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SCS ENGINEERS

November 4, 2003
File No. 04202001.01

Jay Fisher
Principal Capital Management
801 Grand Avenue
Des Moines, IA 50392-1370

Subject: Sixth Quarter, Groundwater Monitoring Event at the Former Chevron Gasoline Station Site, Meeker Square, Kent, Washington

1637 W. Meeker St.
Kent, WA.

Dear Jay:

This letter describes the sixth round of quarterly groundwater monitoring at the former Chevron gasoline station site at the Meeker Square shopping center in Kent, Washington. The groundwater sampling was conducted on September 30, 2003.

Background

Standard Oil (Chevron) purchased the subject site and constructed a gasoline station in 1960 and 1961. The station had two fuel island canopies, one facing each of the two adjoining streets. The underground storage tanks (USTs) were removed from the site in 1983 when the business closed. Observations made during the soil remediation excavation suggested that the former fuel supply lines were left in place and the UST excavation was filled with building debris after the tanks were removed. Soil in the suspected former UST excavation was stained gray and had an obvious gasoline odor.

In April 2002, soils contaminated above MTCA Method A soil cleanup levels were removed to the extent practical. Limited contamination was inaccessible in the saturated soil at the center of the excavation, below electrical and irrigation utilities in the east portion of the south wall, and below electrical and irrigation utilities in the west portion of the south wall. Oxygen-Release Compound® (ORC) was mixed into the saturated soil in the base of the excavation. The ORC releases oxygen to the groundwater, thereby providing an environment that is conducive to the growth of naturally-occurring microbes that can degrade the petroleum hydrocarbon contaminants in the groundwater. The Department of Ecology issued a no further action (NFA) designation for the soil on July 29, 2002.

Soil sample analytical results indicated that the contaminants were limited to gasoline-range petroleum hydrocarbons and xylenes. Benzene was detected in soils at the site only during an investigation by others conducted in 1998. No benzene was detected in any of the soil samples analyzed during the soil remediation project in April 2002.

Depending on seasonal variations, the depth to groundwater at the site is approximately 7.5 to 10.5 feet below grade. Water level data from the wells installed during the 1998 investigation indicated a southerly groundwater flow toward West Meeker Street. The Green River is located approximately 0.4 miles farther south.

Quarterly groundwater monitoring was initiated in June 2002. During the five quarters of groundwater monitoring, concentrations of benzene and gasoline-range total petroleum hydrocarbons (TPH) were identified in samples collected from well OW3, located at the southeast corner of the property. No contaminants were identified in samples collected from any of the other monitoring wells at the site.

ORC Injection

The original scope for the remediation project at the Meeker Square gas station also included injecting ORC into the subsurface outside the excavated area. The ORC injection task was included for use in the event that an additional ORC application was deemed necessary to enhance the contaminant degradation.

The ORC injection was accomplished on September 16, 2003, using a limited-access, direct-push sampling rig. The direct-push rig was operated by a subcontracted licensed driller. The ORC was injected at eight separate points in the southeast portion of the site near the contaminated well (OW3). At each injection point the material was installed from 4 to 12 feet below grade, which provided ORC above and below the present level of the water table.

Based on the recommendations of the ORC manufacturer, Regenesis, 450 pounds of ORC was injected at the site. Regenesis provided their recommendation based on site-specific information including contaminant concentrations, depth to groundwater, dissolved oxygen concentrations in the groundwater, and the estimated size of the contaminant plume.

Three days after the ORC injection, SCS Engineers purged the four wells at the site to obtain measurements of the dissolved oxygen (DO) in the groundwater. Table 1 presents the DO concentrations and compares them against readings recorded during the current monitoring event and during prior quarterly groundwater monitoring.

Table 1 Dissolved Oxygen Concentrations

Well	DO Concentration				
	September 19, 2003	Current Monitoring Event (September 30, 2003)	Previous Monitoring Event (June 2003)	Previous Year (September 2002)	Highest Concentration Recorded
OW-1	0.93 mg/L	0.48 mg/L	0.28 mg/L	0.12 mg/L	1.67 mg/L (June 2002)
OW-2	0.95 mg/L	0.75 mg/L	0.46 mg/L	0.19 mg/L	3.35 mg/L (June 2002)
OW-3	0.56 mg/L	0.45 mg/L	0.23 mg/L	0.09 mg/L	0.86 mg/L (March 2003)
MW-3GS	0.82 mg/L	0.64 mg/L	0.38 mg/L	0.16 mg/L	5.17 mg/L (June 2002)

Dissolved oxygen concentrations were slightly higher immediately after the injection (September 16, 2003) and during the current monitoring event (September 30, 2003) compared to DO readings recorded during the previous monitoring event and during the same quarter in 2002. However, the highest DO concentrations were recorded after the contaminated soil was excavated

and ORC was installed in the open excavation. The exception is at OW3, on the southeast corner of the site, where a high of 0.86 mg/L DO was recorded in March 2003.

Groundwater Sampling

Four groundwater monitoring wells are present at the site: one well remains from the 1998 investigation (MW3-GS) and three wells were installed after the 2002 soil remediation activities (OW1, OW2, and OW3). On September 30, 2003, measurements of the depth to groundwater were recorded at each of the four wells at the site to facilitate calculating the groundwater flow direction.

Low-flow equipment (specifically, a peristaltic pump) was used to purge the wells and produce groundwater samples with minimal turbidity. Groundwater quality parameters (pH, conductivity, dissolved oxygen content, and temperature) were measured during purging to evaluate when the parameters had stabilized. The wells were sampled after parameter stabilization had been achieved. The parameters were measured using a multi-probe, flow-through cell. Dissolved oxygen concentrations in the wells were low, ranging from 0.45 mg/L in OW3 to 0.75 mg/L in OW2.

The groundwater samples were collected in laboratory-supplied glassware, placed on ice in a field cooler, and transported to the laboratory with standard chain-of-custody documentation. Severn Trent Laboratory Seattle (STL) analyzed the samples for gasoline-range total petroleum hydrocarbons (TPH) and gasoline-constituent BTEX compounds (benzene, toluene, ethylbenzene, and xylenes). STL is accredited by the Department of Ecology for the analyses performed.

Groundwater Results

A summary of the analytical results of the sixth round of groundwater monitoring is provided below in Table 2. The complete analytical report is attached.

Table 2 Sixth Quarter Groundwater Sample Analytical Results in ug/L (Parts per Billion)

Sample Name	Gasoline-Range TPH	BTEX Compounds			
		Benzene	Toluene	Ethylbenzene	Xylenes
OW1	<100	<0.5	<1	<1	<3
OW2	<100	<0.5	<1	<1	<3
OW3	***3,360***	***106***	2	102	74.75
MW3-GS	<100	<0.5	<1	<1	<3
MTCA Cleanup Level	800	5	1,000	700	1,000

Bold Indicates the concentration exceeds the MTCA Method A cleanup level.

The results of the sixth quarter of groundwater monitoring indicate that gasoline-range TPH and benzene are present in the groundwater at the southeast corner of the site (OW3). The gasoline concentration at OW3 is 3,360 ug/L, which exceeds the MTCA Method A cleanup level of 800 ug/L in groundwater. Benzene was detected in the same sample at a concentration of 106 ug/L, which exceeds the MTCA Method A cleanup level of 5 ug/L in groundwater. The samples from OW1, OW2, and the earlier-installed MW3-GS did not contain detectable concentrations of gasoline-range TPH or gasoline-constituent BTEX compounds.

Groundwater Flow Direction

Two rounds of groundwater elevation measurements recorded in 2000 indicated a southerly groundwater flow direction toward West Meeker Street and the Green River. The groundwater gradient at the site was nearly flat.

Following the soil remediation in the spring of 2002, site restoration was completed coincident with the final efforts of a street-widening project by the City of Kent. The street project included the installation of small trees and new grass along the south edge of the property. Small trees were also installed on the east side of the property. Irrigation plumbing was installed to ensure the survival of the new plants.

On September 30, 2003, measurements of the depth to groundwater were recorded at the four groundwater monitoring wells at the former Chevron site. Depth-to-groundwater, well elevation, and the calculated water table elevations for each well are provided in Table 3.

Table 3 Groundwater Elevation Data, September 2003

Well ID	Depth to Groundwater	Surveyed Well Elevation	Water Table Elevation
OW1	9.56	99.78	90.22
OW2	9.83	99.82	89.99
OW3	9.53	99.25	89.72
MW3-GS	10.51	100.21	89.70

Based on the groundwater elevation data from the September 2003 monitoring event, groundwater appears to be mounding beneath the planted strip west of the former Chevron site at the south edge of the property. At the former Chevron site, the local groundwater flow direction is east. The gradient, due to suspected contribution from the landscape irrigation, was approximately 0.0167 feet per foot. Groundwater elevation data from the first post-remediation groundwater monitoring event (June 2002) indicated a southerly groundwater flow direction with a flatter gradient consistent with previous data collected in 2000.

Conclusions

Laboratory analytical results from the sixth groundwater monitoring event indicate that gasoline-range TPH is present at the southeast corner of the site (OW3) at a concentration of 3,360 ug/L, which exceeds the MTCA Method A cleanup level of 800 ug/L in groundwater. At the same location, benzene is also present in the groundwater at a concentration of 106 ug/L, which exceeds the MTCA Method A cleanup level of 5 ug/L in groundwater. Groundwater samples from the three other wells at the site did not contain detectable concentrations of gasoline-range TPH or gasoline-constituent BTEX compounds.

The irrigation applied to the planted strips at the south and east edges of the property is suspected to be increasing surface water infiltration to such an extent that groundwater is mounding beneath the planting strip. Thus, the irrigation water has created a localized change in the groundwater flow direction, causing the groundwater to flow east. Groundwater level data from the first post-remediation groundwater monitoring event (June 2002) indicated a southerly groundwater flow direction consistent with previous data collected in 2000.

The results of the current monitoring event are consistent with those of the June 2002 and June 2003 monitoring events. The concentration of gasoline-range TPH was reported at 4,550 ug/L in June 2002, 4,790 ug/L in June 2003, and 3,360 ug/L in September 2003. The benzene concentration was reported at 125 ug/L in June 2002, 119 ug/L in June 2003, and 106 ug/L in September 2003.

Some variability in the contaminant concentrations has been noted during the six monitoring events at the former Chevron site. Additional data are needed to evaluate any apparent trends in the contaminant concentrations. It is notable however, that the gasoline and benzene concentrations have declined since the September 2002 monitoring event, when the highest levels were recorded. The monitoring plan for the former Chevron station site at Meeker Square includes two additional monitoring events. The next event is scheduled for late December 2003.

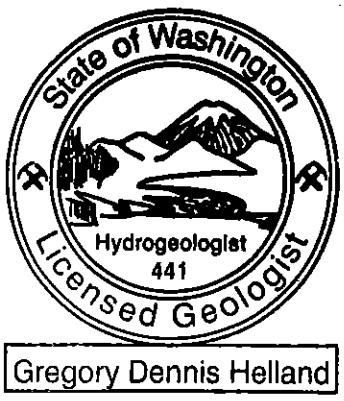
Thank you for the opportunity to provide our services. Please do not hesitate to call if you have any questions.

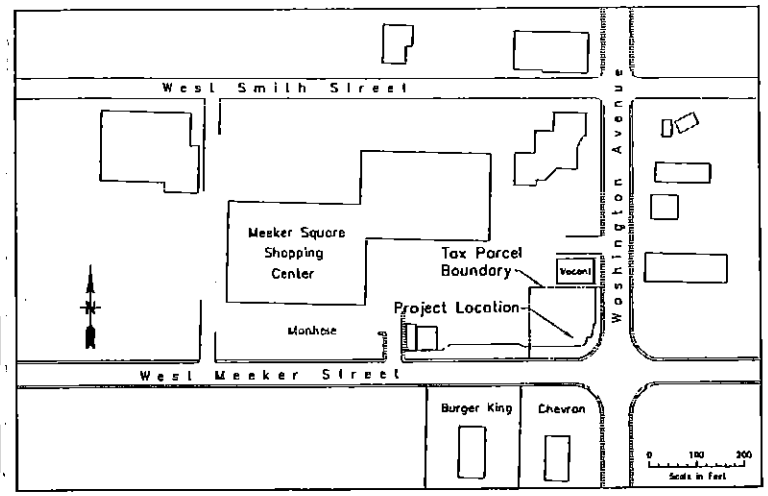
Sincerely,

Brian G. Doan
Project Scientist
SCS ENGINEERS

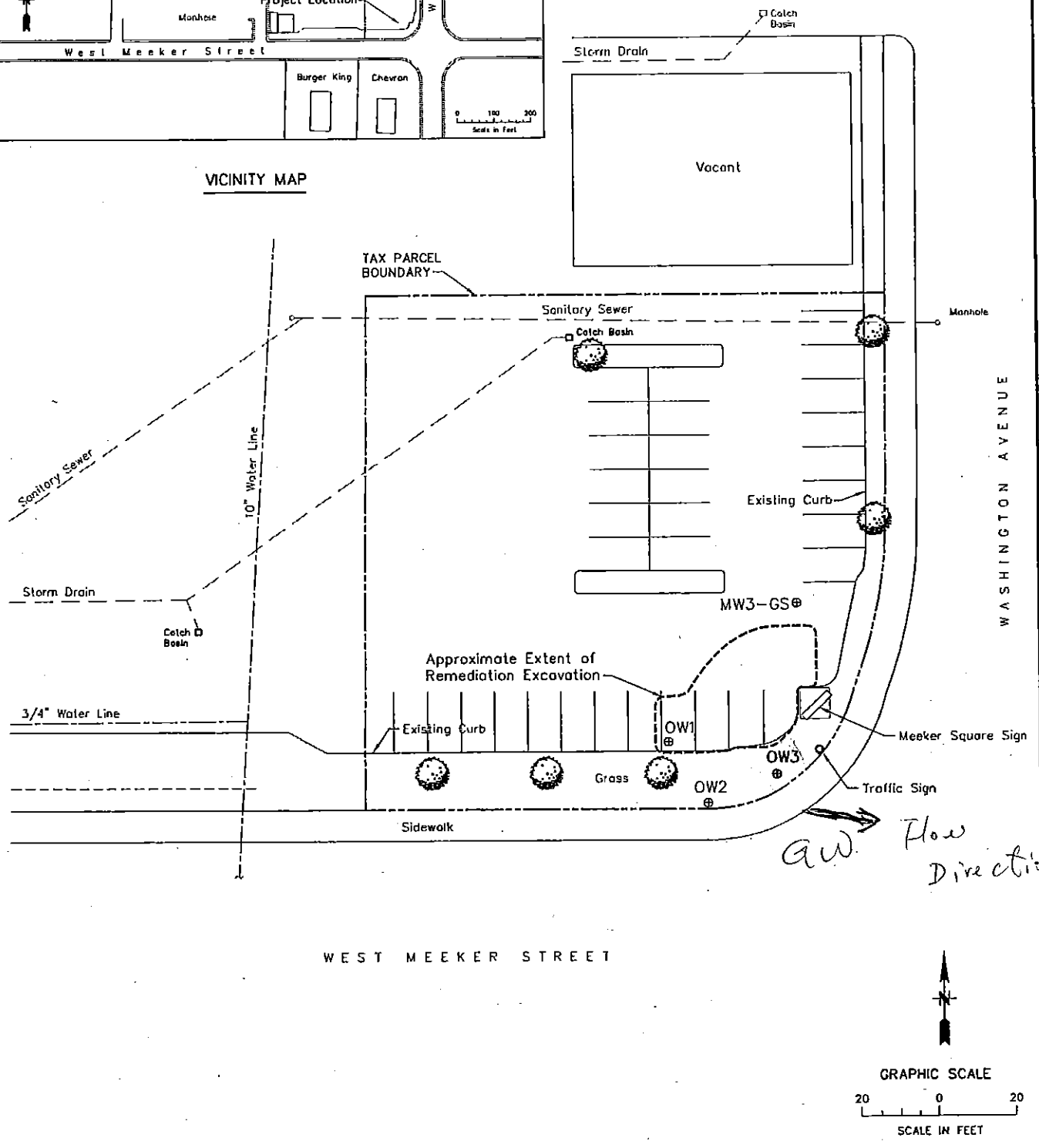
Gregory D. Helland, R.G.
Project Director
SCS ENGINEERS

cc: Tim Wirta, Principal Capital Management
Grant Yang, Washington State Department of Ecology





VICINITY MAP



SCS ENGINEERS STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS, INC. 2405 140TH AVE NE, SUITE 107, BELLEVUE, WA 98005 (425) 746-4600	PROJECT NO. 04202001.01 / DES BY B.D. SCALE AS SHOWN / CHK BY G.H. CAD FILE FIGURE 1 / APP BY G.H.	SITE PLAN FORMER GASOLINE STATION SITE MEEKER SQUARE SHOPPING CENTER KENT, WASHINGTON	DATE JAN' 2003 FIGURE 1

SEVERN TRENT STL

STL Seattle
5755 8th Street East
Tacoma, WA 98424

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TRANSMITTAL MEMORANDUM

DATE: October 14, 2003

TO: Brian Doan
SCS Engineers
2405 140th Ave. N. E., Suite 107
Bellevue, WA 98005

PROJECT: Meeker Former Gas Station (WA)

REPORT NUMBER: 116574

TOTAL NUMBER OF PAGES: 25

Enclosed are the test results for five samples received at STL Seattle on October 1, 2003.

Analytical narrative: The percent recovery of pentafluorobenzene (surrogate compound) for samples 116574-1 and 116574-2 and both triflurotoluene and pentafluorbenzene (surrogate compounds) for the reanalyses of samples 116574-1, 116574-2 and 116574-4 and the method blank analysis for samples associated with batch gb3582. The sample batch was reanalyzed with similar results.

The percent recovery of benzene was outside of quality control acceptance limits for the blank spike/blank spike duplicate analyses for samples associated with batch gb3582. All associated samples were reanalyzed.

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,

Darla Powell

Darla Powell
Project Manager

STL Seattle

Sample Identification:

Lab. No.	Client ID	Date/Time Sampled	Matrix
116574-1	OW1	09-30-03 13:36	Liquid
116574-2	OW2	09-30-03 14:21	Liquid
116574-3	OW3	09-30-03 14:48	Liquid
116574-4	MW3-GS	09-30-03 13:00	Liquid
116574-5	Dup B	09-30-03 15:00	Liquid

STL Seattle

Client Name	SCS Engineers
Client ID:	OW1
Lab ID:	116574-01
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	119		80	120
Bromofluorobenzene	116		80	120
Pentafluorobenzene	122	N	80	120

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	SCS Engineers
Client ID:	
Lab ID:	116574X01
Date Received:	-
Date Prepared:	10/7/2003
Date Analyzed:	10/8/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	123	N	80	120
Bromofluorobenzene	109		80	120
Pentafluorobenzene	123	N	80	120

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	SCS Engineers
Client ID:	OW2
Lab ID:	116574-02
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

Surrogate	% Recovery	Flags	Recovery Limits Low	High
Trifluorotoluene	119		80	120
Bromofluorobenzene	115		80	120
Pentafluorobenzene	121	N	80	120

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	SCS Engineers
Client ID:	
Lab ID:	116574X02
Date Received:	-
Date Prepared:	10/7/2003
Date Analyzed:	10/8/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	122	N	80	120
Bromofluorobenzene	108		80	120
Pentafluorobenzene	122	N	80	120

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	SCS Engineers
Client ID:	OW3
Lab ID:	116574-03
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	116		80	120
Bromofluorobenzene	106		80	120
Pentafluorobenzene	202	X9	80	120

Analyte	**Result (mg/L)**	**PQL**	**MRL**	**Flags**
Benzene	0.106	0.0005	0.00025	
Toluene	0.002	0.001	0.0005	
Ethylbenzene	0.102	0.001	0.0005	
m&p-Xylene	0.0722	0.002	0.001	
o-Xylene	0.00255	0.001	0.0005	

STL Seattle

Client Name	SCS Engineers
Client ID:	
Lab ID:	116574X03
Date Received:	-
Date Prepared:	10/7/2003
Date Analyzed:	10/8/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	124	X9	80	120
Bromofluorobenzene	107		80	120
Pentafluorobenzene	123	X9	80	120

Analyte	**Result (mg/L)**	**PQL**	**MRL**	**Flags**
Benzene	0.0979	0.0005	0.00025	
Toluene	0.00192	0.001	0.0005	
Ethylbenzene	0.12	0.001	0.0005	
m&p-Xylene	0.0755	0.002	0.001	
o-Xylene	0.00273	0.001	0.0005	

STL Seattle

Client Name	SCS Engineers
Client ID:	MW3-GS
Lab ID:	116574-04
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	118		80	120
Bromofluorobenzene	115		80	120
Pentafluorobenzene	119		80	120

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	SCS Engineers
Client ID:	
Lab ID:	116574X04
Date Received:	-
Date Prepared:	10/7/2003
Date Analyzed:	10/8/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	124	N	80	120
Bromofluorobenzene	104		80	120
Pentafluorobenzene	123	N	80	120

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	SCS Engineers
Client ID:	DUP B
Lab ID:	116574-05
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	119		80	120
Bromofluorobenzene	108		80	120
Pentafluorobenzene	210	X9	80	120

Analyte	**Result (mg/L)**	**PQL**	**MRL**	**Flags**
Benzene	0.108	0.0005	0.00025	
Toluene	0.00204	0.001	0.0005	
Ethylbenzene	0.104	0.001	0.0005	
m&p-Xylene	0.0736	0.002	0.001	
o-Xylene	0.00259	0.001	0.0005	

STL Seattle

Client Name	SCS Engineers
Client ID:	
Lab ID:	116574X05
Date Received:	-
Date Prepared:	10/7/2003
Date Analyzed:	10/8/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	123	X9	80	120
Bromofluorobenzene	110		80	120
Pentafluorobenzene	121	X9	80	120

Analyte	**Result (mg/L)**	**PQL**	**MRL**	**Flags**
Benzene	0.0968	0.0005	0.00025	
Toluene	0.00195	0.001	0.0005	
Ethylbenzene	0.113	0.001	0.0005	
m&p-Xylene	0.0712	0.002	0.001	
o-Xylene	0.00295	0.001	0.0005	

STL Seattle

Client Name	SCS Engineers
Client ID:	OW1
Lab ID:	116574-01
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% 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	117		50	150
Pentafluorobenzene	83.1		50	150

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

STL Seattle

Client Name	SCS Engineers
Client ID:	OW2
Lab ID:	116574-02
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	95.5		50	150
Bromofluorobenzene	98.3		50	150
Pentafluorobenzene	79.6		50	150

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

STL Seattle

Client Name	SCS Engineers
Client ID:	OW3
Lab ID:	116574-03
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	114		50	150
Bromofluorobenzene	113		50	150
Pentafluorobenzene	125		50	150

Analyte	**Result (mg/L)**	**PQL**	**Flags**
Gasoline by NWTPH-G	3.36	0.1	

STL Seattle

Client Name	SCS Engineers
Client ID:	MW3-GS
Lab ID:	116574-04
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% 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	114		50	150
Pentafluorobenzene	82.8		50	150

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

STL Seattle

Client Name	SCS Engineers
Client ID:	DUP B
Lab ID:	116574-05
Date Received:	10/1/2003
Date Prepared:	10/5/2003
Date Analyzed:	10/6/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	114		50	150
Bromofluorobenzene	111		50	150
Pentafluorobenzene	128		50	150

Analyte	**Result (mg/L)**	**PQL**	**Flags**
Gasoline by NWTPH-G	3.45	0.1	

STL Seattle

Lab ID:	Method Blank - GB3582
Date Received:	-
Date Prepared:	10/5/2003
Date Analyzed:	10/5/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	121	N	80	120
Bromofluorobenzene	116		80	120
Pentafluorobenzene	122	N	80	120

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

Lab ID:	Method Blank - GB3584
Date Received:	-
Date Prepared:	10/7/2003
Date Analyzed:	10/7/2003
% Solids	-
Dilution Factor	1

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	102		80	120
Bromofluorobenzene	95.4		80	120
Pentafluorobenzene	105		80	120

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:	GB3582
Date Prepared:	10/5/2003
Date Analyzed:	10/5/2003
QC Batch ID:	GB3582

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	0.0197	127	0.0198	128	0.78	n
Toluene	0	0.0945	0.114	121	0.115	121	0	
Ethylbenzene	0	0.0223	0.0195	87.6	0.0196	88.1	0.57	
m&p-Xylene	0	0.0782	0.0831	106	0.0835	107	0.94	
o-Xylene	0	0.0314	0.0343	109	0.0345	110	0.91	

STL Seattle

Blank Spike/Blank Spike Duplicate Report

Lab ID:	GB3584
Date Prepared:	10/7/2003
Date Analyzed:	10/7/2003
QC Batch ID:	GB3584

Volatile Aromatic Hydrocarbons by USEPA Method 5030/8260B

ompound Name	Blank Result (mg/L)	Spike Amount (mg/L)	BS Result (mg/L)	BS % Rec.	BSD Result (mg/L)	BSD % Rec.	RPD	Flag
enzene	0	0.025	0.0235	93.9	0.0241	96.2	2.4	
Toluene	0	0.025	0.0269	107	0.0265	106	-0.94	
thylbenzene	0	0.025	0.0239	95.6	0.023	92.2	-3.6	
&p-Xylene	0	0.05	0.0493	98.6	0.0481	96.3	-2.4	
o-Xylene	0	0.025	0.025	100	0.0256	102	2	

STL Seattle

Lab ID:	Method Blank - GB3582
Date Received:	-
Date Prepared:	10/5/2003
Date Analyzed:	10/5/2003
% Solids	-
Dilution Factor	1

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

			Recovery Limits	
Surrogate	**% Recovery**	**Flags**	**Low**	**High**
Trifluorotoluene	96.7		50	150
Bromofluorobenzene	101		50	150
Pentafluorobenzene	81.7		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:	GB3582
Date Prepared:	10/5/2003
Date Analyzed:	10/5/2003
QC Batch ID:	GB3582

Volatile Petroleum Products by WSDOE Method NWTPH-Gx Modified

ompound Name	Blank Result (mg/L)	Spike Amount (mg/L)	BS Result (mg/L)	BS % Rec.	BSD Result (mg/L)	BSD % Rec.	RPD	Flag
asoline by NWTPH-G	0	1.25	1.37	109	1.38	110	0.91	

SEVERN TRENT STL

STL Seattle
5755 8th Street East
Tacoma, WA 98424

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

DATA QUALIFIERS AND ABBREVIATIONS

B1: This analyte was detected in the associated method blank. The analyte concentration was determined not to be significantly higher than the associated method blank (less than ten times the concentration reported in the blank).

B2: This analyte was detected in the associated method blank. The analyte concentration in the sample was determined to be significantly higher than the method blank (greater than ten times the concentration reported in the blank).

D1: 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%.

D2: 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.

D3: 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%.

D4: 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

3733 8th Street E.
Tacoma, WA 98424
Tel. 253-922-2310
Fax 253-922-5047
www.stl-inc.com

TRENT STL

Client: SCS Engineers	Project Manager: Brian Doan	Date: 9/30/03	Chain of Custody Number: 05281
Address: 2405 140th Ave. NE, Ste. 107	Telephone Number (Area Code)/Fax Number: (425)746-4600 / (425)746-6747	Lab Number: 110579	Page 1 of 1
City: Bellevue / State: WA / Zip Code: 98005	Site Contact: Hayley Brown	Lab Contact: Darla Powell	
Project Name and Location (State): Meeker Former Gas Station (WA)	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. and Location/Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: NWTPH-G w/ BTEX
OW1	9/30/03	13:36		X						X			
OW2		14:21											
OW3		14:48											
MW3-GS		1300											
Dup B		1500											

Special Instructions/ Conditions of Receipt:

Please note that the sample bottles are labeled w/ the wrong analysis. Please use the ~~COC~~ chain to determine what analysis to run.
Thanks
HB 9-30-03

Cooler: ☐ Yes ☐ No Cooler Temp:_____

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

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

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

QC Requirements (Specify):

	Relinquished By	Date	Time	Received By	Date	Time
1.	[signature]	10/1/03	10:30	[signature] STL	10/1/03	1039
2.	[signature] Zach	10/1/03	12:12	[signature]	10/1/03	12:12
3.						

Comments:
Please provide MTCA cleanup level detection limits.

SCS ENGINEERS

Groundwater Sampling Data Sheet

SITE: Meeker Gas Station
WELL ID: OW1
DATE: 9-30-03
WEATHER: partly cloudy

9.56 DTW
10 TOS
~12.5 Intake
15 BOS

CONTROL SETTINGS:
Refill
Discharge
Pressure

Well Location: setting 3

WELL CONDITIONS: Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)
Comments:

SAMPLE CONTAINERS: 3 VOA vials

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q
13:23	start							
13:24	9.79	18.70	.581	2.23	6.25	134		280
13:26	9.90	17.96	.580	0.93	6.11	124	52.1	"
13:28	9.99	17.97	.566	0.65	6.06	115	51.7	"
13:30	10.07	18.09	.561	0.59	6.07	111	19.1	"
13:32	10.13	18.17	.570	0.54	6.09	110	8.4	"
13:34	10.17	18.13	.579	0.51	6.11	106	6.7	"
13:36	10.21	18.31	.554	0.48	6.11	101	4.3	"
Sample complete								

Observations (color, odor, anomalies, etc)

SAMPLER: Lauren Brown Lauren Brown

SCS ENGINEERS

Groundwater Sampling Data Sheet

SITE: Meeker gas station
WELL ID: OW2
DATE: 9-30-03
WEATHER: partly cloudy
WELL CONDITIONS: Locked? (Y) N Water in Protector? Y (N) Damage? Y (N)
Comments:
SAMPLE CONTAINERS: 3 VOA VIALS

9.83' DTW
9 TOS
~11.5 Intake
14 BOS

CONTROL SETTINGS:
Refill
Discharge
Pressure

Well Location
Setting 3

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q mL
1355	start							
1356	9.93	19.87	.407	5.98	6.38	124		180/min
1359	10.03	18.04	.408	1.04	5.85	130	179	"
1402	10.14	18.01	.406	3.00	5.89	130	67	"
1406	10:21	18.06	.407	1.70	5.81	133	[illegible]	"
1409	10.29	18.00	.409	1.35	5.83	133	16	"
1412	10.30	17.98	.411	1.04	5.85	133	11.2	"
1415	10:32	17.96	.413	0.82	5.86	132	9.21	"
1418	10.34	17.97	.414	0.75	5.84	131	8.55	"
1421	10.35	18.05	.416	0.75	5.84	130	5.8	"
Sample complete @								

Observations (color, odor, anomalies, etc)

SCS ENGINEERS

Groundwater Sampling Data Sheet

SITE: Meeker gas station
WELL ID: OW-3
DATE: 9.30.03
WEATHER: mostly cloudy

9.53 DTW
10 TOS
~12.5 Intake
15 BOS

CONTROL SETTINGS:
Refill
Discharge
Pressure

Well Location

WELL CONDITIONS: Locked? (Y) N Water in Protector? (Y) N Damage? Y (N)

SAMPLE CONTAINERS: Comments: 3 VOA VILES for primary
3 VOA VILES for DUP B

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q mL
1438	Start							
1440	9.73	19.35	1.007	2.87	6.76	33		200/min
1442	9.83	18.82	1.008	0.97	6.63	-58	6.68	"
1444	9.88	18.81	1.004	0.63	6.65	-95	3.69	"
1446	9.88	18.84	1.000	0.51	6.62	-107		"
1448	9.88	18.81	.997	0.45	6.65	-117	2.51	"
Sample complete @ 1453								

Observations (color, odor, anomalies, etc)

Collected DUP B at this location. Time = 1500

Water has a gasoline-like smell.

SAMPLER: Heather Brown

Heather Brown

360
60

SCS ENGINEERS

Groundwater Sampling Data Sheet

SITE: Meeker Gas Station
WELL ID: MW3-GS
DATE: 9-30-03
WEATHER: Mostly cloudy

10.51 DTW
10 TOS
~~17.0~~ Intake
~~15~~ 12 BOS

CONTROL SETTINGS:
Refill
Discharge
Pressure

Well Location: Setting 2

WELL CONDITIONS: Locked? (Y) N Water in Protector? (Y) N Damage? Y (N)

Comments:

SAMPLE CONTAINERS: 3 VOA vials

TIME	DTW	Temp.	Sp.Cond.	DO	pH	Eh	Turbidity	Q mL
12:41	Start							
12:42	10.63	20.71	.549	6.00	6.26	128		1600/min
12:45	10.76	19.79	.549	1.88	6.01	131	4.35	"
12:48	10.83	19.73	.546	1.17	6.01	129	1.25	"
12:51	10.89	19.83	.551	0.89	6.00	130	1.24	"
12:54	10.93	19.90	.552	0.76	6.00	131	1.30	"
12:57	10.96	19.87	.552	0.68	6.00	131	1.20	"
13:00	10.98	19.84	.551	0.64	6.01	131	0.58	"
Sample complete @								

Observations (color, odor, anomalies, etc)

1. ~~Used~~ used graduated tubing & bottom was only at ~12 ft.

SAM: Nami Brown Heather Rose

SCS ENGINEERS **GROUNDWATER SAMPLING INSTRUMENT CALIBRATION DOCUMENTATION FORM**

	Temp.	Conductivity	pH	ORP/Eh	DO	Turbidity	Comments/Exceptions
Date	-1	9/30/03	9/30/03		9/30/03	9/30/03	
Time		0725	0727		0734	0829	
Weather (sky or precip, temp)		cloudy	cloudy		cloudy	Cloudy	
Barometric Pressure (*)					760		
Type of Calibration		Std solution	buffer solution		Std air	Std	
Standard Value		0.732	7.0/4.0		100%	0 10 NTU = 0.36 0 100 = 51.9	
Pre-Cal Reading		0.721	7.12/3.99		100%	0 100 = 52.2	
Post Cal Reading		0.720	7.0/4.0		100%		
Descrepancy		None	none/none		None	None	
Calib. Successful?		yes	yes/yes		yes	yes	
Calibration by		HSB	HSB		HSB	HSB	
Instrument Type, ID		YSI 30	YSI 30		YSI	2100P	
Calibration Location		In field	In field		In field	In field	