SECOR

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Redmond, WA 98052
425 372 1600 TEL
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January 11, 2005

Mr. Kipp Eckert
ConocoPhillips Company
1144 Eastlake Avenue East, Suite 201
Seattle, Washington 98109

RE: Monitoring Well Installation
10023 Old Frontier Road NW, Silverdale, Washington
ConocoPhillips Site No. 2705522
SECOR Project No.: 01CP.05522.04
Department of Ecology Identifier: 100598

Dear Mr. Eckert:

The following presents the results of monitoring well installation and groundwater sampling activities completed by SECOR International, Inc. (SECOR) between October and December 2004, at 10023 Old Frontier Road NW, in Silverdale, Washington (site). The purpose of installing the monitoring well was to delineate groundwater impacts in the southeast portion of the site. Result of the monitoring well installation activities and follow-up groundwater monitoring are presented in this report.

SITE DESCRIPTION

The site is a retail gasoline station and convenience store located on the northwest corner of Old Frontier Road NW and NW Anderson Hill Road in Silverdale, Washington (Figure 1). The site is located in Kitsap County in Section 17; Township 25 North; Range 1 East. The site is bounded by vacant land to the north and west, by Old Frontier Road NW to the east, with Highway 3 beyond, and NW Anderson Hill Road to the south, followed by vacant land.

Site improvements consist of a convenience store building, two gasoline dispenser islands covered with a canopy, and three gasoline underground storage tanks (USTs). The remainder of the site is covered with asphalt or concrete except for landscaped areas. A site plan showing the current site improvements is presented on Figure 2.

BACKGROUND

SECOR reviewed groundwater monitoring results summarized in a report dated January 24, 2001 prepared by Environmental Resolutions, Inc. (ERI). The report contained results of two groundwater monitoring events completed in 1991 and 2000. Groundwater samples were collected from wells MW-2, MW-3, MW-4 and MW-5 during the 1991 event. Groundwater samples were only collected from MW-4 during the 2000 event because of access issues involving MW-2 and MW-5 and lack of groundwater in MW-3. Samples collected during each of the events were submitted for analysis of Total Petroleum Hydrocarbons (TPH) as gasoline and diesel, benzene, ethylbenzene, toluene and xylenes (BTEX) and dissolved lead. No concentrations of any of the hydrocarbon constituents analyzed were detected above the laboratory method reporting limits (MRLs) during either of sampling events. Dissolved lead concentrations were detected in levels lower than 10 ug/L in each of the samples collected during the 1991 event.

SECOR completed a groundwater monitoring event at the site in April 2004. Groundwater samples were collected from each of the monitoring wells (MW-2, MW-3, MW-4 and MW-5). Samples were submitted for analysis of Total Petroleum Hydrocarbons (TPH) as gasoline and diesel, benzene, ethylbenzene, toluene and xylenes (BTEX), dissolved lead and total lead.

Monitoring wells MW-2, MW-3 and MW-4 did not contain any constituents analyzed above the laboratory method reporting limits (MRLs). Trace liquid phase hydrocarbons (LPH) were observed in MW-5 as droplets of fuel on the water surface. TPH as gasoline and diesel was detected in MW-5 at concentrations of 64,100 µg/L and 3,700 ug/L, respectively. Ethylbenzene and total Xylenes were detected in MW-5 at concentrations of 1,370 µg/L and 8,390 µg/L respectively. Toluene was also detected above the MRLs in MW-5 at 358 µg/L. The groundwater gradient was apparently to the southeast. The source of impacts noted in MW-5 was not determined.

Results of SECOR's April 2004 monitoring event indicating trace LPH in MW-5 situated near the southeast property boundary of the site prompted the need to assess groundwater quality downgradient of MW-5.

SCOPE OF WORK

The scope of work consisted of installing a groundwater monitoring well (MW-6) in the landscaped area near the southeast corner of the site. The monitoring well installation work was completed on October 26, 2004. Drilling was completed using a hollow-stem auger drill rig. A soil sample was collected from the boring at 13 feet bgs and submitted to Severn Trent Laboratories (STL) in Tacoma, Washington for chemical analysis. In addition, groundwater samples were collected on December 12, 2004 from monitoring wells MW-3, MW-4, MW-5, and newly installed monitoring well MW-6. Monitoring well MW-2 was not sampled because it was dry. Groundwater samples were submitted to North Creek Analytical Laboratories, Inc. (NCA) for analysis.

FIELD ACTIVITIES

Cascade Drilling Inc. (Cascade) provided drilling services and Applied Professional Services, Inc. (APS) provided private utility locating services. SECOR personnel were present during all phases of the fieldwork. Details regarding fieldwork are described as follows.

Pre-field Activities

The following activities were completed prior to the start of field and drilling activities:

- A project-specific health and safety plan (HASP) was prepared for each phase of the field activities in accordance with federal regulations (40 CFR 1910.120). The HASP identified potential physical and chemical hazards associated with the proposed field activities, and specified personal protection equipment and safety monitoring requirements. All SECOR personnel and subcontractors working on-site were required to be familiar with and to comply with the provisions in the HASP.

- Prior to the start of field activities, SECOR arranged to have a municipal underground utility location service identify subsurface municipal utilities located in public right-of-ways adjacent to the site. In addition, SECOR contracted with APS to provide private utility locating services on the site. Prior to drilling, the boring location was cleared to 5 feet bgs using an air wand and vacuum truck for the purpose of determining if near-surface utilities exist that were not identified during the public and private utility locating activities.

Drilling and Sampling Activities

The boring was advanced using an 8-inch diameter, hollow-stem auger rig. Soil sample collection was completed at 5-foot intervals using a standard split spoon sampler. All soil samples were uniquely labeled and placed in an iced cooler under chain-of-custody documentation pending transportation and analysis at the laboratory.

Following soil sample collection, soil from the sampler was placed into a small, re-sealable plastic bag. The top of the bag was then closed and, following a lapse of approximately 10 minutes, a photo ionization detector (PID) was used to monitor the soils contained within the plastic bag for volatile organic compound (VOC) vapors by inserting the PID probe into the headspace of the bag. Results of these readings were recorded on the boring logs. The PID was equipped with an ultraviolet lamp of 10.8 electron volts (eV) and calibrated to a 100 parts per million isobutylene standard. The soil was classified in accordance with the unified soil classification system (USCS). USCS classifications are presented in the boring logs attached as Appendix A.

Groundwater wells MW-3, MW-4, MW-5, and MW-6 were sampled by purging approximately 3 casing volumes and sampling using a peristaltic pump. Groundwater samples were then collected directly into laboratory supplied containers. Groundwater samples were immediately placed in an iced cooler with chain-of-custody documentation to await transport to the laboratory.

SUBSURFACE CONDITIONS

Soils encountered during the drilling activities consisted primarily of coarse-grained sand with trace silt to a depth of approximately 5 feet bgs followed by silt with some fine grained sand and trace gravel to the total exploratory depth of the boring.

ANALYTICAL PROGRAM

One soil sample collected from the boring was submitted to STL for analysis for TPH as gasoline (TPH-g) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using Northwest Method NWTPH-Gx,

Groundwater samples were submitted to NCA for analysis for gasoline hydrocarbons and BTEX by NWTPH-G and EPA 8021B. Analysis for TPH diesel was requested, however, due to laboratory equipment issues diesel analysis was not completed.

ANALTYICAL TEST RESULTS

No concentrations of any of the constituents analyzed in the soil sample were detected above the method reporting limits (MRLs).

No concentrations of any of the constituents analyzed were detected above the MRLs in groundwater samples collected from MW-3, MW-4, and MW-6.

The following results were reported for the groundwater sample collected from MW-5:

- Gasoline-range hydrocarbons: 15,500µg/L;
- Benzene; 105 µg/L; Toluene: 36.9 ug/L; Ethylbenzene: 325 ug/L and Xylenes: 1780 ug/L.
- LPH was not observed.

Laboratory results for soil are summarized on Table 1 and are shown on Figure 2. Laboratory results for groundwater are summarized on Table 2 and are shown on Figure 2. Analytical laboratory reports and chain-of-custody documentation are included as Attachment B.

CONCLUSIONS

SECOR installed a monitoring well identified as MW-6 in the southeast corner of an active gasoline station/convenience store located at 10023 Old Frontier Road NW, in Silverdale, Washington. The monitoring well installation work was completed in October 2004. The purpose of the installation was to delineate groundwater impacts identified in existing upgradient monitoring well MW-5. A soil sample was collected from the newly installed monitoring well and submitted for analysis of hydrocarbon constituents. Groundwater samples were collected from three of the four previously installed monitoring wells and the newly installed well during a groundwater monitoring event completed in December 2004. The source of impacts identified in MW-5 has not been confirmed.

Soil analytical results did not indicate the presence of impacts in the soil sample submitted. Groundwater impacts were not noted in any of the monitoring wells sampled with the exception of monitoring well MW-5 where gasoline-range hydrocarbons and BTEX constituents were present.

These results indicate that groundwater impacts identified in MW-5 have not migrated off-site to the southeast. Further groundwater monitoring is recommended to confirm the groundwater gradient and monitor groundwater quality.

SECOR appreciates the opportunity to provided environmental consulting services to ConocoPhillips. If you have any questions regarding this investigation or wish to discuss the project in general, please contact us at 425-372-1600.

Sincerely,
SECOR International Incorporated

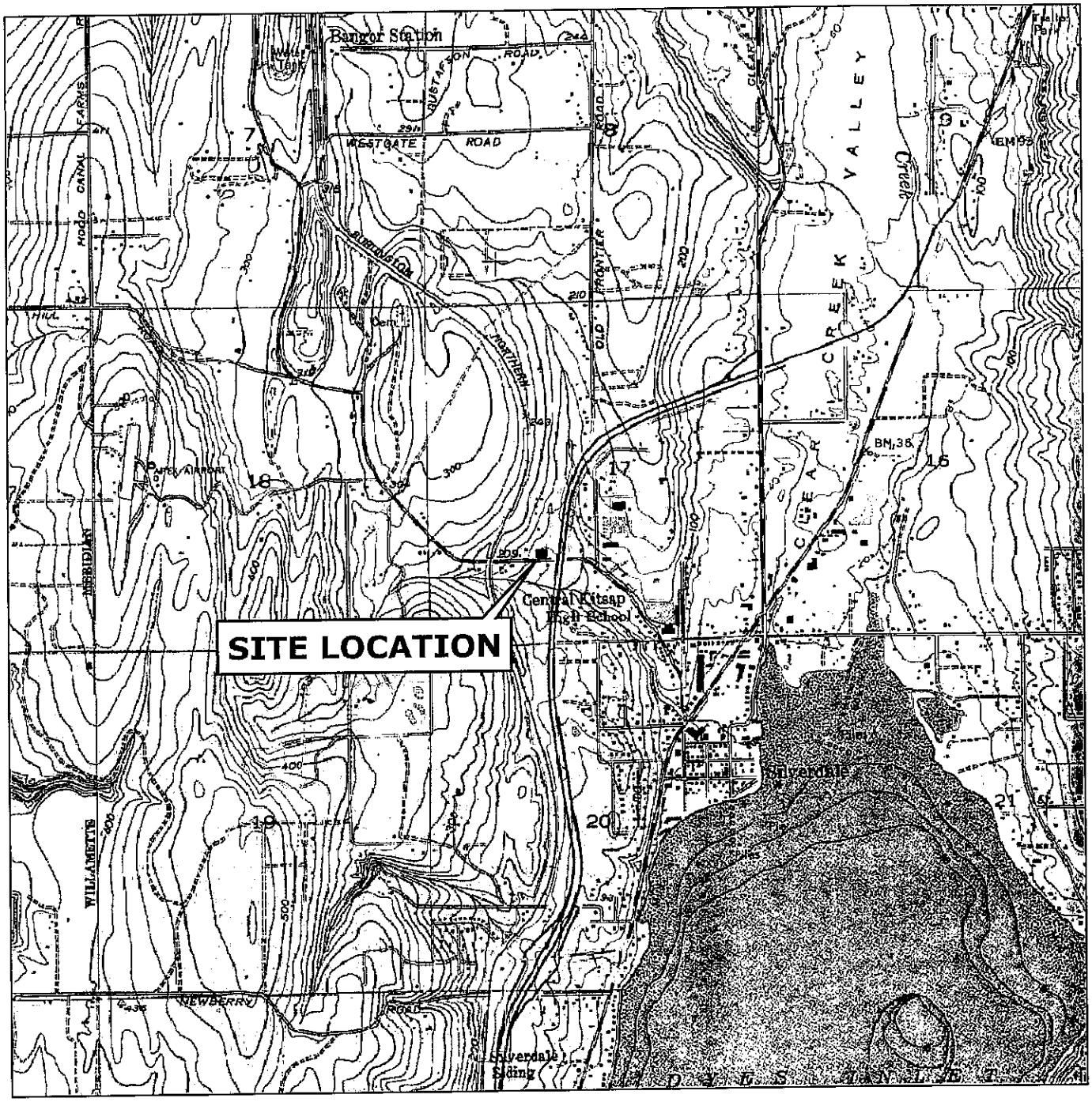
Michael McMahon
Project Manager

Marc Sauze, P.E.
Senior Project Manager

ATTACHMENTS:

FIGURE 1	Site Location Map
FIGURE 2	Site Plan with Soil and Groundwater Analytical Results
TABLE 1	Soil Analytical Results
TABLE 2	Groundwater Analytical Results
APPENDIX A	Boring Logs
APPENDIX B	Soil and Groundwater Analytical Laboratory Reports

FIGURES



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; POULSBO, WASHINGTON; 1978

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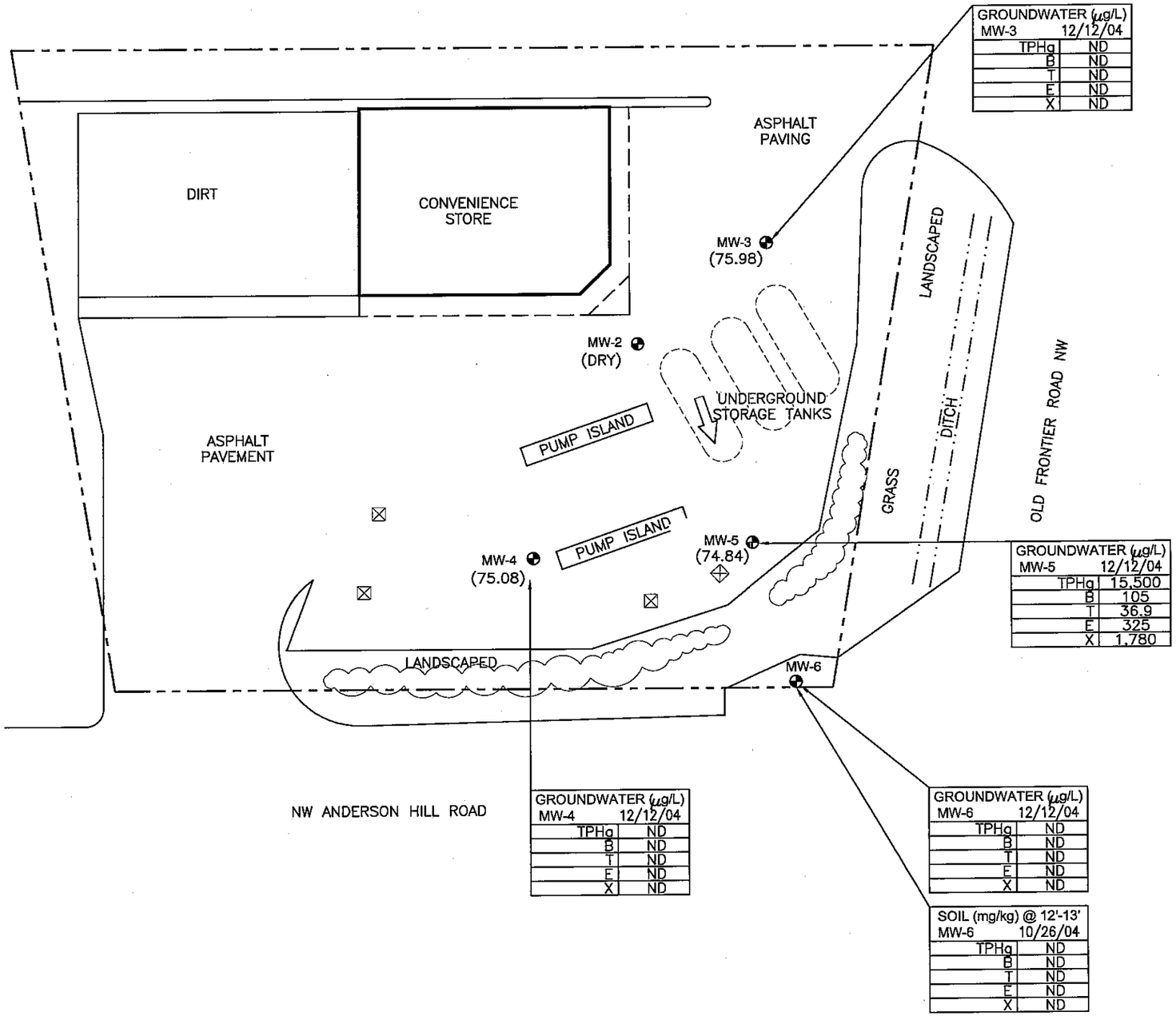
PREPARED FOR:
ConocoPhillips
FACILITY NO. 5522
10023 OLD FRONTIER ROAD NW
SIVERDALE, WASHINGTON

SITE LOCATION MAP

FIGURE: **1**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
01CP.05522.04	S. SIMMONS			5/17/04

FILEPATH: R:\CAD\CAD_FILES\PROJECTS\CONOCO\WASHINGTON\5522\5522(M).DWG MODIFIED BY REDWARDS AT DEC 21, 2004 - 12:06



GROUNDWATER (µg/L) MW-3	12/12/04
TPHg	ND
B	ND
T	ND
E	ND
X	ND

GROUNDWATER (µg/L) MW-5	12/12/04
TPHg	15,500
B	105
T	36.9
E	325
X	1,780

GROUNDWATER (µg/L) MW-4	12/12/04
TPHg	ND
B	ND
T	ND
E	ND
X	ND

GROUNDWATER (µg/L) MW-6	12/12/04
TPHg	ND
B	ND
T	ND
E	ND
X	ND

SOIL (mg/kg) @ 12'-13' MW-6	10/26/04
TPHg	ND
B	ND
T	ND
E	ND
X	ND

LEGEND

- SITE BOUNDARY
- ☒ CATCH BASIN
- MW-5 ◒ MONITORING WELL LOCATION

ANALYTES

- TPHg TOTAL PETROLEUM HYDROCARBONS GASOLINE
- B BENZENE
- T TOLUENE
- E ETHYLBENZENE
- X TOTAL XYLENES
- (--)= NOT ANALYZED
- (µg/L) MICROGRAMS PER LITER
- (mg/kg) MILLIGRAMS PER KILOGRAM
- <= LESS THAN

NOTES:

1). ALL LOCATIONS ARE APPROXIMATE.
2). ALL GROUNDWATER RESULTS REPORTED IN µg/kg
3). ALL SOIL RESULTS REPORTED IN mg/kg

N

0 30 60

APPROXIMATE SCALE (FEET)

SOURCE: BASE MAP FROM AGRA EARTH & ENVIRONMENTAL, TITLED FIGURE 2, BP BRANDED SERVICE STATION NO. 02606, SITE AND EXPLORATION PLAN WITH EXCAVATION LIMITS & SAMPLE LOCATIONS DATED DEC. 1995, SCALE 1"=20', W.O. 11-07951-01, DRAWING NO. \11\07951-01\SITE.DWG

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PREPARED FOR: ConocoPhillips
FACILITY NO. 5522
10023 OLD FRONTIER ROAD NW
SIVERDALE, WASHINGTON

SITE PLAN WITH SOIL AND GROUNDWATER ANALYTICAL RESULTS (10/26/04 and 12/12/04)

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
01CP.05522.04	S. SIMMONS			12/29/04

FILEPATH: R:\CAD\CAD_FILES\PROJECTS\CONOCO\WASHINGTON\5522\5522(SP)(2004-12-21).DWG MODIFIED BY REDWARDS AT DEC 29, 2004 - 12:06

TABLES

TABLE 2
GROUNDWATER ANALYTICAL RESULTS

ConocoPhillips Site No. 2705522
10023 Old Frontier Road NW
Silverdale, Washington

		Total Petroleum Hydrocarbons	Volatile Organic Compounds			
Sample Identification	Sample Date	Gasoline Range (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)
MW3	12/12/04	ND	ND	ND	ND	ND
MW4	12/12/04	ND	ND	ND	ND	ND
MW5	12/12/04	**15,500**	**105**	**36.9**	**325**	**1,780**
MW6	12/12/04	ND	ND	ND	ND	ND
MTCA Method A Cleanup Level		1,000/800*	5	1,000	700	1,000

Notes:
BOLD - detected above the stated analytical reporting limit
All concentrations in µg/L (ppb).
TPH-G = Total petroleum hydrocarbons as gasoline by Northwest Method NWTPH-G
VOCs - Volatile organic compounds
Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8021B
ND = not detected above laboratory reporting limit
*Cleanup level is 1,000 with no detectable benzene and 800 with benzene present in groundwater

TABLE 1
SOIL ANALYTICAL RESULTS
ConocoPhillips Site No. 2705522
10023 Old Frontier Road NW
Silverdale, Washington

			Total Petroleum Hydrocarbons	Volatile Organics			
Sample Identification	Sample Date	Sample Depth (feet bgs)	Gasoline Range (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)
MW6	10/26/04	12-13'	ND	ND	ND	ND	ND
MTCA Method A Soil Cleanup Level			30/100*	0.03	7	6	9

Notes:
All concentrations in milligrams per kilogram (mg/kg)
bgs - below ground surface
Gasoline range results derived from Northwest Method NWTPH-Gx
BTEX by EPA Method 8260B
MTCA - Model Toxics Control Act (Chapter 173-340 WAC)
ND = Less than the stated laboratory method reporting limit
*Gasoline range hydrocarbon cleanup level is 30 mg/kg with benzene present in the sample, and 100 mg/kg with no benzene detected.

APPENDIX A
BORING LOGS

SECOR
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Logged By:	Date Drilled:	Drilling Contractor	Project Name:	Method/Equipment:	Boring Number:
G. McCormick	10/26/04	Cascade Drilling, Inc.	CONOCO PHILLIPS Silverdale, WA #05522	Limited Access Rig	MW-6

See "Legend to Logs" for sampling method, classifications and laboratory testing methods	Boring Diam.(in.):	Surface Elev.(ft.):	Groundwater Depth (ft.):	Total Depth (ft.):	Drive wt.(lbs.):	Drop Dist.(in.):
	8		▽ 13 N/A	20.0	140	30

Well Construction	Depth, (ft.)	Sample Interval	Labrotory Sample 12(inches)	Description	Sample Number
Casing Elev.: Pending					
Concrete				Gravel - 6" thick Well-sorted medium SAND (SP), some Silt and fist-sized Rocks encountered; tan Hand cleared by air knife to 6.5' bgs	
Bentonite	5		40	Well-sorted medium SAND (SP); moist; no odor	
Sand Filter Pack	10		50-6		Sample #1
▽					
Screen - 0.010 Slot	15		50-5	Well-sorted Silty fine SAND (SP); tan; saturated; no odor; heaving	
	20				

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

01CP-05522(BL).GPJ LOG OF BH-REDLANDS-REV1

Project No. **05522**
Date **12/13/2004**

Log of Boring: MW-6

Approved by _____

APPENDIX B
SOIL ANALYTICAL REPORTS

www.ncalabs.com

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425.420.9200 fax 425.420.9210
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541.383.9310 fax 541.382.7588
Anchorage 2000 W. International Airport Road, Suite A10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

16 December 2004

Marc Sauze
Secor-Redmond
PO Box 230, 12034 - 134th Ct NE Ste 102
Redmond, WA/USA 98073

RE: Phillips 66 5522 - Silverdale

Enclosed are the results of analyses for samples received by the laboratory on 12/13/04 08:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sandra Yakamavich

Sandra Yakamavich
Project Manager

www.ncalabs.com

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Anchorage 2000 W. International Airport Road, Suite A10, Anchorage, AK 99502-1119
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Secor-Redmond	Project: Phillips 66 5522 - Silverdale	
PO Box 230, 12034 - 134th Ct NE Ste 102	Project Number: PO# 2426 SEC002	**Reported:**
Redmond, WA/USA 98073	Project Manager: Marc Sauze	12/16/04 10:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-3	B4L0278-01	Water	12/12/04 14:30	12/13/04 08:50
MW-4	B4L0278-02	Water	12/12/04 13:20	12/13/04 08:50
MW-5	B4L0278-03	Water	12/12/04 14:50	12/13/04 08:50
MW-6	B4L0278-04	Water	12/12/04 15:10	12/13/04 08:50
EFF 5522	B4L0278-05	Water	12/12/04 15:20	12/13/04 08:50

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sandra Yakamavich

Sandra Yakamavich, Project Manager

www.ncalabs.com

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Secor-Redmond	Project: Phillips 66 5522 - Silverdale	
PO Box 230, 12034 - 134th Ct NE Ste 102	Project Number: PO# 2426 SEC002	**Reported:**
Redmond, WA/USA 98073	Project Manager: Marc Sauze	12/16/04 10:58

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (B4L0278-01) Water Sampled: 12/12/04 14:30 Received: 12/13/04 08:50									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4L14008	12/14/04	12/15/04	NWTPH-Gx/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*88.3 %*	*58-144*			"	"	"	"	
Surrogate: 4-BFB (PID)	*89.6 %*	*68-140*			"	"	"	"	
MW-4 (B4L0278-02) Water Sampled: 12/12/04 13:20 Received: 12/13/04 08:50									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4L14008	12/14/04	12/14/04	NWTPH-Gx/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*91.0 %*	*58-144*			"	"	"	"	
Surrogate: 4-BFB (PID)	*89.8 %*	*68-140*			"	"	"	"	
MW-5 (B4L0278-03) Water Sampled: 12/12/04 14:50 Received: 12/13/04 08:50									
Gasoline Range Hydrocarbons	**15500**	500	ug/l	10	4L14008	12/14/04	12/15/04	NWTPH-Gx/8021B	
Benzene	**105**	5.00	"	"	"	"	"	"	
Toluene	**36.9**	5.00	"	"	"	"	"	"	
Ethylbenzene	**325**	5.00	"	"	"	"	"	"	
Xylenes (total)	**1780**	10.0	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*105 %*	*58-144*			"	"	"	"	
Surrogate: 4-BFB (PID)	*91.0 %*	*68-140*			"	"	"	"	

North Creek Analytical - Bothell

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Sandra Yakamavich

Sandra Yakamavich, Project Manager

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Secor-Redmond	Project: Phillips 66 5522 - Silverdale	
PO Box 230, 12034 - 134th Ct NE Ste 102	Project Number: PO# 2426 SEC002	**Reported:**
Redmond, WA/USA 98073	Project Manager: Marc Sauze	12/16/04 10:58

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (B4L0278-04) Water Sampled: 12/12/04 15:10 Received: 12/13/04 08:50									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4L14008	12/14/04	12/14/04	NWTPH-Gx/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	ND	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*90.0 %*	*58-144*			"	"	"	"	
Surrogate: 4-BFB (PID)	*88.8 %*	*68-140*			"	"	"	"	
EFF 5522 (B4L0278-05) Water Sampled: 12/12/04 15:20 Received: 12/13/04 08:50									
Gasoline Range Hydrocarbons	ND	50.0	ug/l	1	4L14008	12/14/04	12/14/04	NWTPH-Gx/8021B	
Benzene	ND	0.500	"	"	"	"	"	"	
Toluene	**0.700**	0.500	"	"	"	"	"	"	
Ethylbenzene	ND	0.500	"	"	"	"	"	"	
Xylenes (total)	ND	1.00	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)	*91.7 %*	*58-144*			"	"	"	"	
Surrogate: 4-BFB (PID)	*91.2 %*	*68-140*			"	"	"	"	

North Creek Analytical - Bothell

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Sandra Yakamavich

Sandra Yakamavich, Project Manager

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Anchorage 2000 W. International Airport Road, Suite A10, Anchorage, AK 99502-1119
907.563.9200 fax 907.563.9210

Secor-Redmond	Project: Phillips 66 5522 - Silverdale	
PO Box 230, 12034 - 134th Ct NE Ste 102	Project Number: PO# 2426 SEC002	**Reported:**
Redmond, WA/USA 98073	Project Manager: Marc Sauze	12/16/04 10:58

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4L14008: Prepared 12/14/04 Using EPA 5030B (P/T)										
Blank (4L14008-BLK1)										
Gasoline Range Hydrocarbons	ND	50.0	ug/l							
Benzene	ND	0.500	"							
Toluene	ND	0.500	"							
Ethylbenzene	ND	0.500	"							
Xylenes (total)	ND	1.00	"							
Surrogate: 4-BFB (FID)	*43.0*		"	*48.0*		*89.6*	*58-144*			
Surrogate: 4-BFB (PID)	*43.0*		"	*48.0*		*89.6*	*68-140*			
LCS (4L14008-BS1)										
Gasoline Range Hydrocarbons	500	50.0	ug/l	502		99.6	80-120			
Benzene	6.18	0.500	"	6.21		99.5	80-120			
Toluene	34.0	0.500	"	34.9		97.4	80-120			
Ethylbenzene	9.02	0.500	"	8.38		108	80-120			
Xylenes (total)	43.2	1.00	"	40.6		106	80-120			
Surrogate: 4-BFB (FID)	*43.2*		"	*48.0*		*90.0*	*58-144*			
Surrogate: 4-BFB (PID)	*41.7*		"	*48.0*		*86.9*	*68-140*			
LCS Dup (4L14008-BSD1)										
Gasoline Range Hydrocarbons	538	50.0	ug/l	502		107	80-120	7.32	25	
Benzene	6.77	0.500	"	6.21		109	80-120	9.11	25	
Toluene	36.3	0.500	"	34.9		104	80-120	6.54	25	
Ethylbenzene	9.59	0.500	"	8.38		114	80-120	6.13	25	
Xylenes (total)	45.6	1.00	"	40.6		112	80-120	5.41	25	
Surrogate: 4-BFB (FID)	*42.5*		"	*48.0*		*88.5*	*58-144*			
Surrogate: 4-BFB (PID)	*41.2*		"	*48.0*		*85.8*	*68-140*			
Matrix Spike (4L14008-MS1)					**Source: B4L0151-02**					
Gasoline Range Hydrocarbons	498	50.0	ug/l	502	13.1	96.6	58-129			
Benzene	6.32	0.500	"	6.21	ND	102	46-130			
Toluene	35.0	0.500	"	34.9	0.123	99.9	60-124			
Ethylbenzene	9.12	0.500	"	8.38	ND	109	56-141			
Xylenes (total)	44.2	1.00	"	40.6	ND	109	66-132			

North Creek Analytical - Bothell

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Sandra Yakamavich

Sandra Yakamavich, Project Manager

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Secor-Redmond	Project: Phillips 66 5522 - Silverdale	
PO Box 230, 12034 - 134th Ct NE Ste 102	Project Number: PO# 2426 SEC002	**Reported:**
Redmond, WA/USA 98073	Project Manager: Marc Sauze	12/16/04 10:58

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4L14008: Prepared 12/14/04 Using EPA 5030B (P/T)										
Matrix Spike (4L14008-MS1)					**Source: B4L0151-02**					
Surrogate: 4-BFB (FID)	*45.9*		*ug/l*	*48.0*		*95.6*	*58-144*			
Surrogate: 4-BFB (PID)	*42.6*		*"*	*48.0*		*88.8*	*68-140*			
Matrix Spike Dup (4L14008-MSD1)					**Source: B4L0151-02**					
Gasoline Range Hydrocarbons	489	50.0	ug/l	502	13.1	94.8	58-129	1.82	25	
Benzene	6.42	0.500	"	6.21	ND	103	46-130	1.57	40	
Toluene	35.8	0.500	"	34.9	0.123	102	60-124	2.26	40	
Ethylbenzene	9.18	0.500	"	8.38	ND	110	56-141	0.656	40	
Xylenes (total)	44.8	1.00	"	40.6	ND	110	66-132	1.35	40	
Surrogate: 4-BFB (FID)	*45.4*		*"*	*48.0*		*94.6*	*58-144*			
Surrogate: 4-BFB (PID)	*42.9*		*"*	*48.0*		*89.4*	*68-140*			

Sandra Yakamavich

Sandra Yakamavich, Project Manager

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Secor-Redmond	Project: Phillips 66 5522 - Silverdale	
PO Box 230, 12034 - 134th Ct NE Ste 102	Project Number: PO# 2426 SEC002	**Reported:**
Redmond, WA/USA 98073	Project Manager: Marc Sauze	12/16/04 10:58

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

North Creek Analytical - Bothell

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Sandra Yakamavich

Sandra Yakamavich, Project Manager

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3209 Denali St, Anchorage, AK 99503-4030 907-334-9200 FAX 334-9210

CHAIN OF CUSTODY REPORT

Work Order #: 541027S

CLIENT: SECOR

INVOICE TO: Conoco Phillips

REPORT TO: August Welch / Mark Sauer
ADDRESS: 12034 134th Ct. NE #102

PHONE: 425-372-1600 FAX:

P.O. NUMBER: 2426 SEC002

PROJECT NAME: 5522 - Silverdale

PROJECT NUMBER:

SAMPLED BY: August Welch

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: 5 STD. | 4 | X | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE	REQUESTED ANALYSES: TPH-Gx	BTEX	TPH-Dx	MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	NCA WO ID
1	MW-3	12/12/04 1430		X	X	X	W	4		-01
2	MW-4	1320								-02
3	MW-5	1450								-03
4	MW-6	1510								-04
5	EFF 5522	12/12/04 1520					W	3		-05
6										
7										
8										
9										
10										

Samples were not @2 sc upon receipt

RELEASED BY: August Welch	DATE: 12/13/04	RECEIVED BY: Tom Blankinship	DATE: 12/13/04
PRINT NAME: August Welch	FIRM: SECOR	TIME: 0850	PRINT NAME: Blankinship	FIRM: NCA	TIME: 0850
RELEASED BY:	DATE:	RECEIVED BY:	DATE:
PRINT NAME:	FIRM:	TIME:	PRINT NAME:	FIRM:	TIME:

ADDITIONAL REMARKS: TPH-Dx w/ silica gel cleanup.

TEMP: 9.2C w/c

COC REV 1/03

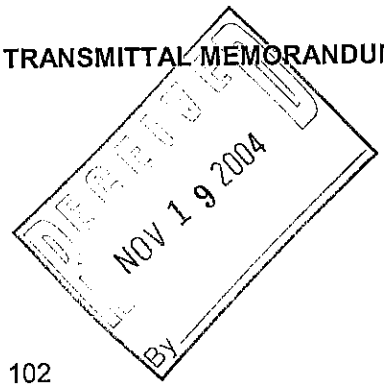
PAGE OF

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: November 17, 2004

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

PROJECT: Station #5522-Silverdale

REPORT NUMBER: 124530

TOTAL NUMBER OF PAGES: 7

Enclosed are the test results for one sample received at STL Seattle on October 27, 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.

Nonconformance Narrative: Sample was collected incorrectly for 5035 method 5 grams instead of 25 grams were collected and a greater than 1:1 ratio of preservative to sample resulted, sample was analyzed as received.
For NWTPH-GX Blank Spike and Blank Spike Duplicate surrogates failed high. No corrective action was taken all samples were ND.

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
124530-1	MW-6	10-26-04 12:00	solid

STL Seattle

Client Name:	SECOR International Inc.
Client ID:	MW-6
Lab ID:	124530-01
Date Received:	10/27/04
Date Prepared:	11/9/04
Date Analyzed:	11/9/04
% Solids	
Dilution Factor	1

Gasoline Range Organics by NWTPH-Gx / Volatile Aromatics by EPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	102		50	150
1-Chloro-3-fluorobenzene	173	X9	76	137
Bromofluorobenzene	172	X9	79	132
Pentafluorobenzene	193	X9	76	142

Sample results are on an as received basis.

Analyte	**Result (mg/kg)**	**RL**	**Flags**
Gasoline By NWTPH-G	ND	18	
MTBE	ND	0.18	
Benzene	ND	0.18	
Toluene	ND	0.18	
Ethylbenzene	ND	0.18	
m&p-Xylene	ND	0.36	
o-Xylene	ND	0.18	

STL Seattle

Lab ID:	Method Blank - GB4004
Date Received:	-
Date Prepared:	11/9/04
Date Analyzed:	11/9/04
% Solids	
Dilution Factor	1

Gasoline Range Organics by NWTPH-Gx / Volatile Aromatics by EPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	105		50	150
1-Chloro-3-fluorobenzene	167	N	76	137
Bromofluorobenzene	165	N	79	132
Pentafluorobenzene	184	N	76	142

Sample results are on an as received basis.

Analyte	**Result (mg/kg)**	**RL**	**Flags**
Gasoline By NWTPH-G	ND	4	
MTBE	ND	0.04	
Benzene	ND	0.04	
Toluene	ND	0.04	
Ethylbenzene	ND	0.04	
m&p-Xylene	ND	0.08	
o-Xylene	ND	0.04	

STL Seattle

Blank Spike/Blank Spike Duplicate Report

Lab ID:	GB4004
Date Prepared:	11/9/04
Date Analyzed:	11/9/04
QC Batch ID:	GB4004

Gasoline Range Organics by NWTPH-Gx / Volatile Aromatics by EPA Method 5030/8260B

Compound Name	Blank Result (mg/kg)	Spike Amount (mg/kg)	BS Result (mg/kg)	BS % Rec.	BSD Result (mg/kg)	BSD % Rec.	RPD	Flag
Gasoline By NWTPH-G	0	50	53.1	106	53.5	107	0.94	
MTBE	0	1.15	1.38	121	1.37	120	-0.83	
Benzene	0	0.736	0.918	125	0.928	126	0.8	
Toluene	0	3.54	6.14	174	6.22	176	1.1	N
Ethylbenzene	0	0.791	1.39	176	1.4	177	0.57	N
m&p-Xylene	0	2.92	4.97	170	4.92	169	-0.59	N
o-Xylene	0	1.15	1.92	168	1.92	168	0	N

SEVERN TRENT STL

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Tacoma, WA 98424

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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

RL: Reporting Limit

N: See analytical narrative

ND: Not Detected

X1: Contaminant does not appear to be "typical" product. Elution pattern suggests it may be _____.

X2: Contaminant does not appear to be "typical" product.

X3: Identification and quantitation of the analyte or surrogate was complicated by matrix interference.

X4: RPD for duplicates was outside advisory QC limits. The sample was re-analyzed with similar results. The sample matrix may be nonhomogeneous.

X4a: RPD for duplicates outside advisory QC limits due to analyte concentration near the method practical quantitation limit/detection limit.

X5: Matrix spike recovery was not determined due to the required dilution.

X6: Recovery and/or RPD values for matrix spike(/matrix spike duplicate) outside advisory QC limits. Sample was re-analyzed with similar results.

X7: Recovery and/or RPD values for matrix spike(/matrix spike duplicate) outside advisory QC limits. Matrix interference may be indicated based on acceptable blank spike recovery and/or RPD.

X7a: Recovery and/or RPD values for this spiked analyte outside advisory QC limits due to high concentration of the analyte in the original sample.

X8: Surrogate recovery was not determined due to the required dilution.

X9: Surrogate recovery outside advisory QC limits due to matrix interference.

Chain of Custody Record

SECOR International

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

SEVERN TRENT STL

Client: 12034 134th Ct NE, Suite 102	Project Manager: Marc Sauze	Date: 10/26/04	Chain of Custody Number: 14689
Address: Redmond, WA 98052	Telephone Number (Area Code)/Fax Number: (425) 636-6210	Lab Number: 124530	Page 1 of 1
City:	State: WA / Zip Code: 98052	Site Contact:	Lab Contact:
Project Name and Location (State): Station # 5522 - Silverdale	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 01CP.05522.04			

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: 5035A Gas/BTEX	Special Instructions/ Conditions of Receipt
MW-6 (12-13')	10/26/04	12:00		X									X	3 containers
~~MW-6 (12-13')~~	↓	↓		X									X	
~~MW-6 (12-13')~~	↓	↓		X									X	

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):

	Date	Time		Date	Time
1. Relinquished By: [signature]	10/27/04		1. Received By: [signature]		
2. Relinquished By: [signature]	10/27/04	1:00	2. Received By: [signature]	10/27/04	1p
3. Relinquished By			3. Received By		

Comments