



SoundEarth Strategies, Inc.  
2811 Fairview Avenue East, Suite 2000  
Seattle, Washington 98102

June 12, 2015

Mr. Tom Lee  
Madison Development Group, LLC  
10510 Northeast Northup Way, Suite 120  
Kirkland, Washington 98033

**RE: SECOND QUARTER 2015 GROUNDWATER MONITORING  
Smokey Point Retail Center  
2707 171<sup>st</sup> Place Northeast  
Marysville, Washington 98271  
Project Number: 0918-001**

Dear Mr. Lee:

SoundEarth Strategies, Inc. (SoundEarth) is pleased to present the following groundwater monitoring report for the Smokey Point Retail Center located at 2707 171<sup>st</sup> Place Northeast in Marysville, Washington (the Property; Figure 1). Historical releases of gasoline at the adjacent Smokey Point Chevron have impacted groundwater conditions at the Property. The Property is currently enrolled in the Washington State Department of Ecology's (Ecology) Voluntary Cleanup Program (VCP #: NW2833). The upgradient Smokey Point Chevron is currently listed with Ecology as a leaking underground storage tank site and was enrolled in the VCP in 2009 (VCP #: NW2174).

#### **PROJECT BACKGROUND**

The Smokey Point Retail Center was constructed on the Property in 2008. The Property had previously been undeveloped. Smokey Point Chevron was built on the north-adjointing property in 1978. The station included three underground storage tanks (USTs) used for gasoline storage. The USTs ranged in capacity from 5,000 to 12,000 gallons. The retail fuel operation was terminated in 2008.

Previous investigations conducted at the Property and the north-adjointing property by Associated Environmental Group, LLC, GeoScience Management, Inc. (GeoScience), and SoundEarth since September 2006 have identified gasoline-range petroleum hydrocarbons (GRPH) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) impacts to soil and groundwater near the former pump islands and USTs on the north side of Building 1 (Figure 2). GRPH and BTEX concentrations were detected in exceedance of their respective Washington State Model Toxics Control Act (MTCA) Method A cleanup levels (cleanup levels).

#### **2009 Interim Cleanup at Smokey Point Chevron**

The three gasoline-storage USTs on the Smokey Point Chevron property were removed in October 2009. Petroleum-contaminated soil (PCS) was excavated to a reported depth of 7 feet below ground surface (bgs). Groundwater infiltrated the remedial excavation at a depth of 5.5 feet. Brown frothy material and

sheen were observed on the surface of the infiltration water and reportedly removed by skimmers, absorbent materials, and vacuum trucks. A total of 1,767 tons of PCS and 4,900 gallons of infiltration water were removed from the excavation. The cleanup was managed and monitored by GeoScience.

A soil sample collected by GeoScience from the south sidewall of the excavation at a depth of 5 feet (sample #6) contained 22,000 milligrams per kilogram (mg/kg) of GRPH, exceeding the cleanup level of 30 mg/kg. Three samples collected at a depth of 5 feet bgs from the excavation center (samples #5 and #11) and near the northern end (sample #19) contained GRPH concentrations ranging from 1,210 mg/kg to 18,500 mg/kg, also in excess of the applicable cleanup level.

The excavation was not extended further to the south due to the presence of the Smokey Point Chevron building. The elevated GRPH result from the south sidewall indicates that PCS was left in place beneath the building. In addition, PCS was likely left in place at the base of the excavation; the cleanup report does not indicate any samples were collected deeper than 6 feet, and very few verification samples were collected from the bottom-center of the excavation. A PVC-pipe infiltration gallery was installed in the excavation prior to backfilling; however, no additional remediation has been conducted at the Smokey Point Chevron property since 2009.

### **Groundwater Monitoring**

SoundEarth completed groundwater monitoring events on the Property during the second quarter of 2013 and first and third quarters of 2014. Results of these monitoring events were presented in individual reports. Concentrations of GRPH and benzene above their respective MTCA cleanup levels were observed in groundwater beneath the Property during these events.

### **2015 PROPERTY EVALUATION**

During the second quarter of 2015, SoundEarth installed an additional monitoring well on the Property and completed a groundwater monitoring event. The field activities and analytical results of these events are summarized below and on attachments to this report.

#### **Monitoring Well Installation**

Monitoring well MW-119 was installed on the Property on May 18, 2015, under the supervision of a SoundEarth geologist. The well was installed to further refine the evaluation of the environmental quality, flow direction, and gradient of groundwater beneath the Property. Prior to groundbreaking activities, a public utility locate request was submitted and a private utility locate of the proposed drilling location was completed by Applied Professional Services, Inc. of North Bend, Washington.

Drilling services were provided by Boretac Inc. of Spangle, Washington. The well was installed using a limited-access, hollow-stem auger drill rig, and discrete soil samples were collected during drilling. Soils encountered were observed for indications of contamination and described according to the Unified Soil Classification System by a SoundEarth geologist. Soil descriptions and contamination indicators, such as color, odor, and photoionization detector headspace measurements, were recorded on a boring log which is provided in this report as Attachment A.

The boring was advanced to 17.5 feet bgs, and a PVC monitoring well was installed with a screened interval of 4 to 14 feet bgs. Soil samples were collected and placed in clean, laboratory-prepared sample containers, stored on ice, and delivered to Friedman & Bruya, Inc., of Seattle, Washington, under standard chain-of-custody protocol. Drill cuttings were placed in labeled 55-gallon drums and stored on the Property pending analytical results for proper disposal.

Following well installation, MW-119 was developed using a submersible pump. Approximately 18 well volumes were purged from the well until visible turbidity had been removed. Purge water was stored in a labeled 55-gallon drum pending analytical results for proper disposal.

### **Second Quarter 2015 Groundwater Monitoring**

SoundEarth conducted a groundwater monitoring event at the Property on May 20, 2015, in order to evaluate the environmental quality, flow direction, and gradient of groundwater beneath the Property. The monitoring event included measuring depths to groundwater and collecting groundwater samples from the existing well network. Depth to groundwater was measured in monitoring wells MW-112 through MW-119. Water levels were permitted to equilibrate with atmospheric pressure for a minimum of 28 minutes before groundwater level measurements were obtained. Groundwater levels were measured relative to the top of well casing to an accuracy of 0.01 feet using an electronic water level meter.

Groundwater samples were collected on May 20, 2015, from on-Property monitoring wells MW-112, MW-113, MW-114, MW-115, MW-116, and MW-119. Sampling was conducted in accordance with the U.S. Environmental Protection Agency (EPA) *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (April 1996). Purging and sampling of each monitoring well were performed using a peristaltic pump and dedicated polyethylene tubing at flow rates ranging from 205 to 250 milliliters per minute. The intake was placed approximately 1 to 3 feet below the surface of the groundwater in each monitoring well. During purging, water quality was monitored using a Quanta water quality meter equipped with a flow-through cell. The 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 a minimum subset of pH, specific conductivity, and dissolved oxygen or turbidity stabilized.

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

The groundwater samples were submitted for analysis of GRPH by Northwest Total Petroleum Hydrocarbon Method NWTPH-Gx and BTEX by EPA Method 8021B. 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

Soils encountered during installation of monitoring well MW-119 generally consisted of medium to coarse sand with trace silt and varying amounts of gravel. Groundwater was encountered at 7.5 feet bgs during drilling. No indications of contamination were observed in the soil.

Groundwater levels measured on May 20, 2015, ranged from 4.67 (MW-119) to 6.16 (MW-117) feet below the top of the monitoring well casings (Table 1). Using these measurements, the groundwater elevations were calculated and contoured (Figure 3). The groundwater contours indicate groundwater is generally flowing to the south–southwest with an average gradient of 0.002 feet per foot between wells MW-113 and MW-114.

Groundwater analytical results from the monitoring event are summarized below (and in Table 1):

- Concentrations of benzene exceeding the MTCA Method A cleanup level of 5 micrograms per liter ( $\mu\text{g/L}$ ) were detected in groundwater collected from monitoring wells MW-112, MW-113, and MW-114. The highest concentration of benzene detected during the monitoring event was 24  $\mu\text{g/L}$  in MW-112.
- A concentration of GRPH exceeding the MTCA Method A cleanup level of 800  $\mu\text{g/L}$  was detected in groundwater collected from monitoring well MW-112 (990  $\mu\text{g/L}$ ).
- All other GRPH and BTEX concentrations were below their respective laboratory reporting limits and/or MTCA Method A cleanup levels in the groundwater samples collected during the groundwater monitoring event.

## DATA QUALITY REVIEW

SoundEarth performed a quality assurance/quality control (QA/QC) review of the analytical results, which included a review of accuracy and precision of the data supplied by the laboratory. All QA/QC criteria are acceptable for the groundwater samples, and the analytical results are considered usable to meet the project objectives. A copy of the laboratory analytical report is provided as Attachment B.

**CLOSING**

We appreciate the opportunity to provide environmental services on this project. If you have any questions, please contact the undersigned at 206-306-1900.

Respectfully,

SoundEarth Strategies, Inc.

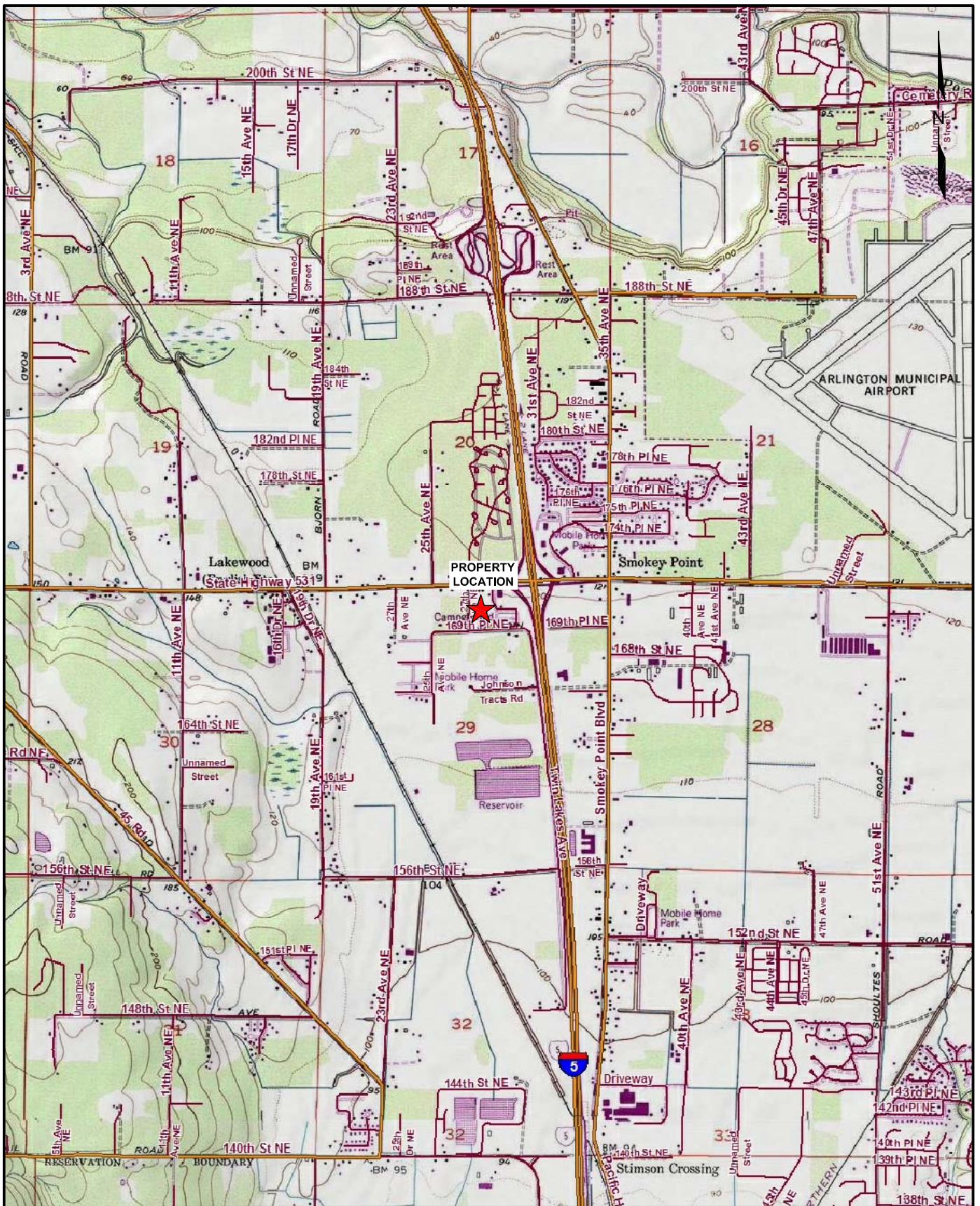


David Mendel, GT  
Staff Geologist

Attachments: Figure 1, Site Location Plan  
Figure 2, Site Plan  
Figure 3, Groundwater Contour Map (May 20, 2015)  
Table 1, Summary of Groundwater Analytical Data  
A, Boring Log  
B, Laboratory Analytical Report  
*Friedman & Bruya, Inc. #505361*

DMM/CER:hsb

## FIGURES



0 1,250 2,500 5,000  
 APPROXIMATE SCALE IN FEET

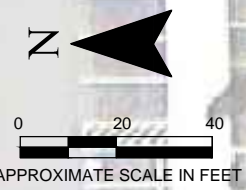
CREATED WITH TOPO!®  
 ©2010 NATIONAL GEOGRAPHIC;  
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DATE: \_\_\_\_\_09/25/2013  
 DRAWN BY: \_\_\_\_\_BLR  
 CHECKED BY: \_\_\_\_\_CER  
 CAD FILE: \_\_\_\_\_0918-001\_2013VIC

PROJECT NAME: \_\_\_\_\_SMOKEY POINT RETAIL CENTER  
 PROJECT NUMBER: \_\_\_\_\_0918-001  
 STREET ADDRESS: \_\_\_\_\_171ST PLACE NORTHEAST  
 CITY, STATE: \_\_\_\_\_MARYSVILLE, WASHINGTON

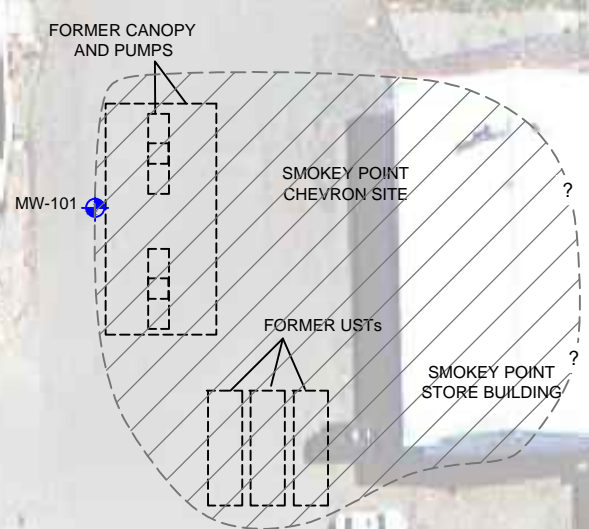
**FIGURE 1**  
 SITE LOCATION PLAN



172ND STREET NORTHEAST

28TH DRIVE NORTHEAST

171ST PLACE NORTHEAST

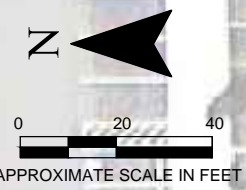


LEGEND	
	PROPERTY BOUNDARY
	APPROXIMATE EXTENT OF PCS
	MW-111 MONITORING WELL
PCS	PETROLEUM-CONTAMINATED SOIL
UST	UNDERGROUND STORAGE TANK



SMOKEY POINT RETAIL CENTER  
171ST PLACE NORTHEAST  
MARYVILLE, WASHINGTON  
SOUNDEARTH PROJECT #0918-001

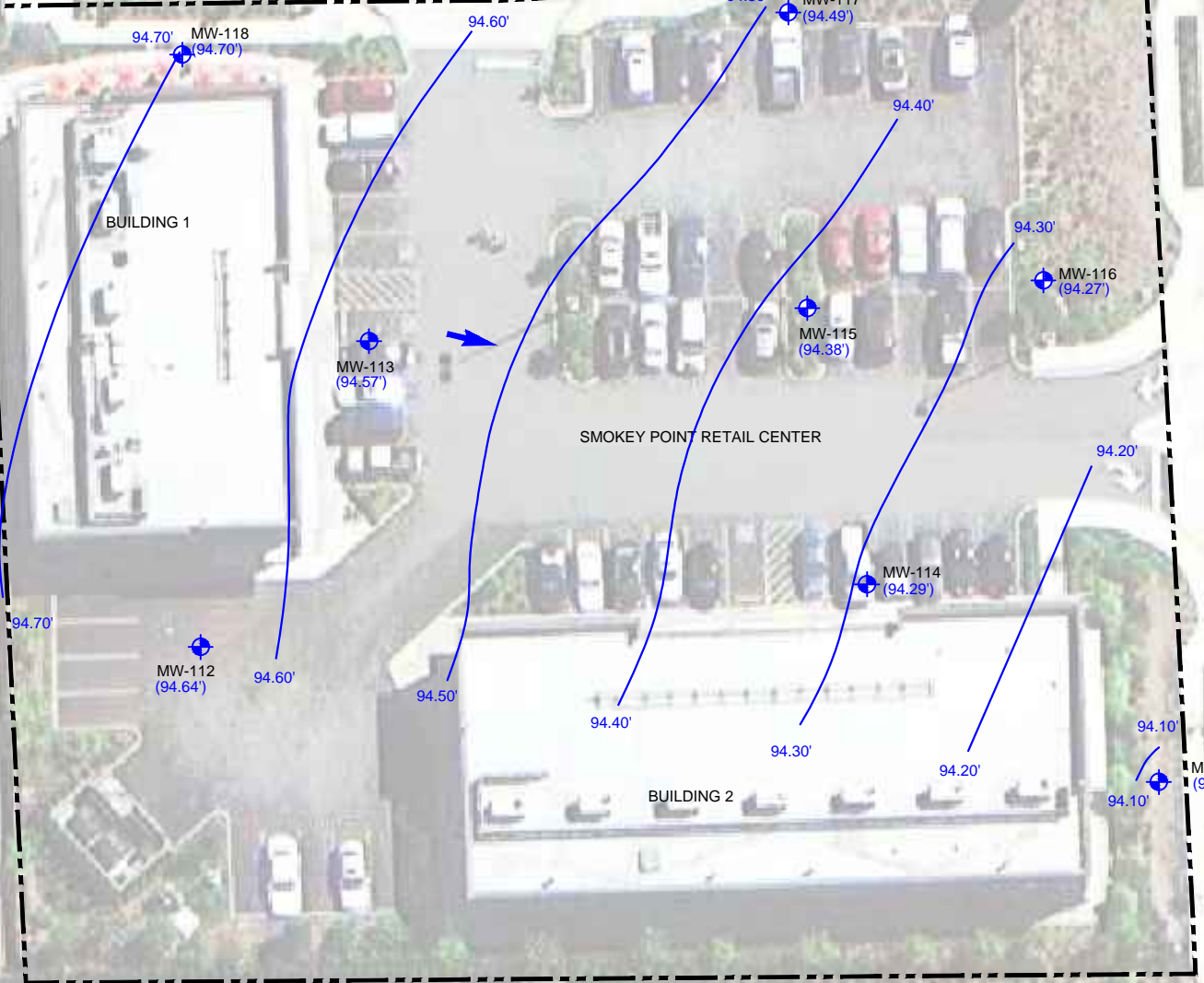
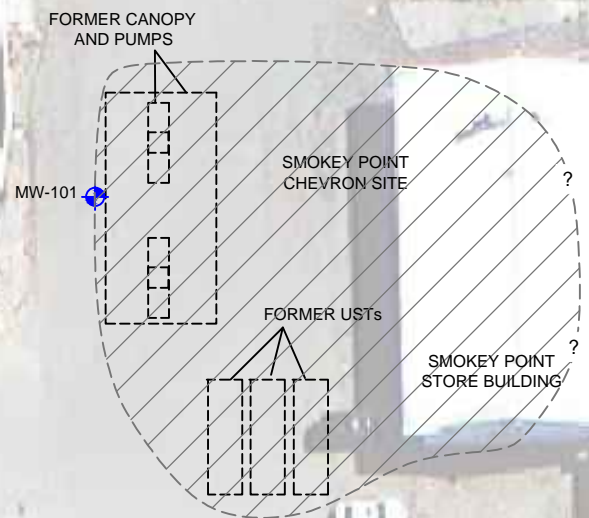
**FIGURE 2**  
SITE PLAN



172ND STREET NORTHEAST

28TH DRIVE NORTHEAST

171ST PLACE NORTHEAST



LEGEND	
	PROPERTY BOUNDARY
	APPROXIMATE EXTENT OF PCS
	MONITORING WELL
	0.10-FOOT-INTERVAL GROUNDWATER CONTOUR
	GROUNDWATER SURFACE ELEVATION
	GROUNDWATER FLOW DIRECTION (MAY 20, 2015)
	GROUNDWATER ELEVATION NOT USED TO CREATE CONTOURS
	PCS PETROLEUM-CONTAMINATED SOIL
	UST UNDERGROUND STORAGE TANK

JOHN L SCOTT REAL ESTATE

**SoundEarth Strategies**  
 WWW.SOUNDEARTHINC.COM

SMOKEY POINT RETAIL CENTER  
 171ST PLACE NORTHEAST  
 MARYVILLE, WASHINGTON  
 SOUNDEARTH PROJECT #0918-001

**FIGURE 3**  
 GROUNDWATER CONTOUR MAP  
 (MAY 20, 2015)

## TABLE



**Table 1**  
**Summary of Groundwater Analytical Data**  
**Smokey Point Retail Center**  
**2707 171st Place Northeast**  
**Marysville, Washington**

Well ID	Sample ID	Sampled By	Sample Date	TOC Elevation (ft)	Depth to Water <sup>(1)</sup> (ft)	Groundwater Elevation <sup>(2)</sup> (ft)	Analytical Results (µg/L)				
							GRPH <sup>(3)</sup>	Benzene <sup>(4)</sup>	Toluene <sup>(4)</sup>	Ethylbenzene <sup>(4)</sup>	Total Xylenes <sup>(4)</sup>
MW101	--	SoundEarth	05/20/15	--	5.20	--	--	--	--	--	
MW111	MW-111	GeoScience	09/27/06	100.78	7.69	93.09	<100	<1	<1	<1	<3
	MW-111	GeoScience	12/06/08		5.46	95.32	<100	<1	<1	<1	<3
	MW-111	GeoScience	09/27/09		7.29	93.49	<100	1.0	1.3	<1	<3
	MW-111	GeoScience	04/11/11		3.50	97.28	<b>4,500</b>	<b>6.9</b>	45	220	130
	MW111-20120914	SoundEarth	09/14/12		4.83	95.95	<100	<1	<1	<1	<3
	MW111-20130405	SoundEarth	04/05/13		5.15	95.63	<50	<1	<1	<1	<2
	--	SoundEarth	01/16/14		4.19	96.59	--	--	--	--	--
	--	SoundEarth	05/20/15		6.05	94.73	--	--	--	--	--
MW112	MW-112	GeoScience	12/06/08	99.50	4.21	95.29	<100	1.5	1.2	<1	<3
	MW-112	GeoScience	09/27/09		6.11	93.39	<100	<1	<1	<1	<3
	MW-112	GeoScience	04/11/11		2.51	96.99	700	<b>140</b>	54	35	67
	MW112-20120913	SoundEarth	09/13/12		5.39	94.11	180	<b>21</b>	1.6	3.4	5.6
	MW112-20130405	SoundEarth	04/05/13		4.02	95.48	63.2	<b>25.6</b>	<1	<1	2.64
	MW112-20140116	SoundEarth	01/16/14		3	96.50	<100	<1	<1	<1	<3
	MW112-20140530	SoundEarth	05/30/14		4.04	95.46	<b>4,100</b>	<b>570</b>	280	270	260
	MW112-20140711	SoundEarth	07/01/14		5	94.50	<b>1,300</b>	<b>56</b>	22	30	120
	MW112-20140807	SoundEarth	08/07/14		5.30	94.20	<b>5,800</b>	<b>140</b>	97	190	1,000
MW112-20150520	SoundEarth	05/20/15	4.86	94.64	<b>990</b>	<b>24</b>	10	92	110		
MW113	MW-113	GeoScience	12/06/08	100.03	4.86	95.17	250	<b>50</b>	1.8	6.9	<3
	MW-113	GeoScience	09/27/09		6.73	93.30	130	<b>29</b>	4.7	5.6	7.2
	MW-113	GeoScience	04/11/11		3.18	96.85	<b>4,000</b>	<b>70</b>	110	110	260
	MW113-20120913	SoundEarth	09/13/12		5.99	94.04	180	<b>17</b>	20	3.7	17
	MW113-20130405	SoundEarth	04/05/13		4.71	95.32	<b>4,510</b>	<b>118</b>	209	147	792
	MW113-20140116	SoundEarth	01/16/14		3.58	96.45	140	1.9	2.3	4.8	14
	MW113-20140530	SoundEarth	05/30/14		4.59	95.44	<100	1.8	6.5	2.2	5.1
	MW113-20140807	SoundEarth	08/07/14		5.97	94.06	380	<b>16</b>	13	18	48
	MW113-20150520	SoundEarth	05/20/15		5.46	94.57	210	<b>11</b>	16	7.0	32
<b>MTCA Method A Cleanup Level for Groundwater<sup>(5)</sup></b>							<b>1,000/800<sup>(6)</sup></b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>



**Table 1**  
**Summary of Groundwater Analytical Data**  
**Smokey Point Retail Center**  
**2707 171st Place Northeast**  
**Marysville, Washington**

Well ID	Sample ID	Sampled By	Sample Date	TOC Elevation (ft)	Depth to Water <sup>(1)</sup> (ft)	Groundwater Elevation <sup>(2)</sup> (ft)	Analytical Results (µg/L)				
							GRPH <sup>(3)</sup>	Benzene <sup>(4)</sup>	Toluene <sup>(4)</sup>	Ethylbenzene <sup>(4)</sup>	Total Xylenes <sup>(4)</sup>
MW114	MW-114	GeoScience	12/06/08	99.62	4.71	94.91	250	28	<1	<1	<3
	MW-114	GeoScience	09/27/09		6.55	93.07	160	15	1.9	1.3	<3
	MW-114	GeoScience	04/11/11		3.07	96.55	<100	9.2	<1	4.5	8.3
	MW114-20120913	SoundEarth	09/13/12		5.92	93.70	120	21	1.1	4.1	<3
	MW114-20130405	SoundEarth	04/05/13		4.65	94.97	288	59	<1	13.0	2.50
	MW114-20140116	SoundEarth	01/16/14		3.49	96.13	100	1.8	2.4	6.6	6.90
	MW114-20140530	SoundEarth	05/30/14		4.47	95.15	190	25	2.2	7.0	<3
	MW114-20140807	SoundEarth	08/07/14		5.83	93.79	300	43	2.6	23	<3
MW114-20150520	SoundEarth	05/20/15	5.33	94.29	<100	5.4	2.0	<1	<3		
MW115	MW-115	GeoScience	12/06/08	99.90	4.93	94.97	540	120	1.1	14	<3
	MW-115	GeoScience	09/27/09		6.49	93.41	<100	180	<1	10	<3
	MW-115	GeoScience	04/11/11		3.15	96.75	<100	<1	<1	<1	<3
	MW115-20120914	SoundEarth	09/14/12		6.08	93.82	<100	5.2	1.3	<1	<3
	MW115-20130405	SoundEarth	04/05/13		4.85	95.05	<50	5.75	<1	5.34	<2
	MW115-20140116	SoundEarth	01/16/14		3.67	96.23	390	18	5.6	10	16
	MW115-20140530	SoundEarth	05/30/14		4.65	95.25	<100	<1	<1	<1	<3
	MW115-20140807	SoundEarth	08/07/14		6.03	93.87	<100	1.8	<1	<1	<3
MW115-20150520	SoundEarth	05/20/15	5.52	94.38	<100	1.3	<1	<1	<3		
MW116	MW-116	GeoScience	12/06/08	100.17	5.30	94.87	380	49	<1	<1	<3
	MW-116	GeoScience	09/27/09		7.17	93.00	<100	32	<1	1.2	<3
	MW-116	GeoScience	04/11/11		3.75	96.42	<100	<1	<1	<1	<3
	MW116-20120914	SoundEarth	09/14/12		6.53	93.64	<100	1.1	<1	<1	<3
	MW116-20130405	SoundEarth	04/05/13		5.28	94.89	<50	<1	<1	<1	<2
	MW116-20140116	SoundEarth	01/16/14		4.06	96.11	<100	<1	<1	<1	<3
	MW116-20140530	SoundEarth	05/30/14		5.02	95.15	<100	<1	<1	<1	<3
	MW116-20140807	SoundEarth	08/07/14		6.42	93.75	<100	<1	<1	<1	<3
MW116-20150520	SoundEarth	05/20/15	5.90	94.27	<100	<1	<1	<1	<3		
<b>MTCA Method A Cleanup Level for Groundwater<sup>(5)</sup></b>							<b>1,000/800<sup>(6)</sup></b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>



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**Smokey Point Retail Center**  
**2707 171st Place Northeast**  
**Marysville, Washington**

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							GRPH <sup>(3)</sup>	Benzene <sup>(4)</sup>	Toluene <sup>(4)</sup>	Ethylbenzene <sup>(4)</sup>	Total Xylenes <sup>(4)</sup>
MW117	MW-117	GeoScience	12/06/08	100.65	5.59	95.06	100	12	1.6	<1	<3
	MW-117	GeoScience	09/27/09		7.45	93.20	<100	1.4	1.0	<1	<3
	MW-117	GeoScience	04/11/11		3.78	96.87	<100	<1	<1	<1	<3
	MW117-20120913	SoundEarth	09/13/12		6.78	93.87	<100	<1	<1	<1	<3
	MW117-20130405	SoundEarth	04/05/13		5.5	95.15	<50	<1	<1	<1	<2
	--	SoundEarth	01/16/14		4.30	96.35	--	--	--	--	--
	--	SoundEarth	05/30/14		5.27	95.38	--	--	--	--	--
	MW117-20140807	SoundEarth	08/07/14		6.69	93.96	<100	<1	<1	<1	<3
--	SoundEarth	05/20/15	6.16	94.49	--	--	--	--	--		
MW118	MW-118	GeoScience	12/06/08	100.20	4.91	95.29	2,400	290	3.0	20	5.1
	MW-118	GeoScience	09/27/09		6.78	93.42	<100	4.1	21.0	2	14.0
	MW-118	GeoScience	04/11/11		3.19	97.01	<100	1.1	3.1	1.9	5.8
	MW118-20120914	SoundEarth	09/14/12		6.00	94.20	<100	<1	<1	<1	<3
	MW118-20130405	SoundEarth	04/05/13		4.74	95.46	<50	<1	<1	<1	<2
	--	SoundEarth	01/16/14		3.61	96.59	--	--	--	--	--
	MW118-20140530	SoundEarth	05/30/14		4.62	95.58	<100	<1	<1	<1	<3
	--	SoundEarth	08/07/14		6.00	94.20	--	--	--	--	--
--	SoundEarth	05/20/15	5.50	94.70	--	--	--	--	--		
MW119	MW119-20150520	SoundEarth	05/20/15	98.76	4.67	94.09	<100	<1	1.1	<1	<3
<b>MTCA Method A Cleanup Level for Groundwater<sup>(5)</sup></b>							<b>1,000/800<sup>(6)</sup></b>	<b>5</b>	<b>1,000</b>	<b>700</b>	<b>1,000</b>

**NOTES:**

Samples collected by SoundEarth were analyzed by Friedman & Bruya, Inc., and/or Fremont Analytical, Inc., of Seattle, Washington.

Red denotes concentrations exceeding MTCA Method A cleanup levels for groundwater.

<sup>(1)</sup> Measured in feet below north side of the top of monitoring well casing.

<sup>(2)</sup> Based on May 2011 Geoscience Management, Inc. report.

<sup>(3)</sup> Analyzed by Northwest Total Petroleum Hydrocarbon Method NWTPH-Gx.

<sup>(4)</sup> Analyzed by U.S. Environmental Protection Agency Method 8260B, 8260C, or 8021B.

<sup>(5)</sup> MTCA Method A Cleanup Levels, Table 720-1 of Section 900 of Chapter 173-340 of the Washington Administrative Code, revised November 2007.

<sup>(6)</sup> 1,000 µg/L when benzene was present and 800 µg/L when benzene was not present.

-- = not sampled, measured, or analyzed

< = not detected at concentration exceeding the laboratory's lower reporting limit

µg/L = micrograms per liter

ft = feet

GRPH = gasoline-range petroleum hydrocarbons

MTCA = Washington State Model Toxics Control Act

TOC = top of casing elevation

GeoScience = GeoScience Management, Inc.

SoundEarth = SoundEarth Strategies, Inc.

**ATTACHMENT A  
BORING LOG**



**Project:** Smokey Point Retail Center  
**Project Number:** 0918-001-07  
**Logged by:** CGC  
**Date Started:** 5/18/15  
**Surface Conditions:** Landscaping Bark  
**Well Location N/S:** 15.5' S of SW building corner  
**Well Location E/W:** 20.5' E of SW building corner  
**Reviewed by:** CER  
**Date Completed:** 5/18/15

**BORING LOG | MW119**

**Site Address:** 2707 171st Place NE  
 Marysville, Washington

Water Depth At Time of Drilling 7.5 feet bgs  
 Water Depth After Completion 5 feet bgs

Depth (feet bgs)	Interval	Blow Count	% Recovery	PID (ppmv)	Sample ID	USCS Class	Graphic	Lithologic Description	Well Detail/ Water Depth
0									
5	7 9 11		60	0.4	MW119-05	SP		Wet, medium dense, medium to coarse SAND with trace silt and gravel, tan, no hydrocarbon odor (5-90-5).	
10	5 7 8		55	0.5	MW119-10	SP		Similar to previous, with saturated 3" thick layer of gravelly SAND at 11' bgs, no hydrocarbon odor (5-70-25).	
15	7 7 6		100	0.5	MW119-14	SP		Wet, medium dense, gravelly coarse SAND with trace silt, tan, no hydrocarbon odor (5-60-35).	
20								Boring terminated at 17.5 feet bgs.	

**Drilling Co./Driller:** Boretac/Maclen  
**Drilling Equipment:** Limited Access HSA  
**Sampler Type:** Shelby Tube  
**Hammer Type/Weight:** 140 lbs  
**Total Boring Depth:** 17.5 feet bgs  
**Total Well Depth:** 14 feet bgs  
**State Well ID No.:** BIS 188

**Well/Auger Diameter:** 2/4.25 inches  
**Well Screened Interval:** 4 to 14 feet bgs  
**Screen Slot Size:** 0.010 inches  
**Filter Pack Used:** Silica Sand  
**Surface Seal:** Concrete  
**Annular Seal:** Bentonite  
**Monument Type:** Flush Mount

**Notes/Comments:**  
 Boring advanced to 17.5' bgs following sampling for well installation due to heaving sands.

**ATTACHMENT B  
LABORATORY ANALYTICAL REPORT**

*Friedman & Bruya, Inc. #505361*

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Yelena Aravkina, M.S.  
Michael Erdahl, B.S.  
Arina Podnozova, B.S.  
Eric Young, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

May 28, 2015

Rob Roberts, Project Manager  
SoundEarth Strategies  
2811 Fairview Ave. East, Suite 2000  
Seattle, WA 98102

Dear Mr. Roberts:

Included are the results from the testing of material submitted on May 21, 2015 from the SOU\_0918-001\_20150521, F&BI 505361 project. There are 4 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  
SOU0528R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 21, 2015 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU\_0918-001\_20150521, F&BI 505361 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
505361 -01	MW112-20150520
505361 -02	MW113-20150520
505361 -03	MW114-20150520
505361 -04	MW115-20150520
505361 -05	MW116-20150520
505361 -06	MW119-20150520

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/28/15  
 Date Received: 05/21/15  
 Project: SOU\_0918-001\_20150521, F&BI 505361  
 Date Extracted: 05/22/15 and 05/26/15  
 Date Analyzed: 05/22/15 and 05/26/15

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
 FOR BENZENE, TOLUENE, ETHYLBENZENE,  
 XYLENES AND TPH AS GASOLINE  
 USING METHODS 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
MW112-20150520 505361-01	24	10	92	110	990	111
MW113-20150520 505361-02	11	16	7.0	32	210	100
MW114-20150520 505361-03	5.4	2.0	<1	<3	<100	100
MW115-20150520 505361-04	1.3	<1	<1	<3	<100	104
MW116-20150520 505361-05	<1	<1	<1	<3	<100	97
MW119-20150520 505361-06	<1	1.1	<1	<3	<100	103
Method Blank 05-1236 MB	<1	<1	<1	<3	<100	90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/28/15

Date Received: 05/21/15

Project: SOU\_0918-001\_20150521, F&BI 505361

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR BENZENE, TOLUENE, ETHYLBENZENE,  
XYLENES, AND TPH AS GASOLINE  
USING METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 505371-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	<1	<1	nm
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	103	65-118
Toluene	ug/L (ppb)	50	102	72-122
Ethylbenzene	ug/L (ppb)	50	102	73-126
Xylenes	ug/L (ppb)	150	100	74-118
Gasoline	ug/L (ppb)	1,000	99	69-134

# FRIEDMAN & BRUYA, INC.

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## ENVIRONMENTAL CHEMISTS

### **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.

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 the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

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. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

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

j - The analyte concentration is reported below the lowest calibration standard. 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 laboratory control sample(s) percent recovery and/or RPD were 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 analyte 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 with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

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

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

505361

SAMPLE CHAIN OF CUSTODY

ME 05-21-15

03

Send Report to Rob Roberts

Company SoundEarth Strategies, Inc.

Address 2811 Fairview Avenue E, Suite 2000

City, State, ZIP Seattle, Washington 98102

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. 0918-001  
SMOKEY PT. RETAIL

PO #

REMARKS

Page # 1 of 1

TURNAROUND TIME  
Standard (2 Weeks)  
RUSH 5 Days  
Rush charges authorized by: [Signature]

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					Notes	
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOCs by 8260	SVOCs by 8270		
MW112-20150520	MW112	-	01A-D	05/20/15	1423	H <sub>2</sub> O	4		X	X				
MW113-20150520	MW113		02T		1510									
MW114-20150520	MW114		03		1335									
MW115-20150520	MW115		04		1250									
MW116-20150520	MW116		05		1155									
MW119-20150520	MW119		06		1207									

Samples received at 2:10

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

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Rob Roberts</u>	<u>SES</u>	<u>5/21</u>	<u>7:30 AM</u>
Received by: <u>[Signature]</u>	<u>DO LO</u>	<u>F&amp;BI</u>	<u>"</u>	<u>10:45</u>
Relinquished by:				
Received by:				