release 1855
WAOCAL #5028
Blaine

DATE: Feb 17th, 2004

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) [4th - 2003]:

- On 12/12/03, 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). 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; BTEX and Halogenated Volatile Organic Compounds (HVOCs) per USEPA Method 5030/8260B.

WORK PROPOSED FOR NEXT QUARTER [1st - 2004]:

- Measure depth to water of five (MW-1 through MW-4 and MW-6) and purge/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:	1.78 ft. (MW-2A)	(Measured Feet Below
	to 4.03 ft. (MW-4)	Top of Well Casing)
Groundwater Gradient:	Southerly and Westerly	(Direction)
	0.02 ft/ft	(Magnitude)
Maximum TPH-G Concentrations:	130 µg/L / MW-6	(ppb / well ID)
Maximum TPH-D Concentrations:	221 µg/L / MW-6	
Maximum TPH-O Concentrations:	267 µg/L / MW-6	
Maximum Benzene Concentrations:	9.5 µg/L / MW-3	(ppb / well ID)
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 (WW) or	WW - None	(Type)
Surface Waters (SW) w/in 2,000 ft:	SW - 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 MTCA Method A Cleanup Levels for Groundwater (MTCA A). Gasoline range hydrocarbons were detected in MW-3 and MW-6 at concentrations of 96.4 µg/L and 130 µg/L respectively. Diesel range hydrocarbons were detected in MW-6 at a concentration of 221 µg/L. Oil range hydrocarbons were detected in MW-6 at a concentration of 267 µg/L.

- Benzene was detected above MTCA A in MW-3 with a concentration of 9.5 µg/L,

entered CM 3/8/04

- Vinyl Chloride was detected above MTCA A in MW-2A at a concentration of 1.63 µg/L. 1,2-Dichloroethane (1,2-DCA) was detected in MW-6 at a concentration of 0.575 µg/L. The detection of 1,2-DCA is near the laboratory method reporting limit.
- Groundwater monitoring results and trends are generally consistent with past monitoring events.
- One drum containing approximately 25 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 (12/04/02– 12/12/03)
Table 1: Cumulative Summary of Groundwater Elevations and Sample Analytical Results
Laboratory Analytical Report and Chain of Custody Record
Groundwater Monitoring Field Data Records

Prepared By:

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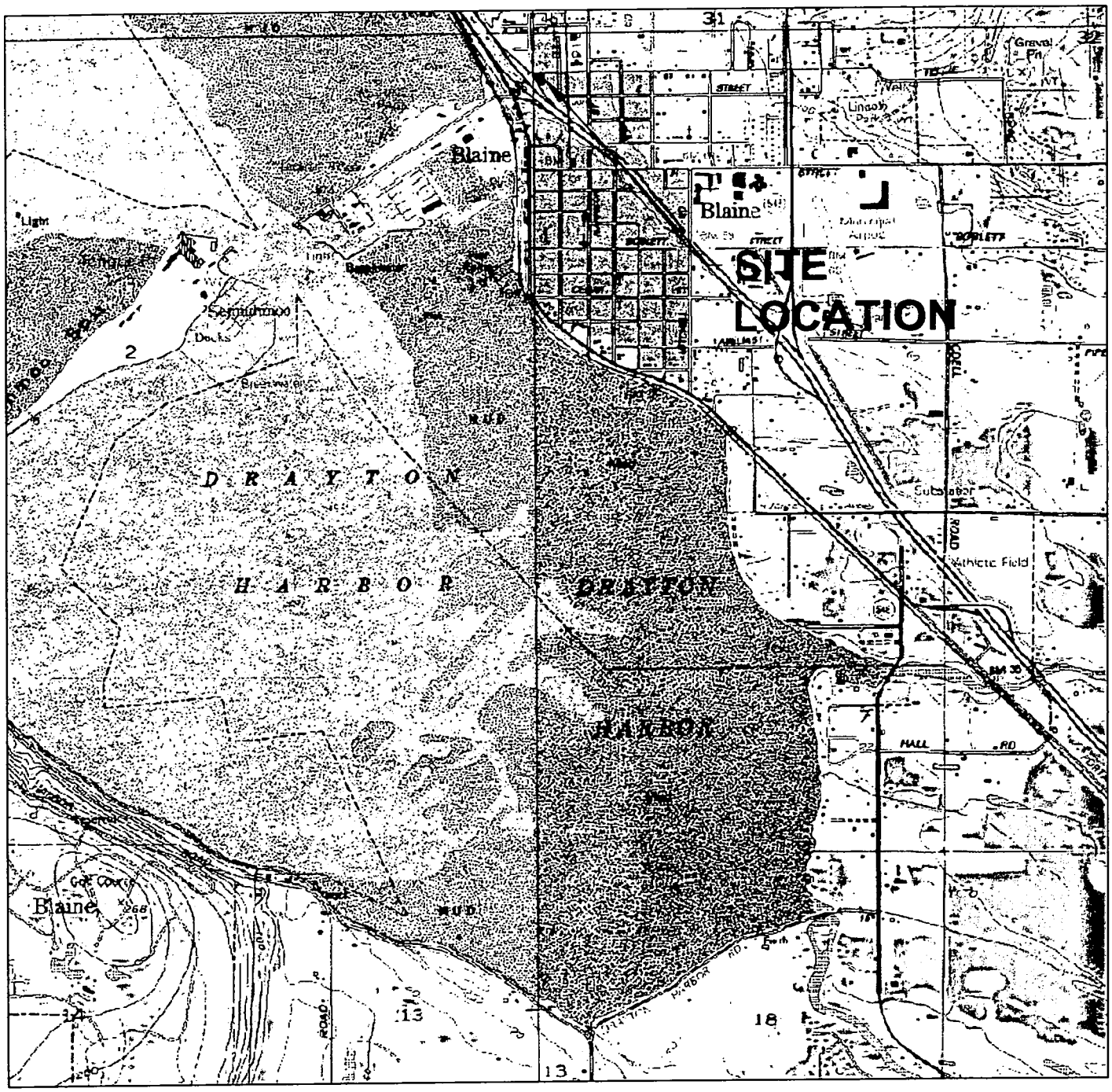
Reviewed By:

Doane E. Cafferty, L.G.
Project Geologist

State of Washington
1663
Licensed Geologist
Doane E. Cafferty

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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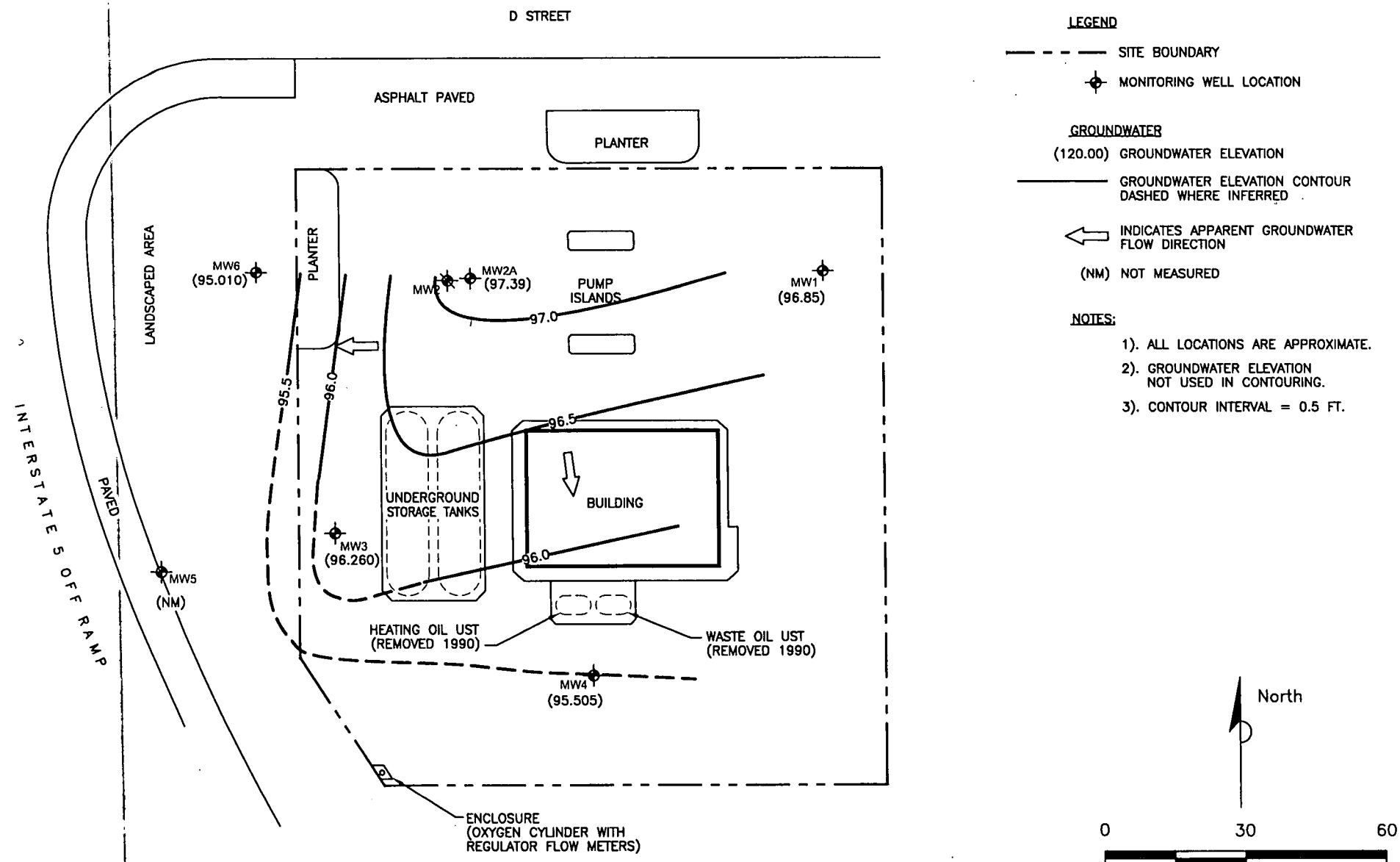

SOURCE:
BASE MAP FROM; ENVIRONMENTAL RESOLUTIONS, INC. (ERI) TITLED GROUNDWATER SAMPLE ANALYSIS MAP– 06/09/03, PLATE 1, DATED 07/14/03, PROJECT NO. 31017. CADD FILE 31017.13.DWG

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SITE PLAN WITH GROUNDWATER ELEVATION CONTOURS (12/12/03)

FIGURE: **2**

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

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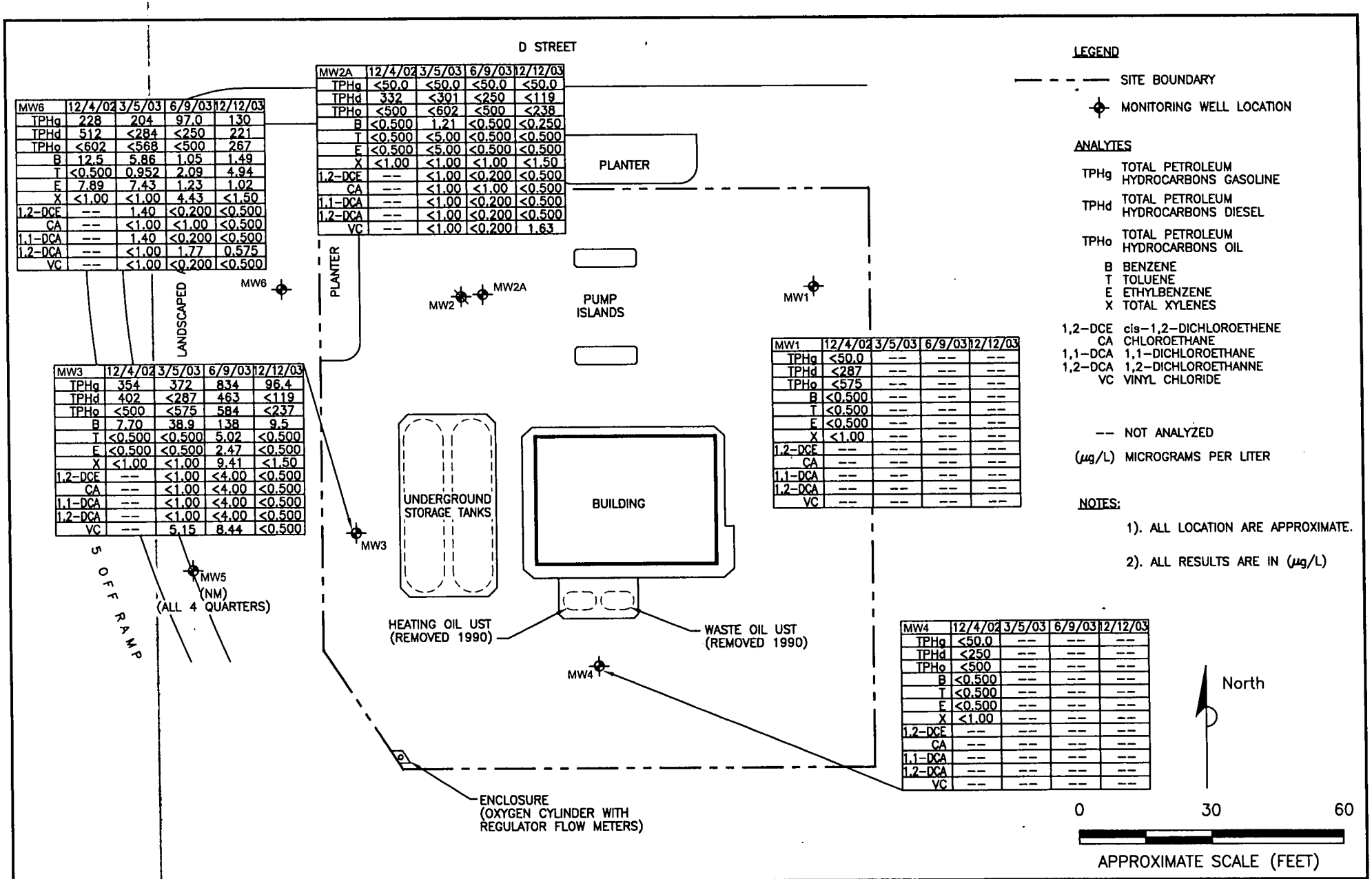

MW6	12/4/02	3/5/03	6/9/03	12/12/03
TPHg	228	204	97.0	130
TPHd	512	<284	<250	221
TPHo	<602	<568	<500	267
B	12.5	5.86	1.05	1.49
T	<0.500	0.952	2.09	4.94
E	7.89	7.43	1.23	1.02
X	<1.00	<1.00	4.43	<1.50
1,2-DCE	--	1.40	<0.200	<0.500
CA	--	<1.00	<1.00	<0.500
1,1-DCA	--	1.40	<0.200	<0.500
1,2-DCA	--	<1.00	1.77	0.575
VC	--	<1.00	<0.200	<0.500

MW2A	12/4/02	3/5/03	6/9/03	12/12/03
TPHg	<50.0	<50.0	<50.0	<50.0
TPHd	332	<301	<250	<119
TPHo	<500	<602	<500	<238
B	<0.500	1.21	<0.500	<0.250
T	<0.500	<5.00	<0.500	<0.500
E	<0.500	<5.00	<0.500	<0.500
X	<1.00	<1.00	<1.00	<1.50
1,2-DCE	--	<1.00	<0.200	<0.500
CA	--	<1.00	<1.00	<0.500
1,1-DCA	--	<1.00	<0.200	<0.500
1,2-DCA	--	<1.00	<0.200	<0.500
VC	--	<1.00	<0.200	1.63

MW3	12/4/02	3/5/03	6/9/03	12/12/03
TPHg	354	372	834	96.4
TPHd	402	<287	463	<119
TPHo	<500	<575	584	<237
B	7.70	38.9	138	9.5
T	<0.500	<0.500	5.02	<0.500
E	<0.500	<0.500	2.47	<0.500
X	<1.00	<1.00	9.41	<1.50
1,2-DCE	--	<1.00	<4.00	<0.500
CA	--	<1.00	<4.00	<0.500
1,1-DCA	--	<1.00	<4.00	<0.500
1,2-DCA	--	<1.00	<4.00	<0.500
VC	--	5.15	8.44	<0.500

MW1	12/4/02	3/5/03	6/9/03	12/12/03
TPHg	<50.0	--	--	--
TPHd	<287	--	--	--
TPHo	<575	--	--	--
B	<0.500	--	--	--
T	<0.500	--	--	--
E	<0.500	--	--	--
X	<1.00	--	--	--
1,2-DCE	--	--	--	--
CA	--	--	--	--
1,1-DCA	--	--	--	--
1,2-DCA	--	--	--	--
VC	--	--	--	--

MW4	12/4/02	3/5/03	6/9/03	12/12/03
TPHg	<50.0	--	--	--
TPHd	<250	--	--	--
TPHo	<500	--	--	--
B	<0.500	--	--	--
T	<0.500	--	--	--
E	<0.500	--	--	--
X	<1.00	--	--	--
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

NOTES:

1). ALL LOCATION ARE APPROXIMATE.

2). ALL RESULTS ARE IN (µg/L)

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 ANALYTICAL RESULTS (12/4/02 - 12/12/03)

FIGURE: 3

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

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TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington
Page 1 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
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[HP]	3.81	96.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/09/03	4.00	96.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/12/03	3.570	96.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MTCA Method A Cleanup Level				1000/800[c]	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

Continued on page 2

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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	890	<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	688	<750	7,820	189	463	901	--	--	--	--	--	0	1.0
	10/16/96	3.96	94.53	6,680	<250	<750	5,360	252	436	1,120	--	--	--	--	--	0	1.4
	02/27/97	3.67	94.82	18,300	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	6,820	<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	889	<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	5,480	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	3,800	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*	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	--	--
MTCA Method A Cleanup Level				1000/800	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

Continued on page 3

TABLE 1
SUMMARY OF CUMULATIVE GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS
ConocoPhillips Site No. 5028
247 D Street
Blaine, Washington
Page 3 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
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	8,300	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	1,850	--	--	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	668	<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	--	--
MTCA Method A Cleanup Level				1000/800	500	500	5	1000	700	1000	NA	NA	NA	5	0.2	NA	NA

Continued on page 4

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	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
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	10.8	<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	5.86	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	–	–
MTCA Method A Cleanup Level				1000/800*	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

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

NM = Not Measured; NA = Not Applicable; – = Not Analyzed or Sampled

Shaded values equal or exceed MTCA Method A Cleanup Levels.

* 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

STL Seattle
5755 8th Street East
Tacoma, WA 98424

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

TRANSMITTAL MEMORANDUM

DATE: December 26, 2003

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

PROJECT: 5028 Blaine , WA

REPORT NUMBER: 118371

TOTAL NUMBER OF PAGES: _____

Enclosed are the test results for three samples received at STL Seattle on December 15, 2003.

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
118371-1	MW-2A	12-12-03 11:45	Liquid
118371-2	MW-3	12-12-03 12:50	Liquid
118371-3	MW-6	12-12-03 12:10	Liquid

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-2A
Lab ID:	118371-01
Date Received:	12/15/2003
Date Prepared:	12/17/2003
Date Analyzed:	12/19/2003
% Solids	-
Dilution Factor	1

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	109		50	150

Analyte	Result (mg/L)	PQL	MRL	Flags
#2 Diesel	ND	0.238	0.119	
Motor Oil	ND	0.476	0.238	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-3
Lab ID:	118371-02
Date Received:	12/15/2003
Date Prepared:	12/17/2003
Date Analyzed:	12/19/2003
% Solids	-
Dilution Factor	1

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	113		50	150

Analyte	Result (mg/L)	PQL	MRL	Flags
#2 Diesel	ND	0.237	0.119	
Motor Oil	ND	0.474	0.237	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-6
Lab ID:	118371-03
Date Received:	12/15/2003
Date Prepared:	12/17/2003
Date Analyzed:	12/19/2003
% Solids	-
Dilution Factor	1

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	118		50	150

Analyte	Result (mg/L)	PQL	MRL	Flags
#2 Diesel	0.221	0.237	0.118	J
Motor Oil	0.267	0.473	0.237	J

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-2A
Lab ID:	118371-01
Date Received:	12/15/2003
Date Prepared:	12/18/2003
Date Analyzed:	12/18/2003
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	91.4		80	120
Fluorobenzene	103		80	120
Toluene-D8	102		80	120
Ethylbenzene-d10	114		80	120
Bromofluorobenzene	103		80	120
Trifluorotoluene	107		80	120

Analyte	Result (ug/L)	PQL	MRL	Flags
Chloromethane	4.58	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			

STL Seattle

Volatile Organics by USEPA Method 5030/8260B data for 118371-01 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-3
Lab ID:	118371-02
Date Received:	12/15/2003
Date Prepared:	12/18/2003
Date Analyzed:	12/18/2003
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	97.1		80	120
Fluorobenzene	103		80	120
Toluene-D8	108		80	120
Ethylbenzene-d10	110		80	120
Bromofluorobenzene	98.6		80	120
Trifluorotoluene	109		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 118371-02 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-6
Lab ID:	118371-03
Date Received:	12/15/2003
Date Prepared:	12/18/2003
Date Analyzed:	12/18/2003
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	95.8		80	120
Fluorobenzene	99		80	120
Toluene-D8	106		80	120
Ethylbenzene-d10	113		80	120
Bromofluorobenzene	103		80	120
Trifluorotoluene	104		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	0.575	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 118371-03 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:	118371-01
Date Received:	12/15/2003
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Trifluorotoluene	103		50	150
Bromofluorobenzene	103		50	150
Pentafluorobenzene	95.3		50	150

Analyte	Result (mg/L)	PQL	Flags
Gasoline by NWTPH-G	ND	0.1	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-3
Lab ID:	118371-02
Date Received:	12/15/2003
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	104		50	150
Bromofluorobenzene	103		50	150
Pentafluorobenzene	108		50	150

Analyte	**Result (mg/L)**	**PQL**	**Flags**
Gasoline by NWTPH-G	0.0964	0.1	J

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-6
Lab ID:	118371-03
Date Received:	12/15/2003
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	103		50	150
Bromofluorobenzene	104		50	150
Pentafluorobenzene	96.9		50	150

Analyte	**Result (mg/L)**	**PQL**	**Flags**
Gasoline by NWTPH-G	0.13	0.1	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-2A
Lab ID:	118371-01
Date Received:	12/15/2003
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Trifluorotoluene	110		82	120
Bromofluorobenzene	106		84	135
Pentafluorobenzene	110		90	121

Analyte	Result (mg/L)	PQL	MRL	Flags
Benzene	ND	0.0005	0.00025	
Toluene	ND	0.001	0.0005	
Ethylbenzene	ND	0.001	0.0005	
m&p-Xylene	ND	0.002	0.001	
o-Xylene	ND	0.001	0.0005	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-3
Lab ID:	118371-02
Date Received:	12/15/2003
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Trifluorotoluene	110		82	120
Bromofluorobenzene	109		84	135
Pentafluorobenzene	110		90	121

Analyte	Result (mg/L)	PQL	MRL	Flags
Benzene	0.0095	0.0005	0.00025	
Toluene	ND	0.001	0.0005	
Ethylbenzene	ND	0.001	0.0005	
m&p-Xylene	ND	0.002	0.001	
o-Xylene	ND	0.001	0.0005	

STL Seattle

Client Name	SECOR International Inc.
Client ID:	MW-6
Lab ID:	118371-03
Date Received:	12/15/2003
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Trifluorotoluene	108		82	120
Bromofluorobenzene	108		84	135
Pentafluorobenzene	109		90	121

Analyte	Result (mg/L)	PQL	MRL	Flags
Benzene	0.00149	0.0005	0.00025	
Toluene	0.00494	0.001	0.0005	
Ethylbenzene	0.00102	0.001	0.0005	
m&p-Xylene	ND	0.002	0.001	
o-Xylene	ND	0.001	0.0005	

STL Seattle

Lab ID:	Method Blank - DW0544
Date Received:	-
Date Prepared:	12/17/2003
Date Analyzed:	12/18/2003
% Solids	-
Dilution Factor	1

Diesel and Motor Oil by NWTPH-Dx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
o-terphenyl	111		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:	DW0544
Date Prepared:	12/17/2003
Date Analyzed:	12/18/2003
QC Batch ID:	DW0544

Diesel and Motor Oil by NWTPH-Dx Modified

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	5.42	108	5.12	102	-5.7	
Motor Oil	0	5	4.86	97.2	4.72	94.4	-2.9	

STL Seattle

Lab ID:	Method Blank - VOA602
Date Received:	-
Date Prepared:	12/18/2003
Date Analyzed:	12/18/2003
% Solids	-
Dilution Factor	1

Volatile Organics by USEPA Method 5030/8260B

SMC / Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Dibromofluoromethane	97.4		80	120
Fluorobenzene	97.6		80	120
Toluene-D8	106		80	120
Ethylbenzene-d10	110		80	120
Bromofluorobenzene	104		80	120
Trifluorotoluene	112		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 VOA602 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:	VOA602
Date Prepared:	12/18/2003
Date Analyzed:	12/18/2003
QC Batch ID:	VOA602

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	4.84	96.8	4.93	98.6	1.8	
Benzene	0	5	4.68	93.5	5.07	101	7.7	
Trichloroethene	0	5	4.69	93.7	4.81	96.2	2.6	
Toluene	0	5	4.82	96.5	5.14	103	6.5	
Chlorobenzene	0	5	4.75	95	5.1	102	7.1	

STL Seattle

Lab ID:	Method Blank - GB3687
Date Received:	-
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Trifluorotoluene	94.2		50	150
Bromofluorobenzene	97.9		50	150
Pentafluorobenzene	89.9		50	150

Analyte	Result (mg/L)	PQL	Flags
Gasoline by NWTPH-G	ND	0.1	

STL Seattle

Blank Spike/Blank Spike Duplicate Report

Lab ID:	GB3687
Date Prepared:	12/19/2003
Date Analyzed:	12/19/2003
QC Batch ID:	GB3687

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

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	1.14	91.6	1.14	91.3	-0.33	

STL Seattle

Matrix Spike Report

Client Sample ID:	MW-3
Lab ID:	118371-02
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
QC Batch ID:	GB3687

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

Compound Name	Sample Result (mg/L)	Spike Amount (mg/L)	MS Result (mg/L)	MS % Rec.	Flag
Gasoline by NWTPH-G	0.096	1.25	1.32	98.2	

STL Seattle

Duplicate Report

Client Sample ID:	MW-3
Lab ID:	118371-02
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
QC Batch ID:	GB3687

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

Parameter Name	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD %	Flag
Gasoline by NWTPH-G	0.0964	0.111	-14.0	

STL Seattle

Lab ID:	Method Blank - GB3687
Date Received:	-
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits Low	Recovery Limits High
Trifluorotoluene	99.3		82	120
Bromofluorobenzene	102		84	135
Pentafluorobenzene	101		90	121

Analyte	Result (mg/L)	PQL	MRL	Flags
Benzene	ND	0.0005	0.00025	
Toluene	ND	0.001	0.0005	
Ethylbenzene	ND	0.001	0.0005	
m&p-Xylene	ND	0.002	0.001	
o-Xylene	ND	0.001	0.0005	

STL Seattle

Blank Spike/Blank Spike Duplicate Report

Lab ID:	GB3687
Date Prepared:	12/19/2003
Date Analyzed:	12/19/2003
QC Batch ID:	GB3687

Volatile Aromatic Hydrocarbons by USEPA Method 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
Benzene	0	0.0155	0.0171	111	0.0174	112	0.9	
Toluene	0	0.0945	0.0895	94.7	0.0893	94.5	-0.21	
Ethylbenzene	0	0.0223	0.0199	89.2	0.0198	88.9	-0.34	
m&p-Xylene	0	0.0782	0.0712	91	0.071	90.7	-0.33	
o-Xylene	0	0.0314	0.0282	89.9	0.0283	90.2	0.33	

STL Seattle

Matrix Spike Report

Client Sample ID:	MW-3
Lab ID:	118371-02
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
QC Batch ID:	GB3687

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Compound Name	Sample Result (mg/L)	Spike Amount (mg/L)	MS Result (mg/L)	MS % Rec.	Flag
Benzene	0.0095	0.0155	0.0295	129	x7
Toluene	0	0.0945	0.0973	103	
Ethylbenzene	0	0.0223	0.022	98.7	
m&p-Xylene	0	0.0782	0.0769	98.4	
o-Xylene	0	0.0314	0.0307	97.9	

STL Seattle

Duplicate Report

Client Sample ID:	MW-3
Lab ID:	118371-02
Date Prepared:	12/19/2003
Date Analyzed:	12/20/2003
QC Batch ID:	GB3687

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Parameter Name	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD %	Flag
Benzene	0.0095	0.0109	-14.0	
Toluene	0	0	NC	
Ethylbenzene	0	0	NC	
m&p-Xylene	0	0	NC	
o-Xylene	0	0	NC	

STL Seattle
5755 8th Street East
Tacoma, WA. 98424

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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 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
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2.4

SEVERN TRENT STL

00032

Client: SECOR for ConocoPhillips	Project Manager: Marc Sauze	Date: 12/12/03	Chain of Custody Number: 08459
Address: 12034 134th CT. NE, Ste.102	Telephone Number (Area Code)/Fax Number: 425-372-1600	Lab Number: 118371	Page 1 of 1
City: Redmond / State: WA / Zip Code: 98052	Site Contact	Lab Contact	
Project Name and Location (State): 5028 Blaine	Carrier/Waybill Number		
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 (Attach list if more space is needed): NWTPH-Gx	BTEX	8260B (HALOs)	NWTPH-Dx	Special Instructions/ Conditions of Receipt
MW-2A	12/12/03	1145		X						7			X	X	X	X	
MW-3	↓	1250		↓						↓			↓	↓	↓	↓	
MW-6	↓	1210		↓						↓			↓	↓	↓	↓	

Cooler: [X] Yes [ ] No Cooler Temp:_____

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

Sample Disposal: [ ] Return To Client [X] 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 [X] 10 Days [ ] 15 Days [ ] Other _____

QC Requirements (Specify):

1. Relinquished By: Marc Sauze	Date: 12/15/03	Time: 9:30	1. Received By: Chad	Date: 12-15-03	Time: 1045
2. Relinquished By: Chad STL	Date: 12-15-03	Time: 1323	2. Received By: [signature]	Date: 12/15/0	Time: 1:23p
3. Relinquished By	Date:	Time:	3. Received By	Date:	Time:

Comments

DISTRIBUTION: WHITE – Stays with the Samples; CANARY – Returned to Client with Report; PINK – Field Copy

STL8274-580 (12/02)

SECOR

DAILY FIELD LOG

Page: 1 of 1
Date: 12/12/03

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

Scope of Work: x Quarter Monitoring/Sampling WNO: 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:

9:15 August Welch (AW) on-site. Locate wells as identified on site plan. Set up equipment & decon.
9:30 Gauge MW-1, MW-4, MW-2A, MW-6, MW-3
10:45 Purge 3 well volumes from MW-2A, MW-6, MW-3.
11:45 Sample MW-2A, MW-6, MW-3 : MW-3 dewatered during Purge. 60% recovery @ time of sample after 1½ hours after Purge.
1:00 AW off-site.

Arrived on Site: 9:15

Departed Site: 1:00

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

Daily Health and Safety Log Completed?: Y

Utility Locations Checked?: N/A

Important Conversations:

Important Changes in Scope of Work:

Weather Conditions: Ft. Fair ~45°

Subcontractors On Site: N/A

SECOR Personnel On Site: August Welch

Signed: August Welch

Date:

SECOR

INTERNATIONAL INCORPORATED

MONITORING & SAMPLING LOG

Page 1 of 1

Project Name: 5028 BLAINE

Date: 12/12/03

Project Number: 01CP.05028.04

No. of Monitoring Wells Gauge: 5

SECOR Rep: August Welch

Checked by:

No. of Monitoring Wells Sampled: 3

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

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 (ug/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				3.640	3.570	12.48	945				
MW-2				1.790		14.35	954				
MW-3				2.310		12.60	1002				
MW-4				12.45	4.025	12.41	960				
MW-6				2.830		14.85	958				

SAMPLING INFORMATION

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives	Analytical Parameters
3 x 40ml VOAs	N	HCL & ICE	NWTPH-Gx
1 x 1 L Amber	N	HCL & ICE	NWTPH-Dx
1 x 1 L Amber	N		8260 HALOs

Notes: 1, = feet from mean sea level

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

SECOR

International Incorporated

Monitoring Well Inspection Report

Site No. & Name: 5028 BLAINE

Date: 12/12/03

Project Number: 01CP.05028.04

Field Personnel: August Welch

	Well Location Number:	MW-1	MW-2A	MW-3	MW-4	MW-6			
EXTERIOR	Well Perimeter Seal Condition (G-Good P-Poor)	P	P	P	P	P			
	Well Structure Drainage (G-Good P-Poor)	G	G	P	P	P			
	Properly Secured (Y-Yes N-No)	Y	Y	Y	Y	Y			
	Type of Well Vault (E=EMCO Wheaton M=Morrison V=Vault)	M	M	M	M	M			
INTERIOR	Type of Well Seal (Dirt, Concrete, etc.)	A	C	A	A	C			
	Well Casing Type (i.e. 2" or 4")	2	2	2	2	2			
	Locking Cap Condition (G-Good P-Poor)	G	G	G	P	~~X~~P			
	Rubber Seal Condition (G-Good P-Poor)	G	G	G	G	G			
	Lock on Well (Y-Yes N-No)	N	N	N Y	Y	N			
	Liquid Present in Well Vault (Y-Yes N-No)	Y	N	Y	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:

SECOR
INTERNATIONAL INCORPORATED

WELL PURGING / SAMPLING LOG

Well No: MW-2A
Project Name: 5028 BLAINE
Date: 12/12/03
Project Number: 10CP.05028.04
Sample Time: 1145
SECOR Rep: August Welch
Checked by:
Sample No: MW-2A

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #
Purging Equipment / Method: ___ Vac Truck ___ Bailer ___ Submersible Pump __x_ 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): 1.780
Total Well Depth (DTB) (ft): 14.35
Water Column: 12.57
Floating Product:
Thickness (in):
Casing Volume (gal): 2.01
3 Casing Volumes (gal): 6.03

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	ORP	Elect. Cond. (µ mhos)	Water Description (odor, turbidity, color)
1045	Started Purging						
1048		7					No odor

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

SAMPLING INFORMATION

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

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives		Analytical Parameters
3 x 40ml VOAs	N	HCL & ICE		NWTPH-Gx & 8021B (BTEX)
1 X 1L AMBER	N	HCL & ICE		NWTPH-DX
1 X 1L AMBER	N	HCL & ICE		8260 HALOs

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
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WELL PURGING / SAMPLING LOG

Well No: MW-3
Project Name: 5028 BLAINE
Date: 12/12/03
Project Number: 10CP.05028.04
Sample Time: 12:50
SECOR Rep: August Welch
Checked by:
Sample No: MW-3

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #
Purging Equipment / Method: ___ Vac Truck ___ Bailer ___ Submersible Pump _x_ 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): 2.310
Total Well Depth (DTB) (ft): 12.60
Water Column: 10.29
Floating Product:
Thickness (in):
Casing Volume (gal): 1.65
3 Casing Volumes (gal): 4.94

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	ORP	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1112	Started Purging						no odor
1116		7					

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

SAMPLING INFORMATION

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

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives		Analytical Parameters
3 x 40ml VOAs	N	HCL & ICE		NWTPH-Gx & 8021B (BTEX)
1 X 1L AMBER	N	HCL & ICE		NWTPH-DX
1 X 1L AMBER	N	HCL & ICE		8260 HALOs

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

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

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

% Recovery = ____ %

80% Recharge = ____

SECOR
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WELL PURGING / SAMPLING LOG

Well No: MW-6
Project Name: 5028 BLAINE
Date: 12/12/03
Project Number: 10CP.05028.04
Sample Time: 1210
SECOR Rep: August Welch
Checked by:
Sample No: MW-6

PURGING & SAMPLING EQUIPMENT / METHOD

Water Level Meter Type & ID: Solinist #
Purging Equipment / Method: ___ Vac Truck ___ Bailer ___ Submersible Pump __x__ 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): 2.830
Total Well Depth (DTB) (ft): 14.85
Water Column: 12.02
Floating Product:
Thickness (in):
Casing Volume (gal): 1.92
3 Casing Volumes (gal): 5.77

PURGING INFORMATION

Time	DTW (ft)	Water Volume Purged (gal)	pH	Temp (°C)	ORP	Elect. Cond. (μ mhos)	Water Description (odor, turbidity, color)
1055	Started Purging						odor
1058		6					

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

SAMPLING INFORMATION

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

Container Types & Volumes	Filtered (Y/N)	Sample Preservatives		Analytical Parameters
3 x 40ml VOAs	N	HCL & ICE		NWTPH-Gx & 8021B (BTEX)
1 X 1L AMBER	N	HCL & ICE		NWTPH-DX
1 X 1L AMBER	N	HCL & ICE		8260 HALOs

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

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Redmond, WA 98052
425 372 1600 TEL
425 372 1650 FAX

March 2, 2004

LUST Coordinator
Washington Department of
Ecology
3190 160th Ave SE
Bellevue, WA 98008-5452

RE: FOURTH QUARTER 2003 GROUNDWATER MONITORING REPORT
CONOCOPHILLIPS INC. FACILITY NUMBER: 255028

Dear Sir Or Madam:

SECOR International Incorporated (SECOR) has prepared this ground water monitoring report summarizing the quarterly groundwater monitoring and sampling event that occurred during the fourth quarter of 2003 at ConocoPhillips facility number 255028 located at 247 D St., Blaine, WA.

If you have any questions or comments regarding the information provided in this report please contact us.

Sincerely,
SECOR International Incorporated

August Welch
Assistant Scientist