VCP # NW0965 Release # 1855
UNOCAL 5028
BLAINE

DATE: April 20th, 2004

UST # 8472

ConocoPhillips

GROUNDWATER MONITORING REPORT

Site No.: 5028 Address: 247 D Street, Blaine, Washington
ConocoPhillips Site Manager: Timothy D. Johnson
Consultant / Contact Person: SECOR International Inc. / Marc Sauze
Primary Agency/Regulatory ID No.: Washington State Department of Ecology
SECOR Project No: 01CP.05028.04

WORK PERFORMED THIS QUARTER(S) [1st - 2004]:

- On 3/24/04, SECOR personnel monitored five (MW-1 through MW-4 and MW-6) and purged and sampled three (MW-2A, MW-3 and MW-6) of the existing network of six groundwater monitoring wells (MW-1 through MW-6). Depth to water was recorded in MW-1 and MW-4 but samples were not taken because the wells are historically non-detect. MW-5 was not monitored because it could not be located. Samples were submitted to Severn Trent Laboratories, Inc. (STL) for analysis of gasoline range hydrocarbons per NWTPH-Gx Method, diesel and motor-oil range hydrocarbons per NWTPH-Dx Method, plus BTEX and Halogenated Volatile Organic Compounds (HVOCs) per USEPA Method 5030/8260B.

WORK PROPOSED FOR NEXT QUARTER [2nd - 2004]:

- Measure depth to water of five (MW-1 through MW-4 and MW-6) and purge and sample three (MW-2A, MW-3 and MW-6) groundwater monitoring wells. Submit groundwater samples to STL for analysis for NWTPH-Gx, NWTPH-Dx, BTEX and HVOCs.

SUMMARY:

Frequency of Sampling Events:	Quarterly	(3/04,6/04,9/04,12/04)
Depth to Groundwater:	2.16 ft. (MW-2A)	(Measured Feet Below
	to 4.14 ft. (MW-6)	Top of Well Casing)
Groundwater Gradient:	South-Southeast and West	(Direction)
	0.01 ft./ft. and 0.10 ft./ft.	(Magnitude)
Maximum TPH-G Concentrations: ✓	<100 µg/L	(ppb / well ID)
Maximum TPH-D Concentrations:	<133 µg/L	
Maximum TPH-O Concentrations:	<265 µg/L	
Maximum Benzene Concentration: ✓	10.7 µg/L / MW-3	
Maximum Vinyl Chloride Concentration:	1.63 µg/L / MW-3	
Measurable Free Product Detected:	No	(Yes - ID well(s)/No)
Free Product Recovered This Quarter:	None	(Gallons)
Cumulative Free Product Recovered to Date:	None	(Gallons)
Water Wells or	No Water Wells Identified	(Type)
Surface Waters w/in 2,000 ft:	Semiahmoo Bay	
Radius and Respective Direction From Site:	1,000 ft, West	(Distance & Direction)
Current Remedial Action: ✓	MNA	(SVE/AS/P&T/MNA etc.)
Permits for Discharge:	None	(NPDES, POTW, etc.)

DISCUSSION:

- None of the 3 wells sampled (MW-2A, MW-3, MW-6) contained any gasoline, diesel or oil-range hydrocarbon concentrations exceeding the laboratory reporting limits (RLs).

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- Benzene was detected in MW-3 above the MTCA Method A Cleanup Levels for Ground Water (MTCA A) at a concentration of 10.7 µg/L. None of the other wells sampled contained any Benzene, Toluene, Ethylbenzene, or Total Xylenes (BTEX) concentrations above the RLs.

- Vinyl Chloride was detected above MTCA A in MW-3 at a concentration of 1.63 µg/L. 1,2-Dichloroethane (1,2-DCA) was detected in MW-6 at a concentration of 0.773 µg/L. Chloromethane was detected in MW-3 at a concentration of 4.18 µg/L.

- Groundwater monitoring results and trends are generally consistent with past monitoring events.

- One drum containing approximately Forty gallons of waste water was left on site.

ATTACHMENTS:

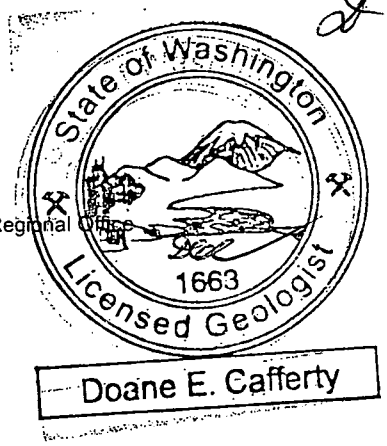
Figure 1: Site Location Map
Figure 2: Site Plan with Groundwater Elevation Contours
Figure 3: Site Plan with Analytical Results (3/05/03– 3/24/04/03)
Table 1: Summary of Cumulative Groundwater Elevations and Sample Analytical Results
Laboratory Analytical Report and Chain of Custody Record
Groundwater Monitoring Field Data Records

Prepared By:

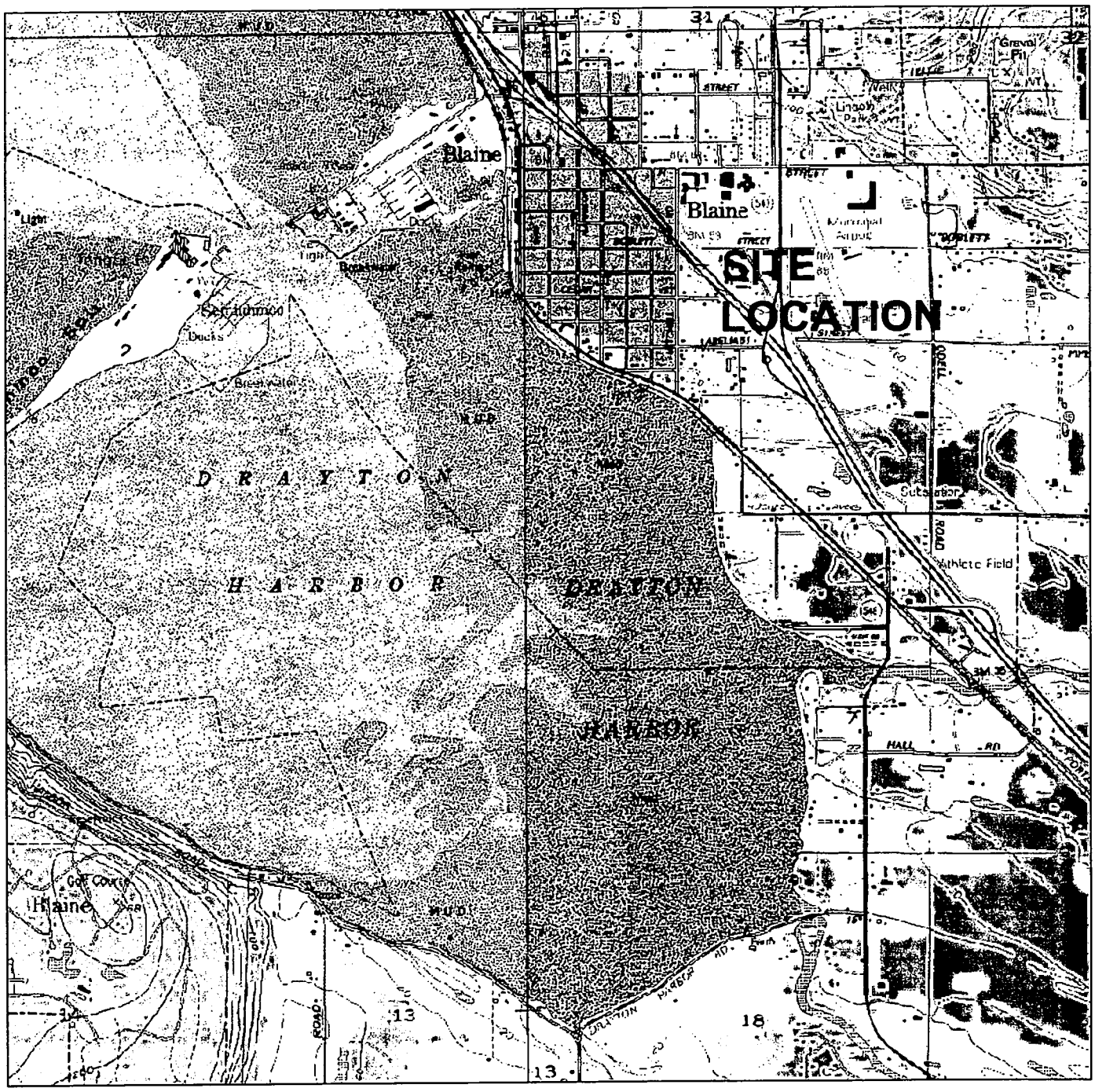
August Welch
Assistant Scientist

Reviewed By:

Doane E. Cafferty, L.G.
Project Geologist



cc: Washington State Department of Ecology, Northwest Regional Office



North

WASHINGTON

1 1/2 0 1

SCALE (MILES)

1000 0 1000 2000 3000 4000 5000 6000 7000

SCALE (FEET)

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; BLAINE, WASHINGTON; 1952

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

PREPARED FOR:
ConocoPhillips
FACILITY NO 5028
247 D STREET
BLAINE, WASHINGTON

SITE LOCATION MAP

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
01CP.05028.04	S. SIMMONS			2/4/04

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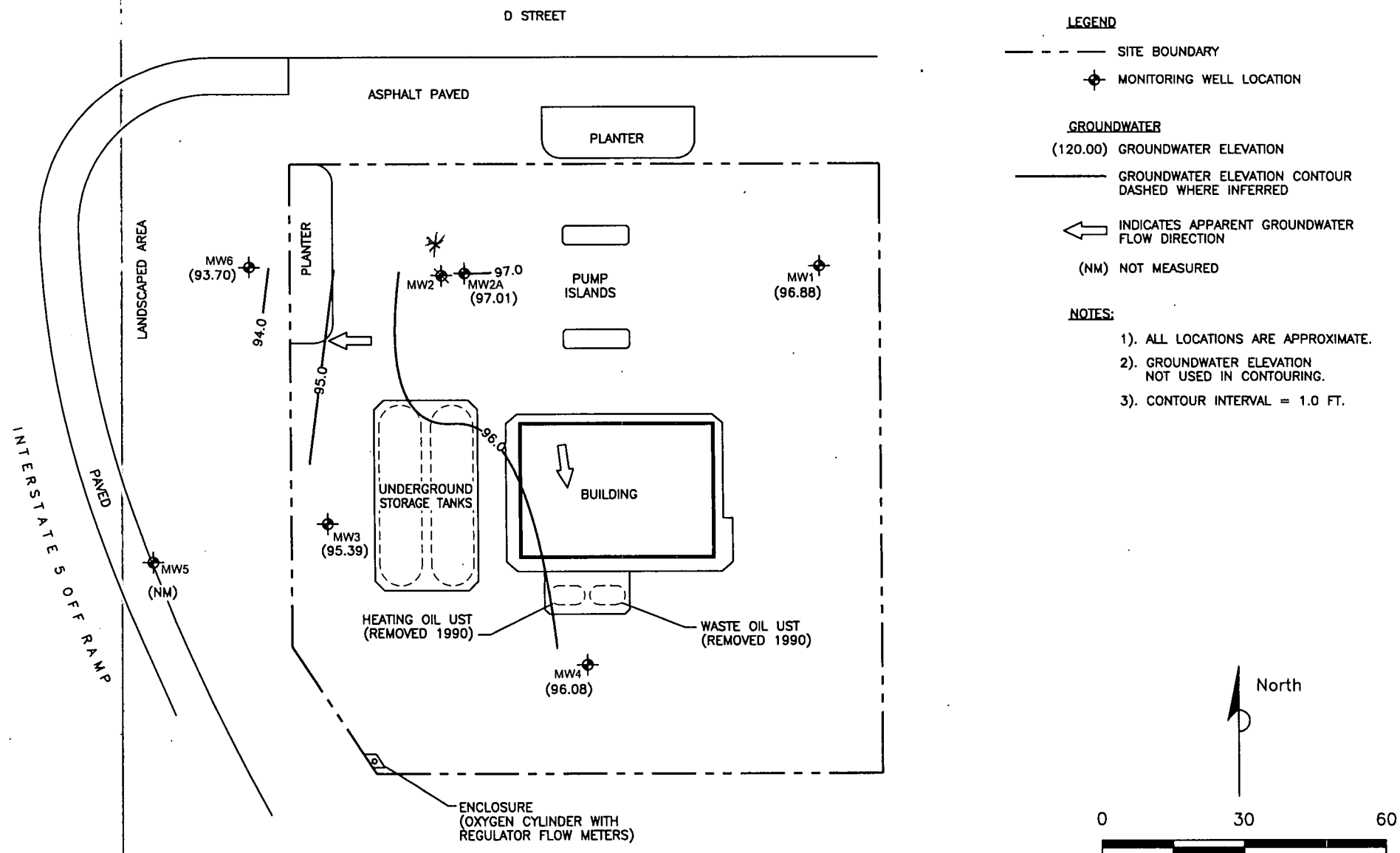

SOURCE:
BASE MAP FROM; ENVIRONMENTAL RESOLUTIONS, INC. (ERI) TITLED GROUNDWATER SAMPLE ANALYSIS MAP– 06/09/03, PLATE 1, DATED 07/14/03, PROJECT NO. 31017. CADD FILE 31017.13.DWG

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SITE PLAN WITH GROUNDWATER ELEVATION CONTOURS (3/24/04)

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
01CP.05028.04	S. SIMMONS			2/4/04

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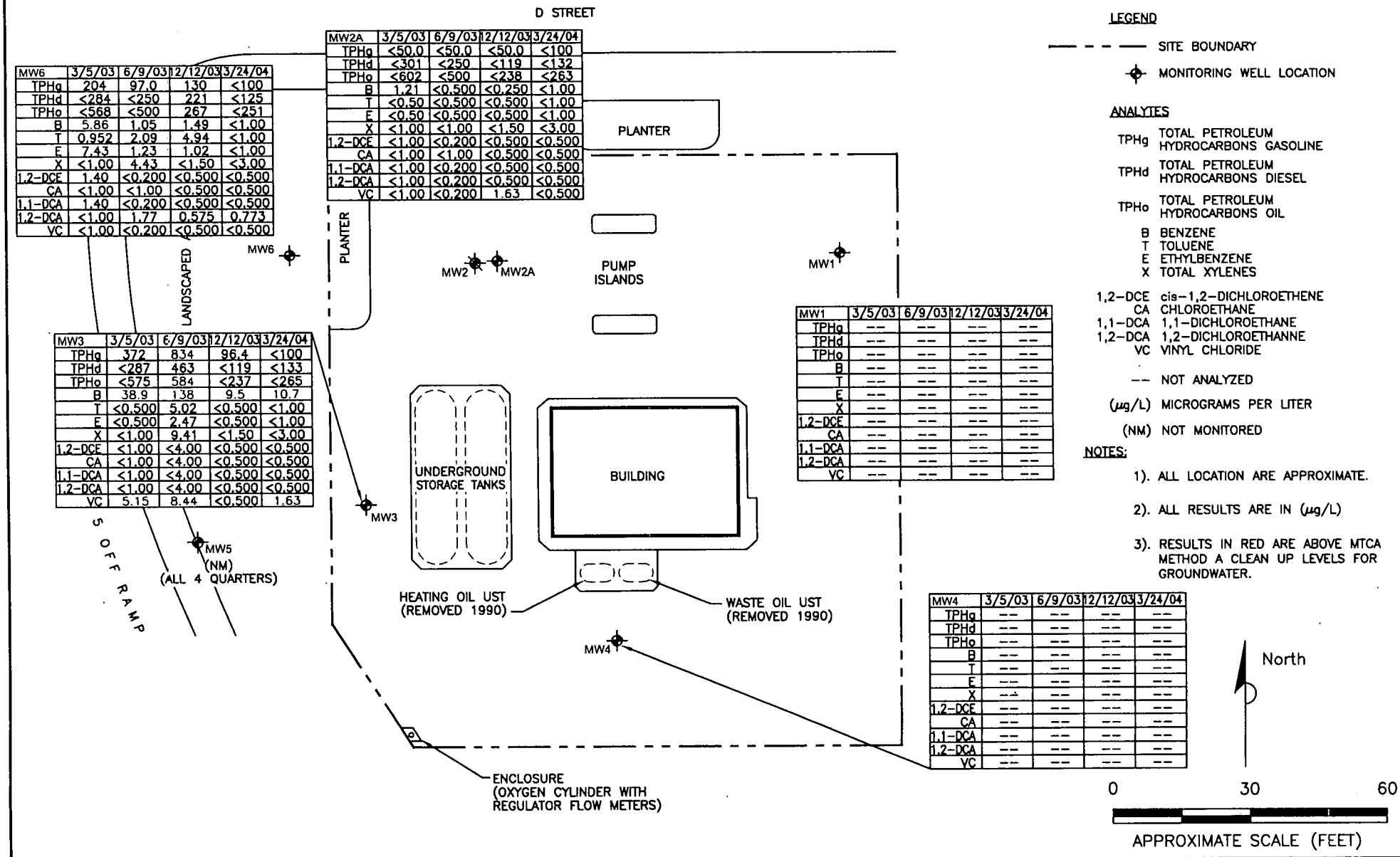

MW6	3/5/03	6/9/03	12/12/03	3/24/04
TPHg	204	97.0	130	<100
TPHd	<284	<250	221	<125
TPHo	<568	<500	267	<251
B	5.86	1.05	1.49	<1.00
T	0.952	2.09	4.94	<1.00
E	7.43	1.23	1.02	<1.00
X	<1.00	4.43	<1.50	<3.00
1,2-DCE	1.40	<0.200	<0.500	<0.500
CA	<1.00	<1.00	<0.500	<0.500
1,1-DCA	1.40	<0.200	<0.500	<0.500
1,2-DCA	<1.00	1.77	0.575	0.773
VC	<1.00	<0.200	<0.500	<0.500

MW2A	3/5/03	6/9/03	12/12/03	3/24/04
TPHg	<50.0	<50.0	<50.0	<100
TPHd	<301	<250	<119	<132
TPHo	<602	<500	<238	<263
B	1.21	<0.500	<0.250	<1.00
T	<0.50	<0.500	<0.500	<1.00
E	<0.50	<0.500	<0.500	<1.00
X	<1.00	<1.00	<1.50	<3.00
1,2-DCE	<1.00	<0.200	<0.500	<0.500
CA	<1.00	<1.00	<0.500	<0.500
1,1-DCA	<1.00	<0.200	<0.500	<0.500
1,2-DCA	<1.00	<0.200	<0.500	<0.500
VC	<1.00	<0.200	1.63	<0.500

MW3	3/5/03	6/9/03	12/12/03	3/24/04
TPHg	372	834	96.4	<100
TPHd	<287	463	<119	<133
TPHo	<575	584	<237	<265
B	38.9	138	9.5	10.7
T	<0.500	5.02	<0.500	<1.00
E	<0.500	2.47	<0.500	<1.00
X	<1.00	9.41	<1.50	<3.00
1,2-DCE	<1.00	<4.00	<0.500	<0.500
CA	<1.00	<4.00	<0.500	<0.500
1,1-DCA	<1.00	<4.00	<0.500	<0.500
1,2-DCA	<1.00	<4.00	<0.500	<0.500
VC	5.15	8.44	<0.500	1.63

MW1	3/5/03	6/9/03	12/12/03	3/24/04
TPHg	--	--	--	--
TPHd	--	--	--	--
TPHo	--	--	--	--
B	--	--	--	--
T	--	--	--	--
E	--	--	--	--
X	--	--	--	--
1,2-DCE	--	--	--	--
CA	--	--	--	--
1,1-DCA	--	--	--	--
1,2-DCA	--	--	--	--
VC	--	--	--	--

MW4	3/5/03	6/9/03	12/12/03	3/24/04
TPHg	--	--	--	--
TPHd	--	--	--	--
TPHo	--	--	--	--
B	--	--	--	--
T	--	--	--	--
E	--	--	--	--
X	--	--	--	--
1,2-DCE	--	--	--	--
CA	--	--	--	--
1,1-DCA	--	--	--	--
1,2-DCA	--	--	--	--
VC	--	--	--	--

LEGEND

SITE BOUNDARY

MONITORING WELL LOCATION

ANALYTES

TPHg TOTAL PETROLEUM HYDROCARBONS GASOLINE

TPHd TOTAL PETROLEUM HYDROCARBONS DIESEL

TPHo TOTAL PETROLEUM HYDROCARBONS OIL

B BENZENE
T TOLUENE
E ETHYLBENZENE
X TOTAL XYLENES

1,2-DCE cis-1,2-DICHLOROETHENE
CA CHLOROETHANE
1,1-DCA 1,1-DICHLOROETHANE
1,2-DCA 1,2-DICHLOROETHANNE
VC VINYL CHLORIDE

-- NOT ANALYZED

(µg/L) MICROGRAMS PER LITER

(NM) NOT MONITORED

NOTES:

1). ALL LOCATION ARE APPROXIMATE.

2). ALL RESULTS ARE IN (µg/L)

3). RESULTS IN RED ARE ABOVE MTCA METHOD A CLEAN UP LEVELS FOR GROUNDWATER.

SOURCE:
BASE MAP FROM; ENVIRONMENTAL RESOLUTIONS, INC. (ERI) TITLED GROUNDWATER SAMPLE ANALYSIS MAP- 06/09/03, PLATE 1, DATED 07/14/03, PROJECT NO. 31017. CADD FILE 31017.13.DWG

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247 D STREET
BLAINE, WASHINGTON

SITE PLAN
WITH ANALYTICAL RESULTS
(3/5/03 - 3/24/04)

FIGURE: **3**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
01CP.05028.04	S. SIMMONS			5/5/04

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TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington

Well Name	Sample Date	DTW	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	1,2-DCE	CA	1,1-DCA	1,2-DCA	VC	O_2 Lab	O_2 Meter
MW1	07/06/93	4.35	96.07	<50	--	--	<0.1	<0.1	<0.1	<1.0	--	--	--	--	--	--	--
TOC Elevation	10/11/94	4.60	95.82	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
100.42	01/20/95	3.80	96.62	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	04/21/95	3.77	96.65	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
	07/24/95	5.13	95.29	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	10/25/95	4.28	96.14	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	01/17/96	2.95	97.47	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	04/18/96	3.30	97.12	--	--	--	--	--	--	--	--	--	--	--	--	4	--
	07/25/96	4.13	96.29	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	1.8	1.6
	10/16/96	4.74	95.68	--	<250	<750	--	--	--	--	--	--	--	--	--	3.0	2.2
	02/27/97	4.47	95.95	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	1.9
	05/13/97	6.19	94.23	--	--	--	--	--	--	--	--	--	--	--	--	--	6.2
	08/21/97	5.65	94.77	142	387	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	8
	11/25/97	4.02	96.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/13/98	4.01	96.41	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/19/98	4.31	96.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/98	4.94	95.48	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	11/19/98	4.28	96.14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/17/99	4.08	96.34	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/25/99	4.90	95.52	136	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/12/99	4.94	95.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/07/99	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/10/00	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/31/00	4.96	95.46	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/31/00	5.00	95.42	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	11/01/00	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/02/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/02/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/14/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/01/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/04/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/07/02	4.18	96.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/02/02	4.86	95.56	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	12/04/02	4.50	95.92	<50.0	<287	<575	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	03/05/03[NP]	3.81	96.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/03	4.00	96.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/03	3.570	96.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/24/04	3.540	96.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level				1000/800	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

Continued on page 2

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SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington

Well Name	Sample Date	DTW	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	1,2-DCE	CA	1,1-DCA	1,2-DCA	VC	O_2 Lab	O_2 Meter
MW2	07/06/93	3.87	94.62	7,800	--	--	990	560	140	840	--	--	--	--	--	--	--
TOC Elevation	10/11/94	5.20	93.29	2,500	380	<750	1,500	37	220	300	--	--	--	--	--	--	--
98.49	01/20/95	4.19	94.30	14,000	690	<750	5,400	1,300	660	2,300	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
	04/21/95	4.23	94.26	16,000	680	<750	8,600	950	810	2,800	--	--	--	--	--	--	--
	07/24/95	4.71	93.78	4,500	690	<750	4,300	85	430	800	--	--	--	--	--	--	--
	10/25/95	4.04	94.45	12,000	1,000	<750	8,900	390	800	2,000	--	--	--	--	--	--	--
	01/17/96	3.87	94.62	13,000	410	<750	5,300	520	640	2,200	--	--	--	--	--	--	--
	04/18/96	2.67	95.82	31,000	670	<750	5,600	1,900	1,100	4,300	--	--	--	--	--	0.6	--
	07/25/96	4.29	94.20	5,780	689	<750	7,920	189	463	901	--	--	--	--	--	0	1.0
	10/16/96	3.96	94.53	8,680	<250	<750	5,360	252	436	1,120	--	--	--	--	--	0	1.4
	02/27/97	3.67	94.82	16,300	280	<750	6,790	661	832	2,800	--	--	--	--	--	--	0.8
	05/13/97	4.08	94.41	15,800	<250	<750	8,530	1,960	793	3,470	--	--	--	--	--	--	4.6
	08/21/97	4.41	94.08	25,500	<250	<750	8,950	716	852	2,220	--	--	--	--	--	--	4.6
	11/25/97	3.48	95.01	42,400	993	<750	9,070	1,330	1,670	6,620	<20	<20	<20	<20	<20	2.11	--
	02/13/98	3.05	95.44	27,600	455	<750	8,020	664	1,560	5,260	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/19/98	3.71	94.78	54,300	1,300	<750	12,200	2,620	2,340	9,850	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	08/17/98	4.72	93.77	44,300	750	<750	12,100	644	2,490	9,700	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	11/19/98	4.18	94.31	30,100	--	--	8,730	435	2,050	6,530	<20.0	<20.0	<20.0	<20.0	<20.0	--	--
	02/17/99	2.66	95.83	24,300	589	<750	7,550	489	1,940	5,070	<20.0	<20.0	<20.0	<20.0	<20.0	--	--
	05/25/99	3.16	95.33	65,900	2,120	<3,750	8,960	3,990	3,100	12,000	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	08/12/99	3.56	94.93	56,100	991	<750	10,600	1,340	3,660	13,500	<100	<100	<100	<100	<100	--	--
	12/07/99	3.23	95.26	17,700	530	<750	6,290	58.9	1,790	2,290	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	02/10/00	2.91	95.58	20,300	532	<1,490	6,540	421	2,050	3,650	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/31/00	3.60	94.89	44,700	637	<750	9,650	793	3,230	8,840	<10.0	<10.0	<10.0	<10.0	<10.0	--	--
	08/31/00	4.65	93.84	33,800	1,020	<750	10,400	110	3,120	5,260	--	--	--	--	--	--	--
	11/01/00	3.78	94.71	35,800	780	<1,330	7,330	677	2,880	6,850	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	02/02/01	2.94	95.55	14,100	1,560	<750	5,460	146	1,620	2,250	--	--	--	--	--	--	--
	05/02/01	3.88	94.61	35,600	561	<750	5,100	1,270	2,330	7,120	<40.0	<40.0	<40.0	<40.0	<40.0	--	--
	08/14/01	4.55	93.94	41,400	1,660	<563	7,880	491	3,600	8,790	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	11/01/01	4.40	94.09	29,000	1,450	<620	5,180	149	2,480	3,600	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	02/04/02	2.10	96.39	20,800	1,170	<500	4,380	341	1,710	2,190	--	--	--	--	--	--	--
	Destroyed																
MW2A	12/04/02[a]	2.96	96.21	<50.0	332	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
TOC Elevation	03/05/03	2.62	96.55	<50.0	<301	<602	1.21	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
99.17	06/09/03	3.15	96.02	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	<0.200	<1.00	<0.200	<0.200	<0.200	--	--
	12/12/03	1.78	97.39	<50.0	<119	<238	<0.250	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500	<0.500	1.63	--	--
	03/24/04	2.160	97.01	<100[b]	<132	<263	<1.00[b]	<1.00[b]	<1.00[b]	<3.00[b]	<0.500	<0.500	<0.500	<0.500	<0.500	--	--
MTCA Method A Cleanup Level				1000/800[c]	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

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TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington

Well Name	Sample Date	DTW	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	1,2-DCE	CA	1,1-DCA	1,2-DCA	VC	O_2 Lab	O_2 Meter
MW3	07/06/93	4.39	94.18	1,000	–	–	840	25	77	570	–	–	–	–	–	–	–
TOC Elevation	10/11/94	5.54	93.03	21,000	1,200	<750	1,100	21	380	640	–	–	–	–	–	–	–
98.57	01/20/95	5.54	93.03	7,900	2,600	<750	990	13	210	150	4.7	<1.0	<1.0	<2.0	46	–	–
	04/21/95	6.63	91.94	6,300	1,900	<750	100	11	130	91	3.3	1.2	<1.0	1.9	130	–	–
	07/24/95	6.54	92.03	<50	1,700	<750	4.6	<0.5	0.69	<1.0	1.7	<1.0	<1.0	1.2	53	–	–
	10/25/95	5.39	93.18	11,000	2,400	<750	840	5.8	130	34	4.5	<1.0	<1.0	1.5	74	–	–
	01/17/96	6.30	92.27	5,600	930	<750	460	3.8	56	16	2.1	1.7	<1.0	1.3	32	–	–
	04/18/96	3.72	94.85	7,400	1,200	<750	380	5.3	61	22	2.4	1.5	<1.0	1.5	53	0.4	–
	07/25/96	4.74	93.83	4,340	997	<750	372	<1.0	40.2	<10.0	1.21	<1.0	<1.0	1.27	22.3	1.2	1.0
	10/16/96	5.22	93.35	4,040	<250	<750	171	1.85	27.2	5.04	1.04	1.65	<1.00	1.12	32.1	0.4	1.0
	02/27/97	3.79	94.78	2,580	<250	<750	261	<2.50	24.1	6.01	1.47	1.85	<1.00	1.39	13.2	–	0.9
	05/13/97	4.54	94.03	186	<250	<750	119	<1.00	6.85	2.35	<1.00	1.31	<1.00	<1.00	15.8	–	5.0
	08/21/97	4.72	93.85	1,760	<250	<750	136	1.96	18.3	5.45	<1.00	2.24	<1.00	<1.00	21.4	–	5.8
	11/25/97	4.19	94.38	1,640	738	<750	36.3	1.80	5.65	3.21	1.07	<1.00	<1.00	<1.00	18.8	2.49	–
	02/13/98	4.35	94.22	1,850	497	<750	65.6	1.86	4.91	2.99	1.16	1.83	<1.00	<1.00	22.7	–	–
	05/19/98	4.78	93.79	2,850	567	<750	85.8	<5.00	9.07	<5.00	1.03	<1.00	<1.00	<1.00	29.5	–	–
	08/17/98	5.29	93.28	2,990	<250	<750	68.4	3.29	3.57	<5.00	1.51	<1.00	<1.00	<1.00	30.6	–	–
	11/19/98	4.89	93.68	1,650	–	–	40.1	<10.0	2.64	<5.00	1.33	1.05	<1.00	<1.00	47.4	–	–
	02/17/99	Obstructed		–	–	–	–	–	–	–	–	–	–	–	–	–	–
	05/25/99	4.21	94.36	1,100	976	<750	53.8	10.8	4.72	<2.00	<1.00	<1.00	<1.00	<1.00	11.2	–	–
	08/12/99	4.40	94.17	3,030	674	<750	314	23.2	15.0	4.25	<2.00	<2.00	<2.00	<2.00	19.3	–	–
	12/07/99	4.85	93.72	1,910	568	<750	211	12.0	<5.00	<10.0	1.05	1.76	<1.00	<1.00	20.2	–	–
	02/10/00	4.76	93.81	2,080	<250	<750	260	6.55	3.31	<2.30	1.17	<1.00	<1.00	<1.00	15.6	–	–
	05/31/00	4.62	93.95	2,250	489	<750	273	9.06	22.6	7.03	<1.00	<1.00	<1.00	<1.00	<1.00	–	–
	08/31/00	4.97	93.60	3,070	622	<750	268	5.86	9.41	<10.0	–	–	–	–	–	–	–
	11/01/00	4.72	93.85	2,190	761	<1,670	139	3.99	<2.05	<3.75	<1.00	<1.00	<1.00	<1.00	4.47	–	–
	02/02/01	5.85	92.72	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	–	–	–	–	–	–	–
	05/02/01	3.81	94.76	1,300	354	<750	29.8	1.64	1.62	1.87	<1.00	<1.00	<1.00	<1.00	<1.00	–	–
	08/14/01	4.31	94.26	1,250	558	<573	31.2	0.712	1.94	4.34	<1.00	<1.00	<1.00	<1.00	<1.00	–	–
	11/01/01	4.18	94.39	774	704	<500	4.25	<0.500	0.556	1.47	<1.00	<1.00	<1.00	<1.00	<1.00	–	–
	02/04/02	3.91	94.66	881	491	<500	30.4	<0.500	0.753	1.28	–	–	–	–	–	–	–
	05/07/02	4.32	94.25	807	635	<625	49.7	1.45	1.63	4.48	–	–	–	–	–	–	–
	08/02/02	5.11	93.46	859	421	<562	31.7	0.506	1.10	2.17	–	–	–	–	–	–	–
	12/04/02	4.40	94.17	354	402	<500	7.70	<0.500	<0.500	<1.00	–	–	–	–	–	–	–
	03/05/03	2.25	96.32	372	<287	<575	38.9	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	5.15	–	–
	06/09/03	5.55	93.02	834	463	584	138	5.02	2.47	9.41	<4.00	<4.00	<4.00	<4.00	8.44	–	–
	12/12/03	2.310	96.260	96.4	<119	<237	9.5	<0.500	<0.500	<1.50	<0.500	<0.500	<0.500	<0.500	<0.500	–	–
	03/24/04	3.180	95.390	<100	<133	<265	10.7	<1.00	<1.00	<3.00	<0.500	<0.500	<0.500	<0.500	1.63	–	–
MTCA Method A Cleanup Level				1000/800	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

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TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington

Well Name	Sample Date	DTW	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	1,2-DCE	CA	1,1-DCA	1,2-DCA	VC	O_2 Lab	O_2 Meter
MW4	07/06/93	4.78	94.75	<50	320	<1,000	<1.0	<1.0	<1.0	<1.0	9.8	<1.0	<1.0	<1.0	<5.0	--	--
TOC Elevation	10/11/94	5.50	94.03	<50	290	<750	<0.5	<0.5	<0.5	<1.0	9.8	<1.0	<1.0	<1.0	<1.0	--	--
99.53	01/20/95	6.53	93.00	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	8.9	<1.0	<1.0	<1.0	<1.0	--	--
	04/21/95	6.62	92.91	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	6.8	<1.0	<1.0	<1.0	<1.0	--	--
	07/24/95	6.83	92.70	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	8.6	<1.0	<1.0	<0.5	<1.0	--	--
	10/25/95	6.41	93.12	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	11	<1.0	<1.0	<0.5	<1.0	--	--
	01/17/96	6.25	93.28	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	7.8	<1.0	<1.0	<0.5	<1.0	--	--
	04/18/96	4.13	95.40	--	--	--	--	--	--	--	--	--	--	--	--	8	--
	07/25/96	4.88	94.65	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	5.15	<1.0	<1.0	<0.5	<1.0	2.0	2.7
	10/16/96	6.55	92.98	--	--	--	--	--	--	--	--	--	--	--	--	4.8	2.4
	02/27/97	6.05	93.48	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	8.33	<1.00	<1.00	<1.00	<1.00	--	2.2
	05/13/97	6.26	93.27	--	--	--	--	--	--	--	--	--	--	--	--	--	7.3
	08/21/97	6.04	93.49	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	10.3	<1.00	<1.00	<1.00	<1.00	--	6.5
	11/25/97	4.88	94.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/13/98	4.89	94.64	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	7.76	<1.00	<1.00	<1.00	<1.00	--	--
	05/19/98	5.11	94.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/17/98	5.20	94.33	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	5.38	<1.00	<1.00	<1.00	<1.00	--	--
	11/19/98	4.95	94.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/17/99	4.72	94.81	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	9.01	<1.00	<1.00	<1.00	<1.00	--	--
	05/25/99	4.66	94.87	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	6.96	<1.00	<1.00	<1.00	<1.00	--	--
	08/12/99	4.98	94.55	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/07/99	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/10/00	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/31/00	4.78	94.75	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	6.11	<1.00	<1.00	<1.00	<1.00	--	--
	08/31/00	5.44	94.09	<50.0	<463	<1390	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	11/01/00	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/02/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/02/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/14/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/01/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/04/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/07/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/02/02	5.00	94.53	<50.0	<352	<704	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	12/04/02	4.29	95.24	<50.0	<250	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	03/05/03[NP]	4.80	94.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/03	4.96	94.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/03	4.025	95.505	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/24/04	3.450	96.080	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level				1000/800[a]	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

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TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington
Page 5 of 6

Well Name	Sample Date	DTW	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	1,2-DCE	CA	1,1-DCA	1,2-DCA	VC	O_2 Lab	O_2 Meter
MW5	10/11/94	5.75	87.21	55	660	<750	2.8	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
TOC Elevation	01/20/95	3.04	89.92	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
92.96	04/21/95	3.57	89.39	<50	<250	<750	<0.70	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	07/24/95	4.37	88.59	<50	<250	<750	<0.88	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	10/25/95	3.87	89.09	<50	<250	<750	4.1	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	01/17/96	2.86	90.10	<50	<250	<750	<0.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	04/18/96	3.19	89.77	<50	<250	<750	2.9	<0.5	<0.5	<1.0	--	--	--	--	--	4.8	--
	07/25/96	4.06	88.90	<50	<250	<750	1.97	<0.5	<0.5	<1.0	--	--	--	--	--	0.6	1.2
	10/16/96	3.87	89.09	<50	<250	<750	1.02	<0.500	<0.500	<1.00	--	--	--	--	--	2.0	1.6
	02/27/97	3.09	89.87	<50	<250	<750	0.836	<0.500	<0.500	<1.00	--	--	--	--	--	--	2.2
	05/13/97	3.05	89.91	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	5.1
	08/21/97	3.89	89.07	<50	348	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	6.6
	11/25/97	2.53	90.43	<50	266	<750	0.876	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	3.02	--
	02/13/98	3.02	89.94	88.9	<250	<750	<6.00	<0.500	<0.500	<2.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/19/98	3.65	89.31	160	<250	<750	<5.00	<1.00	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/17/98	4.53	88.43	78.8	<250	<750	<3.00	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	11/19/98	3.33	89.63	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	02/17/99	3.21	89.75	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/25/99	3.66	89.30	<50.0	<250	<750	0.800	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/12/99	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/07/99	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/10/00	Unable to locate		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/31/00	Unable to locate		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/31/00	Unable to locate		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/01/00	Unable to locate		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/02/01	Unable to locate		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/02/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/14/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	11/01/01	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/04/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/07/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	08/02/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/04/02	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/05/03	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/03	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/03	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	03/24/04	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level				1000/800[a]	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

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TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington

Well Name	Sample Date	DTW	GW Elev.	TPH-G	TPH-D	TPH-O	B	T	E	X	1,2-DCE	CA	1,1-DCA	1,2-DCA	VC	O_2 Lab	O_2 Meter
MW6	10/11/94	5.85	91.99	<50	<250	<750	3.2	<0.5	0.53	<1.0	--	--	--	--	--	--	--
TOC Elevation	01/20/95	2.36	95.48	<50	260	<750	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
97.84	04/21/95	3.34	94.50	<50	260	<750	4.5	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	07/24/95	5.00	92.84	150	330	<750	34	<0.5	2.8	<1.0	--	--	--	--	--	--	--
	10/25/95	4.97	92.87	290	440	<750	28	<0.5	2.1	<1.0	--	--	--	--	--	--	--
	01/17/96	2.15	95.69	<50	250	<750	1.6	<0.5	<0.5	<1.0	--	--	--	--	--	--	--
	04/18/96	3.34	94.50	61	250	<750	5.9	<0.5	0.54	<1.0	--	--	--	--	--	8	--
	07/25/96	4.22	93.62	149	321	<750	76.2	<0.5	3.68	1.92	--	--	--	--	--	2.2	2.6
	10/16/96	4.24	93.60	68.3	<250	<750	10.6	<0.500	0.760	<1.00	--	--	--	--	--	1.0	2.5
	02/27/97	4.41	93.43	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	2.6
	05/13/97	4.32	93.52	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	7.9
	08/21/97	5.75	92.09	<50	370	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	6.6
	11/25/97	2.09	95.75	<50	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	4.83	--
	02/13/98	4.23	93.61	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/19/98	4.26	93.58	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/17/98	6.46	91.38	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	1.04	<1.00	--	--
	11/19/98	3.15	94.69	<50.0	--	--	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	02/17/99	3.54	94.30	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	05/25/99	4.86	92.98	<50.0	341	<750	0.601	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/12/99	NM	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/07/99	3.11	94.73	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	02/10/00	3.60	94.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/31/00	4.61	93.23	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/31/00	6.18	91.66	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	11/01/00	5.07	92.77	<50.0	<250	<750	0.688	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	02/02/01	4.05	93.79	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	05/02/01	4.04	93.80	<50.0	<250	<750	<0.500	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	--	--
	08/14/01	6.20	91.64	60.0	341	<560	0.538	<0.500	<0.500	<1.00	<1.00	<1.00	<1.00	2.08	<1.00	--	--
	11/01/01	Obstructed		--	--	--	--	--	--	--	--	--	--	--	--	--	--
	02/04/02	1.88	95.96	<50.0	261	<500	<0.500	<0.500	<0.500	<1.00	--	--	--	--	--	--	--
	05/07/02	4.70	93.14	121	467	<500	4.42	0.773	1.73	2.11	--	--	--	--	--	--	--
	08/02/02	5.39	92.45	460	418	<500	46.9	0.804	19.8	2.52	--	--	--	--	--	--	--
	12/04/02	4.58	93.26	228	512	<602	12.5	<0.500	7.89	<1.00	--	--	--	--	--	--	--
	03/05/03	4.35	93.49	204	<284	<568	5.88	0.952	7.43	<1.00	1.40	<1.00	1.40	<1.00	<1.00	--	--
	06/09/03	4.89	92.95	97.0	<250	<500	1.05	2.09	1.23	4.43	<0.200	<1.00	<0.200	1.77	<0.200	--	--
	12/12/03	2.830	95.010	130	221	267	1.49	4.94	1.02	<1.50	<0.500	<0.500	<0.500	0.575	<0.500	--	--
	03/24/04	4.140	93.70	<100	<125	<251	<1.00	<1.00	<1.00	<3.00	<0.500	<0.500	<0.500	0.773	<0.500	--	--
MTCA Method A Cleanup Level				1000/800[a]	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

EXPLANATION:

All concentrations are in ug/L (ppb).
TOC = Top of casing. Wellhead elevations were taken from prior consultant's reports.
DTW = Depth to water in feet below top of casing
GW Elev. = Groundwater elevation relative to top of casing elevations
TPH-G = Total Petroleum Hydrocarbons as Gasoline by Ecology Method NWTPH-Gx
TPH-D and TPH-O = Total Petroleum Hydrocarbons as Diesel and Oil, respectively, by Ecology Method NWTPH-Dx
B = Benzene; T = Toluene; E = Ethylbenzene; X = Total Xylenes
Prior to 12/12/03 BTEX = Aromatic compounds by EPA Method 8020 or EPA 8021B; refer to official laboratory reports
After 12/12/03 BTEX = Aromatic compounds by EPA Method 5030/8260B; refer to official laboratory reports
1,2-DCE = Cis-1,2-Dichloroethene; CA = Chloroethane; 1,1-DCA = 1,1-Dichloroethane; 1,2-DCA = 1,2-Dichloroethane; VC = Vinyl Chloride
[b] The RL stated in the official laboratory report is equivalent to the Practical Quantitation Limit (PQL) and is used, where applicable, as the value reported in the table.
[c] The MRL is taken to be 1/2 of the PQL as given in the official laboratory report

1,2-DCE, CA, 1,1-DCA, 1,2-DCA, and VC by EPA 8010B (modified) or EPA 8260B; refer to official laboratory reports
< = Less than the stated laboratory reporting limit; see notes b & c
NM = Not Measured; NA = Not Applicable; -- = Not Analyzed or Sampled
Shaded values equal or exceed MTCA Method A Cleanup Levels.
[a] Concentration levels stated by MTCA Method A for TPH-G are 1000 µg/L when no benzene is present and 800 µg/L when benzene is present.
Data collected before 12/12/03 are taken from prior consultants
O_2 Lab = Dissolved oxygen by APHA/EPA Methods; results in parts per million (ppm)
O_2 Meter = Dissolved oxygen in parts per million (ppm) measured with field instrumentation
* samples from MW2A indicated as MW2R on laboratory report

SEVERN TRENT STL

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TRANSMITTAL MEMORANDUM

DATE: April 13, 2004

TO: Marc Sauze
SECOR International Inc.
12034 134th Ct. NE, Suite 102
Redmond, WA 98052

PROJECT: Blaine 5028

REPORT NUMBER: 120211

TOTAL NUMBER OF PAGES: _____

Enclosed are the test results for three samples received at STL Seattle on March 25, 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

Sample Identification:

Lab. No.	Client ID	Date/Time Sampled	Matrix
120211-1	MW 2A	03-24-04 09:45	Liquid
120211-2	MW 6	03-24-04 10:20	Liquid
120211-3	MW 3	03-24-04 10:55	Liquid

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 2A
Lab ID:	120211-01
Date Received:	3/25/2004
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
o-terphenyl	102		50	150

Analyte		**Result (mg/L)**	**PQL**	**MRL**	**Flags**
#2 Diesel	ND		0.263	0.132	
Motor Oil	ND		0.526	0.263	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 6
Lab ID:	120211-02
Date Received:	3/25/2004
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
o-terphenyl	108		50	150

		Result			
Analyte		**(mg/L)**	**PQL**	**MRL**	**Flags**
#2 Diesel	ND		0.251	0.125	
Motor Oil	ND		0.501	0.251	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 3
Lab ID:	120211-03
Date Received:	3/25/2004
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
o-terphenyl	81.3		50	150

Analyte	**Result (mg/L)**	**PQL**	**MRL**	**Flags**
#2 Diesel	ND	0.265	0.133	
Motor Oil	ND	0.531	0.265	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 2A
Lab ID:	120211-01
Date Received:	3/25/2004
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	95		80	120
Fluorobenzene	110		80	120
Toluene-D8	107		80	120
Ethylbenzene-d10	110		80	120
Bromofluorobenzene	109		80	120
Trifluorotoluene	103		80	120

Analyte	Result (ug/L)	PQL	MRL	Flags
Chloromethane	ND	2	1	
Vinyl chloride	ND	1	0.5	
Bromomethane	ND	2.5	1.25	
Chloroethane	ND	1	0.5	
Trichlorofluoromethane	ND	1	0.5	
1,1-Dichloroethene	ND	1	0.5	
Methylene chloride	ND	2	1	
trans-1,2-Dichloroethene	ND	1	0.5	
1,1-Dichloroethane	ND	1	0.5	
cis-1,2-Dichloroethene	ND	1	0.5	
Chloroform	ND	1	0.5	
1,1,1-Trichloroethane	ND	1	0.5	
Carbon Tetrachloride	ND	1	0.5	
1,2-Dichloroethane	ND	1	0.5	
Trichloroethene	ND	1	0.5	
1,2-Dichloropropane	ND	1	0.5	
Bromodichloromethane	ND	1	0.5	
cis-1,3-Dichloropropene	ND	1	0.5	
trans-1,3-Dichloropropene	ND	1	0.5	
1,1,2-Trichloroethane	ND	1	0.5	
Tetrachloroethene	ND	1	0.5	
Dibromochloromethane	ND	1	0.5	
Chlorobenzene	ND	1	0.5	
Bromoform	ND	1	0.5	
1,1,2,2-Tetrachloroethane	ND	1	0.5	
1,3-Dichlorobenzene	ND	1	0.5	

STL Seattle

Volatile Organics by USEPA Method 5030/8260B data for 120211-01 continued...

Analyte	Result (ug/L)	PQL	MRL
1,4-Dichlorobenzene	ND	1	0.5
1,2-Dichlorobenzene	ND	1	0.5

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 6
Lab ID:	120211-02
Date Received:	3/25/2004
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	96.9		80	120
Fluorobenzene	105		80	120
Toluene-D8	111		80	120
Ethylbenzene-d10	101		80	120
Bromofluorobenzene	93.6		80	120
Trifluorotoluene	105		80	120

Analyte	Result (ug/L)	PQL	MRL	Flags
Chloromethane	ND	2	1	
Vinyl chloride	ND	1	0.5	
Bromomethane	ND	2.5	1.25	
Chloroethane	ND	1	0.5	
Trichlorofluoromethane	ND	1	0.5	
1,1-Dichloroethene	ND	1	0.5	
Methylene chloride	ND	2	1	
trans-1,2-Dichloroethene	ND	1	0.5	
1,1-Dichloroethane	ND	1	0.5	
cis-1,2-Dichloroethene	ND	1	0.5	
Chloroform	ND	1	0.5	
1,1,1-Trichloroethane	ND	1	0.5	
Carbon Tetrachloride	ND	1	0.5	
1,2-Dichloroethane	0.773	1	0.5	J
Trichloroethene	ND	1	0.5	
1,2-Dichloropropane	ND	1	0.5	
Bromodichloromethane	ND	1	0.5	
cis-1,3-Dichloropropene	ND	1	0.5	
trans-1,3-Dichloropropene	ND	1	0.5	
1,1,2-Trichloroethane	ND	1	0.5	
Tetrachloroethene	ND	1	0.5	
Dibromochloromethane	ND	1	0.5	
Chlorobenzene	ND	1	0.5	
Bromoform	ND	1	0.5	
1,1,2,2-Tetrachloroethane	ND	1	0.5	
1,3-Dichlorobenzene	ND	1	0.5	

STL Seattle

Volatile Organics by USEPA Method 5030/8260B data for 120211-02 continued...

Analyte		Result (ug/L)	PQL	MRL
1,4-Dichlorobenzene	ND		1	0.5
1,2-Dichlorobenzene	ND		1	0.5

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 3
Lab ID:	120211-03
Date Received:	3/25/2004
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	94.4		80	120
Fluorobenzene	105		80	120
Toluene-D8	105		80	120
Ethylbenzene-d10	109		80	120
Bromofluorobenzene	100		80	120
Trifluorotoluene	105		80	120

Analyte	Result (ug/L)	PQL	MRL	Flags
Chloromethane	4.18	2	1	
Vinyl chloride	1.63	1	0.5	
Bromomethane	ND	2.5	1.25	
Chloroethane	ND	1	0.5	
Trichlorofluoromethane	ND	1	0.5	
1,1-Dichloroethene	ND	1	0.5	
Methylene chloride	ND	2	1	
trans-1,2-Dichloroethene	ND	1	0.5	
1,1-Dichloroethane	ND	1	0.5	
cis-1,2-Dichloroethene	ND	1	0.5	
Chloroform	ND	1	0.5	
1,1,1-Trichloroethane	ND	1	0.5	
Carbon Tetrachloride	ND	1	0.5	
1,2-Dichloroethane	ND	1	0.5	
Trichloroethene	ND	1	0.5	
1,2-Dichloropropane	ND	1	0.5	
Bromodichloromethane	ND	1	0.5	
cis-1,3-Dichloropropene	ND	1	0.5	
trans-1,3-Dichloropropene	ND	1	0.5	
1,1,2-Trichloroethane	ND	1	0.5	
Tetrachloroethene	ND	1	0.5	
Dibromochloromethane	ND	1	0.5	
Chlorobenzene	ND	1	0.5	
Bromoform	ND	1	0.5	
1,1,2,2-Tetrachloroethane	ND	1	0.5	
1,3-Dichlorobenzene	ND	1	0.5	

STL Seattle

Volatile Organics by USEPA Method 5030/8260B data for 120211-03 continued...

Analyte		Result (ug/L)	PQL	MRL
1,4-Dichlorobenzene	ND		1	0.5
1,2-Dichlorobenzene	ND		1	0.5

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW 2A
Lab ID:	120211-01
Date Received:	3/25/2004
Date Prepared:	3/31/2004
Date Analyzed:	3/31/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
a,a,a-Trifluorotoluene	113		50	150
1-Chloro-3-fluorobenzene	103		87	115
Bromofluorobenzene	100		87	118
Pentafluorobenzene	108		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	SECOR International Inc.
Client ID:	MW 6
Lab ID:	120211-02
Date Received:	3/25/2004
Date Prepared:	3/31/2004
Date Analyzed:	3/31/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
a,a,a-Trifluorotoluene	115		50	150
1-Chloro-3-fluorobenzene	102		87	115
Bromofluorobenzene	99.7		87	118
Pentafluorobenzene	107		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	SECOR International Inc.
Client ID:	MW 3
Lab ID:	120211-03
Date Received:	3/25/2004
Date Prepared:	3/31/2004
Date Analyzed:	3/31/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
a,a,a-Trifluorotoluene	107		50	150
1-Chloro-3-fluorobenzene	101		87	115
Bromofluorobenzene	98.2		87	118
Pentafluorobenzene	102		81	126

Analyte		**Result (mg/L)**	**RL**	**Flags**
Gasoline By NWTPH-G	ND		0.1	
Benzene		0.0107	0.001	
Toluene	ND		0.001	
Ethylbenzene	ND		0.001	
m&p-Xylene	ND		0.002	
o-Xylene	ND		0.001	

STL Seattle

Lab ID:	Method Blank - DW0596
Date Received:	-
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
o-terphenyl	98.4		50	150

Analyte		**Result (mg/L)**	**PQL**	**MRL**	**Flags**
#2 Diesel	ND		0.25	0.125	
Motor Oil	ND		0.5	0.25	

STL Seattle

Blank Spike/Blank Spike Duplicate Report

Lab ID:	DW0596
Date Prepared:	3/29/2004
Date Analyzed:	3/30/2004
QC Batch ID:	DW0596

Diesel and Motor Oil by NWTPH-Dx Modified with Sulfuric Acid 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	5.07	101	5.08	102	0.99	
Motor Oil	0	5	5.24	105	5.54	111	5.6	

STL Seattle

Lab ID:	Method Blank - VOA680
Date Received:	-
Date Prepared:	3/29/2004
Date Analyzed:	3/29/2004
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	High
Dibromofluoromethane	96.8		80	120
Fluorobenzene	107		80	120
Toluene-D8	102		80	120
Ethylbenzene-d10	106		80	120
Bromofluorobenzene	103		80	120
Trifluorotoluene	92		80	120

Analyte	Result (ug/L)	PQL	MRL	Flags
Chloromethane	ND	2	1	
Vinyl chloride	ND	1	0.5	
Bromomethane	ND	2.5	1.25	
Chloroethane	ND	1	0.5	
Trichlorofluoromethane	ND	1	0.5	
1,1-Dichloroethene	ND	1	0.5	
Methylene chloride	ND	2	1	
trans-1,2-Dichloroethene	ND	1	0.5	
1,1-Dichloroethane	ND	1	0.5	
cis-1,2-Dichloroethene	ND	1	0.5	
Chloroform	ND	1	0.5	
1,1,1-Trichloroethane	ND	1	0.5	
Carbon Tetrachloride	ND	1	0.5	
1,2-Dichloroethane	ND	1	0.5	
Trichloroethene	ND	1	0.5	
1,2-Dichloropropane	ND	1	0.5	
Bromodichloromethane	ND	1	0.5	
cis-1,3-Dichloropropene	ND	1	0.5	
trans-1,3-Dichloropropene	ND	1	0.5	
1,1,2-Trichloroethane	ND	1	0.5	
Tetrachloroethene	ND	1	0.5	
Dibromochloromethane	ND	1	0.5	
Chlorobenzene	ND	1	0.5	
Bromoform	ND	1	0.5	
1,1,2,2-Tetrachloroethane	ND	1	0.5	
1,3-Dichlorobenzene	ND	1	0.5	

STL Seattle

Volatile Organics by USEPA Method 5030/8260B data for VOA680 continued...

Analyte		Result (ug/L)	PQL	MRL
1,4-Dichlorobenzene	ND		1	0.5
1,2-Dichlorobenzene	ND		1	0.5

STL Seattle

Blank Spike/Blank Spike Duplicate Report

Lab ID:	VOA680
Date Prepared:	3/29/2004
Date Analyzed:	3/29/2004
QC Batch ID:	VOA680

Volatile Organics by USEPA Method 5030/8260B

Compound Name	Blank Result (ug/L)	Spike Amount (ug/L)	BS Result (ug/L)	BS % Rec.	BSD Result (ug/L)	BSD % Rec.	RPD	Flag
1,1-Dichloroethene	0	5	5.09	102	4.91	98.2	-3.8	
Benzene	0	5	5.04	101	4.92	98.4	-2.6	
Trichloroethene	0	5	4.91	98.2	4.88	97.6	-0.61	
Toluene	0	5	4.88	97.5	5.09	102	4.5	
Chlorobenzene	0	5	4.51	90.2	4.94	98.8	9.1	

STL Seattle

Lab ID:	Method Blank - GB3764
Date Received:	-
Date Prepared:	3/31/2004
Date Analyzed:	3/31/2004
% Solids	-
Dilution Factor	1

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

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
a,a,a-Trifluorotoluene	109		50	150
1-Chloro-3-fluorobenzene	100		87	115
Bromofluorobenzene	97.2		87	118
Pentafluorobenzene	102		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:	GB3764
Date Prepared:	3/31/2004
Date Analyzed:	3/31/2004
QC Batch ID:	GB3764

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	1.11	88.8	1.12	89.7	1	
Benzene	0	0.0155	0.0173	112	0.0176	114	1.8	
Toluene	0	0.0945	0.077	81.5	0.0777	82.2	0.86	
Ethylbenzene	0	0.0223	0.0175	78.5	0.0181	81	3.1	
m&p-Xylene	0	0.0782	0.0617	78.9	0.0633	80.9	2.5	n
o-Xylene	0	0.0314	0.0248	79	0.0254	80.9	2.4	

SEVERN TRENT STL

STL Seattle
5755 8th Street East
Tacoma, WA 98424

Tel: 253 922 2310
Fax: 253 922 5047
www.stl-inc.com

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 presence of this analyte was not verified per WAC 246-290-010. 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

MRL: Method Reporting Limit

N: See analytical narrative

ND: Not Detected

PQL: Practical Quantitation Limit

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.

Chain of Custody Record

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

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SEVERN TRENT STL

00023

Client	Project Manager	Date	Chain of Custody Number
SECOR	Marc Sauze	032404	09154
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
12034 134TH CT NE #102	425-372-1600 425-372-1650		
City / State / Zip Code	**Site Contact / Lab Contact**		
Redmond / WA / 98052			
Project Name and Location (State)	**Carrier/Waybill Number**		
Blaine 5028			
Contract/Purchase Order/Quote No.			
1344SEC001			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: NWTPH-Gx	BTEX	HVOC	NWTPH-Dx
MW2A	032404	0945		X						X			X	X	X	X
MW6	↓	1020		X						X			X	X	X	X
MW3	↓	1055		X						X			X	X	X	X

Special Instructions/ Conditions of Receipt

Cooler: ☐ Yes ☐ No Cooler Temp:_____

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

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

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

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Michael Mc	032504	0600	Gregg STL	3-25-04	1000
2.	Gregg	3/25/04	1120		3-25-04	2:25
3.						

Comments

SECOR

DAILY FIELD LOG

Page: 1 of 1
Date: 032404

Client: ConocoPhillips	Site No: 5028 Blaine	Project No: 01CP.05028.04

Scope of Work: x Quarter Monitoring/Sampling **1344SEC001**

Describe Daily Activities:

Gauged 5 monitoring wells.
Purged 3 monitoring wells.
Sampled 3 monitoring wells.

Number of drums left on site: 1

Field Notes:

On site at 0800. Gauge MW4 at 8:45. Gauge MW1 at 0900 Gauge MW2A at 0910 and sample/purge 0945. Gauge MW6 at 1005 purge the sample at 1020. Gauge MW3 at 1030. purge the sample at 1055.

Drum about 3/4 full.

Arrived on Site: 0800

Departed Site: 1135

Decontamination Procedures: **3-Stage (Alconox Wash, Tap Water Rinse, & Distilled Water Rinse)**

Daily Health and Safety Log Completed?:

Utility Locations Checked?:

Important Conversations:
none

Important Changes in Scope of Work:
none

Weather Conditions: 45°F rain

Subcontractors On Site: none

SECOR Personnel On Site: M. McMahon

Signed: [signature]

Date: 032404

SECOR

INTERNATIONAL INCORPORATED

MONITORING & SAMPLING LOG

Page 1 of 1

Project Name: 5028 Blaine

Date:

Project Number: 01CP.05028.04

No. of Monitoring Wells Gauge:

SECOR Rep: mm

Checked by:

No. of Monitoring Wells Sampled:

MONITORING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #

Dissolved Oxygen Meter Type/ID: YSI Model 55 # _____ Calibration:_____ ft above mean sea level

Sampling Method: _____Teflon Bailer _____Disposable Bailer ___X___Other: Dedicated Pump Tubing; Peristaltic Pump

Decontamination Method: _____Steam / High Pressure Wash ___x___3 Stage (Alconox, Tap & DI rinse) _____Other:_____

MONITORING / SAMPLING DATA

Well I.D.	Previous Quarter DTW	Previous Quarter Gas/Benz (µg/L)	Depth to Floating Product (ft)	Current DTW (ft)	Floating Product Thickness	Total Depth	Meas. Time	Casing Elevation[1]	Groundwater Elevation	Corrected Groundwater Elevation[2]	Comments
MW-1	3.57			3.54		12.5	0900				
MW-2A	1.78			2.16		14.4	0910				
MW-3	2.31			3.18		12.6	1030				
MW-4	4.03			3.45		12.4	0845				
MW-6	2.83			4.14		14.9	1005				

SAMPLING INFORMATION

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
6 VOAs	N	HCL & Ice	TPH-Gx / BTEX / HVOCs
1 L Amber	N	HCL & Ice	TPH-Dx

Notes: 1 = feet from mean sea level

2 = elevation adjusted by adding (.75 x product thickness) to measured water elevation

SECOR
INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Well No: MW2A
Project Name: 5028 Blaine
Date: 032404
Project Number: 01CP.05028.04
Sample Time: 0945
SECOR Rep: mm
Checked by:
Sample No:

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #

Purging Equipment / Method: ___ Vac Truck ___Bailer __X_Submersible Pump ___Peristaltic

pH Temp/Conductivity Meter Type / ID:

Sampling Method: ____Teflon Bailer ____Disposable Bailer ___x__Other: Peristaltic

Decontamination Method: ___Steam / High Pressure Wash _x__3 Stage (Alconox, Tap & DI rinse) Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): (8) 10 12
Casing Diameter (in): (2) 4 6
Depth to Water (DTW_1) (ft): 2.16
Total Well Depth (DTB) (ft): 14.4
Water Column: 12.24
Floating Product:
Thickness (in):
Casing Volume (gal): 1.96
3 Casing Volumes (gal): 5.88

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	ORP	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
	Started Purging						
920		~6					

Maximum Drawdown (DTW_2) (ft) =
Pump Rate (GPM) =

__X__ Fast Recharging Well
___ Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 0945
Depth to Water at time of sampling (DTW_3):

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives		Analytical Parameters
6 VOAs	N	HCL & Ice		TPH-Gx / BTEX / HVOCs
1 L Amber	N	HCL & Ice		TPH-Dx

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 (DTB-DTW_1)
2	10	1.14 (DTB-DTW_1)
4	10	1.50 (DTB-DTW_1)
4	12	1.95 (DTB-DTW_1)
6	10	2.11 (DTB-DTW_1)

Notes:

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(\quad)-(\quad)}{(\quad)-(\quad)} = \_\_\_\_$$

$$= \_\_\_\_ \%$$

80% Recharge = _____

SECOR
INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Well No: MW3
Project Name: 5028 Blaine
Date: 032404
Project Number: 01CP.05028.04
Sample Time: 1055
SECOR Rep: MM
Checked by:
Sample No:

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #
Purging Equipment / Method: ___ Vac Truck ___ Bailer __X_ Submersible Pump ___ Peristaltic
pH Temp/Conductivity Meter Type / ID:
Sampling Method: ____ Teflon Bailer ____ Disposable Bailer __x__ Other: Peristaltic
Decontamination Method: ___ Steam / High Pressure Wash _x_ 3 Stage (Alconox, Tap & DI rinse) Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): 8 10 12
Casing Diameter (in): 2 4 6
Depth to Water (DTW_1) (ft): 3.18
Total Well Depth (DTB) (ft): 12.6
Water Column: 9.42
Floating Product:
Thickness (in):
Casing Volume (gal): 1.51
3 Casing Volumes (gal): 4.52

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	ORP	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
	Started Purging						
1035		~ 4.6					

Maximum Drawdown (DTW_2) (ft) =
Pump Rate (GPM) =
____ Fast Recharging Well
____ Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1055
Depth to Water at time of sampling (DTW_3):

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives		Analytical Parameters
6 VOAs	N	HCL & Ice		TPH-Gx / BTEX / HVOCs
1 L Amber	N	HCL & Ice		TPH-Dx

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes:

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(\quad)-(\quad)}{(\quad)-(\quad)} = \_\_\_\_$$

$$= \_\_\_\_ \%$$

80% Recharge = _____

SECOR
INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Project Name:	5028 Blaine
Project Number:	01CP.05028.04
SECOR Rep: mm	Checked by:
Well No:	MW6
Date:	032404
Sample Time:	1020
Sample No:	

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #

Purging Equipment / Method: ___ Vac Truck ___ Bailer _X_ Submersible Pump ___ Peristaltic

pH Temp/Conductivity Meter Type / ID:

Sampling Method: ____ Teflon Bailer ____ Disposable Bailer __x__ Other: Peristaltic

Decontamination Method: ___ Steam / High Pressure Wash _x_ 3 Stage (Alconox, Tap & DI rinse) Other:

WELL SPECIFICATIONS & MEASUREMENTS

Borehole Diameter (in): (8) 10 12

Casing Diameter (in): (2) 4 6

Depth to Water (DTW_1) (ft): 4.14

Total Well Depth (DTB) (ft): 14.9

Water Column: 10.76

Floating Product:

Thickness (in):

Casing Volume (gal): 1.72

3 Casing Volumes (gal): 5.16

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	ORP	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
	Started Purging						
1010		25.2					

Maximum Drawdown (DTW_2) (ft) =

Pump Rate (GPM) =

____ Fast Recharging Well

____ Slow Recharging Well

SAMPLING INFORMATION

Time Sampled: 1020

Depth to Water at time of sampling (DTW_3):

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives		Analytical Parameters
6 VOAs	N	HCL & Ice		TPH-Gx / BTEX / HVOCs
1 L Amber	N	HCL & Ice		TPH-Dx

BOREHOLE VOLUME CALCULATIONS

The calculation of one borehole volume is based on the formula in the SAM Manual.

Casing Diameter (in)	Borehole Diameter (in)	Calculated Borehole Volume (gal)
2	8	.77 ($DTB-DTW_1$)
2	10	1.14 ($DTB-DTW_1$)
4	10	1.50 ($DTB-DTW_1$)
4	12	1.95 ($DTB-DTW_1$)
6	10	2.11 ($DTB-DTW_1$)

Notes:

RECOVERY CALCULATIONS

$$\% \text{ of Recovery} = 1 - \frac{(DTW_1) - (DTW_3)}{(DTW_1) - (DTW_2)} \times 100$$

$$\% \text{ of Recovery} = 1 - \frac{(\quad)-(\quad)}{(\quad)-(\quad)} = \_\_\_\_$$

$$= \_\_\_\_ \%$$

80% Recharge = ____

SECOR

International Incorporated

Monitoring Well Inspection Report

Site No. & Name: 5028 Blaine

Date: 032404

Project Number: 01CP.05028.04

Field Personnel: MM

	Well Location Number:		MW 4	MW 1	MW2A	MW6	MW3			
EXTERIOR	Well Perimeter Seal Condition	G-Good P-Poor	P	P	G	P	P			
	Well Structure Drainage	G-Good P-Poor	P	P	G	P	P			
	Properly Secured	Y-Yes N-No	N	N	Y	N	N			
	Type of Well Vault (E=EMCO Wheaton M=Morrison V=Vault)									
INTERIOR	Type of Well Seal (Dirt, Concrete, etc.)		C	C	C	C	C			
	Well Casing Type (i.e. 2" or 4")		2	2	2	2	2			
	Locking Cap Condition	G-Good P-Poor	P	P	G	P	P			
	Rubber Seal Condition	G-Good P-Poor	P	P	G	P	P			
	Lock on Well	Y-Yes N-No	N	N	N	N	N			
	Liquid Present in Well Vault	Y-Yes N-No	Y-Full	Y-Full	N	Y	Y			

	Well Location Number:									
EXTERIOR	Well Perimeter Seal Condition	G-Good P-Poor								
	Well Structure Drainage	G-Good P-Poor								
	Properly Secured	Y-Yes N-No								
	Type of Well Vault (E=EMCO Wheaton M=Morrison V=Vault)									
INTERIOR	Type of Well Seal (Dirt, Concrete, etc.)									
	Well Casing Type (i.e. 2" or 4")									
	Locking Cap Condition	G-Good P-Poor								
	Rubber Seal Condition	G-Good P-Poor								
	Lock on Well	Y-Yes N-No								
	Liquid Present in Well Vault	Y-Yes N-No								

Comments: