SOUND ENVIRONMENTAL STRATEGIES
www.soundenvironmental.com

Date: December 31, 2008

GROUNDWATER MONITORING REPORT
Fourth Quarter 2008
Precision Pattern, Inc.
Tacoma, Washington

Property Address:	2620 East G Street, Tacoma, Washington
Client Contact:	Mr. Donald Lundquist
Primary Regulatory Agency/ID:	Washington State Department of Ecology/85239825
SES Project Number:	0459-001-04
SES Project Manager:	Corey League
Frequency of Groundwater Sampling:	Quarterly
Owner/Property Land Use	Precision Pattern, Inc./Industrial
Off-Property Land Use	Commercial/Industrial

INTRODUCTION

Sound Environmental Strategies Corporation (SES) has prepared this report to present the results of the Fourth Quarter 2008 groundwater monitoring event (monitoring event) conducted at the Precision Pattern, Inc. facility located at 2620 East G Street, Tacoma, Washington (herein referred to as the Property) (Figure 1). The monitoring event was performed in an effort to evaluate the environmental quality of groundwater beneath the Property and to demonstrate compliance with Washington State Department of Ecology Model Toxics Control Act Cleanup Regulations.

The monitoring event was conducted on November 25, 2008, at the Property and included collecting groundwater samples from monitoring wells MW01 through MW03 (Figure 2). In addition, a field duplicate sample (MW99) was collected from monitoring well MW01 for quality assurance/quality control (QA/QC) purposes. This report presents field activities performed during the monitoring event, laboratory analytical results, and a description of upcoming work.

FIELD ACTIVITIES

Upon arrival at the Property, SES personnel opened all three of the monitoring wells, and water levels were permitted to equilibrate with atmospheric pressure for a minimum of 15 minutes before groundwater level measurements were obtained. Groundwater levels were measured to an accuracy of 0.01 feet using an electronic water level meter. Purging and sampling of each monitoring well was performed using a peristaltic pump and dedicated polyethylene tubing at flow rates ranging from 100 to 300 milliliters per minute. The tubing intake was placed approximately 2 to 3 feet below the surface of the groundwater or mid-screen in each monitoring well. During purging, water quality was monitored using a HORIBA U-22 water quality meter equipped with a flow-through cell. The six water quality parameters that were monitored and recorded included temperature, pH, specific conductance, dissolved oxygen, turbidity, and oxidation-reduction potential. Each monitoring well was purged until all six water quality parameters stabilized.

Following purging, groundwater samples were collected from the pump outlet tubing located upstream of the flow-through cell and placed directly into laboratory-prepared sample containers. The containers were placed on ice in a cooler and transported to Friedman & Bruya, Inc. of Seattle, Washington, under standard chain-of-custody protocols. The groundwater samples were submitted for analysis of diesel- and

oil-range petroleum hydrocarbons by Northwest Total Petroleum Hydrocarbon (NWTPH) Method NWTPH-Dx and analysis of benzene, toluene, ethylbenzene, and total xylenes by United States Environmental Protection Agency Method 8021B. All purge water generated during the monitoring event was placed in an appropriately labeled 55-gallon steel drum and temporarily stored on the Property pending receipt of analytical data and proper disposal.

RESULTS

Depth-to-groundwater levels measured on November 25, 2008, ranged from 0.02 feet (MW01) to 0.47 feet (MW02) below the top of the monitoring well casing. Groundwater elevations were contoured using the water level measurements collected on November 25, 2008 (Figure 2; Table 1). Groundwater flow direction was measured to be toward the north at a gradient of approximately 0.011 feet per foot between monitoring wells MW01 and MW02. Laboratory analytical results from the monitoring event indicate that no detectable concentrations of chemicals of concern were present above the laboratory's reporting limits in groundwater samples collected from monitoring wells MW01, MW02, or MW03 (Figure 3; Table 1).

Data Quality Review

SES performed a QA/QC review of the analytical results, which included a review of accuracy and precision of the data supplied by the laboratory. In addition, the relative percent difference (RPD) was calculated for the field duplicate collected by SES from monitoring well MW01. The RPD for each analyte was within acceptable limits. The analytical results for these samples and the field duplicate are considered to be usable for the purposes intended. All other laboratory QA/QC data were within laboratory-supplied control limits. A copy of the laboratory analytical report is provided as Attachment A.

WORK PLANNED

Acknowledging the fact that the concentrations of chemicals of concern have remained below their respective MTCA Method A cleanup levels during each of the last four consecutive quarterly monitoring events conducted at the Property, no additional monitoring events are currently scheduled for the Property.

CLOSING

SES appreciates the opportunity to work with you on this project. Please contact the undersigned at (206) 306-1900 if you have any questions or require additional information.

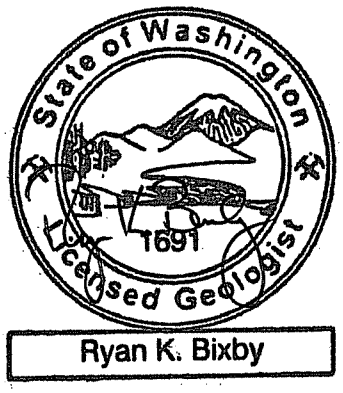
Respectfully,

Sound Environmental Strategies Corporation

Corey League
Project Manager

for:

Ryan Bixby, LG #1691
Principal Geologist



Attachments:
Figure 1, Property Location Map
Figure 2, Groundwater Contour Map (November 25, 2008)
Figure 3, Groundwater Analytical Results (November 25, 2008)
Table 1, Groundwater Analytical Data
Attachment A, Laboratory Analytical Report
Friedman & Bruya, Inc. #811294

cc: Mr. Scott Rose, Washington State Department of Ecology, Southwest Regional Office

CSD:dnm

TABLE

SOUND ENVIRONMENTAL STRATEGIES
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Table 1
Groundwater Analytical Data
Precision Pattern, Inc.
2620 East G Street
Tacoma, Washington

Location	Date Sampled	Depth to Groundwater[1] (feet)	Groundwater Elevation[2] (feet)	Analytical Results (µg/L) ORPH[3]	DRPH[3]	Benzene[4]	Toluene[4]	Ethylbenzene[4]	Total Xylenes[4]
MW01	01/03/08	0.06	99.94	<250	86[a]	<1	5	<1	<3
	05/29/08	0.08	99.92	<250	<50	<1	<1	<1	<3
	08/29/08	0.15	99.85	<250	<50	<1	<1	<1	<3
	11/25/08	0.02	99.98	<250	<50	<1	<1	<1	<3
MW02	01/03/08	0.23	99.78	<250	<50	<1	<1	<1	<3
	05/29/08	0.43	99.58	<250	<50	<1	<1	<1	<3
	08/29/08	0.45	99.56	<250	<50	<1	<1	<1	<3
	11/25/08	0.47	99.54	<250	<50	<1	<1	<1	<3
MW03	01/03/08	0.50[b]	--	<250	<50	<1	<1	<1	<3
	05/29/08	0.05	99.93	<250	<50	<1	<1	<1	<3
	08/29/08	-0.08[c]	100.06	<250	<50	<1	<1	<1	<3
	11/25/08	0.07	99.91	<250	<50	<1	<1	<1	<3
MTCA Method A Cleanup Level for Groundwater[5]				**500**	**500**	**5**	**1,000**	**700**	**1,000**

NOTES:

Chemical analyses conducted by Friedman & Bruya, Inc. of Seattle, Washington.

[1]Measured below a fixed spot on the well casing rim.

[2]Measured relative to temporary benchmark with an assumed elevation of 100.00 feet.

[3]Analyzed by NWTPH Method NWTPH-Dx.

[4]Analyzed by EPA Method 8021B.

[5]MTCA Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

[a]Sample extracts passed through a silica gel column prior to analysis.

[b]The depth-to-groundwater was misinterpreted. Actual depth-to-groundwater is above the well casing rim.

[c]The static depth-to-groundwater is above the well casing rim.

-- = elevation not measured

< = not detected at a concentration exceeding the laboratory reporting limit

µg/L = micrograms per liter

DRPH = diesel-range petroleum hydrocarbons

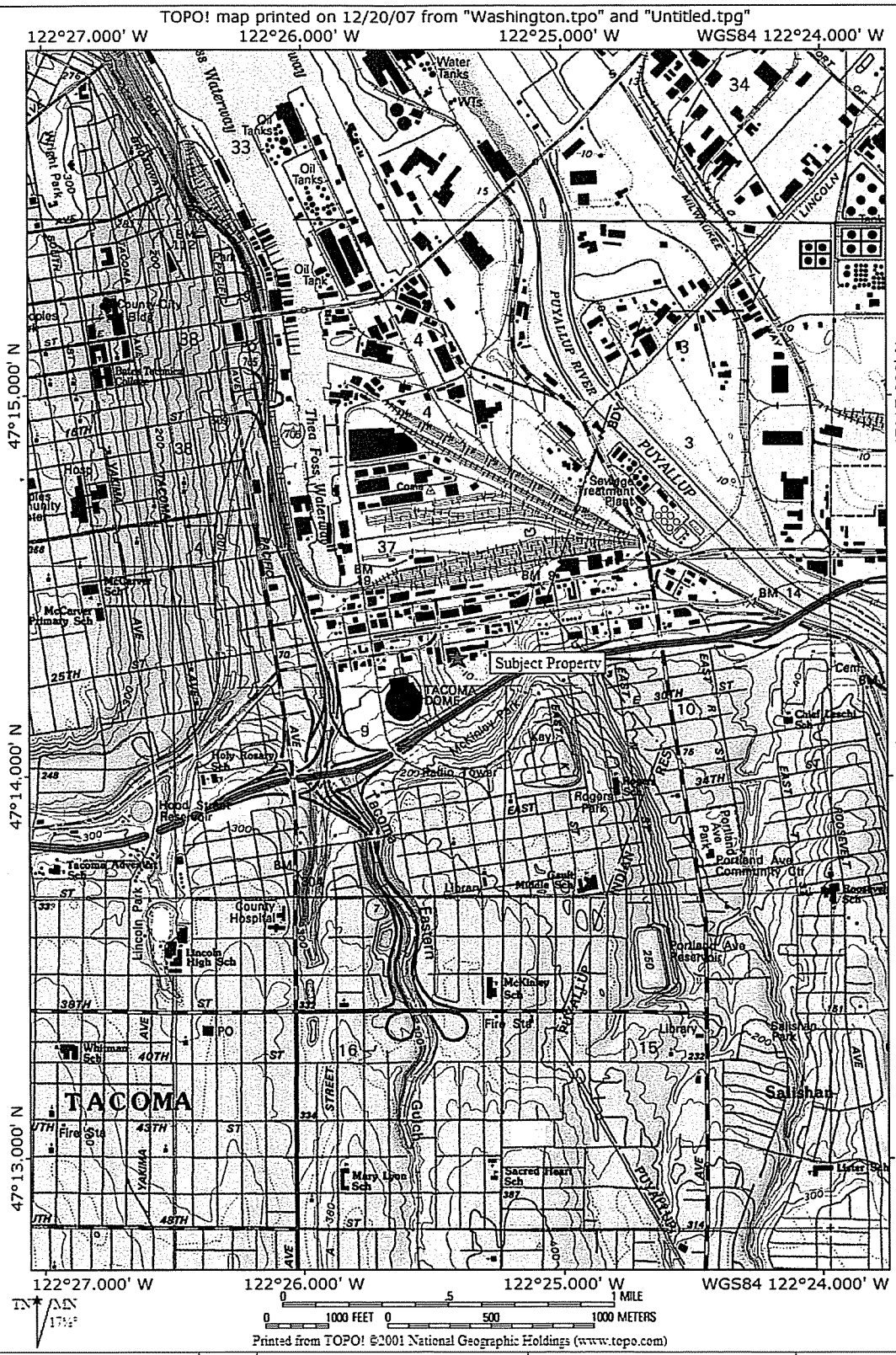
EPA = United States Environmental Protection Agency

MTCA = Model Toxics Control Act

NWTPH = Northwest Total Petroleum Hydrocarbon

ORPH = oil-range petroleum hydrocarbons

FIGURES



SOUND ENVIRONMENTAL STRATEGIES
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Date: July 9, 2008
Drawn By: N. Hoeft
Chk By: C. League
SES Project No.: 0459-001-04
File ID: 0459_ fig1_property location map

Precision Pattern, Inc.
2620 East G Street
Tacoma, Washington

FIGURE 1
Property Location Map

SLOPE

SLOPE

N

VEGETATION

VEGETATION

VEGETATION

VEGETATION

MACHINE SHOP

LEGEND

MW01	MONITORING WELL LOCATION
99.90'	0.10-FOOT-INTERVAL GROUNDWATER CONTOUR
	GROUNDWATER FLOW DIRECTION (NOVEMBER 25, 2008)
UST	UNDERGROUND STORAGE TANK

MW01/B03
(99.98')

99.90'

99.80'

99.70'

99.60'

FORMER UST EXCAVATION (SES 2005)

WOODSHOP

ACTIVE PRODUCTION AREAS

MW02/B02
(99.54')

MW03/B01
(99.91')

99.90'

99.80'

99.70'

99.60'

CONCRETE FLOOR

CONCRETE FLOOR

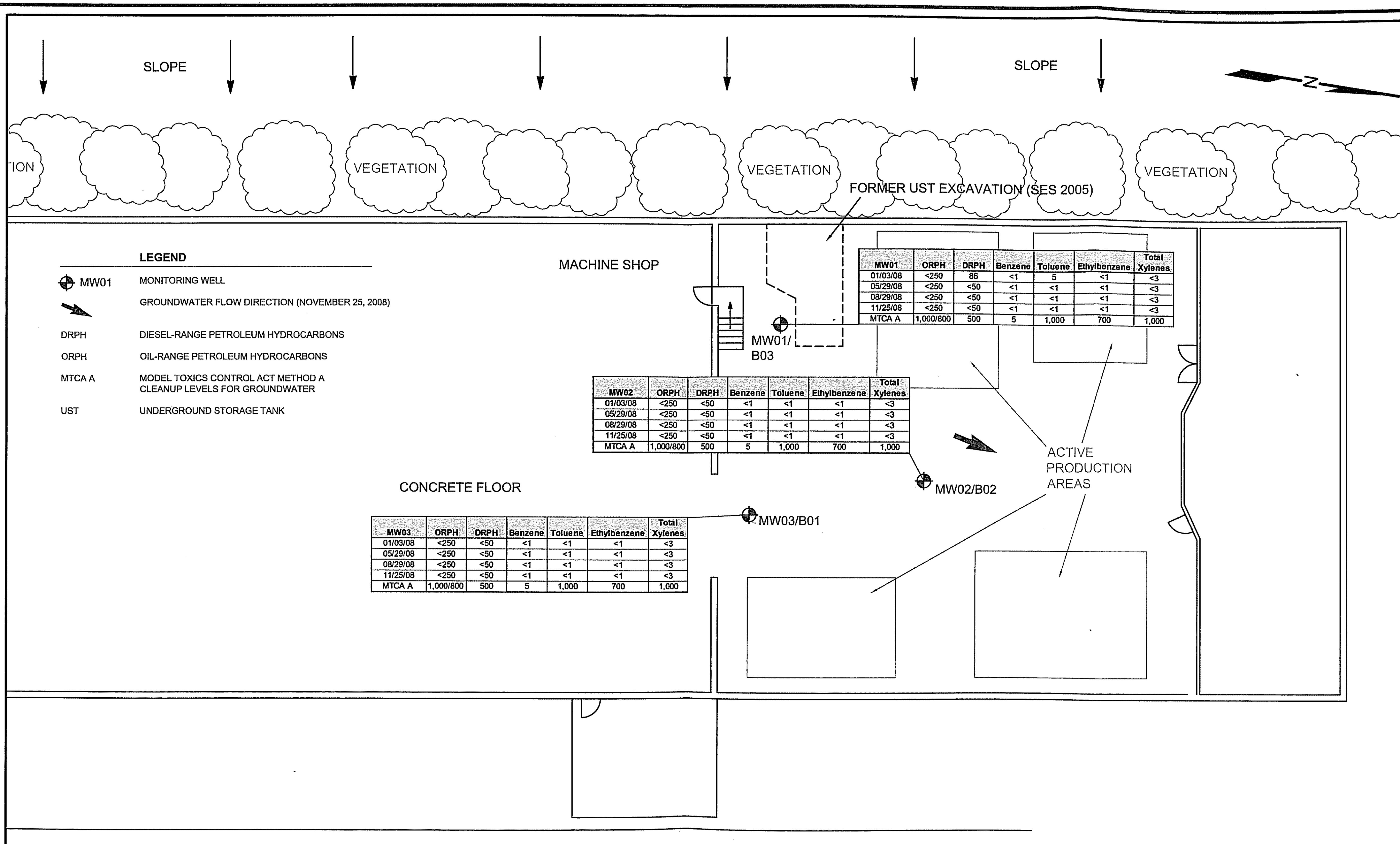
SOUND ENVIRONMENTAL STRATEGIES SOUNDENVIRONMENTAL.COM	DATE: 12/04/08 DRAWN BY: NAC/JQC CHECKED BY: HCL CAD FILE: 0459-001-03_2008Q4_CM	PROJECT NAME: PRECISION PATTERN, INC. SES PROJECT NUMBER: 0459-001-04 STREET ADDRESS: 2620 EAST G STREET CITY, STATE: TACOMA, WASHINGTON	REGION:	0 5 10 15 30 APPROXIMATE SCALE IN FEET

FIGURE 2
GROUNDWATER CONTOUR MAP
(NOVEMBER 25, 2008)

12/30/2008

P:\0459-001 PRECISION PATTERN (ETS)\0459-001-04 QUARTERLY GROUNDWATER SAMPLING\TECHNICAL\CAD\2008Q4 GW0459-001-03 2008Q4 CM F.DWG

SOUNDENVIRONMENTAL.COM



MW01	ORPH	DRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
01/03/08	<250	86	<1	5	<1	<3
05/29/08	<250	<50	<1	<1	<1	<3
08/29/08	<250	<50	<1	<1	<1	<3
11/25/08	<250	<50	<1	<1	<1	<3
MTCA A	1,000/800	500	5	1,000	700	1,000

MW02	ORPH	DRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
01/03/08	<250	<50	<1	<1	<1	<3
05/29/08	<250	<50	<1	<1	<1	<3
08/29/08	<250	<50	<1	<1	<1	<3
11/25/08	<250	<50	<1	<1	<1	<3
MTCA A	1,000/800	500	5	1,000	700	1,000

MW03	ORPH	DRPH	Benzene	Toluene	Ethylbenzene	Total Xylenes
01/03/08	<250	<50	<1	<1	<1	<3
05/29/08	<250	<50	<1	<1	<1	<3
08/29/08	<250	<50	<1	<1	<1	<3
11/25/08	<250	<50	<1	<1	<1	<3
MTCA A	1,000/800	500	5	1,000	700	1,000

LEGEND

MW01	MONITORING WELL
(arrow)	GROUNDWATER FLOW DIRECTION (NOVEMBER 25, 2008)
DRPH	DIESEL-RANGE PETROLEUM HYDROCARBONS
ORPH	OIL-RANGE PETROLEUM HYDROCARBONS
MTCA A	MODEL TOXICS CONTROL ACT METHOD A CLEANUP LEVELS FOR GROUNDWATER
UST	UNDERGROUND STORAGE TANK

SOUND ENVIRONMENTAL STRATEGIES
SOUNDENVIRONMENTAL.COM

DATE: 12/04/08
DRAWN BY: NAC/JQC
CHECKED BY: RKB
CAD FILE: 0459-001-03_2008Q4_GD

PROJECT NAME: PRECISION PATTERN, INC.
SES PROJECT NUMBER: 0459-001-04
STREET ADDRESS: 2620 EAST G STREET
CITY, STATE: TACOMA, WASHINGTON

REGION:

0 5 10 15 30
APPROXIMATE SCALE IN FEET

FIGURE 3
GROUNDWATER ANALYTICAL RESULTS
(NOVEMBER 25, 2008)

P:\0459-001 PRECISION PATTERN (ETS)\0459-001-04 QUARTERLY GROUNDWATER SAMPLING\TECHNICAL\CAD\2008Q4_GW\0459-001-03_2008Q4_GD_F.DWG 09/30/2008

ATTACHMENT A

Laboratory Analytical Report
Friedman & Bruya, Inc. #811294

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

December 2, 2008

Corey League, Project Manager
Sound Environmental Strategies Corporation
2400 Airport Way S., Suite 200
Seattle, WA 98134-2020

Dear Mr. League:

Included are the results from the testing of material submitted on November 25, 2008 from the SOU_0459-001-04_20081125, F&BI 811294 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
SOU1202R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on November 25, 2008 by Friedman & Bruya, Inc. from the Sound Environmental Strategies SOU_0459-001-04_20081125, F&BI 811294 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Sound Environmental Strategies
811294-01	MW01-20081125
811294-02	MW02-20081125
811294-03	MW03-20081125
811294-04	MW99-20081125

All quality control requirements were acceptable.

Date of Report: 12/02/08
Date Received: 11/25/08
Project: SOU_0459-001-04_20081125, F&BI 811294
Date Extracted: 11/26/08
Date Analyzed: 11/26/08

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (% Recovery) Limit (52-124)
MW01-20081125 811294-01	<1	<1	<1	<3	78
MW02-20081125 811294-02	<1	<1	<1	<3	81
MW03-20081125 811294-03	<1	<1	<1	<3	78
MW99-20081125 811294-04	<1	<1	<1	<3	79
Method Blank	<1	<1	<1	<3	80

Date of Report: 12/02/08
Date Received: 11/25/08
Project: SOU_0459-001-04_20081125, F&BI 811294
Date Extracted: 11/26/08
Date Analyzed: 11/26/08

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-132)
MW01-20081125 811294-01	<50	<250	104
MW02-20081125 811294-02	<50	<250	80
MW03-20081125 811294-03	<50	<250	91
MW99-20081125 811294-04	<50	<250	85
Method Blank	<50	<250	92

Date of Report: 12/02/08
Date Received: 11/25/08
Project: SOU_0459-001-04_20081125, F&BI 811294

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES USING EPA METHOD 8021B

Laboratory Code: 811271-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	70	72	3
Toluene	ug/L (ppb)	27	29	7
Ethylbenzene	ug/L (ppb)	19	20	5
Xylenes	ug/L (ppb)	25	26	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	93	65-118
Toluene	ug/L (ppb)	50	96	72-122
Ethylbenzene	ug/L (ppb)	50	98	73-126
Xylenes	ug/L (ppb)	150	96	74-118

Date of Report: 12/02/08
Date Received: 11/25/08
Project: SOU_0459-001-04_20081125, F&BI 811294

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	86	84	67-141	2

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probablility.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - The sample was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of diesel.

y - The pattern of peaks present is not indicative of motor oil.

811294

SAMPLE CHAIN OF CUSTODY ME 11/25/08 BOA / V2

Page # 1 of 1

Send Report To Corey League
Company Sound Environmental Strategies
Address 2400 Airport Way South, Suite 200
City, State, ZIP Seattle, WA 98134
Phone # 206.306.1900 Fax # 306.1907

SAMPLERS (signature): L. Namba

PROJECT NAME/NO.: Precision Pattern 0459-001-04

PO #:

REMARKS: Please E-mail results

GEMS Y / N

TURNAROUND TIME
- ☑ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☑ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals			Notes
MW01-20081125	MW-01	—	01 A-D	11/25/08	1255	water	4	✓		✓						
MW02-20081125	MW-02	—	02 A-D	11/25/08	1220	water	4	✓		✓						
MW03-20081125	MW-03	—	03 A-D	11/25/08	1145	water	4	✓		✓						
MW99-20081125	MW-99	—	04 A-D	11/25/08	1310	water	4	✓		✓						

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: L. Namba	Larry Namba	SES	11/25/08	1540
Received by: Nhan Phan	Nhan Phan	FEBI	11/25/08	15:40
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\SESGEMSR1.DOC (Revision 1)

Samples received at 14 °C