	<266	<1	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	Not accessible due to road construction activities						
12/29/04	--	--	--	--	--	--	--

MW-36	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	<100	<133	<267	<1	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	<50	<250	<500	0.90	<0.50	<0.50	<1.0
12/29/04	--	--	--	--	--	--	--

MW-45	G	D	O	B	T	E	X
01/14/04	360	<118	<236	4.97	<0.5	2.48	1.01
03/30/04	303	234	<240	<1	<1	<1	<2
06/22/04	151	365	358	<1	<1	<1	<1
09/29/04	270	<251	<503	<0.50	1.5	0.62	7.3
12/29/04	207	<249	<498	2.90	<1	<1	9.04

MW-47	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	272	262	980	<1	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	200	329	735	<0.50	<0.50	<0.50	<1.0
12/29/04	--	--	--	--	--	--	--

MW-51	G	D	O	B	T	E	X
01/14/04	73.5	<139	<278	<0.25	0.804	<0.5	<1
03/30/04	<100	404	401	<1	<1	<1	<2
06/22/04	104	129	<237	<1	<1	<1	<2
09/29/04	150	<242	<484	<0.50	<0.50	<0.50	<1.0
12/29/04	<100	<257	<514	<1	<1	<1	<2

MW-50	G	D	O	B	T	E	X
01/14/04	29,700	1,970	<258	308	502	312	6,180
03/30/04	3,330	867	<241	21.8	<5	21.9	226.4
06/22/04	2,130	874	<237	14.2	2.4	27.9	85.11
09/29/04	3,600	1,330	<502	92	62	100	520
12/29/04	1,570	745	<611	9.69	3.88	9.98	27.62

MW-40	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	627	863	3,360	3.69	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	390	32,800	219,000	<0.50	<0.50	<0.50	<1.0
12/29/04	--	--	--	--	--	--	--

MW-33	G	D	O	B	T	E	X
01/14/04	524	<135	<271	17	3.7	7.65	31
03/30/04	2,680	725	<256	218	14.7	53.2	150.4
06/22/04	3,500	1,330	<443	197	12.1	99.2	217.3
09/29/04	290	290	<511	12	1.9	5.6	22
12/29/04	2,860	795	<491	91	30.9	49.4	169.3

MW-53	G	D	O	B	T	E	X
01/14/04	2,770	181	<264	173	3.79	91.7	127.1
03/30/04	3,580	686	<237	257	49.7	125	204.8
06/22/04	4,820	750	<240	363	85.2	188	425
09/29/04	240	311	<509	1.9	<0.50	1.4	6.7
12/29/04	2,650	655	<491	225	11.9	92.8	123.4

MW-37	G	D	O	B	T	E	X
01/14/04	471	<127	<255	4.56	<0.5	9.01	27.75
03/30/04	572	180	<281	5.77	<1	<1	1.53
06/22/04	737	487	294	3.26	3.66	1.46	14.25
09/29/04	190	419	<496	<0.50	<0.50	0.67	1.3
12/29/04	430	<262	<524	18.2	2.27	1.08	11.22

MW-34	G	D	O	B	T	E	X
01/14/04	160	<122	<245	23.7	<0.5	2.11	<1
03/30/04	15,100	1,120	<300	3,060	238	564	846.6
06/22/04	6,760	1,900	<238	2,320	14.3	395	279.8
09/29/04	310	306	<505	10	<0.50	3.5	8.2
12/29/04	2,590	481	<504	320	<10	83.8	101.4

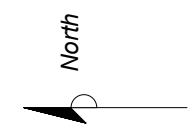
MW-52	G	D	O	B	T	E	X
01/14/04	905	<126	<252	16.6	0.532	39.6	2.45
03/30/04	738	462	<253	16.8	<1	18.4	24.66
06/22/04	1,600	593	<248	161	<10	70.1	<20
09/29/04	290	<253	<507	4.9	<0.50	4.8	2.3
12/29/04	844	272	<507	28.7	<1	17	9.22

MW-43	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	<100	<129	<258	<1	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	180	<249	<499	3.6	<0.50	<0.50	<1.0
12/29/04	--	--	--	--	--	--	--

MW-32A	G	D	O	B	T	E	X
01/14/04	1,580	316	<253	28.9	4.13	13.1	32.5
03/30/04	7,310	838	<276	18.3	<10	209	122
06/22/04	3,330	1,470	381	149	<10	72.5	43.8
09/29/04	330	<242	<484	13	1.6	3.7	39
12/29/04	1,500	592	<478	71	<5	30.9	31.2

SMW-3	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	<100	<119	<238	<1	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	56	<242	<483	<0.50	<0.50	<0.50	<1.0
12/29/04	--	--	--	--	--	--	--

MW-44	G	D	O	B	T	E	X
01/14/04	--	--	--	--	--	--	--
03/30/04	<100	<134	<268	<1	<1	<1	<2
06/22/04	--	--	--	--	--	--	--
09/29/04	--	--	--	--	--	--	--
12/29/04	<100	<260	<520	<1	<1	<1	<2



- LEGEND**
- MW-3 ● GROUNDWATER MONITORING WELL
  - (10.12) GROUNDWATER ELEVATION, SEPTEMBER 29, 2004
  - MW-2 ∅ ABANDONED OR DESTROYED GROUNDWATER MONITORING WELL
  - ▲ FORMER VAPOR EXTRACTION WELL (DECOMMISSIONED)
  - (NM) NOT MONITORED
  - G GASOLINE RANGE HYDROCARBONS (ug/l)
  - D DIESEL RANGE HYDROCARBONS (ug/l)
  - O OIL RANGE HYDROCARBONS (ug/l)
  - B BENZENE (ug/l)
  - T TOLUENE (ug/l)
  - E ETHYLBENZENE (ug/l)
  - X XYLENES (ug/l)
  - <0.50 ANALYTE NOT DETECTED AT OR ABOVE THE LABORATORY REPORTING LIMIT OF 0.50 ug/l
  - (ug/l) MICROGRAMS PER LITER
  - NOT MEASURED OR ANALYZED
  - \* WELL HEAD HAS NOT BEEN SURVEYED
  - ➔ GROUNDWATER FLOW DIRECTION



**FIGURE 1**

**SITE MAP WITH GROUNDWATER ELEVATIONS AND PETROLEUM HYDROCARBON AND BTEX CONCENTRATIONS**

CONOCOPHILLIPS SITE NO. 255353  
600 WESTLAKE AVENUE NORTH  
SEATTLE, WASHINGTON

PROJECT NO. WA255-3506-1	DRAWN BY TS 1-24-05
FILE NO. WA255-3506-1	PREPARED BY TS 1-24-05
REVISION NO. 0	REVIEWED BY EL

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

**LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY  
DOCUMENTATION**

Quarterly Groundwater Sampling  
ConocoPhillips Site No. 255353



# STL

STL Seattle  
5755 8<sup>th</sup> Street East  
Tacoma, WA 98424

Tel: 253 922 2310  
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[www.stl-inc.com](http://www.stl-inc.com)

RECEIVED  
JAN 19 2005  
BY:  
~~TRANSMITTAL MEMORANDUM~~

DATE: January 14, 2005

TO: Eric Larsen  
Delta Environmental  
17720 NE 65th Street Ste 201  
Redmond, WA 98052

PROJECT: WA25-535-1 / 255353 Seattle

REPORT NUMBER: 125667

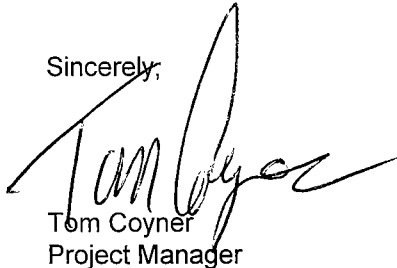
TOTAL NUMBER OF PAGES: 30

Enclosed are the test results for eleven samples received at STL Seattle on December 30, 2004.

The report consists of this transmittal memo, analytical results, quality control reports, a copy of the chain-of-custody, a list of data qualifiers and analytical narrative when applicable, and a copy of any requested raw data.

Should there be any questions regarding this report, please contact me at (253) 922-2310.

Sincerely,



Tom Coyner  
Project Manager

---

STL Seattle is a part of Severn Trent Laboratories, Inc.

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# STL Seattle

## Sample Identification:

<u>Lab. No.</u>	<u>Client ID</u>	<u>Date/Time Sampled</u>	<u>Matrix</u>
125667-1	MW-32A	12-29-04 09:50	Liquid
125667-2	MW-33	12-29-04 10:55	Liquid
125667-3	MW-34	12-29-04 09:40	Liquid
125667-4	MW-35	12-29-04 10:00	Liquid
125667-5	MW-37	12-29-04 10:20	Liquid
125667-6	MW-44	12-29-04 10:50	Liquid
125667-7	MW-45	12-29-04 11:10	Liquid
125667-8	MW-50	12-29-04 10:35	Liquid
125667-9	MW-51	12-29-04 11:15	Liquid
125667-10	MW-52	12-29-04 10:10	Liquid
125667-11	MW-53	12-29-04 11:30	Liquid

---

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# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-32A
Lab ID:	125667-01
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	5

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	106		50	150
1-Chloro-3-fluorobenzene	124	X9	80	120
Bromofluorobenzene	112		80	120
Pentafluorobenzene	143	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	1.5	0.5	
Benzene	0.071	0.005	
Toluene	ND	0.005	
Ethylbenzene	0.0309	0.005	
m&p-Xylene	0.0203	0.01	
o-Xylene	0.0109	0.005	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-33
Lab ID:	125667-02
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	10

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	102		50	150
1-Chloro-3-fluorobenzene	117		80	120
Bromofluorobenzene	104		80	120
Pentafluorobenzene	135	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	2.86	1	
Benzene	0.0909	0.01	
Toluene	0.0309	0.01	
Ethylbenzene	0.0494	0.01	
m&p-Xylene	0.0934	0.02	
o-Xylene	0.0759	0.01	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-34
Lab ID:	125667-03
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	10

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	102		50	150
1-Chloro-3-fluorobenzene	117		80	120
Bromofluorobenzene	104		80	120
Pentafluorobenzene	134	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	2.59	1	
Benzene	0.32	0.01	
Toluene	ND	0.01	
Ethylbenzene	0.0838	0.01	
m&p-Xylene	0.0884	0.02	
o-Xylene	0.013	0.01	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-35
Lab ID:	125667-04
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	100		50	150
1-Chloro-3-fluorobenzene	112		80	120
Bromofluorobenzene	101		80	120
Pentafluorobenzene	131	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	0.28	0.1	
Benzene	ND	0.001	
Toluene	ND	0.001	
Ethylbenzene	ND	0.001	
m&p-Xylene	ND	0.002	
o-Xylene	ND	0.001	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-37
Lab ID:	125667-05
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	95.8		50	150
1-Chloro-3-fluorobenzene	107		80	120
Bromofluorobenzene	96.2		80	120
Pentafluorobenzene	122		81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	0.43	0.1	
Benzene	0.0182	0.001	
Toluene	0.00227	0.001	
Ethylbenzene	0.00108	0.001	
m&p-Xylene	0.00619	0.002	
o-Xylene	0.00503	0.001	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-44
Lab ID:	125667-06
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	104		50	150
1-Chloro-3-fluorobenzene	117		80	120
Bromofluorobenzene	104		80	120
Pentafluorobenzene	137	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	ND	0.1	
Benzene	ND	0.001	
Toluene	ND	0.001	
Ethylbenzene	ND	0.001	
m&p-Xylene	ND	0.002	
o-Xylene	ND	0.001	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-45
Lab ID:	125667-07
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	104		50	150
1-Chloro-3-fluorobenzene	120		80	120
Bromofluorobenzene	106		80	120
Pentafluorobenzene	140	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	0.207	0.1	
Benzene	0.0029	0.001	
Toluene	ND	0.001	
Ethylbenzene	ND	0.001	
m&p-Xylene	0.00526	0.002	
o-Xylene	0.00378	0.001	



# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-50
Lab ID:	125667-08
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/7/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	104		50	150
1-Chloro-3-fluorobenzene	119		80	120
Bromofluorobenzene	110		80	120
Pentafluorobenzene	135	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	1.57	0.1	
Benzene	0.00969	0.001	
Toluene	0.00388	0.001	
Ethylbenzene	0.00998	0.001	
m&p-Xylene	0.0192	0.002	
o-Xylene	0.00842	0.001	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-51
Lab ID:	125667-09
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/7/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	99.4		50	150
1-Chloro-3-fluorobenzene	113		80	120
Bromofluorobenzene	101		80	120
Pentafluorobenzene	133	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	ND	0.1	
Benzene	ND	0.001	
Toluene	ND	0.001	
Ethylbenzene	ND	0.001	
m&p-Xylene	ND	0.002	
o-Xylene	ND	0.001	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-52
Lab ID:	125667-10
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/7/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	100		50	150
1-Chloro-3-fluorobenzene	114		80	120
Bromofluorobenzene	102		80	120
Pentafluorobenzene	132	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	0.844	0.1	
Benzene	0.0287	0.001	
Toluene	ND	0.001	
Ethylbenzene	0.017	0.001	
m&p-Xylene	0.00633	0.002	
o-Xylene	0.00289	0.001	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-53
Lab ID:	125667-11
Date Received:	12/30/04
Date Prepared:	1/6/05
Date Analyzed:	1/7/05
% Solids	-
Dilution Factor	10

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	102		50	150
1-Chloro-3-fluorobenzene	116		80	120
Bromofluorobenzene	105		80	120
Pentafluorobenzene	133	X9	81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	2.65	1	
Benzene	0.225	0.01	
Toluene	0.0119	0.01	
Ethylbenzene	0.0928	0.01	
m&p-Xylene	0.102	0.02	
o-Xylene	0.0214	0.01	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-32A
Lab ID:	125667-01
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	90.5		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	0.592	0.239	X1
Motor Oil	ND	0.478	

X1 - Chromatogram suggests this might be overlap from gasoline range

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-33
Lab ID:	125667-02
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	89.5		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	0.795	0.245	X1
Motor Oil	ND	0.491	

X1 - Chromatogram suggests this might be overlap from gasoline range

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-34
Lab ID:	125667-03
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	87.4		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	0.481	0.252	
Motor Oil	ND	0.504	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-35
Lab ID:	125667-04
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	86.3		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	ND	0.255	
Motor Oil	ND	0.51	



# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-37
Lab ID:	125667-05
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	87.8		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	ND	0.262	
Motor Oil	ND	0.524	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-44
Lab ID:	125667-06
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	94.3		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	ND	0.26	
Motor Oil	ND	0.52	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-45
Lab ID:	125667-07
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	99.6		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	ND	0.249	
Motor Oil	ND	0.498	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-50
Lab ID:	125667-08
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	84		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	0.745	0.305	X1
Motor Oil	ND	0.611	

X1 - Chromatogram suggests this might be overlap from gasoline range

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-51
Lab ID:	125667-09
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	86		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	ND	0.257	
Motor Oil	ND	0.514	

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-52
Lab ID:	125667-10
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	83.5		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	0.272	0.254	X1
Motor Oil	ND	0.507	

X1 - Chromatogram suggests this might be overlap from gasoline range

# STL Seattle

Client Name:	Delta Environmental
Client ID:	MW-53
Lab ID:	125667-11
Date Received:	12/30/2004
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	80.4		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	0.655	0.246	X1
Motor Oil	ND	0.491	

X1 - Chromatogram suggests this might be overlap from gasoline range

# STL Seattle

Lab ID:	Method Blank - GB4059
Date Received:	-
Date Prepared:	1/6/05
Date Analyzed:	1/6/05
% Solids	-
Dilution Factor	1

## GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
Trifluorotoluene	91.1		50	150
1-Chloro-3-fluorobenzene	102		80	120
Bromofluorobenzene	93.6		80	120
Pentafluorobenzene	116		81	126

Analyte	Result (mg/L)	RL	Flags
Gasoline By NWTPH-G	ND	0.1	
Benzene	ND	0.001	
Toluene	ND	0.001	
Ethylbenzene	ND	0.001	
m&p-Xylene	ND	0.002	
o-Xylene	ND	0.001	



# STL Seattle

## Blank Spike/Blank Spike Duplicate Report

Lab ID: GB4059  
Date Prepared: 1/6/05  
Date Analyzed: 1/6/05  
QC Batch ID: GB4059

### GRO by NWTPH-Gx / Volatile Aromatics by 5030/8260B

Compound Name	Blank Result (mg/L)	Spike Amount (mg/L)	BS Result (mg/L)	BS % Rec.	BSD Result (mg/L)	BSD % Rec.	RPD	Flag
Gasoline By NWTPH-G	0	1.25	1.19	95	1.18	94.8	-0.21	
Benzene	0	0.0184	0.0159	86.3	0.0159	86.3	0	
Toluene	0	0.0884	0.0997	113	0.0985	111	-1.8	
Ethylbenzene	0	0.0198	0.0202	102	0.0208	105	2.9	
m&p-Xylene	0	0.073	0.0748	103	0.0721	98.9	-4.1	
o-Xylene	0	0.0286	0.0302	105	0.0296	103	-1.9	

# STL Seattle

Lab ID:	Method Blank - DW0716
Date Received:	-
Date Prepared:	1/5/2005
Date Analyzed:	1/6/2005
% Solids	-
Dilution Factor	1

## Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Surrogate	% Recovery	Flags	Recovery Limits	
			Low	High
o-terphenyl	90.4		50	150

Analyte	Result (mg/L)	RL	Flags
#2 Diesel	ND	0.25	
Motor Oil	ND	0.5	

# STL Seattle

## Blank Spike/Blank Spike Duplicate Report

Lab ID: DW0716  
Date Prepared: 1/5/2005  
Date Analyzed: 1/6/2005  
QC Batch ID: DW0716

### Diesel and Motor Oil by NWTPH-Dx Modified with Silica Gel Cleanup

Compound Name	Blank Result (mg/L)	Spike Amount (mg/L)	BS Result (mg/L)	BS % Rec.	BSD Result (mg/L)	BSD % Rec.	RPD	Flag
#2 Diesel	0	5	5.19	104	5.16	103	-0.97	
Motor Oil	0	5	4.76	95.3	4.65	93	-2.4	

**DATA QUALIFIERS AND ABBREVIATIONS**

- B1: This analyte was detected in the associated method blank. The analyte concentration was determined not to be significantly higher than the associated method blank (less than ten times the concentration reported in the blank).
- B2: This analyte was detected in the associated method blank. The analyte concentration in the sample was determined to be significantly higher than the method blank (greater than ten times the concentration reported in the blank).
- C1: Second column confirmation was performed. The relative percent difference value (RPD) between the results on the two columns was evaluated and determined to be < 40%.
- C2: Second column confirmation was performed. The RPD between the results on the two columns was evaluated and determined to be > 40%. The higher result was reported unless anomalies were noted.
- C3: Second analysis confirmation was performed. The relative percent difference value (RPD) between the results on the two columns was evaluated and determined to be ≤ 30%.
- C4: Second analysis confirmation was performed. The RPD between the results on the two columns was evaluated and determined to be > 30%. The original analysis was reported unless anomalies were noted.
- M: GC/MS confirmation was performed. The result derived from the original analysis was reported.
- D: The reported result for this analyte was calculated based on a secondary dilution factor.
- E: The concentration of this analyte exceeded the instrument calibration range and should be considered an estimated quantity.
- J: The analyte was analyzed for and positively identified, but the associated numerical value is an estimated quantity.
- MCL: Maximum Contaminant Level
- MDL: Method Detection Limit
- RL: Reporting Limit
- N: See analytical narrative
- ND: Not Detected
- X1: Contaminant does not appear to be "typical" product. Elution pattern suggests it may be \_\_\_\_\_.
- X2: Contaminant does not appear to be "typical" product.
- X3: Identification and quantitation of the analyte or surrogate was complicated by matrix interference.
- X4: RPD for duplicates was outside advisory QC limits. The sample was re-analyzed with similar results. The sample matrix may be nonhomogeneous.
- X4a: RPD for duplicates outside advisory QC limits due to analyte concentration near the method practical quantitation limit/detection limit.
- X5: Matrix spike recovery was not determined due to the required dilution.
- X6: Recovery and/or RPD values for matrix spike(/matrix spike duplicate) outside advisory QC limits. Sample was re-analyzed with similar results.
- X7: Recovery and/or RPD values for matrix spike(/matrix spike duplicate) outside advisory QC limits. Matrix interference may be indicated based on acceptable blank spike recovery and/or RPD.
- X7a: Recovery and/or RPD values for this spiked analyte outside advisory QC limits due to high concentration of the analyte in the original sample.
- X8: Surrogate recovery was not determined due to the required dilution.
- X9: Surrogate recovery outside advisory QC limits due to matrix interference.

STL Seattle  
5755 8th Street E.  
Tacoma, WA 98424  
Tel. 253-922-2310  
Fax 253-922-5047  
www.stl-inc.com

## Chain of Custody Record

125667  
B2/Vol.

Client: **Conoco Phillips c/o Delta Environmental**  
 Address: **17720 NE 15th St, Suite 201, Redmond, WA 98052**  
 Project Manager: **Eric Larsen / elarsen@deltaenv.com**  
 Telephone Number (Area Code)/Fax Number: **425-558-0134**  
 Date: **12-29-04**  
 Chain of Custody Number: **11765**  
 Page **1** of **1**

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)	
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		
MW-32A	12-29-04	950	X											NMTPH-6X BTEX (8260) NMTPH-DX with silica gel clean up
MW-33		1055												
MW-34		940												
MW-35		1000												
MW-37		1020												
MW-44		1050												
MW-45		1110												
MW-50		1035												
MW-51		1115												
MW-52		1010												
MW-53		1130												

Some of sample spilled  
Out of bottle (amber) 116

Project Name and Location (State): **WA25-5354 / 255353 Seattle**  
 Contract/Purchase Order/Quote/No.: **WO #: 1396DELO01**  
 Lab Contact: **Tom Coyner**  
 Carrier/Waybill Number: **Manager Kifley**

Possible Hazard Identification:  
 Non-Hazard  
 Flammable  
 Skin Irritant  
 Poison B  
 Unknown

Turn Around Time Required (business days):  
 24 Hours  
 48 Hours  
 5 Days  
 10 Days  
 15 Days  
 Other

QC Requirements (Specify):  
 1. Received By: **[Signature]** Date: **12-30-04** Time: **10:35**  
 2. Received By: **[Signature]** Date: **12-30-04** Time: **16:15**  
 3. Received By: **[Signature]** Date: \_\_\_\_\_ Time: \_\_\_\_\_

Sample Disposal:  Disposal By Lab  
 Return To Client  
 Archive For \_\_\_\_\_ Months

Cooler:  Yes  
 No  
 Cooler Temp: \_\_\_\_\_

Comments: \_\_\_\_\_

# **GROUNDWATER SAMPLING PROCEDURES AND FIELD SHEETS**

Quarterly Groundwater Sampling  
ConocoPhillips Site No. 255353

## **GROUNDWATER MONITORING AND SAMPLING**

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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 (GWE) 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: WA25535-1 CLIENT: COP  
 SITE No./JOB No.: 255353 Seattle PAGE: 1 of 1  
 SITE ADDRESS/LOCATION: 600 Westlake Ave N DATE: 12-29-04  
 FIELD PERSONNEL: Laura Brock, Alan Starr WEATHER: rainy

Well ID	Time	Well Diameter (in.)	Depth to Bottom (feet)	Depth to Water (feet)	Depth to LPH (feet)	LPH Thickness (feet)	Calc. Purge (gal)	Actual Purge (gal)	Purge Method (B/LF/P)	Dissolved Oxygen (mg/l)	Sample Appearance/Comments
MW-3A	950	2	24.30	12.24	NA	NA	6.2	6.5	B	1.0	
MW-33	1055		24.90	12.14			6.5	7.0		0.1	
MW-34	940		25.20	12.67			6.4	6.5		2.0	
MW-35	1000		22.30	10.64			5.9	6.0		0.1	sediment
MW-37	1020		18.80	11.90			3.5	3.75		1.5	
MW-44	1050		19.82	9.24			5.4	5.5		0.3	slight sheen - Non Hc 2x
MW-45	1110		18.70	9.40			4.7	4.75		0.3	
MW-50	1035		18.03	11.01			3.6	3.75		1.5	
MW-51	1115		15.00	11.80			1.6	1.75		0.1	
MW-52	1010		17.50	10.75			3.5	3.75		0.4	
MW-53	1130	✓	20.00	11.70	↓	↓	4.2	4.25	↓	0.3	

**System Instructions:**  
 Remedial System On-Site (Y/N)? Y Comments: Temporarily shut down  
 Operational Upon Arrival (Y/N)? N Comments: on 12/17/04  
 Shut Down System 1 / 24 hours before gauging (Y/N)? \_\_\_\_\_ Time/Date Downed: \_\_\_\_\_  
 Re-Start System (Y/N)? N Time/Date Restarted: \_\_\_\_\_  
 Purge Method: bail Comments: \_\_\_\_\_

**Purge Water Disposal Method:**  
 Treated through mobile carbon treatment unit and discharged on-site  
 Placed in drums on site No. of drums: \_\_\_\_\_  
 Transported off-site for treatment Facility/Location: \_\_\_\_\_

**Measuring Device(s):** DO calibrated @ 101% sat