ENVIRONMENTAL PARTNERS INC

1180 NW Maple Street, Suite 310 Issaquah, Washington 98027 ph 425.395.0010

Interim Remedial Action Report

Snohomish Square Cleaners
Avenue D and 13th Street SE
Snohomish, WA

Prepared For:

Skotdal Enterprises Inc.
2707 Colby Avenue Suite 1200
Everett, Washington 98201

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Prepared By:

Environmental Partners, Inc.
1180 NW Maple Street, Suite 310
Issaquah, Washington 98027
(425) 395-0010

Eric Koltes, LG
Senior Geologist

Eric Michael Koltes

Josh Bernthal, PE
Senior Engineer

EPI Project Number: 69402.2

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ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
bgs	Below ground surface
COC	Contaminant of concern
CUL	Cleanup level
EPA	U.S. Environmental Protection Agency
EPI	Environmental Partners, Inc.
ERD	Enhanced reductive dechlorination
Holt	Holt Drilling Services
HSA	Hollow-stem auger
IAWP	Interim Action Work Plan
IRA	Interim remedial action
µg/L	Micrograms per liter
mg/L	Milligrams per liter
MTCA	Model Toxics Control Act
ORP	Oxidation-reduction potential
PCE	Tetrachloroethene
PDB	Passive diffusion bag
psi	Pounds per square inch
PVC	Polyvinyl chloride
Skotdal	Skotdal Enterprises, Inc.
TCE	Trichloroethylene
TOC	Total organic carbon

1.0 INTRODUCTION

Environmental Partners, Inc. (EPI) is pleased to submit this Interim Remedial Action (IRA) Report to address tetrachloroethene (PCE) impacted groundwater at the former Snohomish Square Cleaners property located at Avenue D and 13th Street SE in Snohomish, WA (subject property). Skotdal Enterprises, Inc. (Skotdal) currently owns the subject property. The location of the subject property is indicated in Figure 1.

PCE was historically released at the subject property, which has resulted in impacts to soil and groundwater. Based on Site-specific data, the sole remaining contaminant of concern (COC) is PCE in groundwater. The breakdown products of PCE include trichloroethylene (TCE), cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride. As the sequential reductive dechlorination breakdown of PCE occurs, these less chlorinated daughter products might become future COCs. The groundwater impacts have migrated downgradient (to the southwest) to a property owned by Snohomish County. The "Site," as defined by the Model Toxics Control Act (MTCA), includes portions of the subject property as well as the "upper terrace" of the downgradient property to the southwest owned by Snohomish County (Snohomish property). This Subject Property area is depicted in Figure 2.

Enhanced reductive dechlorination (ERD), which is an in situ bioaugmentation remediation technology, was selected as the remedial technology to bring the Snohomish property into regulatory compliance. A pilot study performed at the Site showed ERD to be an effective remedial strategy at the subject property in consideration of the Site-specific goals and current and future Site uses.

EPI completed an *Interim Action Work Plan* dated October 10, 2015 (IAWP) that provided the scope of services necessary to implement this IRA. The initial purpose of this IRA is to reduce PCE impacts to shallow groundwater at the subject property in order to obtain a "No Further Action" (NFA) determination for the Snohomish County property.

2.0 OBJECTIVES

The objectives of the work documented herein were as follows:

- Establish baseline groundwater conditions immediately prior to implementation of *in situ* ERD treatment;
- Document *in situ ERD* treatment;
- Perform two quarterly groundwater monitoring events and document/discuss results; and
- Provide recommendations for additional actions.

3.0 REPORT ORGANIZATION

The information presented in this IRA Report is organized as shown in the following sections:

- Section 1.0 – Introduction
- Section 2.0 – Objectives
- Section 3.0 – Report Organization
- Section 4.0 – Groundwater Sampling Procedures
- Section 5.0 – February 2016 Baseline Groundwater Monitoring Event
- Section 6.0 – Remedial Action Implementation
- Section 7.0 – Groundwater Monitoring – May 2016
- Section 8.0 – Groundwater Monitoring – August 2016
- Section 9.0 – Data Evaluation and Recommendations
- Section 10.0 – Conclusions

4.0 GROUNDWATER SAMPLING PROCEDURES

Unless otherwise noted, the groundwater sampling procedures presented in the following paragraphs were followed during each monitoring event.

Prior to sampling, the static water levels were collected to the nearest 0.01-foot using a Solinst electronic water level meter. To ensure consistency all measurements were taken on the north side of the top edge of the polyvinyl chloride (PVC) casing. EPI surveyed measuring point elevations for all monitoring wells and used those data, along with measured depth-to-water data to determine groundwater elevations, elevation contours, and flow directions at the Site.

Wells selected for groundwater sampling were purged using a peristaltic pump and low-flow purging techniques. Pump tubing was new, single-use tubing that was changed between each well. During low-flow purging, groundwater field parameters were measured and recorded approximately every three minutes for the following parameters:

- pH
- Temperature
- Oxidation-reduction potential (ORP)

- Specific conductivity
- Dissolved oxygen (DO)

Low-flow purging was continued until these field parameters met stabilization criteria for three successive readings.

After stabilization, groundwater sample containers were labeled and samples were collected into appropriate laboratory-supplied sample containers using low-flow sampling techniques to limit potential contaminant volatilization. Immediately upon collection, filled sample containers were placed in an iced cooler with an internal temperature of 4° Celsius or less for submittal to the analytical laboratory. All samples were transported under standard chain-of-custody protocols to Friedman and Bruya, Inc. (FBI) an analytical laboratory located in Seattle, Washington.

In addition to low-flow sampling, selected wells were also sampled using a passive diffusion bag (PDB). This method was tested side by side with low-flow sampling methods to determine if PDB sampling was a feasible option. PDB sampling requires less time and generates less purge water when compared to low-flow purging and sampling methods. During the baseline monitoring event described below, the PDB bags were installed in the selected wells immediately following the completion of low-flow sampling at each well. The PDBs then remained in the wells for a minimum of 2 weeks to achieve equilibrium conditions with the groundwater before being sampled.

All groundwater samples were submitted for chlorinated volatile organic compounds (cVOCs) by U.S. Environmental Protection Agency (EPA) Method 8260B. Selected groundwater samples were also analyzed for total organic carbon (TOC) by EPA Method 415.1; chemical oxygen demand (COD) by EPA Method 410.4; biological oxygen demand (BOD; 5-Day) by EPA Method 5210B; total and dissolved iron and manganese by EPA Method 6010b; chloride by EPA Method 325.1; sulfate/sulfide and nitrate/nitrite by EPA Method 300.0; and methane, ethane, and ethane, and carbon dioxide by Method RSK-175.

5.0 FEBUARY 2016 BASELINE GROUNDWATER MONITORING

5.1 Groundwater Sampling

From February 9 through February 12, 2016, EPI sampled groundwater at 24 well locations. Procedures in Section 4.0 were followed for sampling. Sixteen of the 24 wells were also sampled using a PDB to allow a comparison with data for samples collected using low-flow sampling techniques. The PDB sampling occurred on February 29, 2016.

5.2 Piezometric Conditions

Measured depth-to-water data ranged from 1.64 to 21.39 feet below top of casing. The resulting groundwater elevation data indicate that groundwater flow direction at the subject property is generally in a south-southwest direction with a horizontal hydraulic gradient of 0.02 feet/foot. Both the groundwater flow direction and the magnitude of the hydraulic gradient may be influenced to some degree by seasonal conditions. Figure 3 depicts groundwater flow directions and elevations from the February 2016 monitoring event. Depth-to-water data are presented in Table 1.

5.3 Baseline Geochemical Conditions

The *in situ* bioremediation technology used at the subject property provides nutrients to the subsurface to enhance anaerobic geochemical conditions in the aquifer. The addition of nutrients promotes the growth of specific anaerobic bacterial populations that are known to reductively dechlorinated PCE and its breakdown products. Geochemical parameters were analyzed for wells MW-1, MW-2, MW-3, MW-7, MW-8, MW-9, GW-4, and GW-11.

The effective distribution of the injected nutrient substrate is tracked by comparing pre-treatment and post-treatment TOC concentrations. Pre-treatment TOC concentrations ranged from less than 500 micrograms per liter (µg/L) to a maximum of 4,200 µg/L. These are relatively low values and support that the nutrients available for natural biological processes prior to treatment were limited.

Anaerobic conditions in groundwater can be determined by measuring concentrations of iron and manganese in groundwater and using that data as a qualitative guide to the redox status. Metals analysis for iron and manganese are also used to indicate if enhanced reducing geochemical conditions have produced unacceptable metals concentrations. Field-filtered (dissolved) groundwater samples were analyzed for iron and manganese. Iron was detected in five groundwater samples ranging from 52.8 µg/L to 202 µg/L. Manganese was detected in all eight groundwater samples at concentrations ranging from 1.42 µg/L to 1,990 µg/L. These concentrations are acceptable for the use of ERD.

Sulfate and nitrate concentrations provide a measure of reducing conditions produced by substrate injection. These analyses indicate the effects of increased biological activity and provide evidence that reducing conditions are present. Evidence of reducing conditions indicates increased biological activity. Sulfate was detected in concentrations ranging from 2,260 µg/L to 24,400 µg/L. Nitrate was detected in concentrations ranging from 32.3 µg/L to 17,200 µg/L. These baseline concentrations are low and support prior conclusions that significant biological degradation of PCE was not occurring naturally. As reducing conditions are created by the substrate injections, sulfate should reduce to sulfide and nitrate should reduce to nitrogen gas or ammonia.

Geochemical analytical data for the baseline sampling are presented in Tables 1 and 2.

Field parameter data for the baseline sampling are presented in Table 3. DO ranged from 1.03 mg/L to 9.51 mg/L. ORP values ranged from 190.1 millivolts (mv) to 326.7 mv. Geochemical conditions generally are considered either aerobic (when DO concentrations are about 1 mg/L or greater) and ORP values are positive, or anaerobic (when DO concentrations are less than 1 mg/L) and ORP values are negative. Temperature, pH, and other field-measured parameters were within acceptable ranges for bioremediation to occur.

5.4 Analytical Results

PCE was detected at concentrations greater than the MTCA Method A Groundwater Cleanup Level (MTCA Method A GW CUL) of 5 µg/L in 11 of the 24 groundwater samples, at concentrations ranging from 6.4 µg/L to 70 µg/L. PCE was detected in an additional six monitoring wells; however, those concentrations were less than the MTCA Method A GW CUL. Figure 4 shows the PCE groundwater concentrations and the horizontal extent of the PCE plume based on data obtained during the February 2016 baseline monitoring event. Laboratory analytical results are included in Attachment A.

6.0 REMEDIAL ACTION IMPLEMENTATIONON

6.1 Injection Well Installation

EPI contracted Holt Drilling Services (Holt) to install 12 injection wells (IJ-1 through IJ-12) and one new monitoring well (MW-15). Each well was installed using standard hollow-stem auger (HSA) drilling and well installation methods. As-built well construction details and soil boring logs are provided in Attachment B.

Holt used a full-sized truck-mounted HSA drilling rig to advance boreholes between 25 and 30 feet below ground surface (bgs). During drilling, one soil sample was collected at the mid-depth of each borehole (10 to 15 feet bgs) for waste characterization and disposal purposes.

The injection wells were constructed of 6-inch diameter, flush- threaded, schedule 40 PVC casing and screen. Monitoring well MW-15 was constructed of 4-inch diameter, flush- threaded, schedule 40 PVC casing and screen. All wells were constructed in conformance with Washington Administrative Code (WAC) 173-160, “Minimum Standards for Construction and Maintenance of Wells.”

The screened intervals for IJ-1 through IJ-8 were from 15 to 30 bgs, and IJ-9 through IJ-12 were screened from 15 to 25 bgs. Well screen assemblies consisted of 0.020-inch (i.e., “20-slot”), flush-threaded, machine-slotted Schedule 40 PVC screen with a threaded end cap. A filter pack consisting of properly graded silica sand was placed in the annulus of the borehole to a depth of about 2 feet above the top of the well screen. Bentonite chips were then placed in the well annulus to a depth of about 2 feet from ground surface and were then hydrated with potable water. These wells were then completed with a concrete surface seal, a traffic-rated flush mount and a watertight locking cap.

Investigation-derived waste (IDW), including drill cuttings, decontamination fluids, and well development water were contained in large roll-off bins (solid waste) and Department of Transportation approved 55-gallon drums (water waste). Approximately 24 tons of non-regulated soil was disposed at Waste Management's Alaska Street Facility. Approximately 2,600 gallons of liquid hazardous waste listed as F002 were disposed at Waste Management's CMW Arlington, Oregon, facility. Waste Disposal Documentation is provided in Attachment C.

6.2 Injection of Treatment Compound

6.2.1 Injection Compound

As discussed in the IAWP, ERD was selected as the most readily implementable and applicable remediation technology for the Site. ERD requires the introduction of a nutrient substrate that provides a carbon source for driving geochemical conditions to be more anaerobic. The nutrient substrate also provides a hydrogen releasing compound that serves as an electron donor to enhance the ability of the natural biota to reductively dechlorinate PCE. In order for the natural reaction to be more successful, EPI selected a proprietary product called 3-D Microemulsion®.

6.2.2 Injection Technique

3-D Microemulsion® injections began on March 29, 2016 using a pressurized injection method into the three treatment areas described in the IAWP, shown on Figure 2. Potable water was mixed in a 275-gallon water tote with the two-part 3-D Microemulsion® solution (three parts 3-D Microemulsion® to one part Chemical reducer) at a ratio of 10 parts water to 1 part 3-D Microemulsion® mixture. The tote was then mixed until homogeneous using the circulating valve on the injection pump.

Valves and gauges located on the injection pump allowed for the operator to manage flow and document pressures within the injection wells. Flow rate was controlled by a gate valve located on the discharge side of the injection pump.

Injections were initiated on March 29 and were completed on April 13, 2016. Details of well injections are noted in Table 4, displaying dates and total volumes injected into each well. In some of the wells, leakage at the surface around the well annulus was noted and was caused by location-specific geologic conditions that limited infiltration rates. If leakage occurred at the surface, pressurized injections were stopped and gravity feed methods were used to minimize leakage at the surface. Wells that were partially gravity fed are noted in Table 4. In general, each well took approximately 42 pounds per square inch (psi) to overcome the piezometric head of the water column within the well. When the static piezometric head pressure was overcome, injection pressures dropped to 15 to 20 psi for the duration of injection. A total volume of 8,090 gallons of the nutrient substrate mixture were injected into the subsurface. Details of well injections are noted in Table 4 displaying dates and total volumes injected into each well.

Ongoing groundwater monitoring will determine if additional injections are required.

7.0 GROUNDWATER MONITORING – MAY 2016

7.1 Groundwater Sampling

EPI sampled groundwater from 25 monitoring wells from May 3 through May 6, 2016. The additional sample collected during this event was from the newly installed MW-15. Sixteen of the 24 wells were again sampled using a PDB for side-by-side comparison with low-flow sampling techniques. This represents the first post-treatment groundwater monitoring event.

7.2 Piezometric Conditions

Depth-to-water measurements in wells ranged from approximately 2.46 to 23.21 feet below top of casing. A summary of the depth-to-water measurements is provided in Table 1. Figure 5 depicts groundwater elevations and the groundwater flow direction at the subject and Snohomish County properties as measured during the May 2016 monitoring event.

Water level data collected in May 2016 indicated that groundwater flow direction at the property is generally in the south-southwest direction with a horizontal hydraulic gradient of 0.02 feet/foot. Both the groundwater direction and horizontal gradient are consistent with the baseline monitoring event.

7.3 Geochemical Results

Geochemical analytical data for this monitoring event are presented in Tables 1 and 2. Geochemical parameters were analyzed from wells MW-1, MW-2, MW-3, MW-4, MW-7, MW-8, MW-9, MW-15, GW-4, and GW-11.

TOC was detected in all groundwater samples, except in the sample from MW-9, at concentrations ranging from 700 µg/L to 120,000 µg/L. These numbers indicate an increase in TOC concentrations across the Site, particularly in source area well MW-3. This increase in TOC indicates that the substrate has reached the subsurface. The wells farther away from the injection wells did not show as much increase in TOC as the source area wells.

Iron was detected in eight groundwater samples ranging from 73.9 µg/L to 15,700 µg/L. Manganese was not analyzed during this monitoring event. The iron concentration in source area well MW-3 significantly increased during this monitoring event. The concentration at this monitoring well will be monitored over the upcoming monitoring events to evaluate if metals concentrations approach unacceptable levels.

Anions (i.e., sulfate and nitrate) were analyzed to provide a measure of geochemical conditions produced by substrate injection. Sulfate was detected in concentrations ranging from 6,540 µg/L to 43,100 µg/L. Sulfate concentrations significantly increased in source area well MW-9. Nitrate was detected in concentrations ranging from 300 µg/L to 2,670 µg/L. Generally, nitrate concentrations decreased during this monitoring event. The anion results indicate an overall slight increase in reducing conditions.

Field parameter data for the May sampling are presented in Table 3. DO ranged from 0.44 mg/L to 7.92 mg/L. Most of the source area wells experienced a drop in DO levels following treatment. Temperature, pH, and other parameters were within acceptable ranges for ERD to occur.

7.4 Analytical Results

PCE concentrations were detected at concentrations ranging from 5.1 µg/L to 140 µg/L. Twelve of the 25 sample results were greater than the MTCA Method A GW CUL of 5 µg/L, with the greatest concentration in the sample from the newly installed well, MW-15. PCE was detected at concentrations less than the MTCA Method A GW CUL for PCE in seven other monitoring wells.

The breakdown products of PCE include TCE, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride. TCE exceeded the MTCA Method A GW CUL of 5 µg/L in the sample from MW-10 at a concentration of 73 µg/L. TCE was not detected at a concentration greater than the MTCA Method A GW CUL in any other sample. Figure 6 shows the PCE groundwater concentrations and plume as identified during the May 2016 monitoring event. Analytical results are included in Attachment A.

8.0 GROUNDWATER MONITORING – AUGUST 2016

8.1 Groundwater Sampling

EPI sampled groundwater from 25 monitoring wells on August 29 and 30, 2016. Four of the 24 wells were again sampled using a PDB for comparison with low-flow purging and sampling techniques. This represents the second post-treatment groundwater monitoring event.

8.2 Piezometric Conditions

Depth-to-water measurements in wells ranged from approximately 2.71 to 23.86 feet below top of casing. A summary of the depth-to-water measurements is provided in Table 1. Figure 7 depicts groundwater elevations and the groundwater flow direction at the subject and Snohomish County properties as measured during the August 2016 monitoring event.

Water level data collected in August 2016 indicate that groundwater flow direction at the property is generally in the south-southwest direction with a horizontal hydraulic gradient of 0.02 feet/foot. Both the groundwater flow directions and horizontal gradient are consistent with the previous monitoring events.

8.3 Geochemical Results

Geochemical analytical data for this monitoring event are presented in Tables 1 and 2. Geochemical parameters were analyzed in samples from wells MW-1, MW-2, MW-3, MW-7, MW-8, MW-9, MW-15, GW-4, and GW-11.

TOC was detected in all groundwater samples ranging from 1,100 μg/L to 86,000 μg/L. These numbers indicate a general increase in TOC concentration across the Site, including wells (GW-4 and GW-11) farther downgradient from the source area. This indicates the substrate is traveling throughout the area of the plume. Although the TOC concentration in the sample from MW-3 decreased significantly from the concentration in the sample from the May 2016 monitoring event.

Iron was detected in samples from five groundwater wells at concentrations ranging from 62.8 µg/L to 79,300 µg/L. Manganese was detected in samples from all nine monitoring wells at concentrations ranging from 4.57 µg/L to 9,620 µg/L. The iron and manganese concentrations in source area well MW-3 again significantly increased during this monitoring event and may be approaching an unacceptable level to secondary groundwater standards. The concentrations at this monitoring well will be monitored over the upcoming monitoring events, but any future injections may not include this portion of the Site until the metal concentrations decrease.

Sulfate was detected in concentrations ranging from 51 µg/L to 26,100 µg/L. Sulfate concentrations significantly decreased in source area well MW-9. Nitrate was detected at concentrations ranging from 172 µg/L to 3,800 µg/L. Generally, nitrate concentrations were similar to the previous monitoring event.

Field parameter data for the August monitoring event are presented in Table 3. Dissolved oxygen ranged 0.45 mg/L to 3.90 mg/L. Despite the decrease in the upper range of DO levels, the levels were generally similar to the previous monitoring event. Temperature, pH, and other parameters were within acceptable ranges for ERD to occur.

8.4 Analytical Results

PCE was detected at concentrations greater than the MTCA Method A GW CUL of 5 µg/L in 10 of the 25 groundwater samples at concentrations ranging from 7.3 µg/L to 99 µg/L. Concentrations in the sample from MW-10 showed a significant increase from 10 µg/L in May to 99 µg/L during this monitoring event. PCE was detected in an additional four monitoring wells; however, these detected concentrations were less than the MTCA Method A GW CUL for PCE.

Concentrations of TCE and cis-1,2-dichloroethene exceeded their respective GW CULs of 5 µg/L and 16 µg/L in the sample from MW-10 at 170 µg/L and 97 µg/L, respectively. Concentrations of cis-1,2-dichloroethene and vinyl chloride exceeded their respective GW CULs of 16 µg/L and 0.2 µg/L in the sample from MW-11 at 32 µg/L and 1.1 µg/L, respectively. Figure 8 shows the PCE groundwater concentrations and plume as identified during the August 2016 monitoring event. Laboratory data sheets for the analytical results are presented in Attachment A.

9.0 DATA EVALUATION

Tables 1 and 2 summarize the groundwater analytical data. Due to the large number of wells and volume of data, the analytical results are most clearly presented graphically. PCE concentrations are shown in a graphical representation of the analytical data on Figure 9. Figures 4, 6, and 8 illustrate, on a quarter-by-quarter basis, the estimated extent of PCE concentrations exceeding the MTCA Method A GW CUL.

PDBs have been demonstrated to be an effective method for sample collection. Going forward, EPI will no longer perform side-by-side comparisons of both sampling techniques and will sample 16 wells using only PDBs and sample the remaining 9 wells using low-flow purging and sampling techniques to obtain the geochemical parameters.

Figure 9 is a graphical representation of the total detected concentrations of PCE over time for each monitoring event. That is, the sum of concentrations, on a quarter-by-quarter basis, of all wells sampled is representative of the general abundance of PCE in the environment. Because MW-15 was not installed prior to the baseline monitoring event, the concentration of PCE detected during the May monitoring event was used for both the baseline and May monitoring events. For the number of wells present and the observed concentrations, this analysis provides a general indication of Site-wide trends in PCE concentration. Figure 9 depicts an overall decline in PCE concentrations in response to the remedial action.

Using the best-fit regression trend lines, PCE has decreased in concentration by approximately 27 percent since the baseline monitoring event and subsequent injection. While concentrations remain elevated, this trend represents a clear improvement in groundwater quality at the Site and the effectiveness of injection event. With the successful distribution of the 3-D Microemulsion® this improving trend in PCE concentrations is expected to continue.

Figures 4, 6, and 8 represent the lateral extent of PCE- impacted groundwater, which extends off-property to the southwest beneath Avenue D and onto the Snohomish County Property. The lateral extent of impacts to the aquifer, as indicated by PCE concentrations, is well characterized and is delineated by the existing monitoring well network.

10.0 CONCLUSIONS

The following conclusions are supported by the findings of the baseline monitoring event, initial nutrient substrate injection event, and two follow-up quarterly groundwater monitoring events.

- Groundwater elevation data from all three monitoring events indicate that the predominant groundwater flow direction at the subject property is generally in a south-southwest direction with a horizontal hydraulic gradient of approximately 0.02 feet/foot.

- The current monitoring network and monitoring frequency are appropriate for the observed Site-specific conditions.

- 3-D Microemulsion® injections began on March 29, 2016 using a pressurized injection method. Over the duration of the injection period, 8,090 gallons of the nutrient substrate mixture were injected into the subsurface at 12 locations.

- Geochemical parameters have indicated an increase in available carbon, as measured by TOC, traveling throughout the area of the plume. Declining DO and ORP values indicate that increased biological activity stimulated by the addition of a carbon food source are creating the reducing geochemical conditions that are necessary for continued ERD.

- There is a demonstrable trend of improving groundwater quality. This trend is clearly observable in the decreased total concentration of PCE in groundwater since the first injection event. The total concentration of PCE in groundwater has decreased by 27 percent since the baseline monitoring event.

- EPI will evaluate data from the recently completed November 2016 monitoring event and will determine the time frame for an additional upcoming injection event.

Tables

Table 1
Groundwater Geochemical Analytical Data (µg/L)
Interim Remedial Action Report
Snohomish Square Cleaners
Avenue D and 13th Street SE, Snohomish, Washington

Sample ID	Depth to Water (feet)	Sample Date	Conventionals	Demand			Minerals		Nutrients		Dissolved Gasses[f]			
			Total Sulfide[a]	BOD[b]	TOC[c]	COD[d]	Chloride[e]	Sulfate[e]	Nitrite[e]	Nitrate[e]	Carbon Dioxide	Methane	Ethane	Ethene
MW-1	6.68	2/9/2016	--	<2,000	**3,900**	**16,000**	**24,300**	**7,450**	<5	**10,500**	**120,000**	<5	<10	<10
	8.96	5/17/2016	<50	<2,000	**7,500**	**13,000**	**43,300**	**7,820**	--	**2,300[g]**	**110,000**	**26**	<10	<10
	11.17	8/30/2016	<50	<2,000	**86,000**	<10,000	**29,400**	**11,500**	<5	**3,380**	**120,000**	<5	<10	<10
MW-2	7.67	2/9/2016	--	<2,000	**4,200**	<10,000	**1,560**	**2,260**	<5	**17,200**	**13,000**	<5	<10	<10
	11.02	5/17/2016	**80**	<2,000	**700**	<10,000	**4,500**	**9,410**	<5	**10,200**	**61,000**	<5	<10	<10
	13.31	8/30/2016	<50	<2,000	**1,500**	<10,000	**464**	**1,380**	<5	**638**	**72,000**	<5	<10	<10
MW-3	4.49	2/9/2016	--	<2,000	**520**	<10,000	**22,300**	**11,900**	<5	**2,180**	**79,000**	<5	<10	<10
	8.35	5/17/2016	<50	<2,000	**120,000**	**1,300,000**	**10,400**	**6,540**	--	<10[g]	**100,000**	<5	<10	<10
	10.82	8/30/2016	<50	5,500	**30,000**	**110,000**	**988**	**51**	<5	<2.5	**200,000**	**620 ve (640)**	<10 (<100)	<10 (<100)
MW-4	8.93	5/20/2016	<50	<2,000	**790**	**18,000**	**11,300**	**13,800**	<5	**1,230**	--	--	--	--
MW-7	9.82	2/9/2016	--	<2,000	**2,600**	**13,000**	**191,000**	**15,700**	<5	**4,400**	**86,000**	<5	<10	<10
	11.07	5/17/2016	<50	<2,000	**1,300**	<10,000	**172,000**	**10,800**	--	**2,600[g]**	**75,000**	<5	<10	<10
	13.46	8/30/2016	<50	**15,000**	**2,200**	**34,000**	**267,000**	**26,100**	<5	**3,020**	**96,000**	<5	<10	<10
MW-8	9.45	2/9/2016	--	<2,000	**570**	<10,000	2,620	**24,400**	<5	**1,150**	**91,000**	<5	<10	<10
	11.03	5/17/2016	<50	<2,000	**3,200**	<10,000	**4,530**	**26,600**	--	**380[g]**	**130,000**	**17**	<10	<10
	12.89	8/30/2016	**6**	<2,000	**1,100**	<10,000	**376**	**957**	<5	**200**	**110,000**	<5	<10	<10
MW-9	6.00	2/9/2016	--	<2,000	<500	<10,000	**4,360**	**8,230**	<5	**1,050**	**76,000**	<5	<10	<10
	9.27	5/17/2016	<50	<2,000	<500	<10,000	**17,000**	**43,100**	<5	<25	**67,000**	<5	<10	<10
	11.78	8/30/2016	<50	<2,000	**1,200**	<10,000	**377**	**957**	<5	**200**	**110,000**	<5	<10	<10
MW-15	8.42	5/17/2016	<50	<2,000	**700**	<10,000	**12,600**	**11,800**	--	**2,200[g]**	**67,000**	<5	<10	<10
	10.42	8/30/2016	<50	<2,000	**20,000**	<10,000	**12,400**	**11,800**	<5	**1,280**	**87,000**	<5	<10	<10
GW-4	2.78	2/10/2016	--	<2,000	<500	<10,000	**2,500**	**6,960**	<5	**323**	**29,000**	<5	<10	<10
	3.40	5/17/2016	<50	<2,000	**790**	**18,000**	**11,300**	**13,800**	**<5**	**1,230**	**76,000**	<5	<10	<10
	3.39	8/30/2016	<50	<2,000	**6,700**	<10,000	**1,140**	**1,960**	<5	**172**	**96,000**	<5	<10	<10
GW-11	18.52	2/9/2016	--	<200	**740**	<10,000	**20,500**	**15,700**	<5	**971**	**130,000**	<5	<10	<10
	19.92	5/17/2016	<50	<200	**790**	<10,000	**30,800**	**19,500**	<5	**2,670**	**90,000**	<5	<10	<10
	20.68	8/30/2016	<50	<200	**28,000**	<10,000	**24,600**	**17,900**	<5	**3,800**	**110,000**	<5	<10	<10
MTCA Method B Groundwater Cleanup Level[h]			**NVE**	**NVE**	**NVE**	**NVE**	**NVE**	**NVE**	**8,000**	**25,600**	**NVE**	**NA**	**NA**	**NA**

Notes:

All results presented in milligrams/kilogram (µg/L).

Bold Bold results indicate that the compound was detected.

a Analyzed by Method SM 4500-S2-D.

b Analyzed by Method SM 5210B.

c Analyzed by Method SM 5310B.

d Anayzed by EPA Method 410.4.

e Anayzed by EPA Method 300.0 unless otherwise indicated.

f Anayzed by Method RSK 175.

g Analyzed as Nitrate + Nitrite by EPA 353.2

h Model Toxics Control Act (MTCA) Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) database.

-- Not analyzed.

(640) Value in parentheses is the result of a reanalyzed sample.

NVE No value established.

NA Not applicable.

Compounds:

BOD Biochemical oxygen demand

TOC Total organic carbon

COD Chemical oxygen demand

Qualifier:

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

Table 2
Additional Groundwater Analytical Data (µg/L)
Interim Remedial Action Report
Snohomish Square Cleaners
Avenue D and 13th Street SE, Snohomish, Washington

Sample ID	Depth to Water (feet)	Sample Date	Metals[a]						Detected VOCs[b]					Detected VOCs[c]				
			Iron filtered	Iron unfiltered	Lead filtered	Lead unfiltered	Manganese filtered	Manganese unfiltered	PCE	TCE	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl chloride	PCE	TCE	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl chloride
MW-1	6.68	2/9/2016	**202**	**808**	--	--	**1,990**	**2,080**	**8.9**	<1	<1	<1	<0.2	--	--	--	--	--
	8.96	5/17/2016	**1,070**	**960**	--	--	--	--	**4.7**	<1	<1	<1	<0.2	--	--	--	--	--
	11.17	8/30/2016	**72.2**	**263**	--	--	**1,870**	**1,960**	**18**	<1	<1	<1	<0.2	--	--	--	--	--
MW-2	7.67	2/9/2016	**52.8**	**213**	--	--	**3.41**	**8.09**	<1	<1	<1	<1	<0.2	--	--	--	--	--
	11.02	5/17/2016	**365**	**12,600 ve J (16,700)**	<1	**6.07**	--	--	<1	<1	<1	<1	<0.2	--	--	--	--	--
	13.31	8/29/2016	<50	**3,910**	--	--	**6.41**	**115**	<1	<1	<1	<1	<0.2	--	--	--	--	--
MW-3	4.49	2/9/2016	<50	**270**	--	--	**2.76**	**8.74**	**12**	<1	<1	<1	<0.2	--	--	--	--	--
	8.35	5/17/2016	**12,400 ve J (15,700)**	**16,600 ve J (26,400)**	--	--	--	--	<1	<1	<1	<1	<0.2	--	--	--	--	--
	10.82	8/29/2016	**79,300**	**75,600**	--	--	**9,620**	**10,000**	<5	<5	<5	<5	<0.2 j	--	--	--	--	--
MW-4	4.54	2/12/2016	--	--	--	--	--	--	**26**	**1.1**	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**28**	<1	<1	<1	<0.2
	8.93	5/20/2016	--	--	--	--	--	--	**5.6**	<1	**1.3**	<1	<0.2	**1.6**	<1	<1	<1	<0.2
	10.29	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	**4.7**	<1	**0.45**
MW-5	9.18	2/11/2016	--	--	--	--	--	--	**70**	**1.4**	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**50**	<1	<1	<1	<0.2
	10.89	5/19/2016	--	--	--	--	--	--	**26**	**1.2**	<1	<1	<0.2	**8.6**	**1.0**	<1	<1	<0.2
	12.06	8/30/2016	--	--	--	--	--	--	**16**	<1	<1	<1	<0.2	**9.5**	<1	<1	<1	<0.2
MW-6	13.39	2/11/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
	14.63	5/19/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	<1	<1	<1		
	16.21	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
MW-7	9.82	2/9/2016	**194**	**296**	--	--	**6.49**	**10.3**	**4.8**	<1	<1	<1	<0.2	--	--	--	--	--
	11.07	5/17/2016	**196**	**9,690**	--	--	--	--	**25**	<1	<1	<1	<0.2	--	--	--	--	--
	13.46	8/30/2016	**187**	**42,000**	--	--	**15.4**	**1,330**	**16**	<1	<1	<1	<0.2	--	--	--	--	--
MW-8	9.45	2/9/2016	**73.9**	**231**	--	--	**70.5**	**99.7**	<1	<1	<1	<1	<0.2	--	--	--	--	--
	11.03	5/17/2016	**171**	**117**	--	--	--	--	<1	<1	<1	<1	<0.2	--	--	--	--	--
	12.89	8/29/2016	**72.1**	**69,200**	--	--	**203**	**3,640**	<1	<1	<1	<1	<0.2	--	--	--	--	--
MW-9	6.00	2/9/2016	<50	**2,570**	--	--	**1.27**	**55.1**	**7.9**	<1	<1	<1	<0.2	--	--	--	--	--
	9.27	5/17/2016	**78.1**	**7,120 ve J (7,990)**	<1	**2**	--	--	**6.5**	<1	<1	<1	<0.2	--	--	--	--	--
	11.78	8/29/2016	<50	<500	--	--	**4.57**	**13.5**	<1	<1	<1	<1	<0.2	--	--	--	--	--
MW-10	4.02	2/12/2016	--	--	--	--	--	--	**38**	**2.7**	**2.4**	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**38**	**1.8**	**1.5**	<1	<0.2
	7.56	5/19/2016	--	--	--	--	--	--	**7.0**	**73**	**5.5**	<1	<0.2	**10**	**12**	<1	<1	<0.2
	10.08	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	**99 (97)**	**170 ve (170)**	**97**	**1.1** (<10)	<0.2 (<2)
MW-11	5.23	2/12/2016	--	--	--	--	--	--	**48**	**2.5**	**1.2**	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**57**	**2.2**	**1.1**	<1	<0.2
	7.55	5/19/2016	--	--	--	--	--	--	**62**	**2.8**	**1.0**	<1	<0.2	**36**	**2.4**	**<1**	<1	<0.2
	10.28	8/30/2016	--	--	--	--	--	--	<1	<1	**30**	<1	**0.7**	<1	<1	**32**	<1	**1.1**
MW-12	9.67	2/12/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
	11.09	5/19/2016	--	--	--	--	--	--	**1.7**	<1	<1	<1	<0.2	**1.7**	<1	<1	<1	<0.2
	13.34	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	**3.5**	<1	<1	<1	<0.2
MW-13	18.09	2/11/2016	--	--	--	--	--	--	**3.2**	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**3.3**	<1	<1	<1	<0.2
	18.92	5/20/2016	--	--	--	--	--	--	**2.6**	<1	<1	<1	<0.2	**1.5**	<1	<1	<1	<0.2
	19.85	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
MW-14	11.29	2/11/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	<1	<1	<1		
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
	11.95	5/19/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	<1	<1	<1	<1	<0.2
	13.34	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
MW-15	8.42	5/17/2016	**78.7**	**214**	--	--	--	--	**140**	**2.8**	**1.1**	<1	<0.2	--	--	--		
	10.42	8/30/2016	<50	**289**	--	--	**22.7**	**28.0**	**95**	**2.3**	**1.5**	<1	<0.2	--	--	--	--	--

Table 2
Additional Groundwater Analytical Data (µg/L)
Interim Remedial Action Report
Snohomish Square Cleaners
Avenue D and 13th Street SE, Snohomish, Washington

Sample ID	Depth to Water (feet)	Sample Date	Metals[a]						Detected VOCs[b]					Detected VOCs[c]				
			Iron filtered	Iron unfiltered	Lead filtered	Lead unfiltered	Manganese filtered	Manganese unfiltered	PCE	TCE	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl chloride	PCE	TCE	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Vinyl chloride
GW-1	1.64	2/10/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
	2.46	5/18/2016	--	--	--	--	--	--	<1	<1	<1	<1	<0.2	<1	<1	<1	<1	<0.2
	2.71	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
GW-3	3.13	2/10/2016	--	--	--	--	--	--	**1.6**	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
	3.15	5/18/2016	--	--	--	--	--	--	**2.0**	<1	<1	<1	<0.2	**1.6**	<1	<1	<1	<0.2
	3.34	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	**2.4**	<1	<1	<1	<0.2
GW-4	2.78	2/10/2016	<50	**188**	--	--	**1.42**	**133**	**4.8**	<1	<1	<1	<0.2	--	--	--		
	3.40	5/17/2016	**91.7**	**3,250**	<1	<1	--	--	**9.6**	<1	<1	<1	<0.2	--	--	--		
	3.39	8/29/2016	**62.8**	<500	--	--	**44.1**	**332**	**11**	<1	<1	<1	<0.2	--	--	--	--	--
GW-5	4.60	2/10/2016	--	--	--	--	--	--	**2.5**	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**2.5**	<1	<1	<1	<0.2
	5.04	5/18/2016	--	--	--	--	--	--	**3.1**	<1	<1	<1	<0.2	**1.8**	<1	<1	<1	<0.2
	5.42	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	**2.9**	<1	<1	<1	<0.2
GW-6	3.92	2/10/2016	--	--	--	--	--	--	**6.4**	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**6.1**	<1	<1	<1	<0.2
	4.08	5/18/2016	--	--	--	--	--	--	**6.6**	<1	<1	<1	<0.2	**5.1**	<1	<1	<1	<0.2
	4.21	8/30/2016	--	--	--	--	--	--	**7.3**	<1	<1	<1	<0.2	**7**	<1	<1	<1	<0.2
GW-7	2.67	2/11/2016	--	--	--	--	--	--	**1.2**	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	<1	<1	<0.2
	3.99	5/20/2016	--	--	--	--	--	--	**2.0**	<1	<1	<1	<0.2	**1.1**	<1	<1	<1	<0.2
	4.56	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	**1.1**	<1	<1	<1	<0.2
GW-8	2.39	2/11/2016	--	--	--	--	--	--	**22**	<1	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**21**	<1	<1	<1	<0.2
	3.04	5/20/2016	--	--	--	--	--	--	**25**	<1	<1	<1	<0.2	**21**	<1	<1	<1	<0.2
	3.57	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	**20**	<1	<1	<1	<0.2
GW-9	2.66	2/11/2016	--	--	--	--	--	--	<1	<1	**1.7**	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	**1.3**	<1	<0.2
	2.84	5/20/2016	--	--	--	--	--	--	<1	<1	**1.7**	<1	<0.2	<1	<1	**1.4**	<1	<0.2
	4.30	8/30/2016	--	--	--	--	--	--	--	--	--	--	--	<1	<1	**1.1**	<1	<0.2
GW-10	21.39	2/11/2016	--	--	--	--	--	--	**19**	**1.2**	<1	<1	<0.2	--	--	--	--	--
	NA	2/29/2016	--	--	--	--	--	--	--	--	--	--	--	**27**	**1.2**	<1	<1	<0.2
	23.21	5/20/2016	--	--	--	--	--	--	**8.5**	**1.3**	<1	<1	<0.2	**5.8**	**1.1**	<1	<1	<0.2
	23.86	8/30/2016	--	--	--	--	--	--	**19**	**1.3**	**2.7**	<1	<0.2	**18**	**1.1**	<1	<1	<0.2
GW-11	18.52	2/9/2016	**91.2**	**85.8**	--	--	**2.09**	**2.7**	**8.4**	<1	<1	<1	<0.2	--	--	--	--	--
	19.92	5/17/2016	**127**	**95**	<1	<1	--	--	**25**	<1	<1	<1	<0.2	--	--	--	--	--
	20.68	8/30/2016	**90.4**	**1,210**	--	--	**5.27**	**29.4**	**19**	<1	<1	<1	<0.2	--	--	--	--	--
MTCA Method A Groundwater Cleanup Level[d]			**11,200[e]**		**15**		**2,240[e]**		**5**	**5**	**16[e]**	**160[e]**	**0.2**	**5**	**5**	**16[e]**	**160[e]**	**0.2**

Notes:
All results presented in milligrams/kilogram (µg/L).
Bold Bold results indicate that the compound was detected.
Shaded cells indicate that the compound was detected at a concentration greater than the cleanup level.
a Anayzed by EPA Method 200.8.
b Analyzed by EPA Method 8260; sampled 2/09/16-2/11/16 and 5/18/16.
c Analyzed by EPA Method 8260; sampled with passive diffusion bag (PDB).
d Model Toxics Control Act (MTCA) Method A used, Table 720-1, WAC 173-340-900; unless otherwise noted.
e MTCA Method B Groundwater Cleanup Levels from Cleanup Levels and Risk Calculations (CLARC) database.
-- Not analyzed.
(640) Value in parentheses is the result of a reanalyzed sample.

Compounds:
VOCs Volatile organic compounds
TCE Trichloroethylene
PCE Tetrachloroethene

Qualifiers:
j The analyte concentration is reported below the lowest calibration standard. The value is reported as an estimate.
ve The analyte response exceeded the valid instrument calibration range. 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.

Table 3
Field Parameters
Interim Remedial Action Report
Snohomish Square Cleaners
Avenue D and 13th Street SE, Snohomish, Washington

Sample ID	Sample Date	Depth to Water (feet)	pH	Conductivity (ms/cm^2)	DO (mg/L)	Tempuratur e (ºC)	ORP (mv)
MW-1	2/9/2016	6.68	6.20	0.420	2.24	12.90	190.1
	5/17/2016	8.96	6.04	0.347	1.20	14.87	114.6
	8/30/2016	11.17	5.82	0.381	1.01	18.14	257.6
MW-2	2/9/2016	7.67	5.54	0.139	9.51	12.66	326.7
	5/17/2016	11.02	5.20	0.124	7.82	13.37	263.1
	8/30/2016	13.31	5.07	0.151	2.89	15.67	258.6
MW-3	2/9/2016	4.49	5.82	0.187	6.88	10.50	305.4
	5/17/2016	8.35	5.92	0.461	0.48	14.14	6.5
	8/30/2016	10.82	5.37	0.684	1.50	17.89	46.8
MW-4	2/12/2016	4.54	5.85	0.129	7.15	12.80	183.3
	5/20/2016	8.93	5.66	0.397	0.49	13.79	28.8
	8/30/2016	10.29	--	--	--	--	--
MW-5	2/11/2016	9.18	5.85	0.361	0.31	12.56	303.1
	5/19/2016	10.89	5.68	0.280	1.41	12.86	198.9
	8/30/2016	12.06	5.74	0.328	0.87	16.29	145.2
MW-6	2/11/2016	13.39	5.81	0.424	0.40	14.58	237.1
	5/19/2016	14.63	5.57	0.366	0.51	14.25	167.4
	8/30/2016	16.21	--	--	--	--	--
MW-7	2/9/2016	9.82	6.37	0.987	5.65	12.49	325.6
	5/17/2016	11.07	5.57	0.725	2.2	14.96	206.3
	8/30/2016	13.46	5.54	0.974	3.09	18.41	272.8
MW-8	2/9/2016	9.45	6.02	0.185	1.69	13.55	284.7
	5/17/2016	11.03	5.65	0.209	0.44	14.30	213.2
	8/30/2016	12.89	5.87	0.250	0.91	18.00	158.8
MW-9	2/9/2016	6.00	5.87	0.108	7.03	12.88	326.5
	5/17/2016	9.27	5.46	0.097	6.77	15.22	243.0
	8/30/2016	11.78	5.34	0.108	3.90	19.05	136.0
MW-10	2/12/2016	4.02	5.88	0.125	7.79	11.56	340.2
	5/19/2016	7.56	6.08	0.238	1.76	13.31	23.8
	8/30/2016	10.08	--	--	--	--	--
MW-11	2/12/2016	5.23	5.89	0.133	6.40	13.62	337.7
	5/19/2016	7.55	5.71	0.248	0.34	14.02	27.7
	8/30/2016	10.28	6.09	0.663	0.45	17.63	-1.9
MW-12	2/12/2016	9.67	5.47	0.329	4.90	12.53	265.9
	5/19/2016	11.09	5.30	0.260	4.35	14.07	157.2
	8/30/2016	13.34	--	--	--	--	--
MW-13	2/11/2016	18.09	5.69	0.290	1.25	13.48	364.4
	5/20/2016	18.92	5.44	0.270	2.92	15.24	150.6
	8/30/2016	19.85	--	--	--	--	--
MW-14	2/11/2016	11.29	6.00	0.117	4.40	12.82	303.4
	5/19/2016	11.95	5.62	0.088	5.97	13.31	194.9
	8/30/2016	13.34	--	--	--	--	--
MW-15	5/17/2016	8.42	5.74	0.143	3.56	14.71	188.2
	8/30/2016	10.42	5.56	0.185	0.95	17.13	274.4
GW-1	2/10/2016	1.64	6.10	0.144	6.79	10.26	295.3
	5/18/2016	2.46	5.83	0.155	5.41	15.41	156.8
	8/30/2016	2.71	--	--	--	--	--
GW-3	2/10/2016	3.13	6.68	0.169	7.62	9.22	298.5
	5/18/2016	3.15	6.30	0.178	5.75	16.65	169.5
	8/30/2016	3.34	--	--	--	--	--
GW-4	2/10/2016	2.78	6.39	0.110	1.03	9.26	283.7
	5/17/2016	3.40	5.74	0.169	1.46	14.08	237.9
	8/30/2016	3.39	5.76	0.243	0.76	18.58	227.9
GW-5	2/10/2016	4.60	6.36	0.363	1.62	10.89	281.0
	5/18/2016	5.04	6.06	0.283	1.41	13.49	151.3
	8/30/2016	5.42	--	--	--	--	--
GW-6	2/10/2016	3.92	6.36	0.168	2.63	10.17	298.0
	5/18/2016	4.08	6.09	0.151	1.30	15.91	164.6
	8/30/2016	4.21	6.06	0.219	0.61	20.23	166.9
GW-7	2/11/2016	2.67	6.20	0.185	8.92	9.41	283.9
	5/20/2016	3.99	5.62	0.171	7.95	15.42	196.3
	8/30/2016	4.56	--	--	--	--	--
GW-8	2/11/2016	2.39	6.01	0.213	3.05	9.71	318.3
	5/20/2016	3.04	5.65	0.200	1.13	15.51	198.7
	8/30/2016	3.57	--	--	--	--	--
GW-9	2/11/2016	2.66	6.38	0.247	0.29	9.38	216.0
	5/20/2016	2.84	6.11	0.230	0.33	16.89	33.0
	8/30/2016	4.30	--	--	--	--	--
GW-10	2/11/2016	21.39	5.89	0.248	3.11	12.71	347.7
	5/20/2016	23.21	6.19	0.341	0.53	13.69	-20.2
	8/30/2016	23.86	6.15	0.440	0.69	15.97	-13.4
GW-11	2/9/2016	18.52	5.83	0.214	2.79	14.87	319.4
	5/17/2016	19.92	5.56	0.227	2.13	14.01	255.3
	8/30/2016	20.68	5.34	0.260	2.40	15.76	282.5

Notes:

ms/cm^2	Microsiemens per square centimeter
mg/L	Milligrams per liter
ºC	Degrees Celsius
mv	Millivolts
--	Not analyzed

Compounds:

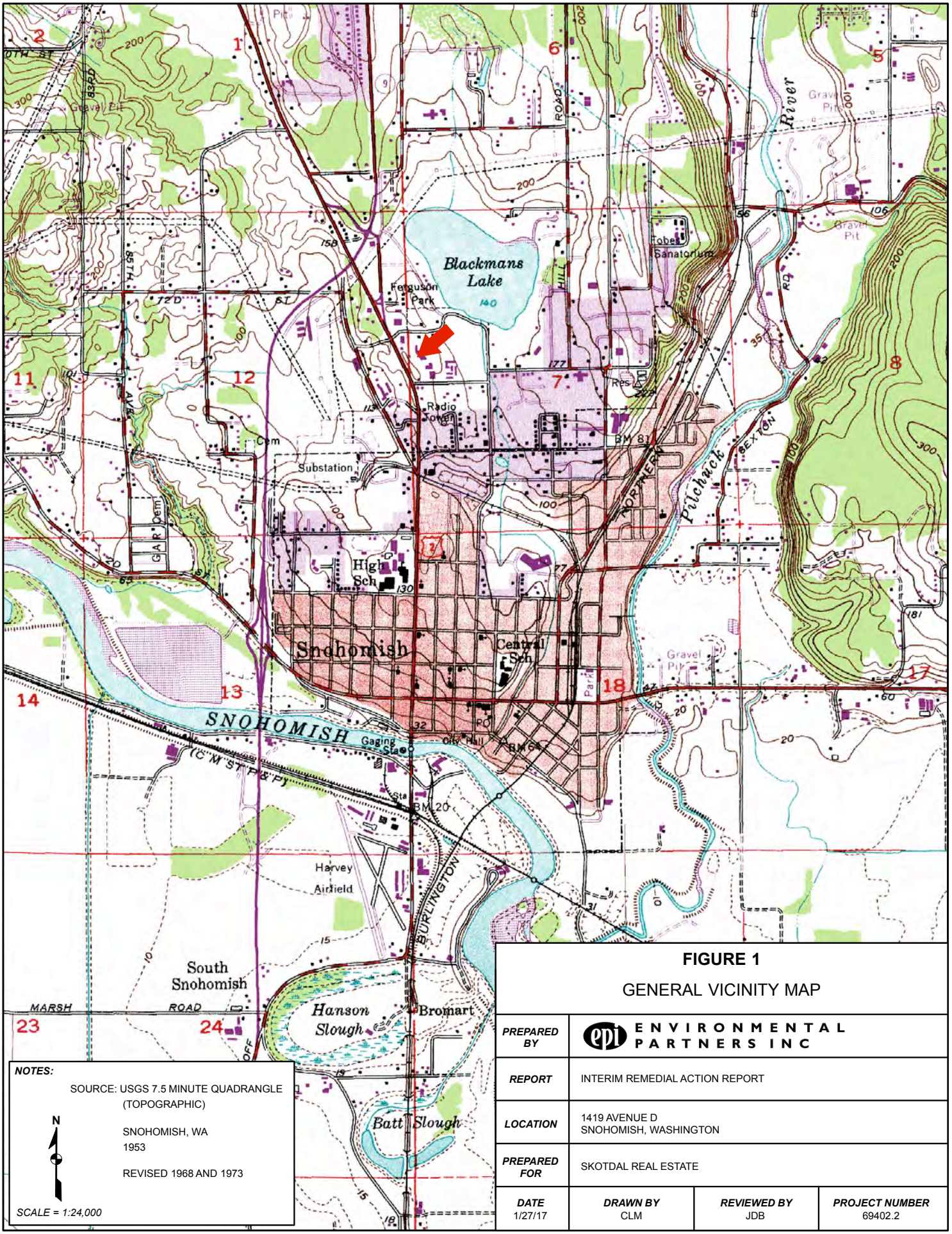
DO	Dissolved oxygen
ORP	Oxidation-reduction potential

Table 4
Substrate Injection Amounts
Interim Remedial Action Report
Snohomish Square Cleaners
Avenue D and 13th Street SE, Snohomish, Washington

Well	3/29/2016	3/30/2016	3/31/2016	4/5/2016	4/6/2016	4/7/2016	4/8/2016	4/12/2016	4/13/2016	Total
IJ-1	--	--	245	--	155	--	--	--	--	**400** *
IJ-2	--	--	--	400	--	--	--	--	--	**400** *
IJ-3	--	--	--	175	225	--	--	--	--	**400** *
IJ-4	--	--	--	400	--	--	--	--	--	**400** *
IJ-5	--	--	400	--	--	--	--	--	--	**400**
IJ-6	--	--	400	--	--	--	--	--	--	**400**
IJ-7	--	--	400	--	--	--	--	--	--	**400**
IJ-8	--	--	--	--	400	--	--	--	--	**400**
IJ-9	--	35	30	--	--	--	120	90	100	**375**
IJ-10	--	--	--	--	--	--	25	85	90	**200** *
IJ-11	--	375	--	--	--	--	--	--	--	**375** *
IJ-12	40	335	--	--	--	--	--	--	--	**375**
MW-3	--	--	--	--	--	140	100	--	--	**240** *
MW-4	--	--	--	--	--	--	230	150	--	**380**
GW-10	--	--	--	165	235	--	--	--	--	**400**
MW-11	--	--	--	--	--	--	375	--	--	**375**
EIW-E	--	--	--	--	--	1,080	--	--	--	**1,080**
EIW-W	--	--	--	--	650	430	--	--	--	**1,080**
									Total Injected Amount:	**8,080**

Notes:
Injection amounts are in gallons.
Method: Pressurized injection using injection pump.
* Part of injection was gravity fed.
-- No injection at this well.

Figures



NOTES:

SOURCE: USGS 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC)

SNOHOMISH, WA
1953

REVISED 1968 AND 1973

N

SCALE = 1:24,000

FIGURE 1

GENERAL VICINITY MAP

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WASHINGTON		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/27/17	***DRAWN BY*** CLM	***REVIEWED BY*** JDB	***PROJECT NUMBER*** 69402.2

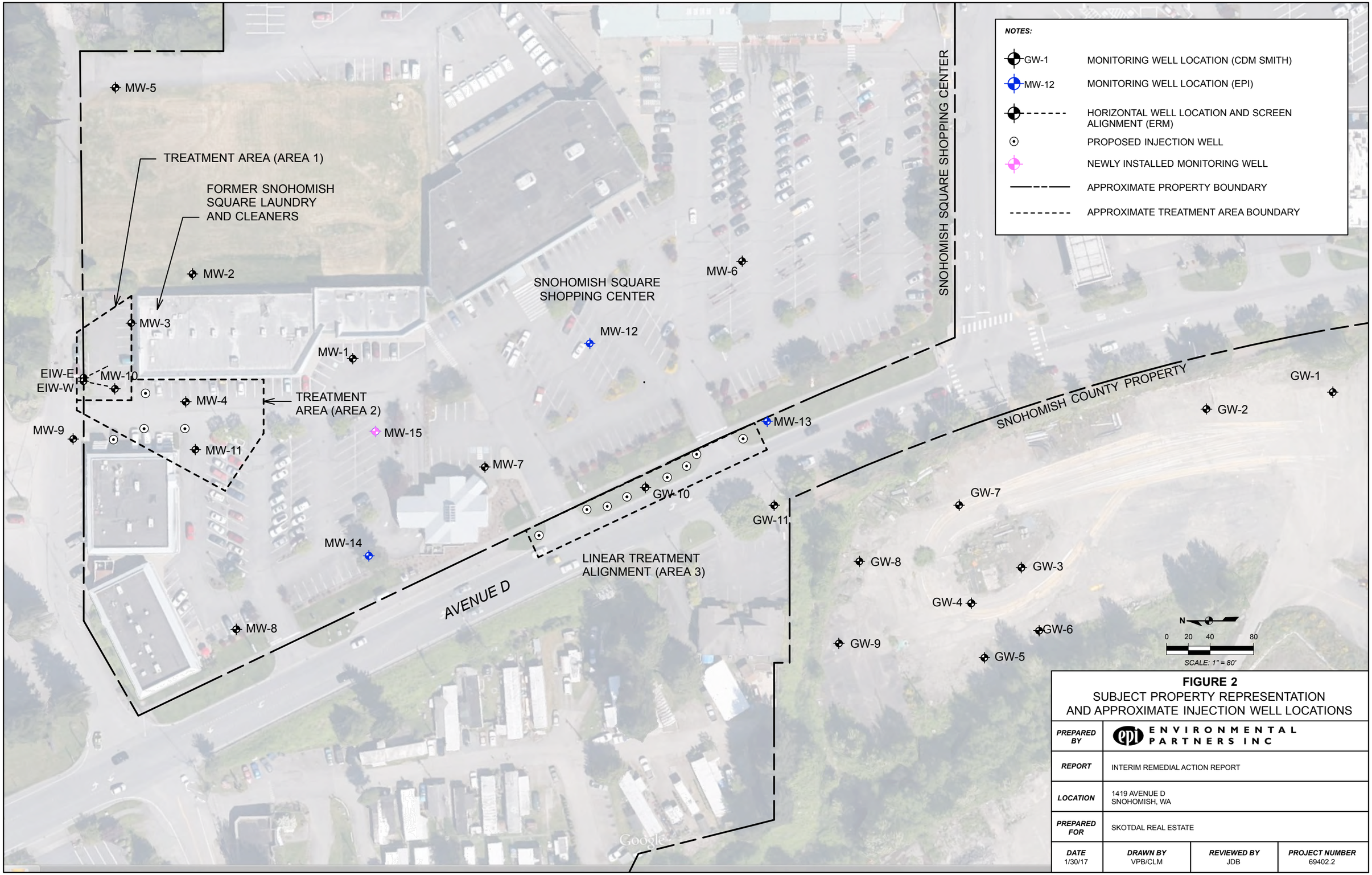


FIGURE 2
SUBJECT PROPERTY REPRESENTATION
AND APPROXIMATE INJECTION WELL LOCATIONS

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	***DRAWN BY*** VPB/CLM	***REVIEWED BY*** JDB	***PROJECT NUMBER*** 69402.2

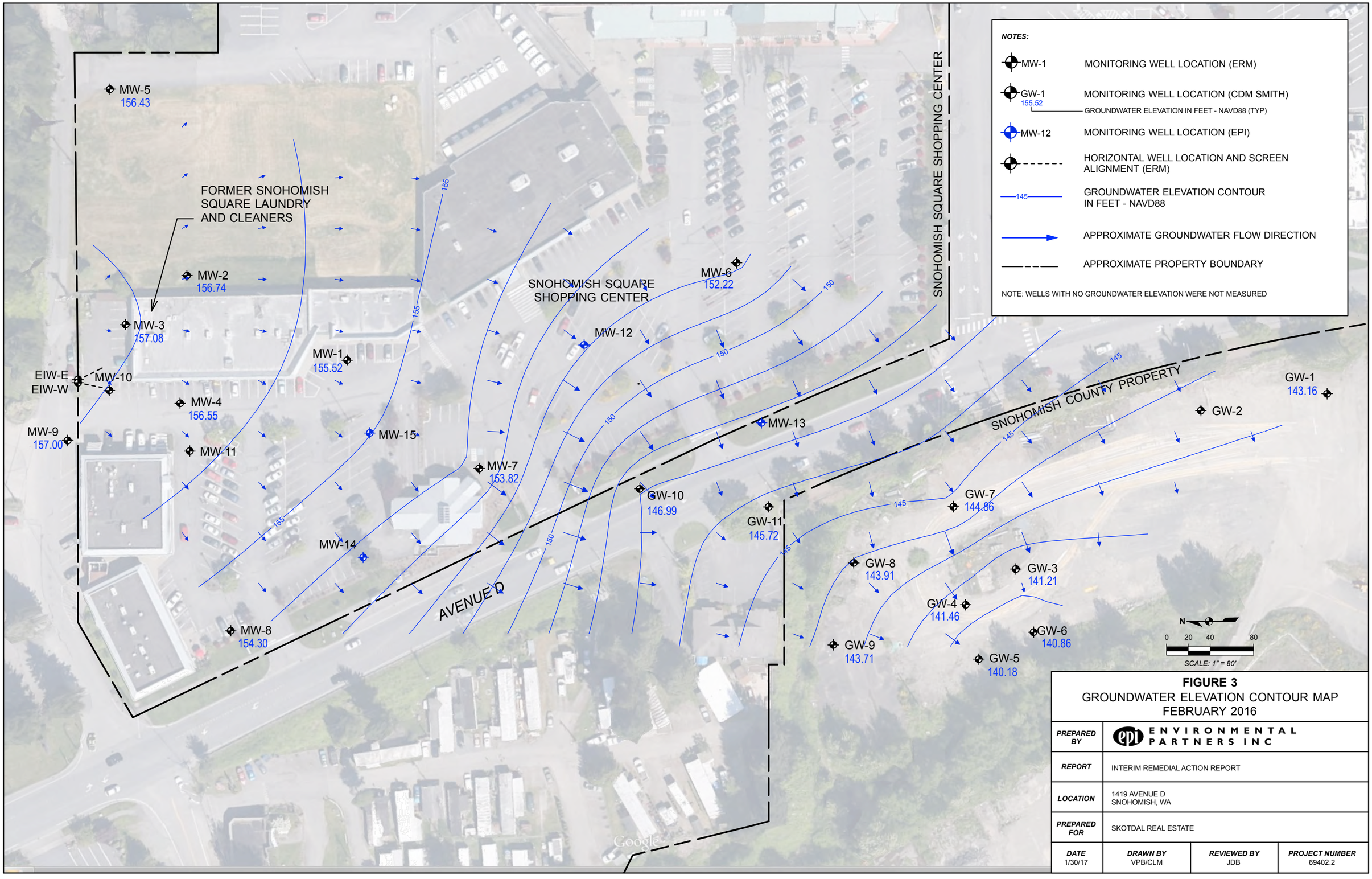


FIGURE 3
GROUNDWATER ELEVATION CONTOUR MAP
FEBRUARY 2016

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	DRAWN BY VPB/CLM	REVIEWED BY JDB	PROJECT NUMBER 69402.2

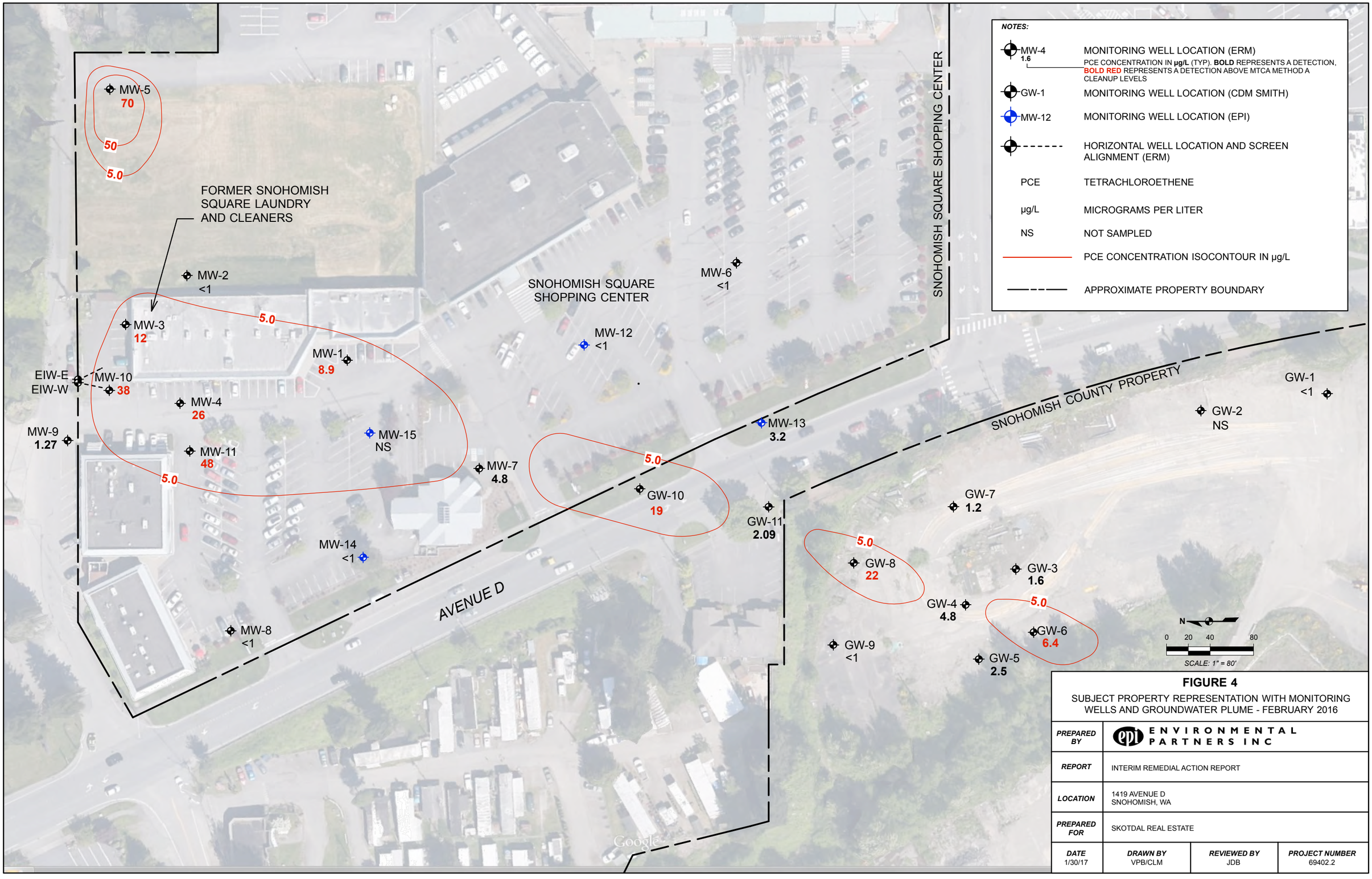


FIGURE 4

SUBJECT PROPERTY REPRESENTATION WITH MONITORING WELLS AND GROUNDWATER PLUME - FEBRUARY 2016

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	***DRAWN BY*** VPB/CLM	***REVIEWED BY*** JDB	***PROJECT NUMBER*** 69402.2

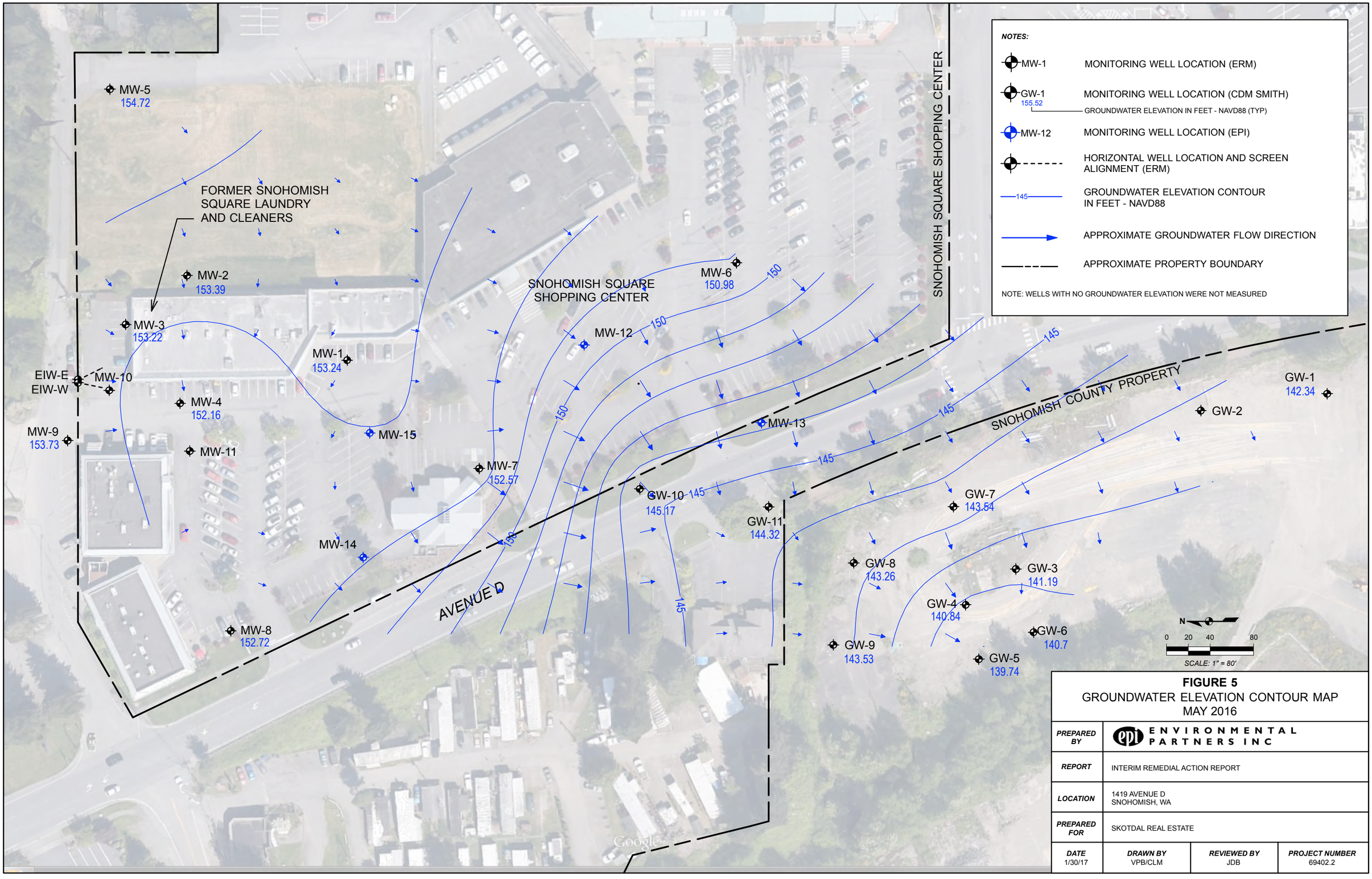


FIGURE 5
GROUNDWATER ELEVATION CONTOUR MAP
MAY 2016

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	***DRAWN BY*** VPB/CLM	***REVIEWED BY*** JDB	***PROJECT NUMBER*** 69402.2

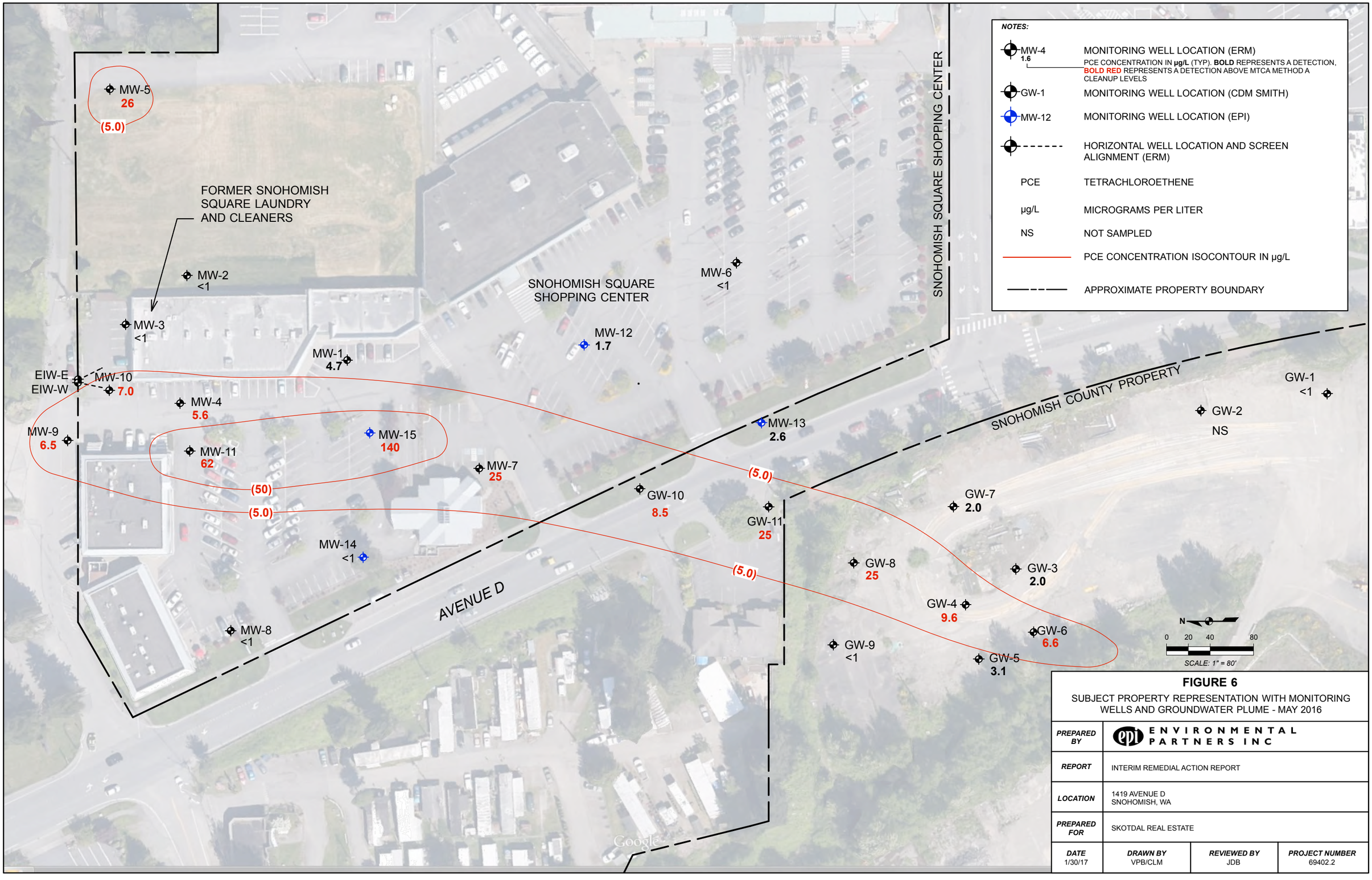


FIGURE 6

SUBJECT PROPERTY REPRESENTATION WITH MONITORING WELLS AND GROUNDWATER PLUME - MAY 2016

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	DRAWN BY VPB/CLM	REVIEWED BY JDB	PROJECT NUMBER 69402.2

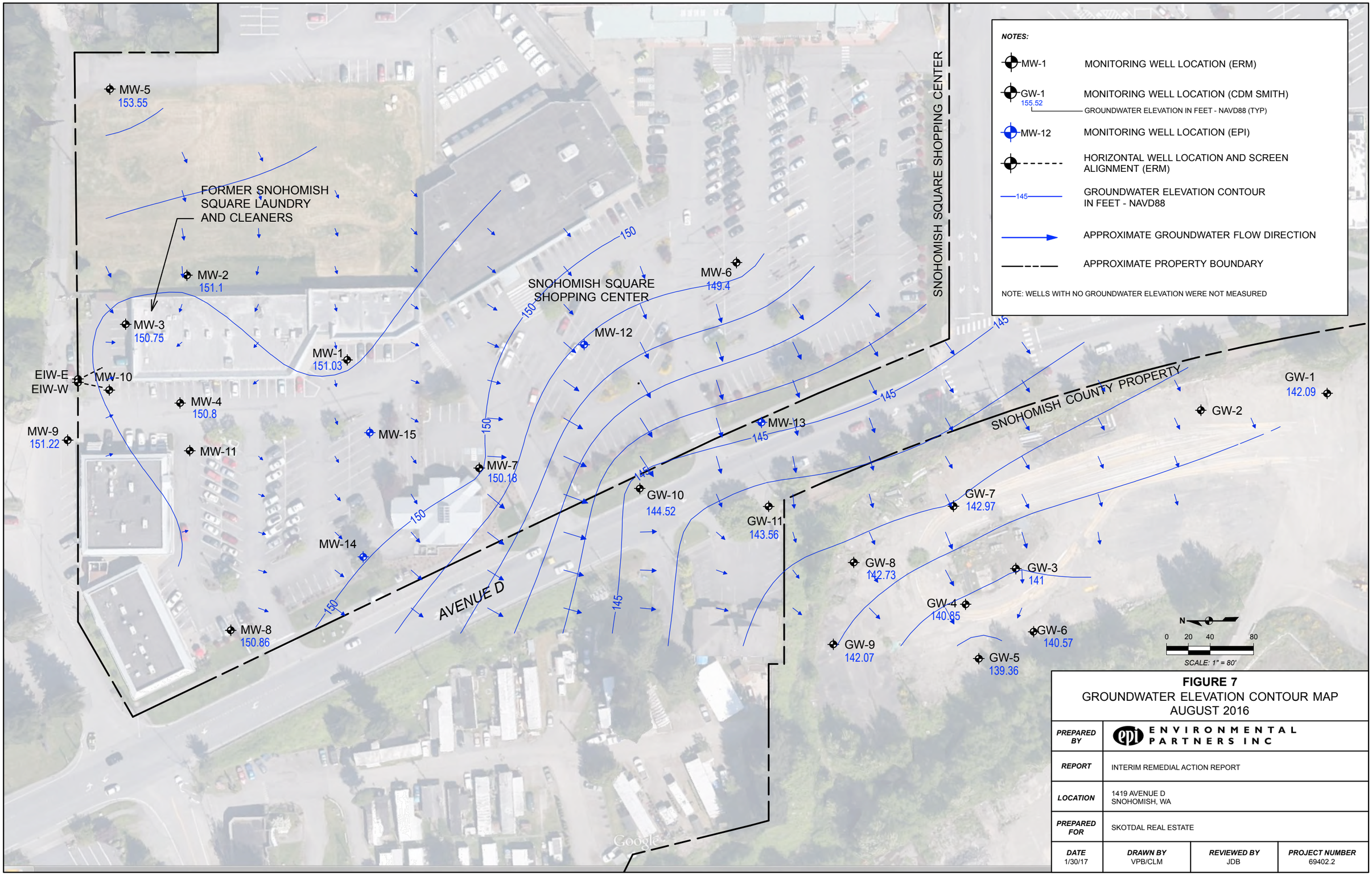


FIGURE 7
GROUNDWATER ELEVATION CONTOUR MAP
AUGUST 2016

PREPARED BY	epi ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	***DRAWN BY*** VPB/CLM	***REVIEWED BY*** JDB	***PROJECT NUMBER*** 69402.2

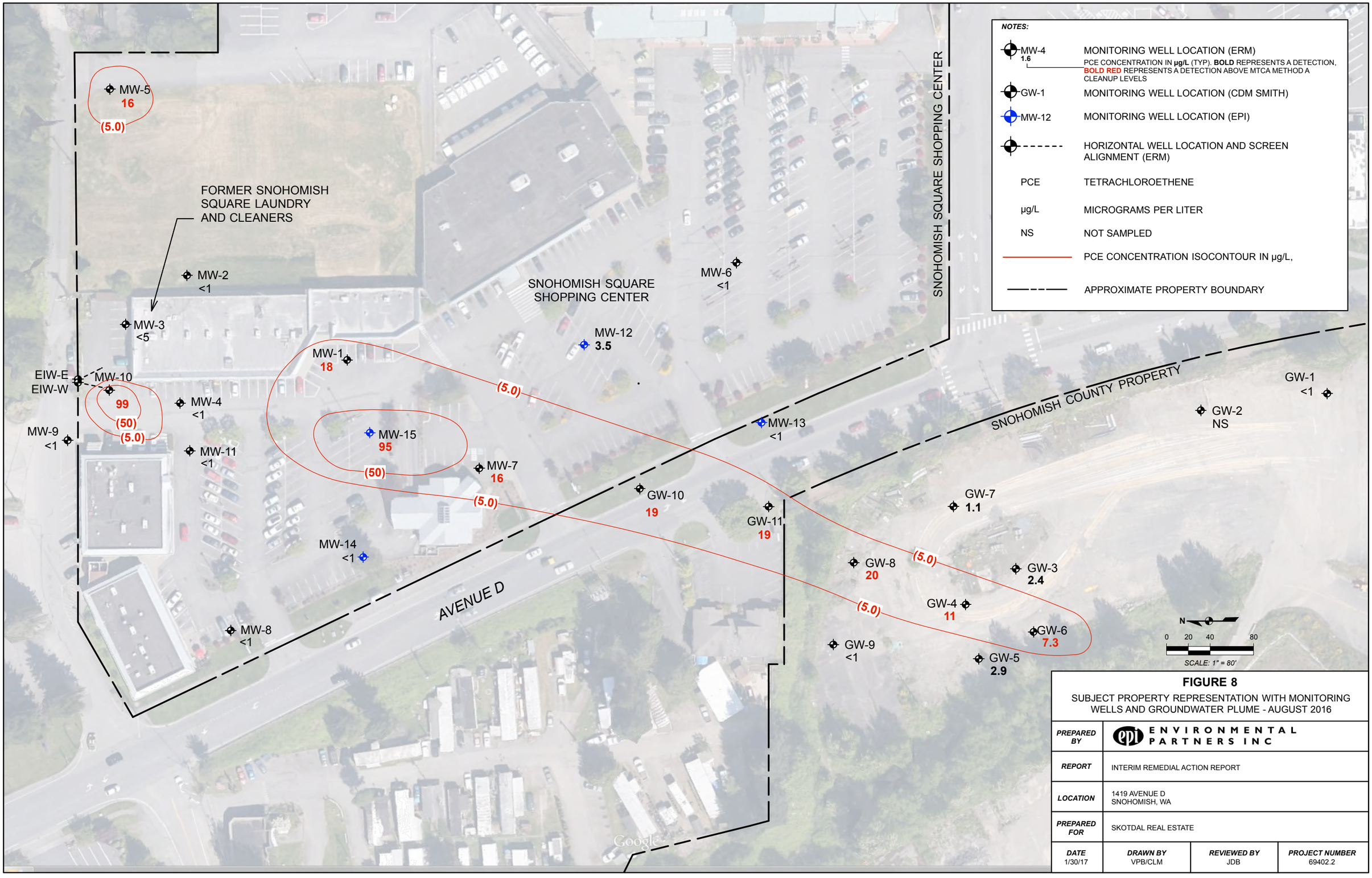
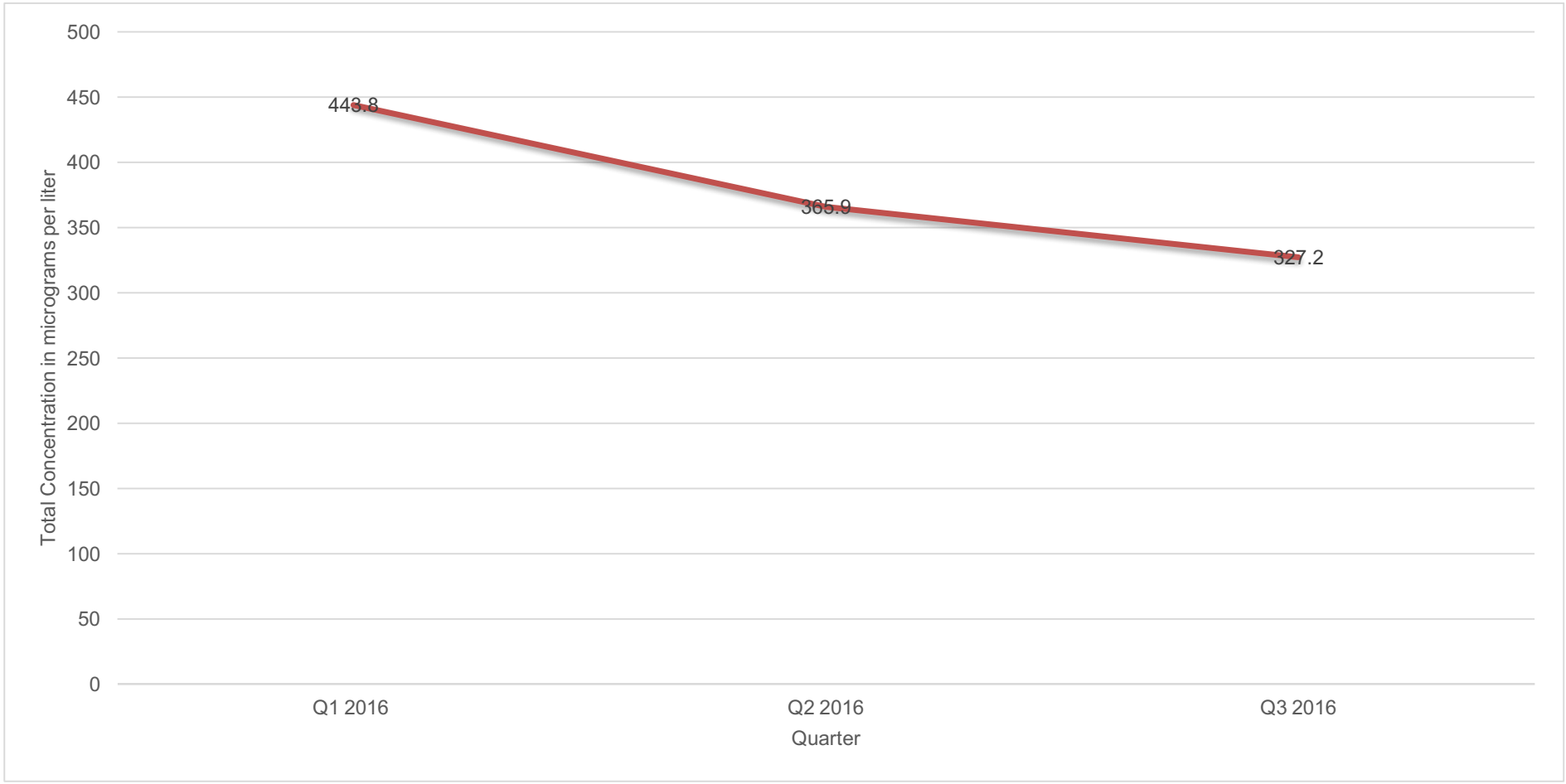


FIGURE 8

SUBJECT PROPERTY REPRESENTATION WITH MONITORING WELLS AND GROUNDWATER PLUME - AUGUST 2016

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WA		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	DRAWN BY VPB/CLM	REVIEWED BY JDB	PROJECT NUMBER 69402.2



NOTE:

PCE TETRACHLOROETHENE

FIGURE 9
PCE CONCENTRATIONS VERSUS TIME
2016

PREPARED BY	ENVIRONMENTAL PARTNERS INC		
REPORT	INTERIM REMEDIAL ACTION REPORT		
LOCATION	1419 AVENUE D SNOHOMISH, WASHINGTON		
PREPARED FOR	SKOTDAL REAL ESTATE		
DATE 1/30/17	***CREATED BY*** CSW	***REVIEWED BY*** JB	***PROJECT NUMBER*** 69402.2

Attachment A
Analytical Results

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Feb 25 2016
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL

Dear MICHAEL ERDAHL:

Enclosed please find the analytical data for your 602160 project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
MW-2	Water	16-A001818	DEM, MIN, NUT
GW-11	Water	16-A001819	DEM, MIN, NUT
MW-7	Water	16-A001820	DEM, MIN, NUT
MW-8	Water	16-A001821	DEM, MIN, NUT
MW-1	Water	16-A001822	DEM, MIN, NUT
MW-9	Water	16-A001823	DEM, MIN, NUT
MW-3	Water	16-A001824	DEM, MIN, NUT
GW-4	Water	16-A001825	DEM, MIN, NUT

Your samples were received on Wednesday, February 10, 2016. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to conact me.

Sincerely,

Aaron W. Young
Laboratory Manager

Project #: 602160
PO Number: D-847

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL
Project Name: 602160
Project #: 602160
PO Number: D-847
All results reported on an as received basis.

Date Received: 02/10/16
Date Reported: 2/25/16

AMTEST Identification Number **16-A001818**
Client Identification **MW-2**
Sampling Date **02/09/16, 13:34**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	4.2	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	1.56	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	2.26	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	17.2	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	17.2	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001819**
Client Identification **GW-11**
Sampling Date **02/09/16, 12:41**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	0.74	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	20.5	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	15.7	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	0.971	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	0.971	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001820**
Client Identification **MW-7**
Sampling Date **02/09/16, 11:51**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	2.6	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	13.	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	191.	mg/l		0.05	EPA 300.0	TN	02/16/16
Sulfate	15.7	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	4.40	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	4.40	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001821**
Client Identification **MW-8**
Sampling Date **02/09/16, 10:58**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	0.57	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	2.62	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	24.4	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	1.15	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	1.15	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001822**
Client Identification **MW-1**
Sampling Date **02/09/16, 10:17**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	3.9	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	16.	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	24.3	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	7.45	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	10.5	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	10.5	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001823**
Client Identification **MW-9**
Sampling Date **02/09/16, 09:17**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	< 0.5	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	4.36	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	8.23	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	1.05	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	1.05	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001824**
Client Identification **MW-3**
Sampling Date **02/09/16, 08:29**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	0.52	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	22.3	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	11.9	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	2.18	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	2.18	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001825**
Client Identification **GW-4**
Sampling Date **02/10/16, 10:00**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	< 0.5	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	2.50	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	6.96	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	0.323	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	0.323	mg/l		0.025	EPA 300.0	Calculated	

Aaron W. Young
Laboratory Manager

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

QC Summary for sample numbers: 16-A001818 to 16-A001825

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
16-A001793	BOD	mg/l	920	840	9.1
16-A001819	Chloride	mg/l	20.5	20.6	0.49
16-A001787	Nitrate	mg/l	< 0.025	< 0.025	
16-A001819	Nitrate	mg/l	0.971	1.02	4.9
16-A001787	Nitrite	mg/l	< 0.005	< 0.005	
16-A001819	Nitrite	mg/l	< 0.005	< 0.005	
16-A001819	Sulfate	mg/l	15.7	16.0	1.9
16-A001833	Sulfate	mg/l	17.0	16.3	4.2

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
16-A001389	Total Organic Carbon	mg/l	< 0.5	46.	50.	92.00 %
16-A001974	Total Organic Carbon	mg/l	1.7	47.	50.	90.60 %
16-A001983	Total Organic Carbon	mg/l	3.4	45.	50.	83.20 %
16-A002121	Chemical Oxygen Demand	mg/l	< 10	52.	50.	104.00 %
16-A002226	Chemical Oxygen Demand	mg/l	< 10	52.	50.	104.00 %
16-A001787	Nitrate	mg/l	< 0.025	1.95	2.00	97.50 %
16-A001819	Nitrate	mg/l	0.971	2.94	2.00	98.45 %
16-A001787	Nitrite	mg/l	< 0.005	2.08	2.00	104.00 %
16-A001819	Nitrite	mg/l	< 0.005	1.88	2.00	94.00 %
16-A001819	Sulfate	mg/l	15.7	17.6	2.00	95.00 %
16-A001833	Sulfate	mg/l	17.0	29.0	12.0	100.00 %

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Total Organic Carbon	mg/l	50.	45.	90.0 %
Total Organic Carbon	mg/l	50.	43.	86.0 %
Chemical Oxygen Demand	mg/l	100	100	100. %
Chemical Oxygen Demand	mg/l	100	110	110. %
Chloride	mg/l	2.00	1.96	98.0 %
Chloride	mg/l	2.00	2.13	106. %
Nitrate	mg/l	2.00	2.05	102. %
Nitrite	mg/l	2.00	2.03	102. %
Sulfate	mg/l	2.00	2.06	103. %

QC Summary for sample numbers: 16-A001818 to 16-A001825...

BLANKS

ANALYTE	UNITS	RESULT
Total Organic Carbon	mg/l	< 0.5
Total Organic Carbon	mg/l	< 0.5
Chemical Oxygen Demand	mg/l	< 10
Chemical Oxygen Demand	mg/l	< 10
Chloride	mg/l	< 0.05
Chloride	mg/l	< 0.05
Nitrate	mg/l	< 0.025
Nitrite	mg/l	< 0.005
Sulfate	mg/l	< 0.1

5.9°

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

P.12

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Amtest

PROJECT NAME/NO.	PO #
602160	D-847

REMARKS *please lab filter Nitrate/Nitrite

Please Email Results

TURNAROUND TIME

☒ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Total Organic Carbon	COD	BOD	Chloride	Sulfate	Sulfide	Nitrate *	Nitrite *		
MW-2	1818	2/9/16	1334	W	5	X	X	X	X	X		X	X		
GW-11	19		1241		5	X	X	X	X	X		X	X		
MW-7	20		1151		5	X	X	X	X	X		X	X		
MW-8	21		1058		5	X	X	X	X	X		X	X		
MW-1	22		1017		5	X	X	X	X	X		X	X		
MW-9	23		0917		5	X	X	X	X	X		X	X		
MW-3	24		0829		5	X	X	X	X	X		X	X		
GW-4	25	2/10/16	1000		5	X	X	X	X	X		X	X		

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:		Michael Erdahl	Friedman and Bruya	2/10/16	1600
Received by:	MY	Mackenzie Johnson	AmTest	2/10/16	1600
Relinquished by:		T2 6.5			
Received by:					

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

February 26, 2016

Mike Erdahl
Friedman & Bruya, Incorporated
3012 16th Ave. W.
Seattle, WA 98119

RE: 602160

Dear Mike:

Enclosed are the results of the samples submitted to our laboratory on February 12, 2016. For your reference, these analyses have been assigned our service request number P1600714.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 9:34 am, Feb 26, 2016

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Friedman & Bruya, Incorporated
Project: 602160

Service Request No: P1600714

CASE NARRATIVE

The samples were received intact under chain of custody on February 12, 2016 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Carbon Dioxide Analysis

The samples were analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gas (carbon dioxide) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175 as described in laboratory SOP VOA-DISGAS. This analyte is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AIHA-LAP accreditation.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L15-398
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	977273
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-15-6
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272015-5
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Friedman & Bruya, Incorporated
Service Request: P1600714
Project ID: 602160

Date Received: 2/12/2016
Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	RSK 175 - CO2
MW-2	P1600714-001	Water	2/9/2016	13:34	X
GW-11	P1600714-002	Water	2/9/2016	12:41	X
MW-7	P1600714-003	Water	2/9/2016	11:51	X
MW-8	P1600714-004	Water	2/9/2016	10:38	X
MW-1	P1600714-005	Water	2/9/2016	10:17	X
MW-9	P1600714-006	Water	2/9/2016	09:10	X
MW-3	P1600714-007	Water	2/9/2016	08:29	X
TRIP BLANK	P1600714-008	Water	2/9/2016	0:00	X
GW-4	P1600714-009	Water	2/10/2016	10:00	X

P1600714

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Send Report To Michael Erdahl
Company Friedman and Bruya, Inc.
Address 3012 16th Ave W
City, State, ZIP Seattle, WA 98119
Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER ALS
PROJECT NAME/NO. 602160
PO # D-851
REMARKS
Please Email Results

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Dioxins/Furans	EPH	VPH	Nitrate	Sulfate	Alkalinity	TOC-9060M	CO_2			Notes
MW-2	1	2/9/16	1334	water	2								X			
GW-11	2		1241		2								X			
MW-7	3		1151		2								X			
MW-8	4		1058		2								X			
MW-1	5		1017		2								X			
MW-9	6		0917		2								X			
MW-3	7		0829		2								X			
Trip Blank	8		1350		1								X			
GW-4	9	2/10/16	1000		2								X			

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman and Bruya	2/11/16	1130
Received by:					
Relinquished by:					
Received by:		2/12/16 0930	2°gel		

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

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Incorporated Work order: P1600714

Project: 602160

Sample(s) received on: 2/12/16 Date opened: 2/12/16 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: 2° C Blank Temperature: ° C **Gel Packs**			
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☒	☐
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

P1600714-001.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-001.02	40mL VOA NP				A	
P1600714-002.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-002.02	40mL VOA NP				A	
P1600714-003.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-003.02	40mL VOA NP				A	
P1600714-004.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-004.02	40mL VOA NP				A	
P1600714-005.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-005.02	40mL VOA NP				A	
P1600714-006.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-006.02	40mL VOA NP				A	
P1600714-007.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-007.02	40mL VOA NP				A	
P1600714-008.01	40mL VOA NP		1		A	MC 02/16/2016

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Incorporated Work order: P1600714

Project: 602160

Sample(s) received on: 2/12/16 Date opened: 2/12/16 by: KKELPE

P1600714-009.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-009.02	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Friedman & Bruya, Incorporated**
Client Project ID: **602160** ALS Project ID: P1600714

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date(s) Collected: 2/9 - 2/10/16
Date Received: 2/12/16
Date Analyzed: 2/16/16

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
MW-2	P1600714-001	0.10	**13,000**	1,000	
GW-11	P1600714-002	0.10	**130,000**	1,000	
MW-7	P1600714-003	0.10	**86,000**	1,000	
MW-8	P1600714-004	0.10	**91,000**	1,000	
MW-1	P1600714-005	0.10	**120,000**	1,000	
MW-9	P1600714-006	0.10	**76,000**	1,000	
MW-3	P1600714-007	0.10	**79,000**	1,000	
TRIP BLANK	P1600714-008	0.10	**1,100**	1,000	
GW-4	P1600714-009	0.10	**29,000**	1,000	
Method Control Sample	P160216-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Friedman & Bruya, Incorporated**
Client Sample ID: **Duplicate Lab Control Sample**
Client Project ID: **602160**

ALS Project ID: P1600714
ALS Sample ID: P160216-DLCS

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 2/16/16
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result$_1$ LCS ug/L	Result$_1$ DLCS ug/L	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	18,300	16,400	17,500	**90**	**96**	62-139	6	24	

$_1$ = The concentration shown includes a subtraction of the Method Control Sample value, even if the result is less than the MRL.

FRIEDMAN & BRUYA, INC.

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

February 26, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 602160

Dear Mr. Bernthal:

Included are the results from the testing of material submitted on February 10, 2016 from the 69402, F&BI 602160 project. There are 44 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Joe Sherrod
EPI0226R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 10, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 602160 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
602160 -01	MW-2
602160 -02	GW-11
602160 -03	MW-7
602160 -04	MW-8
602160 -05	MW-1
602160 -06	MW-9
602160 -07	MW-3
602160 -08	Trip Blank
602160 -09	GW-4

The samples, excluding the trip blank, were sent to Amtest for TOC, chloride, sulfate, nitrate, nitrite, BOD, and COD analyses. In addition, all of the samples were sent to ALS-Simi for carbon dioxide analysis. The results from Amtest are included. The results from ALS-Simi will be forwarded upon receipt.

The dissolved metals were filtered at Friedman and Bruya on February 12, 2016 at 11:35. The data were flagged accordingly.

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-2	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-01 f
Date Analyzed:	02/23/16	Data File:	602160-01.043
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	52.8
Manganese	3.41

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	GW-11	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-02 f
Date Analyzed:	02/23/16	Data File:	602160-02.046
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	91.2
Manganese	2.09

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-7	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-03 f
Date Analyzed:	02/23/16	Data File:	602160-03.047
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	194
Manganese	6.49

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-8	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-04 f
Date Analyzed:	02/23/16	Data File:	602160-04.048
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	73.9
Manganese	70.5

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-1	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-05 f
Date Analyzed:	02/23/16	Data File:	602160-05.050
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	202
Manganese	1,990

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-9	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-06 f
Date Analyzed:	02/23/16	Data File:	602160-06.051
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	1.27

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-3	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-07 f
Date Analyzed:	02/23/16	Data File:	602160-07.052
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	2.76

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	GW-4	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	602160-09 f
Date Analyzed:	02/23/16	Data File:	602160-09.053
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	1.42

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 602160
Date Extracted:	02/23/16	Lab ID:	I6-108 mb f
Date Analyzed:	02/23/16	Data File:	I6-108 mb.021
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-2	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-01
Date Analyzed:	02/12/16	Data File:	602160-01.061
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	213
Manganese	8.09

Analysis For Total Metals By EPA Method 200.8

Client ID:	GW-11	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-02
Date Analyzed:	02/12/16	Data File:	602160-02.062
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	85.8
Manganese	2.70

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-7	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-03
Date Analyzed:	02/12/16	Data File:	602160-03.063
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	296
Manganese	10.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-8	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-04
Date Analyzed:	02/12/16	Data File:	602160-04.064
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	231
Manganese	99.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-1	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-05
Date Analyzed:	02/12/16	Data File:	602160-05.065
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	808
Manganese	2,080

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-9	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-06
Date Analyzed:	02/12/16	Data File:	602160-06.066
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	2,570
Manganese	55.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-3	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-07
Date Analyzed:	02/12/16	Data File:	602160-07.067
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	270
Manganese	8.74

Analysis For Total Metals By EPA Method 200.8

Client ID:	GW-4	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	602160-09
Date Analyzed:	02/12/16	Data File:	602160-09.057
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	188
Manganese	133

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 602160
Date Extracted:	02/12/16	Lab ID:	I6-83 mb
Date Analyzed:	02/12/16	Data File:	I6-83 mb.027
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-2	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-01
Date Analyzed:	02/11/16	Data File:	021111.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-11	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-02
Date Analyzed:	02/11/16	Data File:	021112.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	8.4

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-7	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-03
Date Analyzed:	02/11/16	Data File:	021113.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	4.8

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-8	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-04
Date Analyzed:	02/11/16	Data File:	021114.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-1	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-05
Date Analyzed:	02/11/16	Data File:	021115.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	8.9

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-9	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-06
Date Analyzed:	02/11/16	Data File:	021116.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	7.9

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-3	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-07
Date Analyzed:	02/11/16	Data File:	021117.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	12

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Trip Blank	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-08
Date Analyzed:	02/11/16	Data File:	021110.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	105	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-4	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-09
Date Analyzed:	02/11/16	Data File:	021118.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	4.8

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	06-0244 mb
Date Analyzed:	02/11/16	Data File:	021105.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-2	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-01
Date Analyzed:	02/11/16	Data File:	004F0401.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	GW-11	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-02
Date Analyzed:	02/11/16	Data File:	006F0601.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-7	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-03
Date Analyzed:	02/11/16	Data File:	007F0701.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-8	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-04
Date Analyzed:	02/11/16	Data File:	008F0801.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-1	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-05
Date Analyzed:	02/11/16	Data File:	009F0901.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	31
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-9	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-06
Date Analyzed:	02/11/16	Data File:	010F1001.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-3	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-07
Date Analyzed:	02/11/16	Data File:	011F1101.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	Trip Blank	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-08
Date Analyzed:	02/11/16	Data File:	005F0501.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	GW-4	Client:	Environmental Partners
Date Received:	02/10/16	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	602160-09
Date Analyzed:	02/11/16	Data File:	012F1201.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 602160
Date Extracted:	02/11/16	Lab ID:	06-0242 mb2
Date Analyzed:	02/11/16	Data File:	003F0301.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Date of Report: 02/26/16
Date Received: 02/10/16
Project: 69402, F&BI 602160

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 602160-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	52.8	97	101	70-130	4
Manganese	ug/L (ppb)	20	3.41	103	104	70-130	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	107	85-115
Manganese	ug/L (ppb)	20	107	85-115

Date of Report: 02/26/16
Date Received: 02/10/16
Project: 69402, F&BI 602160

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 602160-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	188	138 b	152 b	70-130	10 b
Manganese	ug/L (ppb)	20	133	199 b	267 b	70-130	29 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	107	85-115
Manganese	ug/L (ppb)	20	109	85-115

Date of Report: 02/26/16
Date Received: 02/10/16
Project: 69402, F&BI 602160

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 602160-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	95	36-166
Chloroethane	ug/L (ppb)	50	<1	123	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	108	60-136
Methylene chloride	ug/L (ppb)	50	<5	117	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	102	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	104	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	107	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	106	60-146
Trichloroethene	ug/L (ppb)	50	<1	99	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	91	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	92	94	50-154	2
Chloroethane	ug/L (ppb)	50	122	119	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	107	106	67-136	1
Methylene chloride	ug/L (ppb)	50	109	108	39-148	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	104	102	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	102	102	79-121	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	103	102	80-123	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	105	107	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	105	104	83-130	1
Trichloroethene	ug/L (ppb)	50	99	100	80-120	1
Tetrachloroethene	ug/L (ppb)	50	92	92	76-121	0

Date of Report: 02/26/16
Date Received: 02/10/16
Project: 69402, F&BI 602160

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED GASSES USING METHOD RSK 175

Laboratory Code: 602162-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Methane	ug/L (ppb)	140	110	24 hr
Ethane	ug/L (ppb)	<10	<10	nm
Ethene	ug/L (ppb)	<10	<10	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methane	ug/L (ppb)	59	85	80	50-150	6
Ethane	ug/L (ppb)	110	77	73	50-150	5
Ethene	ug/L (ppb)	102	108	98	50-150	10

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.

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Feb 25 2016
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL

Dear MICHAEL ERDAHL:

Enclosed please find the analytical data for your 602160 project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
MW-2	Water	16-A001818	DEM, MIN, NUT
GW-11	Water	16-A001819	DEM, MIN, NUT
MW-7	Water	16-A001820	DEM, MIN, NUT
MW-8	Water	16-A001821	DEM, MIN, NUT
MW-1	Water	16-A001822	DEM, MIN, NUT
MW-9	Water	16-A001823	DEM, MIN, NUT
MW-3	Water	16-A001824	DEM, MIN, NUT
GW-4	Water	16-A001825	DEM, MIN, NUT

Your samples were received on Wednesday, February 10, 2016. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to conact me.

Sincerely,

Aaron W. Young
Laboratory Manager

Project #: 602160
PO Number: D-847

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL
Project Name: 602160
Project #: 602160
PO Number: D-847
All results reported on an as received basis.

Date Received: 02/10/16
Date Reported: 2/25/16

AMTEST Identification Number **16-A001818**
Client Identification **MW-2**
Sampling Date **02/09/16, 13:34**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	4.2	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	1.56	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	2.26	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	17.2	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	17.2	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001819**
Client Identification **GW-11**
Sampling Date **02/09/16, 12:41**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	0.74	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	20.5	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	15.7	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	0.971	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	0.971	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001820**
Client Identification **MW-7**
Sampling Date **02/09/16, 11:51**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	2.6	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	13.	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	191.	mg/l		0.05	EPA 300.0	TN	02/16/16
Sulfate	15.7	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	4.40	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	4.40	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001821**
Client Identification **MW-8**
Sampling Date **02/09/16, 10:58**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	0.57	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	2.62	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	24.4	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	1.15	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	1.15	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001822**
Client Identification **MW-1**
Sampling Date **02/09/16, 10:17**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	3.9	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	16.	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	24.3	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	7.45	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	10.5	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	10.5	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001823**
Client Identification **MW-9**
Sampling Date **02/09/16, 09:17**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	< 0.5	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	4.36	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	8.23	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	1.05	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	1.05	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001824**
Client Identification **MW-3**
Sampling Date **02/09/16, 08:29**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	0.52	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	22.3	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	11.9	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	2.18	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	2.18	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A001825**
Client Identification **GW-4**
Sampling Date **02/10/16, 10:00**

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	02/11/16
Total Organic Carbon	< 0.5	mg/l		0.5	SM 5310B	TN	02/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	TN	02/24/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	2.50	mg/l		0.05	EPA 300.0	TN	02/11/16
Sulfate	6.96	mg/l		0.1	EPA 300.0	TN	02/11/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	TN	02/11/16
Nitrate	0.323	mg/l		0.025	EPA 300.0	TN	02/11/16
Nitrate+Nitrite	0.323	mg/l		0.025	EPA 300.0	Calculated	

Aaron W. Young
Laboratory Manager

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

QC Summary for sample numbers: 16-A001818 to 16-A001825

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
16-A001793	BOD	mg/l	920	840	9.1
16-A001819	Chloride	mg/l	20.5	20.6	0.49
16-A001787	Nitrate	mg/l	< 0.025	< 0.025	
16-A001819	Nitrate	mg/l	0.971	1.02	4.9
16-A001787	Nitrite	mg/l	< 0.005	< 0.005	
16-A001819	Nitrite	mg/l	< 0.005	< 0.005	
16-A001819	Sulfate	mg/l	15.7	16.0	1.9
16-A001833	Sulfate	mg/l	17.0	16.3	4.2

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
16-A001389	Total Organic Carbon	mg/l	< 0.5	46.	50.	92.00 %
16-A001974	Total Organic Carbon	mg/l	1.7	47.	50.	90.60 %
16-A001983	Total Organic Carbon	mg/l	3.4	45.	50.	83.20 %
16-A002121	Chemical Oxygen Demand	mg/l	< 10	52.	50.	104.00 %
16-A002226	Chemical Oxygen Demand	mg/l	< 10	52.	50.	104.00 %
16-A001787	Nitrate	mg/l	< 0.025	1.95	2.00	97.50 %
16-A001819	Nitrate	mg/l	0.971	2.94	2.00	98.45 %
16-A001787	Nitrite	mg/l	< 0.005	2.08	2.00	104.00 %
16-A001819	Nitrite	mg/l	< 0.005	1.88	2.00	94.00 %
16-A001819	Sulfate	mg/l	15.7	17.6	2.00	95.00 %
16-A001833	Sulfate	mg/l	17.0	29.0	12.0	100.00 %

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Total Organic Carbon	mg/l	50.	45.	90.0 %
Total Organic Carbon	mg/l	50.	43.	86.0 %
Chemical Oxygen Demand	mg/l	100	100	100. %
Chemical Oxygen Demand	mg/l	100	110	110. %
Chloride	mg/l	2.00	1.96	98.0 %
Chloride	mg/l	2.00	2.13	106. %
Nitrate	mg/l	2.00	2.05	102. %
Nitrite	mg/l	2.00	2.03	102. %
Sulfate	mg/l	2.00	2.06	103. %

QC Summary for sample numbers: 16-A001818 to 16-A001825...

BLANKS

ANALYTE	UNITS	RESULT
Total Organic Carbon	mg/l	< 0.5
Total Organic Carbon	mg/l	< 0.5
Chemical Oxygen Demand	mg/l	< 10
Chemical Oxygen Demand	mg/l	< 10
Chloride	mg/l	< 0.05
Chloride	mg/l	< 0.05
Nitrate	mg/l	< 0.025
Nitrite	mg/l	< 0.005
Sulfate	mg/l	< 0.1

5.9°

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

P.12

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Amtest

PROJECT NAME/NO.	PO #
602160	D-847

REMARKS *please lab filter Nitrate/Nitrite

Please Email Results

TURNAROUND TIME

☒ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Total Organic Carbon	COD	BOD	Chloride	Sulfate	Sulfide	Nitrate *	Nitrite *		
MW-2	1818	2/9/16	1334	W	5	X	X	X	X	X		X	X		
GW-11	19		1241		5	X	X	X	X	X		X	X		
MW-7	20		1151		5	X	X	X	X	X		X	X		
MW-8	21		1058		5	X	X	X	X	X		X	X		
MW-1	22		1017		5	X	X	X	X	X		X	X		
MW-9	23		0917		5	X	X	X	X	X		X	X		
MW-3	24		0829		5	X	X	X	X	X		X	X		
GW-4	25	2/10/16	1000		5	X	X	X	X	X		X	X		

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:		~~Michael~~ Erdahl	Friedman and Bruya	2/10/16	1600
Received by:	MY	Mackenzie Johnson	AmTest	2/10/16	1600
Relinquished by:		T2 6.5			
Received by:					

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

February 26, 2016

Mike Erdahl
Friedman & Bruya, Incorporated
3012 16th Ave. W.
Seattle, WA 98119

RE: 602160

Dear Mike:

Enclosed are the results of the samples submitted to our laboratory on February 12, 2016. For your reference, these analyses have been assigned our service request number P1600714.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 9:34 am, Feb 26, 2016

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Friedman & Bruya, Incorporated
Project: 602160

Service Request No: P1600714

CASE NARRATIVE

The samples were received intact under chain of custody on February 12, 2016 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Carbon Dioxide Analysis

The samples were analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gas (carbon dioxide) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175 as described in laboratory SOP VOA-DISGAS. This analyte is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AIHA-LAP accreditation.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L15-398
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	977273
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-15-6
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272015-5
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Friedman & Bruya, Incorporated
Service Request: P1600714
Project ID: 602160

Date Received: 2/12/2016
Time Received: 09:30

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	RSK 175 - CO2
MW-2	P1600714-001	Water	2/9/2016	13:34	X
GW-11	P1600714-002	Water	2/9/2016	12:41	X
MW-7	P1600714-003	Water	2/9/2016	11:51	X
MW-8	P1600714-004	Water	2/9/2016	10:38	X
MW-1	P1600714-005	Water	2/9/2016	10:17	X
MW-9	P1600714-006	Water	2/9/2016	09:10	X
MW-3	P1600714-007	Water	2/9/2016	08:29	X
TRIP BLANK	P1600714-008	Water	2/9/2016	0:00	X
GW-4	P1600714-009	Water	2/10/2016	10:00	X

P1600714

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Send Report To Michael Erdahl
Company Friedman and Bruya, Inc.
Address 3012 16th Ave W
City, State, ZIP Seattle, WA 98119
Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER ALS
PROJECT NAME/NO. 602160
PO # D-851
REMARKS
Please Email Results

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Dioxins/Furans	EPH	VPH	Nitrate	Sulfate	Alkalinity	TOC-9060M	CO_2			Notes
MW-2	1	2/9/16	1334	water	2								X			
GW-11	2		1241		2								X			
MW-7	3		1151		2								X			
MW-8	4		1058		2								X			
MW-1	5		1017		2								X			
MW-9	6		0917		2								X			
MW-3	7		0829		2								X			
Trip Blank	8		1350		1								X			
GW-4	9	2/10/16	1000		2								X			

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Michael Erdahl	Friedman and Bruya	2/11/16	1130
Received by:					
Relinquished by:					
Received by:		2/12/16 0930	2°gel		

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

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Incorporated Work order: P1600714

Project: 602160

Sample(s) received on: 2/12/16 Date opened: 2/12/16 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: 2° C Blank Temperature: ° C **Gel Packs**			
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☒	☐
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

P1600714-001.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-001.02	40mL VOA NP				A	
P1600714-002.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-002.02	40mL VOA NP				A	
P1600714-003.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-003.02	40mL VOA NP				A	
P1600714-004.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-004.02	40mL VOA NP				A	
P1600714-005.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-005.02	40mL VOA NP				A	
P1600714-006.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-006.02	40mL VOA NP				A	
P1600714-007.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-007.02	40mL VOA NP				A	
P1600714-008.01	40mL VOA NP		1		A	MC 02/16/2016

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Incorporated Work order: P1600714

Project: 602160

Sample(s) received on: 2/12/16 Date opened: 2/12/16 by: KKELPE

P1600714-009.01	40mL VOA NP		7		A	MC 02/16/2016
P1600714-009.02	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Friedman & Bruya, Incorporated**
Client Project ID: **602160** ALS Project ID: P1600714

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date(s) Collected: 2/9 - 2/10/16
Date Received: 2/12/16
Date Analyzed: 2/16/16

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
MW-2	P1600714-001	0.10	**13,000**	1,000	
GW-11	P1600714-002	0.10	**130,000**	1,000	
MW-7	P1600714-003	0.10	**86,000**	1,000	
MW-8	P1600714-004	0.10	**91,000**	1,000	
MW-1	P1600714-005	0.10	**120,000**	1,000	
MW-9	P1600714-006	0.10	**76,000**	1,000	
MW-3	P1600714-007	0.10	**79,000**	1,000	
TRIP BLANK	P1600714-008	0.10	**1,100**	1,000	
GW-4	P1600714-009	0.10	**29,000**	1,000	
Method Control Sample	P160216-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Friedman & Bruya, Incorporated**
Client Sample ID: **Duplicate Lab Control Sample**
Client Project ID: **602160**

ALS Project ID: P1600714
ALS Sample ID: P160216-DLCS

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 2/16/16
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result$_1$ LCS ug/L	Result$_1$ DLCS ug/L	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	18,300	16,400	17,500	**90**	**96**	62-139	6	24	

$_1$ = The concentration shown includes a subtraction of the Method Control Sample value, even if the result is less than the MRL.

602160

SAMPLE CHAIN OF CUSTODY

ME 02-10-16

VST / ATG

Page # 1 of 2

Send Report To Josh Bernthal
Company EPI
Address 1180 NW Maple St
City, State, ZIP Issaquah, WA
Phone # ~~425~~ 395-0010 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. 69402

PO#

REMARKS Bill to Skotdal Realestate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	VOCs	TOC	Dissolved Methane/Ethane/Ethene	Carbon dioxide	Chloride and Sulfate	Nitrate and Nitrite	Notes
MW-2	01 A-N	2/9/16	1334	Water	16							X	X	X	X	X	X	Nitrate and nitrite needs to be lab filtered
GW-11	02	2/9/16	1241	Water	16							X	X	X	X	X	X	
MW-7	03	2/9/16	1151	Water	16							X	X	X	X	X	X	
MW-8	04	2/9/16	1058	Water	16							X	X	X	X	X	X	
MW-1	05	2/9/16	1017	Water	16							X	X	X	X	X	X	
MW-9	06	2/9/16	0917	Water	16							X	X	X	X	X	X	
MW-3	07	2/9/16	0829	Water	16							X	X	X	X	X	X	
Trip Blank	08 B	2/9/16	1350	Water	2							X		X	X			
GW-4	09 A-N	2/10/16	1000	Water	16							X	X	X	X	X	X	Nitrate and nitrite needs to be lab filtered

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Sherrod	EPI	2/9/16	1445
Received by:	Matt Langston	FRI	2/10/16	1445
Relinquished by:				
Received by:		Samples received at 4		

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

602160

SAMPLE CHAIN OF CUSTODY

ME 02-10-16

VS / AEG

Page # 2 of 2

Send Report To Josh Bernthal

Company EPI

Address 1180 NW Maple St

City, State, ZIP Issaquah, WA

Phone # 425-395-0010 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. 64402

PO#

REMARKS Bill to Skotdal Real Estate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Total Manganese and Iron	Dissolved Manganese and Iron	COD	BOD			Notes
MW-2	01 D	2/9/16	1334	water	16							X	X	X	X			
GW-11	02		1241									X	X	X	X			
MW-7	03		1151									X	X	X	X			
MW-8	04		1058									X	X	X	X			
MW-1	05		1017									X	X	X	X			
MW-9	06		0917									X	X	X	X			
MW-3	07		0829									X	X	X	X			
GW-4	09 D	2/10/16	1000	water	16							X	X	X	X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Sherwood	EPI	2/10/16	1445
Received by:	Kurt Haynes	FBTA	2/10/16	1445
Relinquished by:				
Received by:		Samples received at 9 °C		

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

FRIEDMAN & BRUYA, INC.

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

February 18, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 602221

Dear Mr. Bernthal:

Included are the results from the testing of material submitted on February 12, 2016 from the 69402, F&BI 602221 project. There are 21 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Joe Sherrod
EPI0218R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on February 12, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 602221 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
602221 -01	GW-5
602221 -02	GW-6
602221 -03	GW-3
602221 -04	GW-1
602221 -05	MW-5
602221 -06	MW-6
602221 -07	MW-14
602221 -08	GW-10
602221 -09	GW-7
602221 -10	GW-9
602221 -11	MW-13
602221 -12	GW-8
602221 -13	MW-4
602221 -14	MW-11
602221 -15	MW-10
602221 -16	MW-12

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-5	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-01
Date Analyzed:	02/15/16	Data File:	021509.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	85	117
Toluene-d8	103	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-6	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-02
Date Analyzed:	02/15/16	Data File:	021510.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	85	117
Toluene-d8	104	91	108
4-Bromofluorobenzene	103	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	6.4

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-3	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-03
Date Analyzed:	02/15/16	Data File:	021511.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	104	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-1	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-04
Date Analyzed:	02/15/16	Data File:	021512.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-05
Date Analyzed:	02/15/16	Data File:	021513.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	103	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.4
Tetrachloroethene	70

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-6	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-06
Date Analyzed:	02/15/16	Data File:	021514.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	100	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-14	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-07
Date Analyzed:	02/15/16	Data File:	021515.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-10	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-08
Date Analyzed:	02/15/16	Data File:	021516.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	101	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.2
Tetrachloroethene	19

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-7	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-09
Date Analyzed:	02/15/16	Data File:	021517.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	104	91	108
4-Bromofluorobenzene	101	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.2

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-9	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-10
Date Analyzed:	02/15/16	Data File:	021518.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	101	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.7
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-13	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-11
Date Analyzed:	02/15/16	Data File:	021519.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	103	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	3.2

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-8	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-12
Date Analyzed:	02/15/16	Data File:	021520.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	22

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-13
Date Analyzed:	02/15/16	Data File:	021521.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	103	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.1
Tetrachloroethene	26

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-14
Date Analyzed:	02/15/16	Data File:	021522.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	100	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.2
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.5
Tetrachloroethene	48

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-15
Date Analyzed:	02/15/16	Data File:	021523.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	103	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	2.4
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.7
Tetrachloroethene	38

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12	Client:	Environmental Partners
Date Received:	02/12/16	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	602221-16
Date Analyzed:	02/15/16	Data File:	021524.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	102	91	108
4-Bromofluorobenzene	102	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 602221
Date Extracted:	02/15/16	Lab ID:	06-0249 mb
Date Analyzed:	02/15/16	Data File:	021508.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	103	91	108
4-Bromofluorobenzene	101	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 02/18/16
Date Received: 02/12/16
Project: 69402, F&BI 602221

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 602221-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	<0.2	114	111	61-139	3
Chloroethane	ug/L (ppb)	50	<1	110	109	55-149	1
1,1-Dichloroethene	ug/L (ppb)	50	<1	108	106	71-123	2
Methylene chloride	ug/L (ppb)	50	<5	113	110	61-126	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	104	103	72-122	1
1,1-Dichloroethane	ug/L (ppb)	50	<1	105	102	79-113	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	106	103	63-126	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	94	92	70-119	2
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	117	114	75-121	3
Trichloroethene	ug/L (ppb)	50	<1	109	105	75-109	4
Tetrachloroethene	ug/L (ppb)	50	2.5	97	96	72-113	1

Date of Report: 02/18/16
Date Received: 02/12/16
Project: 69402, F&BI 602221

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	109	70-119
Chloroethane	ug/L (ppb)	50	105	66-149
1,1-Dichloroethene	ug/L (ppb)	50	103	75-119
Methylene chloride	ug/L (ppb)	50	107	63-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	100	76-118
1,1-Dichloroethane	ug/L (ppb)	50	101	80-116
cis-1,2-Dichloroethene	ug/L (ppb)	50	101	80-112
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	89	79-109
1,1,1-Trichloroethane	ug/L (ppb)	50	112	80-116
Trichloroethene	ug/L (ppb)	50	102	77-108
Tetrachloroethene	ug/L (ppb)	50	94	78-109

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.

602221

SAMPLE CHAIN OF CUSTODY

ME 2/12/16 VM

Page # 1 of 2

Send Report To Josh Berthal

Company EPI

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA

Phone #425-395-0010 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. 69402. PO#

REMARKS Bill to Skotdal Real Estate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs						Notes
GW-5	01A-D	2/10/16	1228	water	4							X						
GW-6	02	2/10/16	1159	water	4							X						
GW-3	03	2/10/16	1134	water	4							X						
GW-1	04	2/10/16	1049	water	4							X						
MW-5	05	2/11/16	1215	water	4							X						
MW-6	06	2/11/16	1046	water	4							X						
MW-14	07	2/11/16	0954	water	4							X						
GW-10	08	2/11/16	0712	water	4							X						
GW-7	09	2/11/16	0917	water	4							X						
GW-9	10	2/11/16	0843	water	4							X						...ved at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Sherrod	EPI	2/12/16	12:15
Received by:	VINH	FBI	2/12/16	15:26
Relinquished by:				
Received by:				

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

602221

SAMPLE CHAIN OF CUSTODY

ME 2/12/16 V4

Page # 2 of 2

Send Report To Josh Berthal

Company EPI

Address 1180 NW Maple St. Suite 310

City, State, ZIP Issaquah, WA

Phone #_____ Fax #_____

SAMPLERS (signature)

PROJECT NAME/NO. 69402

PO#

REMARKS Bill to Skotdal Real Estate

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH_____

Rush charges authorized by

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED: TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs						Notes
MW-13	11 A,D	2/11/16	0754	water	4							X						
GW-8	12	2/11/16	1327	water	4							X						
MW-4	13	2/12/16	0909	water	4							X						
MW-11	14	2/12/16	0841	water	4							X						
MW-10	15	2/12/16	0802	water	4							X						
MW-12	16	2/12/16	0947	wate	4							X						
																		d at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Sherrod	EPI	2/12/16	12:15
Received by:	VINH	FBI	2/12/16	15:26
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

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

March 31, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 603016

Dear Mr. Bernthal:

Included are the results from the testing of material submitted on March 1, 2016 from the 69402, F&BI 603016 project. There are 20 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
EPI0331R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on March 1, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 603016 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
603016-01	MW-10
603016-02	MW-4
603016-03	MW-11
603016-04	MW-14
603016-05	MW-12
603016-06	MW-6
603016-07	MW-13
603016-08	GW-10
603016-09	MW-5
603016-10	GW-8
603016-11	GW-9
603016-12	GW-7
603016-13	GW-3
603016-14	GW-1
603016-15	GW-6
603016-16	GW-5
603016-17	IJ-8:15
603016-18	IJ-10:20

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-01
Date Analyzed:	03/03/16	Data File:	030238.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	98	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.5
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.8
Tetrachloroethene	38

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-02
Date Analyzed:	03/03/16	Data File:	030239.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	28

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11	Client:	Environmental Partners
Date Received:	03/30/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-03
Date Analyzed:	03/03/16	Data File:	030240.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.2
Tetrachloroethene	57

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-14	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-04
Date Analyzed:	03/03/16	Data File:	030241.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-05
Date Analyzed:	03/03/16	Data File:	030242.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-6	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-06
Date Analyzed:	03/03/16	Data File:	030243.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-13	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-07
Date Analyzed:	03/03/16	Data File:	030244.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	3.3

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-10	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-08
Date Analyzed:	03/03/16	Data File:	030245.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.2
Tetrachloroethene	27

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-09
Date Analyzed:	03/03/16	Data File:	030246.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	50

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-8	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-10
Date Analyzed:	03/03/16	Data File:	030247.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	21

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-9	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-11
Date Analyzed:	03/03/16	Data File:	030248.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.3
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-7	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-12
Date Analyzed:	03/03/16	Data File:	030249.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-3	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-13
Date Analyzed:	03/03/16	Data File:	030250.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-1	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-14
Date Analyzed:	03/03/16	Data File:	030251.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-6	Client:	Environmental Partners
Date Received:	03/30/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-15
Date Analyzed:	03/03/16	Data File:	030252.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	6.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-5	Client:	Environmental Partners
Date Received:	03/01/16	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	603016-16
Date Analyzed:	03/03/16	Data File:	030253.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 603016
Date Extracted:	03/02/16	Lab ID:	06-0380 mb
Date Analyzed:	03/02/16	Data File:	030213.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	115	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 03/31/16
Date Received: 03/01/16
Project: 69402, F&BI 603016

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 603017-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	105	36-166
Chloroethane	ug/L (ppb)	50	<1	123	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	111	60-136
Methylene chloride	ug/L (ppb)	50	<5	113	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	109	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	108	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	109	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	111	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	109	60-146
Trichloroethene	ug/L (ppb)	50	<1	105	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	84	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	106	107	50-154	1
Chloroethane	ug/L (ppb)	50	133	126	58-146	5
1,1-Dichloroethene	ug/L (ppb)	50	113	112	67-136	1
Methylene chloride	ug/L (ppb)	50	116	113	39-148	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	111	109	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	109	108	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	110	107	80-123	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	113	111	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	112	110	83-130	2
Trichloroethene	ug/L (ppb)	50	108	106	80-120	2
Tetrachloroethene	ug/L (ppb)	50	86	84	76-121	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.

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.

603016

SAMPLE CHAIN OF CUSTODY

ME 03/01/16 VSI / V4

Page # 1 of 2

Send Report To Josh Bernthal

Company EPI

Address 1180 NW Maple St Suite 310

City, State, ZIP Issaquah, WA

Phone # 425-395-0010 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. 69402

PO#

REMARKS Bill to Skotdal Real Estate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs						Notes
MW-10	01 A-D	2/29/16	0725	Water	4							X						~~Hold~~ per TB
MW-4	02	2/29/16	0736	water	4							X						3/14/16 M
MW-11	03	2/29/16	0748	water	4							X						
MW-14	04	2/29/16	0817	water	4							X						
MW-12	05	2/29/16	0834	water	4							X						
MW-6	06	2/29/16	0849	water	4							X						
MW-13	07	2/29/16	0856	water	4							X						
GW-10	08	2/29/16	0908	water	4							X						
MW-5	09	2/29/16	0920	water	4							X						
GW-8	10	2/29/16	0937	water	4							X						Samples received at 3 °C

ANALYSES REQUESTED

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

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Joe Skotdal	EPI	3/1/16	0700
Received by:	Camille Patterson	Camille Patterson	Fedex	3/1/16	8:38
Relinquished by:					
Received by:	Nhan Phan	Nhan Phan	FCBI	3/1/16	11:00

603016

SAMPLE CHAIN OF CUSTODY

ME 03/01/16 USI/U4

Send Report To Josh Bernthal
Company EPI
Address 1180 NW Maple St. Suite 310
City, State, ZIP Issaquah, WA
Phone # 425-395-0010 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. 6942 | PO#

REMARKS
Bill to Skotdal Real Estate

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs 4, 8260						Notes
GW-9	11 A-D	2/29/16	0950	water	4							X						~~Hold~~ Report
GW-7	12	2/29/16	1000	water	4							X						
GW-3	13	2/29/16	1010	water	4							X						
GW-1	14	2/29/16	1044	water	4							X						
GW-6	15	2/29/16	1102	water	4							X						
GW-5	16	2/29/16	1115	water	4							X						
IJ-8:15	17	2/29/16	1330	Soil	4							X						Hold per JB 3/1/16
IJ-10:20	18	2/29/16	0900	Soil	4							X						
																		Samples received at 3 °C

ANALYSES REQUESTED

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

FORMS\COC\COC.DOC

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		Joe Sherrod	EPI	~~3/1/16~~ 2/29/16	5700
Received by:	Cameo Patterson	Cameo Patterson	FedEx	3/1/16	8:38
Relinquished by:					
Received by:		Nhan Phan	FedEx	3/1/16	11:00

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Jun 2 2016
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL

Dear MICHAEL ERDAHL:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
GW-4	Water	16-A008943	DEM, MIN, NUT, CONV
GW-11	Water	16-A008944	DEM, MIN, NUT, CONV
MW-2	Water	16-A008945	DEM, MIN, NUT, CONV
MW-9	Water	16-A008946	DEM, MIN, NUT, CONV

Your samples were received on Wednesday, May 18, 2016. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

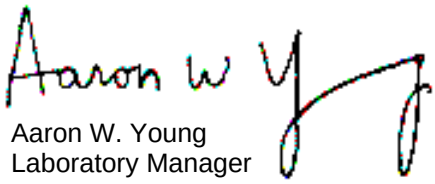
The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to conact me.

Sincerely,



Aaron W. Young
Laboratory Manager

Project #: 605314
PO Number: D-983

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL
Project #: 605314
PO Number: D-983
All results reported on an as received basis.

Date Received: 05/18/16
Date Reported: 6/ 2/16

AMTEST Identification Number **16-A008943**
Client Identification **GW-4**
Sampling Date **05/17/16, 09:17**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	MJ	05/18/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	05/18/16
Total Organic Carbon	0.79	mg/l		0.5	SM 5310B	JR	05/23/16
Chemical Oxygen Demand	18.	mg/l		10	EPA 410.4	MJ	05/23/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	11.3	mg/l		0.05	EPA 300.0	JR	05/19/16
Sulfate	13.8	mg/l		0.1	EPA 300.0	JR	05/19/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	JR	05/19/16
Nitrate	1.23	mg/l		0.025	EPA 300.0	JR	05/19/16
Nitrate+Nitrite	1.23	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A008944**
Client Identification **GW-11**
Sampling Date **05/17/16, 10:36**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	MJ	05/18/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	05/18/16
Total Organic Carbon	0.79	mg/l		0.5	SM 5310B	JR	05/23/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	MJ	05/23/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	30.8	mg/l		0.05	EPA 300.0	JR	05/19/16
Sulfate	19.5	mg/l		0.1	EPA 300.0	JR	05/19/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	JR	05/19/16
Nitrate	2.67	mg/l		0.025	EPA 300.0	JR	05/19/16
Nitrate+Nitrite	2.67	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A008945**
Client Identification **MW-2**
Sampling Date **05/17/16, 12:08**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	0.08	mg/l		0.05	SM 4500-S2-D	MJ	05/18/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	05/18/16
Total Organic Carbon	0.70	mg/l		0.5	SM 5310B	JR	05/23/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	MJ	05/23/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	4.50	mg/l		0.05	EPA 300.0	JR	05/19/16
Sulfate	9.41	mg/l		0.1	EPA 300.0	JR	05/19/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	JR	05/19/16
Nitrate	10.2	mg/l		0.025	EPA 300.0	JR	05/19/16
Nitrate+Nitrite	10.2	mg/l		0.025	EPA 300.0	Calculated	

AMTEST Identification Number **16-A008946**
Client Identification **MW-9**
Sampling Date **05/17/16, 13:06**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	MJ	05/18/16

Demand

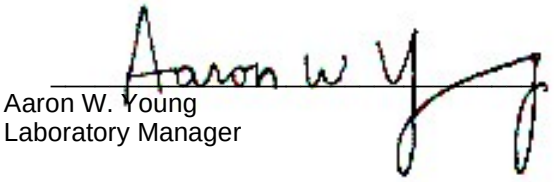
PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	05/18/16
Total Organic Carbon	< 0.5	mg/l		0.5	SM 5310B	JR	05/23/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	MJ	05/23/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	17.0	mg/l		0.05	EPA 300.0	JR	05/19/16
Sulfate	43.1	mg/l		0.1	EPA 300.0	JR	05/19/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	JR	05/19/16
Nitrate	< 0.025	mg/l		0.025	EPA 300.0	JR	05/19/16
Nitrate+Nitrite	< 0.025	mg/l		0.025	EPA 300.0	Calculated	



Aaron W. Young
Laboratory Manager

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

QC Summary for sample numbers: 16-A008943 to 16-A008946

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
16-A008641	BOD	mg/l	< 2	< 2	
16-A009164	Nitrate	mg/l	1.89	1.92	1.6
16-A009164	Nitrite	mg/l	0.010	0.017	52.

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
16-A008751	Total Organic Carbon	mg/l	2.7	43.	38.	106.05 %
16-A009167	Total Organic Carbon	mg/l	1.6	42.	38.	106.32 %
16-A009177	Total Organic Carbon	mg/l	3.3	41.	38.	99.21 %
16-A008943	Chemical Oxygen Demand	mg/l	18.	69.	50.	102.00 %
16-A009385	Chemical Oxygen Demand	mg/l	13.	64.	50.	102.00 %
16-A009164	Nitrate	mg/l	1.89	4.08	2.00	109.50 %
16-A009164	Nitrite	mg/l	0.010	1.92	2.00	95.50 %

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
BOD	mg/l	200	170	85.0 %
Total Organic Carbon	mg/l	75.	87.	116. %
Total Organic Carbon	mg/l	75.	83.	111. %
Total Organic Carbon	mg/l	75.	83.	111. %
Chemical Oxygen Demand	mg/l	100	110	110. %
Chemical Oxygen Demand	mg/l	100	100	100. %
Chloride	mg/l	2.00	2.12	106. %
Nitrate	mg/l	2.00	2.10	105. %
Nitrate	mg/l	2.00	2.14	107. %
Nitrite	mg/l	2.00	2.10	105. %
Nitrite	mg/l	2.00	2.12	106. %
Total Sulfide	mg/l	0.39	0.40	103. %
Total Sulfide	mg/l	0.39	0.38	97.4 %
Sulfate	mg/l	2.00	2.09	104. %
Sulfate	mg/l	2.00	2.15	108. %

BLANKS

ANALYTE	UNITS	RESULT
BOD	mg/l	< 2
Total Organic Carbon	mg/l	< 0.5
Total Organic Carbon	mg/l	< 0.5
Total Organic Carbon	mg/l	< 0.5

QC Summary for sample numbers: 16-A008943 to 16-A008946...

BLANKS continued....

ANALYTE	UNITS	RESULT
Chemical Oxygen Demand	mg/l	< 10
Chemical Oxygen Demand	mg/l	< 10
Chloride	mg/l	< 0.05
Chloride	mg/l	< 0.05
Nitrate	mg/l	< 0.025
Nitrate	mg/l	< 0.025
Nitrite	mg/l	< 0.005
Nitrite	mg/l	< 0.005
Total Sulfide	mg/l	< 0.05
Total Sulfide	mg/l	< 0.05
Sulfate	mg/l	< 0.1
Sulfate	mg/l	< 0.1

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Amtest

PROJECT NAME/NO.	PO #
605314	D-983

REMARKS

Please Email Results

TURNAROUND TIME

☑ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	Nitrate/Nitrite	Sulfide/Sulfate	Alkalinity/BOD	TOC/DOC	COD	Sulfate	Chloride	Notes
8943 GW-4		5/17/16	0917	water	4				X	X	X	X	X	X	X	
44 GW-11			1036		4				X	X	X	X	X	X	X	
45 MW-2			1208		4				X	X	X	X	X	X	X	
46 MW-9			1306		4				X	X	X	X	X	X	X	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Erdahl	Friedman and Bruya	5/18/16	0650AM
Received by: RH	Amtest Rel ex T-0.8		5/18/16	1020
Relinquished by:				
Received by:				

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

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

June 3, 2016

Mike Erdahl
Friedman & Bruya, Incorporated
3012 16th Ave. W.
Seattle, WA 98119

RE: 605343

Dear Mike:

Enclosed are the results of the samples submitted to our laboratory on May 20, 2016. For your reference, these analyses have been assigned our service request number P1602603.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 12:48 pm, Jun 03, 2016

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Friedman & Bruya, Incorporated
Project: 605343

Service Request No: P1602603

CASE NARRATIVE

The samples were received intact under chain of custody on May 20, 2016 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Carbon Dioxide Analysis

The samples were analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gas (carbon dioxide) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175 as described in laboratory SOP VOA-DISGAS. This analyte is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AIHA-LAP accreditation.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L15-398
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	977273
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-003
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-15-6
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272015-5
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Friedman & Bruya, Incorporated
Project ID: 605343

Service Request: P1602603

Date Received: 5/20/2016
Time Received: 09:50

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	RSK 175 - CO2
MW-1	P1602603-001	Water	5/18/2016	06:40	X
MW-15	P1602603-002	Water	5/18/2016	07:20	X
MW-7	P1602603-003	Water	5/18/2016	08:02	X
MW-8	P1602603-004	Water	5/18/2016	08:41	X
MW-3	P1602603-005	Water	5/18/2016	09:46	X

P16Ø2683

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Send Report To Michael Erdahl
Company Friedman and Bruya, Inc.
Address 3012 16th Ave W
City, State, ZIP Seattle, WA 98119
Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER ALS Simi Valley
PROJECT NAME/NO. 605343
PO # D-993
REMARKS Please Email Results

Page # 1 of 1

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	VPH	Nitrate	Sulfate	Alkalinity	TOC-9060M	Carbon Dioxide CO2			Notes
MW-1	1	5/18/16	0640	water	2								X			
MW-15	2	↓	0720	↓	2								X			
MW-7	3		0802		2								X			
MW-8	4		0841		2								X			
MW-3	5	↓	0946	↓	2								X			

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Erdahl	Friedman and Bruya	5/19/16	0950
Received by:				
Relinquished by:				
Received by:				

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

5 of 8

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Incorporated Work order: P1602603

Project: 605343

Sample(s) received on: 5/20/16 Date opened: 5/20/16 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: 6° C Blank Temperature: ° C **Gel Packs**			
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☒	☐
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

P1602603-001.01	40mL VOA NP		7		A	MC 5/27/2016
P1602603-001.02	40mL VOA NP				A	
P1602603-002.01	40mL VOA NP		7		A	MC 5/27/2016
P1602603-002.02	40mL VOA NP				A	
P1602603-003.01	40mL VOA NP		7		A	MC 5/27/2016
P1602603-003.02	40mL VOA NP				A	
P1602603-004.01	40mL VOA NP		7		A	MC 5/27/2016
P1602603-004.02	40mL VOA NP				A	
P1602603-005.01	40mL VOA NP		7		A	MC 5/27/2016
P1602603-005.02	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Friedman & Bruya, Incorporated**
Client Project ID: **605343** ALS Project ID: P1602603

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date(s) Collected: 5/18/16
Date Received: 5/20/16
Date Analyzed: 5/27/16

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
MW-1	P1602603-001	0.10	**110,000**	1,000	
MW-15	P1602603-002	0.10	**67,000**	1,000	
MW-7	P1602603-003	0.10	**75,000**	1,000	
MW-8	P1602603-004	0.10	**130,000**	1,000	
MW-3	P1602603-005	0.10	**100,000**	1,000	
Method Control Sample	P160527-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Friedman & Bruya, Incorporated**
Client Sample ID: **Duplicate Lab Control Sample** ALS Project ID: P1602603
Client Project ID: **605343** ALS Sample ID: P160527-DLCS

Test Code: RSK 175 Date Collected: NA
Instrument ID: HP5890A/GC10/TCD Date Received: NA
Analyst: Mike Conejo Date Analyzed: 5/27/16
Matrix: Water Volume(s) Analyzed: NA ml(s)
Test Notes:

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result$_1$ LCS ug/L	Result$_1$ DLCS ug/L	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	22,900	17,700	21,200	77	93	62-139	19	24	

$_1$ = The concentration shown includes a subtraction of the Method Control Sample value, even if the result is less than the MRL.

FRIEDMAN & BRUYA, INC.

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 27, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 605406

Dear Mr. Bernthal:

Included are the results from the testing of material submitted on May 20, 2016 from the 69402, F&BI 605406 project. There are 38 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
EPI0527R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on May 20, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 605406 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
605406-01	GW-1:Bag
605406-02	GW-1
605406-03	GW-5:Bag
605406-04	GW-5
605406-05	GW-6:Bag
605406-06	GW-6
605406-07	GW-3:Bag
605406-08	GW-3
605406-09	MW-10:Bag
605406-10	MW-10
605406-11	GW-9:Bag
605406-12	GW-9
605406-13	MW-4:Bag
605406-14	MW-4
605406-15	GW-10:Bag
605406-16	GW-10
605406-17	MW-13:Bag
605406-18	MW-13
605406-19	GW-7:Bag
605406-20	GW-7
605406-21	GW-8:Bag
605406-22	GW-8
605406-23	MW-11:Bag
605406-24	MW-11
605406-25	MW-12:Bag
605406-26	MW-12
605406-27	MW-6:Bag
605406-28	MW-6
605406-29	MW-14:Bag
605406-30	MW-14
605406-31	MW-5:Bag
605406-32	MW-5

Methylene chloride was detected in an 8260C method blank. The data were flagged as due to laboratory contamination.

All other quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-1:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-01
Date Analyzed:	05/23/16	Data File:	052309.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-1	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-02
Date Analyzed:	05/23/16	Data File:	052310.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-5:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-03
Date Analyzed:	05/23/16	Data File:	052311.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.8

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-5	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-04
Date Analyzed:	05/23/16	Data File:	052312.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	104	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	3.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-6:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-05
Date Analyzed:	05/23/16	Data File:	052313.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	5.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-6	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-06
Date Analyzed:	05/23/16	Data File:	052314.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	6.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-3:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-07
Date Analyzed:	05/23/16	Data File:	052315.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-3	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-08
Date Analyzed:	05/23/16	Data File:	052316.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.0

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-09
Date Analyzed:	05/23/16	Data File:	052317.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	104	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	12
Tetrachloroethene	10

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-10
Date Analyzed:	05/23/16	Data File:	052318.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	104	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	5.5
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	73
Tetrachloroethene	7.0

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-9:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-11
Date Analyzed:	05/23/16	Data File:	052319.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.4
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-9	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-12
Date Analyzed:	05/23/16	Data File:	052320.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.7
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-13
Date Analyzed:	05/23/16	Data File:	052328.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-14
Date Analyzed:	05/23/16	Data File:	052329.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.3
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	5.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-10:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-15
Date Analyzed:	05/23/16	Data File:	052330.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.1
Tetrachloroethene	5.8

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-10	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-16
Date Analyzed:	05/23/16	Data File:	052331.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.3
Tetrachloroethene	8.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-13:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-17
Date Analyzed:	05/23/16	Data File:	052332.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-13	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-18
Date Analyzed:	05/23/16	Data File:	052333.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	103	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-7:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-19
Date Analyzed:	05/23/16	Data File:	052334.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-7	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-20
Date Analyzed:	05/23/16	Data File:	052335.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.0

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-8:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-21
Date Analyzed:	05/23/16	Data File:	052336.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	21

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-8	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-22
Date Analyzed:	05/23/16	Data File:	052337.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	25

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-23
Date Analyzed:	05/23/16	Data File:	052338.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.4
Tetrachloroethene	36

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-24
Date Analyzed:	05/23/16	Data File:	052339.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.0
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.8
Tetrachloroethene	62

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-25
Date Analyzed:	05/23/16	Data File:	052340.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.7

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-26
Date Analyzed:	05/23/16	Data File:	052341.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.7

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-6:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-27
Date Analyzed:	05/23/16	Data File:	052342.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-6	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-28
Date Analyzed:	05/23/16	Data File:	052343.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-14:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-29
Date Analyzed:	05/23/16	Data File:	052344.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-14	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-30
Date Analyzed:	05/24/16	Data File:	052345.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5:Bag	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-31
Date Analyzed:	05/24/16	Data File:	052346.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.0
Tetrachloroethene	8.6

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5	Client:	Environmental Partners
Date Received:	05/20/16	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	605406-32
Date Analyzed:	05/24/16	Data File:	052347.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.2
Tetrachloroethene	26

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	06-1022 mb
Date Analyzed:	05/23/16	Data File:	052307.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	104	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 605406
Date Extracted:	05/23/16	Lab ID:	06-1025 mb
Date Analyzed:	05/23/16	Data File:	052327.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	105	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	6.2 lc
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 05/27/16
Date Received: 05/20/16
Project: 69402, F&BI 605406

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 605394-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	112	36-166
Chloroethane	ug/L (ppb)	50	<1	124	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	100	60-136
Methylene chloride	ug/L (ppb)	50	<5	109	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	102	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	104	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	95	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	98	60-146
Trichloroethene	ug/L (ppb)	50	<1	101	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	96	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	94	108	50-154	14
Chloroethane	ug/L (ppb)	50	111	118	58-146	6
1,1-Dichloroethene	ug/L (ppb)	50	98	97	67-136	1
Methylene chloride	ug/L (ppb)	50	106	104	39-148	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	103	97	68-128	6
1,1-Dichloroethane	ug/L (ppb)	50	102	98	79-121	4
cis-1,2-Dichloroethene	ug/L (ppb)	50	104	101	80-123	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	94	90	73-132	4
1,1,1-Trichloroethane	ug/L (ppb)	50	100	97	83-130	3
Trichloroethene	ug/L (ppb)	50	101	97	80-120	4
Tetrachloroethene	ug/L (ppb)	50	96	92	76-121	4

Date of Report: 05/27/16
Date Received: 05/20/16
Project: 69402, F&BI 605406

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 605406-32 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	112	36-166
Chloroethane	ug/L (ppb)	50	<1	124	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	99	60-136
Methylene chloride	ug/L (ppb)	50	<5	111	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	103	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	105	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	94	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	99	60-146
Trichloroethene	ug/L (ppb)	50	1.2	100	66-135
Tetrachloroethene	ug/L (ppb)	50	26	94 b	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	111	111	50-154	0
Chloroethane	ug/L (ppb)	50	123	120	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	101	100	67-136	1
Methylene chloride	ug/L (ppb)	50	103	100	39-148	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	103	102	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	104	102	79-121	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	107	106	80-123	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	97	95	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	101	101	83-130	0
Trichloroethene	ug/L (ppb)	50	104	103	80-120	1
Tetrachloroethene	ug/L (ppb)	50	98	98	76-121	0

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.

605406

SAMPLE CHAIN OF CUSTODY

ME 5/20/16

V6

Page # 1 of 4

Send Report To Josh Bernthal

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA

Phone #425-395-0010 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. 69402

PO#

REMARKS
Bill to SKotsdal Real Estate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs						Notes
ANALYSES REQUESTED																		
GW-1: Bag	01 A-D	5/18/16	1046	Water	4							X						
GW-1	02	5/18/16	1104															
GW-5: Bag	03		1120															
GW-5	04		1134															
GW-6: Bag	05		1155															
GW-6	06		1210															
GW-3: Bag	07		1240															
~~GW-3: Bag~~ GW-3	08	↓	1252															
MW-10: Bag	09	5/19/16	0640															
MW-10	10	↓	0658	↓	↓							↓						Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shernd	EPI	5/20/16	1500
~~Received by:~~	Michael Erdahl	FG Bru	↓	↓
Relinquished by:				
Received by:				

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

SAMPLE CHAIN OF CUSTODY

6054016 — 5/20116 — V6

Page # 2 of 4

Send Report To Josh Bernthal
Company EPI
Address 1180 NW Maple St.
City, State, ZIP Issaquah, WA 98027
Phone # 425-395-0010 Fax #

SAMPLERS (signature)
PROJECT NAME/NO. 6940 2
PO#
REMARKS Bill to Skotdal Real Estate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs						Notes
GW-9: Bag	11A-D	5/20116	0950	Water	4							X						
GW-9	12	↓	1012	↓	↓							↓						
																		Samples received at 4 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shemet	EPI	5/20116	1500
Received by:	Michael Erdahl	FBrue.	↓	↓
Relinquished by:				
Received by:				

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

SAMPLE CHAIN OF CUSTODY

605406 — MES/2011/6 — V6

Page # 3 of 4

Send Report To Josh Bernthal
Company EPI
Address 1180 NW Maple St.
City, State, ZIP Issaquah, WA 98027
Phone # 425-395-0010 Fax #

SAMPLERS (signature)
PROJECT NAME/NO. 64402
PO#
REMARKS Bill to Skotdal Real Estate

TURNAROUND TIME
☒ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	cVOCs						Notes
MW-4 : Bag	13	5/20/16	0650	Water	4							X						
MW-4	14		0704															
GW-10 : Bag	15		0730															
GW-10	16		0738															
MW-13 : Bag	17		0755															
MW-13	18		0815															
GW-7 : Bag	19		0850															
GW-7	20		0908															
GW-8 : Bag	21		0930															Samples received at 4 °C
GW-8	22		0941															

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shemet	EPI	5/20/16	1500
Received by:	Michael Erdahl	FBrn	↓	↓
Relinquished by:				
Received by:				

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

605406

SAMPLE CHAIN OF CUSTODY ME5/20/16 V6

Page # 4 of 4

Send Report To Josh Bernthal
Company EPI
Address 1180 NW Maple St.
City, State, ZIP Issaquah, WA 98027
Phone # 425-395-0010 Fax #

SAMPLERS (signature)
PROJECT NAME/NO. 69402
PO#
REMARKS Bill to Skotdal Real Estate

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

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

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	X cVOCs						Notes
MW-11: Bag	23	5/19/16	0725	Water	4							X						
MW-11	24		0746															
MW-12: Bag	25		0807															
MW-12	26		0818															
MW-6: Bag	27		0840															
MW-6	28		0852															
MW-14: Bag	29		0930															
MW-14	30		0944															
MW-5: Bag	31		1008															Samples received at 4 °C
MW-5	32		1023															

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Sherrod	EPI	5/20/16	1500
Received by:	Michael Erdahl	F&B	↓	↓
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

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

September 22, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 608538

Dear Mr Bernthal:

Included are the results from the testing of material submitted on August 29, 2016 from the 69402, F&BI 608538 project. There are 31 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0922R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 29, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 608538 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
608538-01	GW-4
608538-02	MW-2
608538-03	MW-3
608538-04	MW-9
608538-05	MW-8

The samples were sent to Amtest for TOC, chloride, sulfate, nitrate, nitrite, BOD, and COD analyses. In addition, all of the samples were sent to ALS-Simi for carbon dioxide analysis. The results from Amtest and ALS are included.

Sample MW-3 was diluted due to matrix effect. The reporting limits were raised accordingly.

All other quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	GW-4	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	09/09/16	Lab ID:	608538-01
Date Analyzed:	09/12/16	Data File:	608538-01.062
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	62.8
Manganese	44.1

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-2	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	09/09/16	Lab ID:	608538-02
Date Analyzed:	09/12/16	Data File:	608538-02.063
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	6.41

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-3	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	09/09/16	Lab ID:	608538-03 x10
Date Analyzed:	09/12/16	Data File:	608538-03 x10.084
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	79,300
Manganese	9,620

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-9	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	09/09/16	Lab ID:	608538-04
Date Analyzed:	09/13/16	Data File:	608538-04.083
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	4.57

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-8	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	09/09/16	Lab ID:	608538-05
Date Analyzed:	09/12/16	Data File:	608538-05.066
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	72.1
Manganese	203

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608538
Date Extracted:	09/09/16	Lab ID:	I6-594 mb
Date Analyzed:	09/09/16	Data File:	I6-594 mb.085
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	GW-4	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/31/16	Lab ID:	608538-01 x10
Date Analyzed:	09/01/16	Data File:	608538-01 x10.035
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<500
Manganese	332

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-2	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/31/16	Lab ID:	608538-02 x10
Date Analyzed:	09/01/16	Data File:	608538-02 x10.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	3,910
Manganese	115

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-3	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/31/16	Lab ID:	608538-03 x10
Date Analyzed:	09/01/16	Data File:	608538-03 x10.046
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	75,600
Manganese	10,000

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-9	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/31/16	Lab ID:	608538-04 x10
Date Analyzed:	09/01/16	Data File:	608538-04 x10.047
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<500
Manganese	13.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-8	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/31/16	Lab ID:	608538-05 x10
Date Analyzed:	09/01/16	Data File:	608538-05 x10.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	69,200
Manganese	3,640

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608538
Date Extracted:	08/31/16	Lab ID:	I6-578 mb
Date Analyzed:	09/01/16	Data File:	I6-578 mb.028
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-4	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-01
Date Analyzed:	08/30/16	Data File:	083019.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	11

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-2	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-02
Date Analyzed:	08/30/16	Data File:	083020.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-3	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-03 1/5
Date Analyzed:	08/30/16	Data File:	083027.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	107	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2 j
Chloroethane	<5
1,1-Dichloroethene	<5
Methylene chloride	<25
trans-1,2-Dichloroethene	<5
1,1-Dichloroethane	<5
cis-1,2-Dichloroethene	<5
1,2-Dichloroethane (EDC)	<5
1,1,1-Trichloroethane	<5
Trichloroethene	<5
Tetrachloroethene	<5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-9	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-04
Date Analyzed:	08/30/16	Data File:	083028.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	108	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-8	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-05
Date Analyzed:	08/30/16	Data File:	083029.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	97	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	06-1724 mb
Date Analyzed:	08/30/16	Data File:	083015.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	GW-4	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-01
Date Analyzed:	08/30/16	Data File:	006F0601.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-2	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-02
Date Analyzed:	08/30/16	Data File:	007F0701.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-3	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-03
Date Analyzed:	08/30/16	Data File:	008F0801.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	620 ve
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-3	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-03 1/10
Date Analyzed:	09/07/16	Data File:	004F0401.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	640
Ethane	<100
Ethene	<100

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-9	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-04
Date Analyzed:	08/30/16	Data File:	009F0901.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-8	Client:	Environmental Partners
Date Received:	08/29/16	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	608538-05
Date Analyzed:	08/30/16	Data File:	010F1001.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608538
Date Extracted:	08/30/16	Lab ID:	06-1725 mb
Date Analyzed:	08/30/16	Data File:	005F0501.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Date of Report: 09/22/16
Date Received: 08/29/16
Project: 69402, F&BI 608538

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 608594-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	5,860	220 b	112 b	70-130	65 b
Manganese	ug/L (ppb)	20	728	123 b	86 b	70-130	35 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	102	85-115
Manganese	ug/L (ppb)	20	103	85-115

Date of Report: 09/22/16
Date Received: 08/29/16
Project: 69402, F&BI 608538

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 608384-61 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	170	126	119	70-130	6
Manganese	ug/L (ppb)	20	9.06	117	110	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	101	85-115
Manganese	ug/L (ppb)	20	101	85-115

Date of Report: 09/22/16
Date Received: 08/29/16
Project: 69402, F&BI 608538

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 608538-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	105	36-166
Chloroethane	ug/L (ppb)	50	<1	125	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	96	60-136
Methylene chloride	ug/L (ppb)	50	<5	102	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	91	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	88	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	86	60-146
Trichloroethene	ug/L (ppb)	50	<1	85	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	96	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	87	88	50-154	1
Chloroethane	ug/L (ppb)	50	112	114	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	91	91	67-136	0
Methylene chloride	ug/L (ppb)	50	100	98	39-148	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	87	86	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	93	93	79-121	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	85	85	80-123	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	90	88	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	83	83	83-130	0
Trichloroethene	ug/L (ppb)	50	83	83	80-120	0
Tetrachloroethene	ug/L (ppb)	50	95	93	76-121	2

Date of Report: 09/22/16
Date Received: 08/29/16
Project: 69402, F&BI 608538

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED GASSES USING METHOD RSK 175

Laboratory Code: 608538-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Methane	ug/L (ppb)	<5	<5	nm
Ethane	ug/L (ppb)	<10	<10	nm
Ethene	ug/L (ppb)	<10	<10	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methane	ug/L (ppb)	59	86	86	50-150	0
Ethane	ug/L (ppb)	110	83	84	50-150	1
Ethene	ug/L (ppb)	102	108	108	50-150	0

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.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

September 8, 2016

Mike Erdahl
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119

RE: 608538

Dear Mike:

Enclosed are the results of the samples submitted to our laboratory on August 31, 2016. For your reference, these analyses have been assigned our service request number P1604225.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 3:12 pm, Sep 08, 2016

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Friedman & Bruya, Inc.
Project: 608538

Service Request No: P1604225

CASE NARRATIVE

The samples were received intact under chain of custody on August 31, 2016 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Carbon Dioxide Analysis

The samples were analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gas (carbon dioxide) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175 as described in laboratory SOP VOA-DISGAS. This analyte is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AIHA-LAP, LLC accreditation.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA-LAP, LLC	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	977273
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-003
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-16-7
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272016-6
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Friedman & Bruya, Inc.
Project ID: 608538

Service Request: P1604225

Date Received: 8/31/2016
Time Received: 09:40

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	RSK 175 - CO2
GW-4	P1604225-001	Water	8/29/2016	09:44	X
[redacted]					
MW-3	P1604225-003	Water	8/29/2016	11:30	X
[redacted]					
MW-8	P1604225-005	Water	8/29/2016	13:11	X

P16P4225

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Send Report To: Michael Erdahl
Company: Friedman and Bruya, Inc.
Address: 3012 16th Ave W
City, State, ZIP: Seattle, WA 98119
Phone #: (206) 285-8282 Fax #: (206) 283-5044

SUBCONTRACTER: ALS-Simi Valley
PROJECT NAME/NO.: 068538
PO #: E-264

REMARKS: Please Email Results

TURNAROUND TIME
- [X] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Dioxins/Furans	EPH	VPH	Nitrate	Sulfate	Alkalinity	TOC-9060M	Carbon Dioxide			Notes
						ANALYSES REQUESTED										
GW-4	1	8/29/16	0944	water	2								X			
MW-2	2	"	1043	"	2								X			
MW-3	3	"	1130	"	2								X			
MW-9	4	"	1220	"	2								X			
MW-8	5	"	1311	"	2								X			

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		Michael Erdahl	Friedman and Bruya	8/30/16	1300
Received by					
Relinquished by					
Received by					

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Inc. Work order: P1604225

Project: 608538

Sample(s) received on: 8/31/16 Date opened: 8/31/16 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: 1° C Blank Temperature: ° C			
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ **Sealing Lid?**	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☒	☐
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

P1604225-001.01	40mL VOA NP		7		A	MC 9/01/2016
P1604225-001.02	40mL VOA NP				A	
P1604225-002.01	40mL VOA NP		7		A	MC 9/01/2016
P1604225-002.02	40mL VOA NP				A	
P1604225-003.01	40mL VOA NP		5		A	MC 9/01/2016
P1604225-003.02	40mL VOA NP				A	
P1604225-004.01	40mL VOA NP		7		A	MC 9/01/2016
P1604225-004.02	40mL VOA NP				A	
P1604225-005.01	40mL VOA NP		7		A	MC 9/01/2016
P1604225-005.02	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Friedman & Bruya, Inc.**
Client Project ID: **608538**

ALS Project ID: P1604225

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date(s) Collected: 8/29/16
Date Received: 8/31/16
Date Analyzed: 9/1/16

Client Sample ID	ALS Sample ID	Injection Volume mk(s)	Result µg/L	MRL µg/L	Data Qualifier
GW-4	P1604225-001	0.10	96,000	1,000	
MW-2	P1604225-002	0.10	72,000	1,000	
MW-3	P1604225-003	0.10	200,000	1,000	
MW-9	P1604225-004	0.10	110,000	1,000	
MW-8	P1604225-005	0.10	110,000	1,000	
Method Control Sample	P160901-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Friedman & Bruya, Inc.**
Client Sample ID: **Duplicate Lab Control Sample**
Client Project ID: **608538**

ALS Project ID: P1604225
ALS Sample ID: P160901-DLCS

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 9/01/16
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result, LCS ug/L	Result, DLCS ug/L	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	22,900	18,300	18,900	80	83	62-139	4	24	

, = The concentration shown includes a subtraction of the Method Control Sample value, even if the result is less than the MRL.

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Sep 20 2016
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL

Dear MICHAEL ERDAHL:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
GW-4	Water	16-A023502	DEM, MIN, NUT, CONV
MW-2	Water	16-A023503	DEM, MIN, NUT, CONV
MW-3	Water	16-A023504	DEM, MIN, NUT, CONV
MW-9	Water	16-A023505	DEM, MIN, NUT, CONV
MW-8	Water	16-A023506	DEM, MIN, NUT, CONV

Your samples were received on Tuesday, August 30, 2016. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to conact me.

Sincerely,

Aaron W. Young
Laboratory Manager

Project #: 608538
PO Number: E-259

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL
Project #: 608538
PO Number: E-259
All results reported on an as received basis.

Date Received: 08/30/16
Date Reported: 9/20/16

AMTEST Identification Number **16-A023502**
Client Identification **GW-4**
Sampling Date **08/29/16, 09:44**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	67.	mg/l		0.5	SM 5310B	CO	09/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	11.4	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	19.6	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	1.72	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023503**
Client Identification **MW-2**
Sampling Date **08/29/16, 10:43**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	15.	mg/l		0.5	SM 5310B	CO	09/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	4.64	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	13.8	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	6.38	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023504**
Client Identification **MW-3**
Sampling Date **08/29/16, 11:30**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	55.	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	300	mg/l	D	2.5	SM 5310B	CO	09/16/16
Chemical Oxygen Demand	1100	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	9.88	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	0.51	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	< 0.025	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023505**
Client Identification **MW-9**
Sampling Date **08/29/16, 12:20**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	12.	mg/l		0.5	SM 5310B	CO	09/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	3.77	mg/l		0.05	EPA 300.0	MJ	08/30/16
Sulfate	9.57	mg/l		0.1	EPA 300.0	MJ	08/30/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	2.00	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023506**
Client Identification **MW-8**
Sampling Date **08/29/16, 13:11**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	0.06	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	11.	mg/l		0.5	SM 5310B	CO	09/16/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

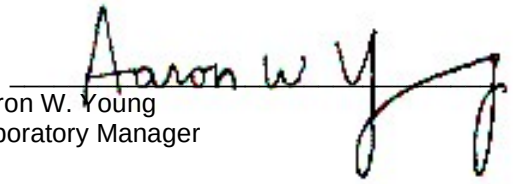
Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	3.76	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	9.57	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	2.00	mg/l		0.025	EPA 300.0	MJ	08/31/16

D = The reported value is from a dilution.



Aaron W. Young
Laboratory Manager

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

QC Summary for sample numbers: 16-A023502 to 16-A023506

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
16-A023503	BOD	mg/l	< 2	2.0	
16-A023505	Chloride	mg/l	3.77	3.82	1.3
16-A023506	Chloride	mg/l	3.76	3.82	1.6
16-A023505	Nitrate	mg/l	2.00	1.98	1.0
16-A023506	Nitrate	mg/l	2.00	1.98	1.0
16-A023524	Nitrate	mg/l	0.049	3.40	190
16-A023505	Nitrite	mg/l	< 0.005	< 0.005	
16-A023506	Nitrite	mg/l	< 0.005	< 0.005	
16-A023524	Nitrite	mg/l	< 0.005	< 0.005	
16-A023505	Sulfate	mg/l	9.57	10.4	8.3
16-A023517	Sulfate	mg/l	16.6	16.6	0.00
16-A023506	Sulfate	mg/l	9.57	10.4	8.3

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
16-A023505	Chloride	mg/l	3.77	6.13	2.50	94.40 %
16-A023506	Chloride	mg/l	3.76	6.13	2.00	118.50 %
16-A023521	Chloride	mg/l	29.4	224.	200.	97.30 %
16-A023505	Nitrate	mg/l	2.00	3.91	2.00	95.50 %
16-A023506	Nitrate	mg/l	2.00	3.90	2.00	95.00 %
16-A023521	Nitrate	mg/l	3.38	5.24	2.00	93.00 %
16-A023505	Nitrite	mg/l	< 0.005	1.86	2.00	93.00 %
16-A023506	Nitrite	mg/l	< 0.005	1.86	2.00	93.00 %
16-A024691	Total Sulfide	mg/l	< 0.05	0.17	0.20	85.00 %
16-A024691	Total Sulfide	mg/l	< 0.05	0.17	0.20	85.00 %
16-A024697	Total Sulfide	mg/l	< 0.05	0.22	0.20	110.00 %
16-A024697	Total Sulfide	mg/l	< 0.05	0.20	0.20	100.00 %
16-A023505	Sulfate	mg/l	9.57	12.0	2.50	97.20 %
16-A023517	Sulfate	mg/l	16.6	28.4	12.0	98.33 %
16-A023506	Sulfate	mg/l	9.57	12.0	2.00	121.50 %
16-A023521	Sulfate	mg/l	11.5	201.	200.	94.75 %

QC Summary for sample numbers: 16-A023502 to 16-A023506...

MATRIX SPIKE DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE + SPK	MSD VALUE	RPD
Spike	Total Sulfide	mg/l	0.17	0.17	0.00
Spike	Total Sulfide	mg/l	0.22	0.20	9.5

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
BOD	mg/l	200	200	100. %
Chemical Oxygen Demand	mg/l	100	100	100. %
Chloride	mg/l	2.00	1.94	97.0 %
Chloride	mg/l	2.00	1.94	97.0 %
Chloride	mg/l	2.00	1.96	98.0 %
Nitrate	mg/l	2.00	1.88	94.0 %
Nitrate	mg/l	2.00	1.95	97.5 %
Nitrate	mg/l	2.00	1.95	97.5 %
Nitrate	mg/l	2.00	1.94	97.0 %
Nitrite	mg/l	2.00	1.86	93.0 %
Nitrite	mg/l	2.00	1.92	96.0 %
Nitrite	mg/l	2.00	1.92	96.0 %
Nitrite	mg/l	2.00	1.93	96.5 %
Total Sulfide	mg/l	0.39	0.40	103. %
Total Sulfide	mg/l	0.39	0.42	108. %
Sulfate	mg/l	2.00	2.20	110. %
Sulfate	mg/l	2.00	1.93	96.5 %
Sulfate	mg/l	2.00	2.01	100. %
Sulfate	mg/l	2.00	1.93	96.5 %
Sulfate	mg/l	2.00	1.94	97.0 %

BLANKS

ANALYTE	UNITS	RESULT
BOD	mg/l	< 2
Chemical Oxygen Demand	mg/l	< 10
Chloride	mg/l	< 0.05
Chloride	mg/l	< 0.05
Chloride	mg/l	< 0.05
Nitrate	mg/l	< 0.025
Nitrate	mg/l	< 0.025
Nitrate	mg/l	< 0.025
Nitrate	mg/l	< 0.025
Nitrite	mg/l	< 0.005
Nitrite	mg/l	< 0.005
Nitrite	mg/l	< 0.005
Nitrite	mg/l	< 0.005
Total Sulfide	mg/l	< 0.05
Total Sulfide	mg/l	< 0.05
Sulfate	mg/l	< 0.1
Sulfate	mg/l	< 0.1
Sulfate	mg/l	< 0.1
Sulfate	mg/l	< 0.1

QC Summary for sample numbers: 16-A023502 to 16-A023506...

BLANKS continued....

ANALYTE	UNITS	RESULT
Sulfate	mg/l	< 0.1

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

P.10

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Anlest

PROJECT NAME/NO.	PO #
608538	E-259.

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	Chloride EPH 2135	VPH	Nitrate 2352 Nitrite 2340	Sulfate 2585	Sulfide 2511 Alkalinity	TOC 9060M 2540	COD 2110	BOD 2520		Notes
GW-4	22502	8/29/16	0944	water	4		X		X	X	X	X	X	X		
MW-2	03		1043		4		X		X	X	X	X	X	X		
MW-3	04		1130		4		X		X	X	X	X	X	X		
MW-9	05		1220		4		X		X	X	X	X	X	X		
MW-8	06		1311		4		X		X	X	X	X	X	Y		

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Erdahl	Friedman and Bruya	8/30/16	
Received by:	ALANNA STAAB	ANTEST	8/30/16	1:10 PM
Relinquished by:				9.6°C
Received by:				FEDEX

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

608538

SAMPLE CHAIN OF CUSTODY

ME 08/29/16

VS/BIG

Page # 1 of 2

Report To Josh Benthal

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA

Phone 425-395-0010 Email joshb@epi-wa.com

SAMPLERS (*signature*)

PROJECT NAME: 69402

PO #

REMARKS

INVOICE TO: Skotdal Real Estate

TURNAROUND TIME
- ☑ Standard Turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	cVOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	TOC	COD + BOD	Iron + Total Manganese Dissolved Iron + Manganese	Notes
GW-4	01 A-P	8/29/16	0944	Water	16											
MW-2	02		1043													
MW-3	03		1130													
MW-9	04		1220													
MW-8	05		1311													
																Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shrout	EPI	8/29/16	1535
Received by:	VINH	FBI	8/29/16	1535
Relinquished by:				
Received by:				

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

608538

SAMPLE CHAIN OF CUSTODY

ME 08/29/16 VSJ BTA

Page # 2 of 2

Report To Josh Benthal

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA, 98027

Phone 425-395-0010 Email joshb@epi-wa.com

SAMPLERS (*signature*)

PROJECT NAME: 69402

PO #:

REMARKS:

INVOICE TO: Bill to Skotdal Real Estate

TURNAROUND TIME
- ☑ Standard Turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Chloride	Sulfate/sulfate	Nitrate/nitrite	Methane, Ethane, Ethene	Carbon dioxide	Notes
GW-4	01 A-P	8/29/16	0944	Water	16								↓	↓	↓	↓	↓	
MW-2	02	↓	1043	↓	↓													
MW-3	03		1130															
MW-9	04		1220															
MW-8	05	✓	134	✓	✓								↓	↓	↓	↓	↓	

Samples received at 6 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shumi	EPI	8/24/16	1535
Received by:	VINH	FBI	8/29/16	1535
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

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

September 22, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 608560

Dear Mr Bernthal:

Included are the results from the testing of material submitted on August 30, 2016 from the 69402, F&BI 608560 project. There are 26 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0922R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 30, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 608560 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
608560-01	GW-11
608560-02	MW-7
608560-03	MW-15
608560-04	MW-1

The samples were sent to Amtest for TOC, chloride, sulfate, nitrate, nitrite, BOD, sulfide and COD analyses. In addition, all of the samples were sent to ALS-Simi for carbon dioxide analysis. The results from Amtest and ALS are included.

All quality control requirements were acceptable.

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	GW-11	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	09/09/16	Lab ID:	608560-01
Date Analyzed:	09/12/16	Data File:	608560-01.069
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	90.4
Manganese	5.27

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-7	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	09/09/16	Lab ID:	608560-02
Date Analyzed:	09/12/16	Data File:	608560-02.070
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	187
Manganese	15.4

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-15	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	09/09/16	Lab ID:	608560-03
Date Analyzed:	09/12/16	Data File:	608560-03.071
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	22.7

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	MW-1	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	09/09/16	Lab ID:	608560-04
Date Analyzed:	09/12/16	Data File:	608560-04.072
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	72.2
Manganese	1,870

Analysis For Dissolved Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608560
Date Extracted:	09/09/16	Lab ID:	I6-594 mb
Date Analyzed:	09/09/16	Data File:	I6-594 mb.085
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Total Metals By EPA Method 200.8

Client ID:	GW-11	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/31/16	Lab ID:	608560-01
Date Analyzed:	09/01/16	Data File:	608560-01.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	1,210
Manganese	29.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-7	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/31/16	Lab ID:	608560-02 x10
Date Analyzed:	09/01/16	Data File:	608560-02 x10.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	42,000
Manganese	1,330

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-15	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/31/16	Lab ID:	608560-03
Date Analyzed:	09/01/16	Data File:	608560-03.051
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	289
Manganese	28.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	MW-1	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/31/16	Lab ID:	608560-04
Date Analyzed:	09/01/16	Data File:	608560-04.052
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	263
Manganese	1,960

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608560
Date Extracted:	08/31/16	Lab ID:	I6-578 mb
Date Analyzed:	09/01/16	Data File:	I6-578 mb.028
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Iron	<50
Manganese	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-11	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-01
Date Analyzed:	08/30/16	Data File:	083037.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	19

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-7	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-02
Date Analyzed:	08/30/16	Data File:	083038.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	16

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-15	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-03
Date Analyzed:	08/30/16	Data File:	083039.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.5
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.3
Tetrachloroethene	94

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-1	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-04
Date Analyzed:	08/30/16	Data File:	083040.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	106	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	18

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	06-1724 mb
Date Analyzed:	08/30/16	Data File:	083015.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	57	121
Toluene-d8	96	63	127
4-Bromofluorobenzene	105	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	GW-11	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-01
Date Analyzed:	08/30/16	Data File:	012F1201.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-7	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-02
Date Analyzed:	08/30/16	Data File:	013F1301.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-15	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-03
Date Analyzed:	08/30/16	Data File:	014F1401.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	MW-1	Client:	Environmental Partners
Date Received:	08/30/16	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	608560-04
Date Analyzed:	08/30/16	Data File:	015F1501.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Analysis For Dissolved Gasses By RSK 175

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608560
Date Extracted:	08/30/16	Lab ID:	06-1725 mb
Date Analyzed:	08/30/16	Data File:	005F0501.D
Matrix:	Water	Instrument:	GC8
Units:	ug/L (ppb)	Operator:	JS

Compounds:	Concentration ug/L (ppb)
Methane	<5
Ethane	<10
Ethene	<10

Date of Report: 09/22/16
Date Received: 08/30/16
Project: 69402, F&BI 608560

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED METALS USING EPA METHOD 200.8

Laboratory Code: 608594-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	5,860	220 b	112 b	70-130	65 b
Manganese	ug/L (ppb)	20	728	123 b	86 b	70-130	35 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	102	85-115
Manganese	ug/L (ppb)	20	103	85-115

Date of Report: 09/22/16
Date Received: 08/30/16
Project: 69402, F&BI 608560

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 608384-61 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Iron	ug/L (ppb)	100	170	126	119	70-130	6
Manganese	ug/L (ppb)	20	9.06	117	110	70-130	6

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Iron	ug/L (ppb)	100	101	85-115
Manganese	ug/L (ppb)	20	101	85-115

Date of Report: 09/22/16
Date Received: 08/30/16
Project: 69402, F&BI 608560

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 608538-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	105	36-166
Chloroethane	ug/L (ppb)	50	<1	125	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	96	60-136
Methylene chloride	ug/L (ppb)	50	<5	102	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	91	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	88	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	86	60-146
Trichloroethene	ug/L (ppb)	50	<1	85	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	96	10-226

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	87	88	50-154	1
Chloroethane	ug/L (ppb)	50	112	114	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	91	91	67-136	0
Methylene chloride	ug/L (ppb)	50	100	98	39-148	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	87	86	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	93	93	79-121	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	85	85	80-123	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	90	88	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	83	83	83-130	0
Trichloroethene	ug/L (ppb)	50	83	83	80-120	0
Tetrachloroethene	ug/L (ppb)	50	95	93	76-121	2

Date of Report: 09/22/16
Date Received: 08/30/16
Project: 69402, F&BI 608560

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR DISSOLVED GASSES USING METHOD RSK 175

Laboratory Code: 608538-05 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Methane	ug/L (ppb)	<5	<5	nm
Ethane	ug/L (ppb)	<10	<10	nm
Ethene	ug/L (ppb)	<10	<10	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Methane	ug/L (ppb)	59	86	86	50-150	0
Ethane	ug/L (ppb)	110	83	84	50-150	1
Ethene	ug/L (ppb)	102	108	108	50-150	0

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.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

September 8, 2016

Mike Erdahl
Friedman & Bruya, Inc.
3012 16th Ave. W.
Seattle, WA 98119

RE: 608560

Dear Mike:

Enclosed are the results of the samples submitted to our laboratory on August 31, 2016. For your reference, these analyses have been assigned our service request number P1604226.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 3:15 pm, Sep 08, 2016

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Friedman & Bruya, Inc.
Project: 608560

Service Request No: P1604226

CASE NARRATIVE

The samples were received intact under chain of custody on August 31, 2016 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Carbon Dioxide Analysis

The samples were analyzed for carbon dioxide using a gas chromatograph equipped with a thermal conductivity detector (TCD). A known amount of liquid was displaced by injecting 8.0 milliliters of helium creating a headspace in the sample vial. Each sample vial was agitated using a sonic disrupter for fifteen minutes and then allowed to equilibrate for at least four hours. A volume of the headspace was withdrawn using a gas-tight syringe and analyzed using a manual injection technique. The amount of dissolved gases (carbon dioxide) in the original sample was calculated using Henry's Law. This method was performed with guidance from RSK 175 as described in laboratory SOP VOA-DISGAS. This analyte is included on the laboratory's NELAP and DoD-ELAP scope of accreditation, however it is not part of the AIHA-LAP, LLC accreditation.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental - Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA-LAP, LLC	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	977273
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-003
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-16-7
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272016-6
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Friedman & Bruya, Inc.
Project ID: 608560

Service Request: P1604226

Date Received: 8/31/2016
Time Received: 09:40

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	RSK 175 - CO2
GW-11	P1604226-001	Water	8/30/2016	05:40	X
MW-7	[redacted]				
MW-15	P1604226-003	Water	8/30/2016	07:11	X
MW-1	[redacted]				

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

P1604226

Page # 1 of 1

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER ALS - Simi Valley

PROJECT NAME/NO. 608560

PO # E-264

REMARKS

Please Email Results

TURNAROUND TIME

☒ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	Dioxins/Furans	EPH	VPH	Nitrate	Sulfate	Alkalinity	TOC-9060M	CO_3			Notes
GW-11	(1)	8/30/14	0540	water	2								X			
MW-7	(2)		0630		2								X			
MW-15	(3)		0711		2								X			
MW-1	(4)		0756		2								X			

ANALYSES REQUESTED

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by	Michael Erdahl	Friedman and Bruya	8/30/14	1310
Received by				
Relinquished by				
Received by		8/31/14	0948	

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

ALS Environmental

Sample Acceptance Check Form

Client: Friedman & Bruya, Inc. Work order: P1604226

Project: 608560

Sample(s) received on: 8/31/16 Date opened: 8/31/16 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☒	☐	☐
	Cooler Temperature: 1° C Blank Temperature: ° C **Gel Packs**			
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ **Sealing Lid?**	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☒	☐	☐
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☒	☐	☐
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☒	☐
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

P1604226-001.01	40mL VOA NP		7		A	MC 9/01/2016
P1604226-001.02	40mL VOA NP				A	
P1604226-002.01	40mL VOA NP		7		A	MC 9/01/2016
P1604226-002.02	40mL VOA NP				A	
P1604226-003.01	40mL VOA NP		7		A	MC 9/01/2016
P1604226-003.02	40mL VOA NP				A	
P1604226-004.01	40mL VOA NP		7		A	MC 9/01/2016
P1604226-004.02	40mL VOA NP				A	

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Friedman & Bruya, Inc.**
Client Project ID: **608560**

ALS Project ID: P1604226

Carbon Dioxide

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date(s) Collected: 8/30/16
Date Received: 8/31/16
Date Analyzed: 9/1/16

Client Sample ID	ALS Sample ID	Injection Volume ml(s)	Result µg/L	MRL µg/L	Data Qualifier
GW-11	P1604226-001	0.10	110,000	1,000	
MW-7	P1604226-002	0.10	96,000	1,000	
MW-15	P1604226-003	0.10	87,000	1,000	
MW-1	P1604226-004	0.10	120,000	1,000	
Method Control Sample	P160901-MB	0.10	ND	1,000	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE / DUPLICATE LABORATORY CONTROL SAMPLE SUMMARY

Client: **Friedman & Bruya, Inc.**
Client Sample ID: **Duplicate Lab Control Sample**
Client Project ID: **608560**

ALS Project ID: P1604226
ALS Sample ID: P160901-DLCS

Test Code: RSK 175
Instrument ID: HP5890A/GC10/TCD
Analyst: Mike Conejo
Matrix: Water
Test Notes:

Date Collected: NA
Date Received: NA
Date Analyzed: 9/01/16
Volume(s) Analyzed: NA ml(s)

CAS #	Compound	Spike Amount LCS / DLCS ug/L	Result, LCS ug/L	Result, DLCS ug/L	% Recovery LCS	% Recovery DLCS	ALS Acceptance Limits	RPD	RPD Limit	Data Qualifier
124-38-9	Carbon Dioxide	22,900	18,300	18,900	80	83	62-139	4	24	

[1] = The concentration shown includes a subtraction of the Method Control Sample value, even if the result is less than the MRL.

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Professional Analytical Services

Sep 20 2016
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL

Dear MICHAEL ERDAHL:

Enclosed please find the analytical data for your project.

The following is a cross correlation of client and laboratory identifications for your convenience.

CLIENT ID	MATRIX	AMTEST ID	TEST
GW-11	Water	16-A023518	DEM, MIN, NUT, CONV
MW-7	Water	16-A023519	DEM, MIN, NUT, CONV
MW-15	Water	16-A023520	DEM, MIN, NUT, CONV
MW-1	Water	16-A023521	DEM, MIN, NUT, CONV

Your samples were received on Tuesday, August 30, 2016. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

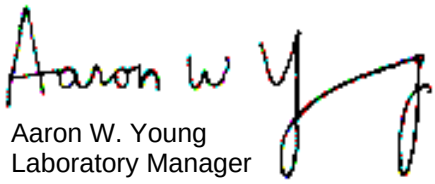
The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to conact me.

Sincerely,



Aaron W. Young
Laboratory Manager

Project #: 608560
PO Number: E-265

BACT = Bacteriological
CONV = Conventionals
MET = Metals
ORG = Organics
NUT=Nutrients
DEM=Demand
MIN=Minerals

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664
www.amtestlab.com

Professional Analytical Services

ANALYSIS REPORT

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Attention: MICHAEL ERDAHL
Project #: 608560
PO Number: E-265
All results reported on an as received basis.

Date Received: 08/30/16
Date Reported: 9/20/16

AMTEST Identification Number **16-A023518**
Client Identification **GW-11**
Sampling Date **08/30/16, 05:40**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	28.	mg/l		0.5	SM 5310B	CO	09/15/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	24.6	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	17.9	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	3.80	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023519**
Client Identification **MW-7**
Sampling Date **08/30/16, 06:30**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	15.	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	2.2	mg/l		0.5	SM 5310B	CO	09/15/16
Chemical Oxygen Demand	34.	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	267.	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	26.1	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	3.02	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023520**
Client Identification **MW-15**
Sampling Date **08/30/16, 07:11**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	20.	mg/l		0.5	SM 5310B	CO	09/15/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	12.4	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	11.8	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	1.28	mg/l		0.025	EPA 300.0	MJ	08/31/16

AMTEST Identification Number **16-A023521**
Client Identification **MW-1**
Sampling Date **08/30/16, 07:56**

Conventionals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Total Sulfide	< 0.05	mg/l		0.05	SM 4500-S2-D	CO	09/15/16

Demand

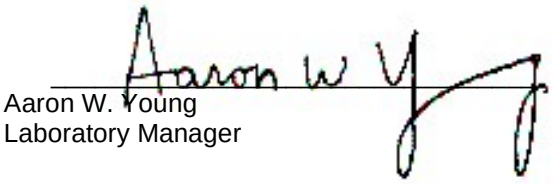
PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
BOD	< 2	mg/l		2	SM 5210B	NG	08/31/16
Total Organic Carbon	86.	mg/l		0.5	SM 5310B	CO	09/15/16
Chemical Oxygen Demand	< 10	mg/l		10	EPA 410.4	CO	09/15/16

Minerals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Chloride	29.4	mg/l		0.05	EPA 300.0	MJ	08/31/16
Sulfate	11.5	mg/l		0.1	EPA 300.0	MJ	08/31/16

Nutrients

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Nitrite	< 0.005	mg/l		0.005	EPA 300.0	MJ	08/31/16
Nitrate	3.38	mg/l		0.025	EPA 300.0	MJ	08/31/16



Aaron W. Young
Laboratory Manager

Am Test Inc.
13600 NE 126th PL
Suite C
Kirkland, WA, 98034
(425) 885-1664
www.amtestlab.com

AMTEST LABORATORIES

Professional Analytical Services

QC Summary for sample numbers: 16-A023518 to 16-A023521

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
16-A023503	BOD	mg/l	< 2	2.0	
16-A023619	Total Organic Carbon	mg/l	2.2	2.2	0.00
16-A023506	Chloride	mg/l	3.76	3.82	1.6
16-A023506	Nitrate	mg/l	2.00	1.98	1.0
16-A023524	Nitrate	mg/l	0.049	3.40	190
16-A023506	Nitrite	mg/l	< 0.005	< 0.005	
16-A023524	Nitrite	mg/l	< 0.005	< 0.005	
16-A023517	Sulfate	mg/l	16.6	16.6	0.00
16-A023506	Sulfate	mg/l	9.57	10.4	8.3

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
16-A023506	Chloride	mg/l	3.76	6.13	2.00	118.50 %
16-A023521	Chloride	mg/l	29.4	224.	200.	97.30 %
16-A023506	Nitrate	mg/l	2.00	3.90	2.00	95.00 %
16-A023521	Nitrate	mg/l	3.38	5.24	2.00	93.00 %
16-A023506	Nitrite	mg/l	< 0.005	1.86	2.00	93.00 %
16-A024691	Total Sulfide	mg/l	< 0.05	0.17	0.20	85.00 %
16-A024691	Total Sulfide	mg/l	< 0.05	0.17	0.20	85.00 %
16-A024697	Total Sulfide	mg/l	< 0.05	0.22	0.20	110.00 %
16-A024697	Total Sulfide	mg/l	< 0.05	0.20	0.20	100.00 %
16-A023517	Sulfate	mg/l	16.6	28.4	12.0	98.33 %
16-A023506	Sulfate	mg/l	9.57	12.0	2.00	121.50 %
16-A023521	Sulfate	mg/l	11.5	201.	200.	94.75 %

MATRIX SPIKE DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE + SPK	MSD VALUE	RPD
Spike	Total Sulfide	mg/l	0.17	0.17	0.00
Spike	Total Sulfide	mg/l	0.22	0.20	9.5

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
BOD	mg/l	200	200	100. %
Total Organic Carbon	mg/l	12.	12.	100. %
Chemical Oxygen Demand	mg/l	100	100	100. %
Chloride	mg/l	2.00	1.94	97.0 %
Chloride	mg/l	2.00	1.96	98.0 %
Nitrate	mg/l	2.00	1.95	97.5 %
Nitrate	mg/l	2.00	1.94	97.0 %
Nitrite	mg/l	2.00	1.92	96.0 %
Nitrite	mg/l	2.00	1.93	96.5 %

QC Summary for sample numbers: 16-A023518 to 16-A023521...

STANDARD REFERENCE MATERIALS continued....

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Total Sulfide	mg/l	0.39	0.40	103. %
Total Sulfide	mg/l	0.39	0.42	108. %
Sulfate	mg/l	2.00	2.01	100. %
Sulfate	mg/l	2.00	1.93	96.5 %
Sulfate	mg/l	2.00	1.94	97.0 %

BLANKS

ANALYTE	UNITS	RESULT
BOD	mg/l	< 2
Total Organic Carbon	mg/l	< 0.5
Chemical Oxygen Demand	mg/l	< 10
Chloride	mg/l	< 0.05
Chloride	mg/l	< 0.05
Nitrate	mg/l	< 0.025
Nitrate	mg/l	< 0.025
Nitrite	mg/l	< 0.005
Nitrite	mg/l	< 0.005
Total Sulfide	mg/l	< 0.05
Total Sulfide	mg/l	< 0.05
Sulfate	mg/l	< 0.1
Sulfate	mg/l	< 0.1
Sulfate	mg/l	< 0.1

SUBCONTRACT SAMPLE CHAIN OF CUSTODY

P.8

Send Report To Michael Erdahl

Company Friedman and Bruya, Inc.

Address 3012 16th Ave W

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

SUBCONTRACTER Amtest

PROJECT NAME/NO.	PO #
608560	E-265

REMARKS

Please Email Results

Page # 1 of 1

TURNAROUND TIME

☒ Standard (2 Weeks)

☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED: Dioxins/Furans	EPH	Nitrate/Nitrite 2320 VPH 7352	Chloride Nitrate 2320	Sulfate	Sulfide Alkalinity 2320	TOC 9060A 2890	BOD 2032	COD 2110	TOC 2090	Notes
GW-11	23518	8/30/16	0540	water				x	x	x	x	x	x	x	x	
MW-7	19	↓	0630	↓				x	x	x	x	x	x	x	x	
MW-15	20		0711					x	x	x	x	x	x	x	x	
MW-1	21		0756					x	x	x	x	x	x	x	x	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michael Erdahl	Friedman and Bruya	8/30/16	1310
Received by: PM	T-14d Redek		8/30/16	1500
Relinquished by:				
Received by:				

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

608560

SAMPLE CHAIN OF CUSTODY

ME 08/30/16 VS/ATY

Page # 1 of 2

Report To Josh Bernthal

Company 1180 NW Maple St.

Address EPI

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email ~~joe~~ joshb@epi-nw.com

SAMPLERS (*signature*)

PROJECT NAME: 69402

PO #

REMARKS

INVOICE TO: Skotdal Real Estate

TURNAROUND TIME
- ☑ Standard Turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	cVOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Tot. COD BOD	Manganese Total Iron +	Manganese Dissolved Iron +	Chloride	Notes
GW-11	01 A-P	8/30/16	0540	Water	16					X			X	X	X	X	
MW-7	02	↓	0630	↓	↓					↓			↓	↓	↓	↓	
MW-15	03	↓	0711	↓	↓					↓			↓	↓	↓	↓	
MW-1	04	↓	0756	↓	↓					↓			↓	↓	↓	↓	
													Samples received at 5 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shemd	EPI	8/30/16	1156
Received by:	VINT	FBA	8/30/16	1156
Relinquished by:				
Received by:				

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

608560

SAMPLE CHAIN OF CUSTODY

MG 08/30/16

US/ALK

Page # 2 of 2

Report To Josh Bernthal

Company EPI

Address 1180 NW Maple St.

City, State, ZIP Issaquah, WA 98027

Phone 425-395-0010 Email joshb@epi-wa.com

SAMPLERS (*signature*)

PROJECT NAME: 69402

PO #

REMARKS

INVOICE TO: Skotdal Real Estate

TURNAROUND TIME
- ☑ Standard Turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM	Sulfate/Sulfide	Nitrate/nitrite	Methane, Ethane, Ethene	Carbon dioxide	Notes
GW-11	01 AP	8/30/16	0540	Water	16								X	X	X	X	
MW-7	02		0630														
MW-15	03		0711														
MW-1	04		0756														
													Samples received at 5 °C				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Shemet	EPI	8/30/16	1150
Received by:	VINH	FBI	8/30/16	1150
Relinquished by:				
Received by:				

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

FRIEDMAN & BRUYA, INC.

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

September 30, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 608582

Dear Mr Bernthal:

Included is the amended report from the testing of material submitted on August 31, 2016 from the 69402, F&BI 608582 project. Per your request, the sample IDs have been amended.

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

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0907R.DOC

FRIEDMAN & BRUYA, INC.

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

September 7, 2016

Josh Bernthal, Project Manager
Environmental Partners, Inc.
1180 NW Maple St, Suite 310
Issaquah, WA 98027

RE: 69402, F&BI 608582

Dear Mr Bernthal:

Included are the results from the testing of material submitted on August 31, 2016 from the 69402, F&BI 608582 project. There are 25 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 have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michael Erdahl
Project Manager

Enclosures
c: Cynthia Moon
EPI0907R.DOC

CASE NARRATIVE

This case narrative encompasses samples received on August 31, 2016 by Friedman & Bruya, Inc. from the Environmental Partners 69402, F&BI 608582 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	Environmental Partners
608582 -01	GW-10:Bag
608582 -02	GW-10
608582 -03	MW-12:Bag
608582 -04	MW-13:Bag
608582 -05	MW-6:Bag
608582 -06	MW-14:Bag
608582 -07	MW-11:Bag
608582 -08	MW-11
608582 -09	MW-4:Bag
608582 -10	MW-10:Bag
608582 -11	MW-5:Bag
608582 -12	MW-5
608582 -13	GW-6:Bag
608582 -14	GW-6
608582 -15	GW-5:Bag
608582 -16	GW-9:Bag
608582 -17	GW-3:Bag
608582 -18	GW-8:Bag
608582 -19	GW-7:Bag
608582 -20	GW-1:Bag

All quality control requirements were acceptable.

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-10:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-01
Date Analyzed:	08/31/16	Data File:	083110.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	97	91	108
4-Bromofluorobenzene	94	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.1
Tetrachloroethene	18

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-10	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-02
Date Analyzed:	08/31/16	Data File:	083111.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	100	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	2.7
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.3
Tetrachloroethene	19

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-12:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-03
Date Analyzed:	08/31/16	Data File:	083112.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	96	91	108
4-Bromofluorobenzene	95	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	3.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-13:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-04
Date Analyzed:	08/31/16	Data File:	083113.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	101	91	108
4-Bromofluorobenzene	98	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-6:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-05
Date Analyzed:	08/31/16	Data File:	083114.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	99	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-14:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-06
Date Analyzed:	08/31/16	Data File:	083115.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	100	91	108
4-Bromofluorobenzene	101	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-07
Date Analyzed:	08/31/16	Data File:	083116.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	96	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.1
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	32
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-11	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-08
Date Analyzed:	08/31/16	Data File:	083117.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	98	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.70
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	30
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-4:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-09
Date Analyzed:	08/31/16	Data File:	083118.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	98	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.45
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	4.7
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-10
Date Analyzed:	08/31/16	Data File:	083119.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	99	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	1.1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	95
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	170 ve
Tetrachloroethene	99

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-10:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-10 1/10
Date Analyzed:	09/01/16	Data File:	090107.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	98	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<2
Chloroethane	<10
1,1-Dichloroethene	<10
Methylene chloride	<50
trans-1,2-Dichloroethene	<10
1,1-Dichloroethane	<10
cis-1,2-Dichloroethene	97
1,2-Dichloroethane (EDC)	<10
1,1,1-Trichloroethane	<10
Trichloroethene	170
Tetrachloroethene	97

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-11
Date Analyzed:	08/31/16	Data File:	083120.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	96	91	108
4-Bromofluorobenzene	96	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	9.5

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW-5	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-12
Date Analyzed:	08/31/16	Data File:	083121.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	99	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	16

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-6: Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-13
Date Analyzed:	08/31/16	Data File:	083122.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	96	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	7.0

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-6	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-14
Date Analyzed:	08/31/16	Data File:	083123.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	98	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	7.3

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-5:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-15
Date Analyzed:	08/31/16	Data File:	083124.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	97	91	108
4-Bromofluorobenzene	97	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.9

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-9:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-16
Date Analyzed:	08/31/16	Data File:	083125.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	85	117
Toluene-d8	100	91	108
4-Bromofluorobenzene	100	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-3:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-17
Date Analyzed:	08/31/16	Data File:	083126.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	99	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.4

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-8:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-18
Date Analyzed:	08/31/16	Data File:	083127.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	85	117
Toluene-d8	96	91	108
4-Bromofluorobenzene	96	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	20

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-7:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-19
Date Analyzed:	08/31/16	Data File:	083128.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	100	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	1.1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	GW-1:Bag	Client:	Environmental Partners
Date Received:	08/31/16	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	608582-20
Date Analyzed:	08/31/16	Data File:	083129.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	85	117
Toluene-d8	98	91	108
4-Bromofluorobenzene	94	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Environmental Partners
Date Received:	Not Applicable	Project:	69402, F&BI 608582
Date Extracted:	08/31/16	Lab ID:	06-1796 mb
Date Analyzed:	08/31/16	Data File:	083109.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	85	117
Toluene-d8	99	91	108
4-Bromofluorobenzene	100	76	126

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

Date of Report: 09/07/16
Date Received: 08/31/16
Project: 69402, F&BI 608582

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 608582-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	91	61-139
Chloroethane	ug/L (ppb)	50	<1	87	55-149
1,1-Dichloroethene	ug/L (ppb)	50	<1	87	71-123
Methylene chloride	ug/L (ppb)	50	<5	83	61-126
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	88	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	86	79-113
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	87	63-126
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	89	70-119
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	95	75-121
Trichloroethene	ug/L (ppb)	50	1.1	86	75-109
Tetrachloroethene	ug/L (ppb)	50	18	85 b	72-113

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	92	97	70-119	5
Chloroethane	ug/L (ppb)	50	89	92	66-149	3
1,1-Dichloroethene	ug/L (ppb)	50	89	92	75-119	3
Methylene chloride	ug/L (ppb)	50	86	91	63-132	6
trans-1,2-Dichloroethene	ug/L (ppb)	50	89	91	76-118	2
1,1-Dichloroethane	ug/L (ppb)	50	86	90	80-116	5
cis-1,2-Dichloroethene	ug/L (ppb)	50	87	89	80-112	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	89	91	79-109	2
1,1,1-Trichloroethane	ug/L (ppb)	50	94	98	80-116	4
Trichloroethene	ug/L (ppb)	50	85	86	77-108	1
Tetrachloroethene	ug/L (ppb)	50	86	86	78-109	0

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.

608582

SAMPLE CHAIN OF CUSTODY

ME 08-31-16 VS

Report To Josh Benthal
Company EPI
Address 1180 NW Maple St.
City, State, ZIP Issaquah, WA, 98027
Phone 425-395-0010 Email joshb@epi-wa.com

SAMPLERS (*signature*)

PROJECT NAME 69402

PO #

REMARKS

INVOICE TO SKotdal Real Estate

Page # 1 o

TURNAROUND T
☑ Standard Turnaroun
☐ RUSH
Rush charges authorize

SAMPLE DISPO
☐ Dispose after 30 days
☐ Archive Samples
☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Nc
						ANALYSES REQUESTED											
GW-10: Bag	01 A-D	8/30/16	0900	Water	4					✓							
GW-10	02		0912														
MW-12 : Bag	03		0925														
MW-13: Bag	04		0937														
MW-6 : Bag	05		0950														
MW-14 : Bag	06		1003														
MW-11: Bag	07		1020														
MW-11	08		1033														
MW-4 : Bag	09		1048														
MW-10 : Bag	10	↓	1111	↓	↓					↓							

Samples received at

SIGNATURE	PRINT NAME	COMPANY	DATE
Relinquished by:	Joe Shemd	EPI	8/31/16
Received by:	Michael Eckhl	FGbm	↓
Relinquished by:			
Received by:			

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

608582

SAMPLE CHAIN OF CUSTODY

ME 08-31-16

Page # 2 of 3

Report To Josh Bernthal
Company EPI
Address 1180 NW Maple St.
City, State, ZIP Issaquah, WA 98027
Phone 425-395-0010 Email joshb@epi-wa.com

SAMPLERS (*signature*)

PROJECT NAME 69402

PO #

REMARKS

INVOICE TO Skotdal Real Estate

TURNAROUND TIME
- ☑ Standard Turnaround
- ☐ RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Archive Samples
- ☐ Other

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	ANALYSES REQUESTED: TPH-HCID	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	cVOCs by 8260C	SVOCs by 8270D	PAHs 8270D SIM					Notes
MW-5: Bag	11 A-D	8/30/16	11:30	Water	4					X							
MW-5	12		1132														
GW-6: Bag	13		1220														
GW-6	14		1231														
GW-5	15		1245														
GW-9	16		1250														
GW-3	17		1257														
GW-8	18		1305														
GW-7	19		1309														Samples received at 3 °C
GW-1	20	↓	1320	↓	↓					↓							

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Joe Stamos	EPI	8/31/16	0630
Received by:	Michael Eckhl	FGBru	↓	↓
Relinquished by:				
Received by:				

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

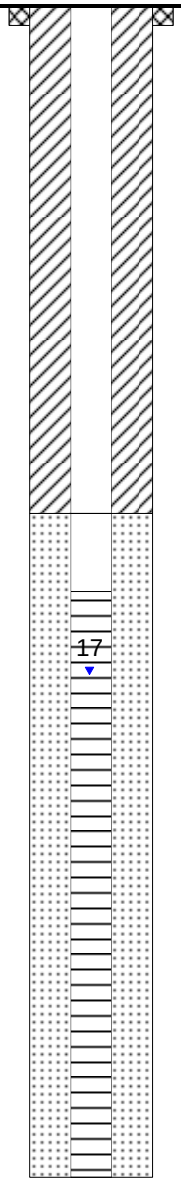
Attachment B
Boring and Well Completion Logs

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-1

SITE ADDRESS **1419 Avenue D. Snohomish, WA**	CLIENT: **Skotdal**	CASING MATERIAL AND SIZE: **6" PVC**
DRILLING CONTRACTOR: **Holt Drilling Services**	PROJECT #: **69402**	SCREEN SIZE: **0.02**
DRILLING EQUIPMENT: **CME-85**	DATE: **3/3/16**	SCREEN INTERVAL: **15-30**
DRILLING METHOD: **HSA**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand**
LOGGED BY: **B. Miles L.G.** / BOREHOLE SIZE: **6" PVC**	TOTAL DEPTH: **31**	FILTER PACK INTERVAL: **13-30**

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0–7	SM	SILTY SAND; reddish brown; damp; loose; fine grain; trace gravel	50	1/2/07		0	
7–10	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; moist; medium dense; fine to coarse grains	50	5/9/12		0	
10–15	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; damp; loose; fine to coarse grains	50	3/3/07	IJ-1:15 (1345)	0	
15–20	SW-SM	Wet	40	3/20/27		0	
20–25	SW-SM	Wet	100	15/35/52		0	
25–30	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; brown; damp; very dense; fine grains	50	14/30/40		0	
30–31	SP-SM	Wet				0	
31–32		End of Borehole					



NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-2

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**6" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.02**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**3/10/16**	**15-30**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
C. Mcfadden / **6" PVC**	**30**	**13-30**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		GRASS AND SOIL SURFACE					
1–13	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; moist; fine to coarse grain	40			0	
			40				
			20	1/6/07	IJ-2: 10 (0930)	0	
13–21	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; medium dense; fine to coarse gravel with minor sand and few silt	50	2/11/ 50 for 5"		0	15
						0	
21–25	GP	POORLY-GRADED GRAVEL; brown; wet; dense; moslty coarse gravel with trace silt	50	11/41/ 50 for 4"		0	
25–32	GP-GM	POORLY-GRADED GRAVEL WITH SILT AND SAND; brown; wet; very dense; mosty fine to coarse gravel with minor medium sand and few silt	50	50 for 4"		0	
32		End of Borehole					

NOTES:

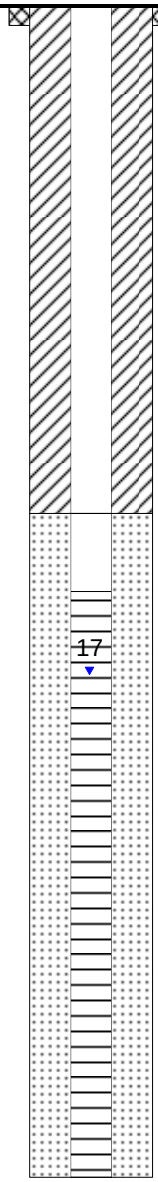
ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-3

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**6" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.02**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**3/2/16**	**15-30**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
B. Miles L.G. / **6" PVC**	**31**	**13-30**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)
0–7	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; moist; loose; fine to coarse grain	30	2/3/05		0
7–8			30	9/7/11		
8–15	SW	WELL-GRADED SAND WITH GRAVEL; brown; damp; medium dense; fine to coarse grain	40	9/6/12	IJ-3: 15 (1530)	0
15–31	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; moist; medium dense; fine to coarse grains	100	3/1/29		0
			40	3/20/ 50 for 5"		0
			20	3/24/ 50 for 5"		0
31–32		End of Borehole				

Well Construction



NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-4

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**6" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.02**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**3/2/16**	**15-30**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
B. Miles L.G. / **6" PVC**	**30**	**13-30**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0–7	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; loose; moist; fine to coarse grains	40	2/2/04	IJ-4: 15 (1140)	0	16.5
7–10	ML	SILT; brown; damp; soft; non-plastic; trace fine grain sand	60	2/3/01		0	
10–15	ML		60	2/12/16		0	
15–20	ML		40	1/6/04		0	
20–25	SM	SILTY SAND; brown; wet; medium dense; fine grain; poorly graded	0	20/50 for 6"		0	
25–30	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; very dense; fine to coarse grain	20	50 for 3"		0	
30		End of Borehole					

NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-5

SITE ADDRESS: **1419 Avenue D. Snohomish, WA**	CLIENT: **Skotdal**	CASING MATERIAL AND SIZE: **6" PVC**
DRILLING CONTRACTOR: **Holt Drilling Services**	PROJECT #: **69402**	SCREEN SIZE: **0.02**
DRILLING EQUIPMENT: **CME-85**	DATE: **3/2/16**	SCREEN INTERVAL: **14.5-29.5**
DRILLING METHOD: **HSA**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand**
LOGGED BY: **B. Miles L.G.** / BOREHOLE SIZE: **6" PVC**	TOTAL DEPTH: **31**	FILTER PACK INTERVAL: **12-29.5**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)
0		GRASS AND TOP SOIL				
1–11	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; moist; loose; fine to coarse grain	20	1/1/03		0
5–12			20	1/1/02		0
10–14			30	1/5/06		0
15–19			30	2/4/08	IJ-5: 15 (0900)	0
20–22		Wet	30	4/ 50 for 6"		0
22–27	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; v. dense; fine to coarse grain	80	15/ 50 for 4"		0
30						0
31		End of Borehole				

Well Construction: 17 ▼

NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-6

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**6" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.02**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**3/1/16**	**15-30**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
B. Miles L.G. / **6" PVC**	**30**	**13-30**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0–7	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; damp; loose; fine to coarse grain	20	1/5/04	IJ-6: 10 (1500)	0	
7–10	SM	SILTY SAND; brown; moist; medium dense; fine grained sand	25	2/6/08		0	
10–15	SM		0	2/6/10		0	
15–25	SM	Wet	100	2/6/12		0	16
			40	1/12/30		0	
25–30	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; wet; dense; fine to coarse grain	0	50 for 1"		0	
30		End of Borehole					

NOTES:

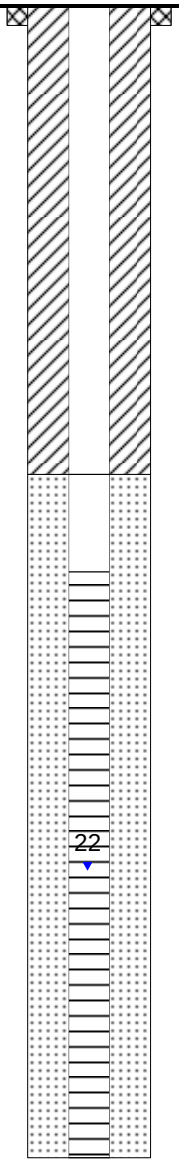
ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-7

SITE ADDRESS: **1419 Avenue D. Snohomish, WA**	CLIENT: **Skotdal**	CASING MATERIAL AND SIZE: **6" PVC**
DRILLING CONTRACTOR: **Holt Drilling Services**	PROJECT #: **69402**	SCREEN SIZE: **0.02**
DRILLING EQUIPMENT: **CME-85**	DATE: **3/1/16**	SCREEN INTERVAL: **14.5-29.5**
DRILLING METHOD: **HSA**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand**
LOGGED BY: **B. Miles L.G.** / BOREHOLE SIZE: **6" PVC**	TOTAL DEPTH: **31**	FILTER PACK INTERVAL: **12-29.5**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)
0		Grass and Soil				
1–5	SW	WELL-GRADED SAND WITH GRAVEL; brown; damp; loose; fine to coarse grain	50	2/4/06		0
5–10	GW	WELL-GRADED GRAVEL WITH SAND; brown; moist; medium dense; fine to coarse grain sand	45	4/9/09		0
10–15	GW		0	3/9/14		0
15–20	GW		55	12/31/20		0
20–25	SW-SM	WELL-GRADED SAND WITH SILT AND GRAVEL; brown; moist; fine to coarse grain sand	90	3/15/18	IJ-7: 20 (1045)	0
25–30	SW-SM	Wet	80	7/ 50 for 6"		0
30						0
31–32		End of Borehole				

Well Construction



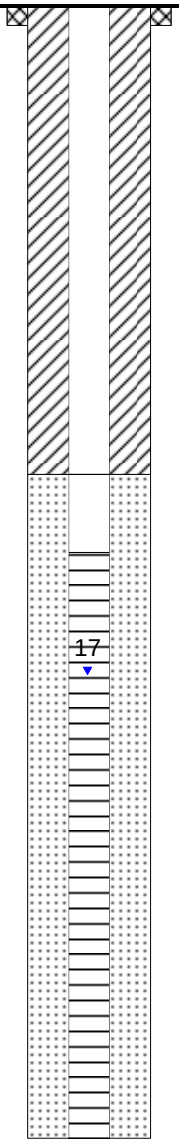
NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-8

SITE ADDRESS **1419 Avenue D. Snohomish, WA**	CLIENT: **Skotdal**	CASING MATERIAL AND SIZE: **6" PVC**
DRILLING CONTRACTOR: **Holt Drilling Services**	PROJECT #: **69402**	SCREEN SIZE: **0.02**
DRILLING EQUIPMENT: **CME-85**	DATE: **2/29/16**	SCREEN INTERVAL: **14-29**
DRILLING METHOD: **HSA**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand**
LOGGED BY: **B. Miles L.G.** / BOREHOLE SIZE: **6" PVC**	TOTAL DEPTH: **31**	FILTER PACK INTERVAL: **12-29**

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0–17	SW	WELL-GRADED SAND WITH GRAVEL; brown; damp; medium dense; fine to coarse grain	70	4/4/10	IJ-8: 15 (1330)	0	
			15	3/3/07		0	
			20	3/9/12		0	
			55	8/7/09		0	
17–23	SM	SILTY SAND; brown; wet; medium dense; fine grain	10	1/ 50 for 5"		0.1	
23–30	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; very dense; fine to coarse grain sand	10	10/ 50 for 4"		0	
30–31						0.1	
31		End of Borehole					



NOTES:

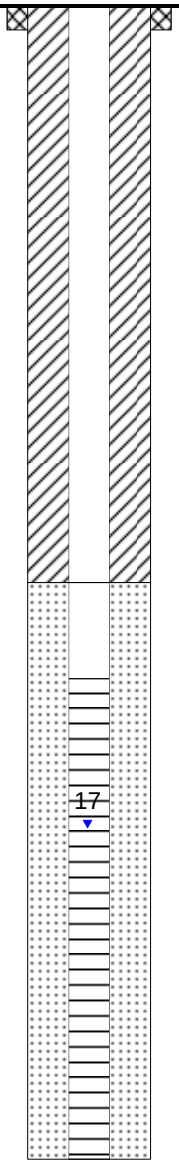
ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-9

SITE ADDRESS: **1419 Avenue D. Snohomish, WA**	CLIENT: **Skotdal**	CASING MATERIAL AND SIZE: **6" PVC**
DRILLING CONTRACTOR: **Holt Drilling Services**	PROJECT #: **69402**	SCREEN SIZE: **0.02**
DRILLING EQUIPMENT: **CME-85**	DATE: **2/24/16**	SCREEN INTERVAL: **14-24**
DRILLING METHOD: **HSA**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand**
LOGGED BY: **B. Miles L.G.** / BOREHOLE SIZE: **6" PVC**	TOTAL DEPTH: **25**	FILTER PACK INTERVAL: **12-24**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)
0		ASPHALT SURFACE				
1	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; moist; loose	40	2/3/04		
2						
3						
4						
5						0.1
6			30	5/3/14		
7						
8						
9						
10						0.1
11			0	5/10/24		
12						
13						
14						
15						0.1
16						
17		Wet Cuttings	35	9/9/09		
18						
19						
20		Med. Dense			IJ-9: 20 (0930)	0
21						
22			30	10/9/16		
23						
24		Increased Silt				
25		End of Borehole				0
26						

Well Construction



NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-10

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**6" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.02**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**2/29/16**	**15-25**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
B. Miles L.G. / **6" PVC**	**26**	**13-25**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		ASPHALT SURFACE					
1–9	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; moist; fine to coarse grain sand (logged from drilling cuttings)	0				
5–9			0				
9–17		Wet	25	2/2/04		0	
17–20	ML	GRAVALLY SILT WITH SAND; brown; damp; hard; fine grain sand	60	16/ 50 for 5"	IJ-10: 20 (0900)	0	
20–23			50	16/ 45 for 2"			
23–25	SP-SM	POORLY-GRADED SAND WITH SILT AND GRAVEL; brown; moist; very dense				0.7	
26		End of Borehole					

NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-11

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**6" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.02**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**2/25/16**	**15-25**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
B. Miles L.G. / **6" PVC**	**26**	**13-25**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0–4	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; moist; medium dense	10	4/6/08			
4–8	GW-GM		60	5/4/04		0.1	
8–12	ML	SANDY SILT WITH GRAVEL; brown; damp; medium stiff; fine grain sand	10	6/6/06	IJ-11: 10 (0800)	0.2	
12–17	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; medium dense	0	6/3/14		0.1	
17–22	ML	SANDY SILT WITH GRAVEL; brown; moist; hard; fine grain sand	80	20/ 40 for 4"		0.1	13
22–26		End of Borehole					

NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: IJ-12

SITE ADDRESS **1419 Avenue D. Snohomish, WA**	CLIENT: **Skotdal**	CASING MATERIAL AND SIZE: **6" PVC**
DRILLING CONTRACTOR: **Holt Drilling Services**	PROJECT #: **69402**	SCREEN SIZE: **0.02**
DRILLING EQUIPMENT: **CME-85**	DATE: **2/25/16**	SCREEN INTERVAL: **9.5-19.5**
DRILLING METHOD: **HSA**	GROUND SURFACE ELEV. FT AMSL: **NM**	FILTER PACK: **Silica Sand**
LOGGED BY: **B. Miles L.G.**	BOREHOLE SIZE: **6" PVC**	TOTAL DEPTH: **25.5**	FILTER PACK INTERVAL: **7.5-19.5**

Depth (feet)	USCS	Description USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		Asphalt Surface					
1	ML	SILT; brown; damp; medium stiff; non-plastic	100	4/6/06	IJ-12: 5 (1245)	0	
2							
3							
4							
5			20	6/3/14			
6							
7							
8	CL	GRAVELLY LEAN CLAY WITH SAND; brown; damp; very stiff; high plasticity				0.6	
9							
10			0	1/1/14			
11							
12							12
13							
14							
15			30	2/2/14			
16							
17							
18							
19							
20	SM	SILTY SAND WITH GRAVEL; brown; wet; medium dense; fine gain sand				0	
21							
22			30	50 for 6"			
23	GW-GM	WELL-GRADED GRAVEL WITH SILT AND SAND; brown; wet; very dense					
24							
25						0	
26		End of Borehole					

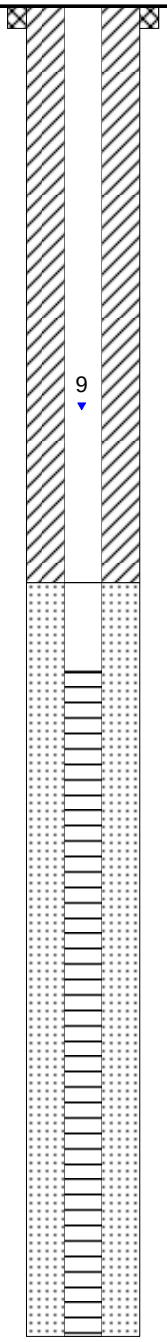
NOTES:

ENVIRONMENTAL PARTNERS INC

BORING ID: MW-15

SITE ADDRESS	CLIENT:	CASING MATERIAL AND SIZE:
1419 Avenue D. Snohomish, WA	**Skotdal**	**2" PVC**
DRILLING CONTRACTOR:	PROJECT #:	SCREEN SIZE:
Holt Drilling Services	**69402**	**0.01**
DRILLING EQUIPMENT:	DATE:	SCREEN INTERVAL:
CME-85	**2/24/16**	**15-30**
DRILLING METHOD:	GROUND SURFACE ELEV. FT AMSL:	FILTER PACK:
HSA	**NM**	**Silica Sand**
LOGGED BY: / BOREHOLE SIZE:	TOTAL DEPTH:	FILTER PACK INTERVAL:
B. Miles L.G. / **2" PVC**	**31**	**13-30**

Depth (feet)	USCS	Description (USCS name; Color; Moisture; Density; Plasticity; Dilatency; EPI description; Other)	Interval & % Recovery	Blows per 6"	Sample	PID (ppm)	Well Construction
0		Asphalt Surface					
1–12	SW	POORLY-GRADED SAND WITH GRAVEL; brown; damp; medium dense; fine to coarse grain	30	6/9/09		0	
			10	7/2/04			
			80	28/31/ 50 for 5"		0	
13–27	SM	SILTY SAND; brown; damp; very dense; fine grain	0	50 for 4"	MW-15: 15	0.2	
			40	50 for 6"			
			50	50 for 5"		0.1	
28–30	ML	GRAVELLY SILT; grey; damp; hard; non-plastic; trace fine grain sand				0	
31		End of Borehole					
32							



NOTES:

Attachment C
Waste Disposal Documentation

INVOICE

DH Environmental Inc

DATE: April 21, 2016
INVOICE: 5246

Fed. ID # 57-1160277
WA UBI# 602 284 251
WA CLB# DHENVEI871NB

BILL TO:
Debra Hill
Skotdal Real Estate
2707 Colby Avenue, Suite 1200
Everett, WA 98201

REMIT TO:
DH Environmental, Inc.
PO BOX 845458
Los Angeles, CA 90084-5485

Project Reference: Skotdal Real Estate

DESCRIPTION	Qty	Unit	Rate	Amount
Dates of Service: March 23, 2016 & April 12, 2016 **IDW Transportation and Disposal - 1419 Avenue D, Snohomish, WA**				
Wednesday, March 23, 2016				
Transportation: Roll-off Delivery	1.0	Each	$ 500.00	$ **500.00**
Transportation: Roll-off Delivery to Alaska St.	2	Each	$ 650.00	$ **1,300.00**
20 Cubic Yard Roll-off Rental	56	Days	$ 35.00	$ **1,960.00**
Non-Regulated Disposal Fee at Alaska St. Transfer Facility	24.03	Tons	$ 58.00	$ **1,393.74**
Roll-off Liners	2	Each	$ 100.00	$ **200.00**
Tuesday, April 12, 2016				
Transportation	6	DM	$ 75.00	$ **450.00**
Disposal: Non-Regulated Soil - Direct Landfill (no free liquids)	6	DM	$ 125.00	$ **750.00**
Profile Fee	1	Each	$ 25.00	$ **25.00**

THANK YOU FOR YOUR BUSINESS	**INVOICE SUBTOTAL**	$ 6,578.74
	SALES TAX	
	TOTAL INVOICE	$ 6,578.74

Please pay this amount

Payment Terms: Net 30 Days.
See attached for additional information

Scott St. John — **Director of Project Services**

Direct Phone: **206-327-0026**
Email: scottstjohn@dhenviro.com

WASTE MANAGEMENT

Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Original
Ticket# 119138

Ph: 206 763 5025

Customer Name DH ENVIRONMENTAL DH ENVIRONME
Ticket Date 03/23/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 1212160R

Carrier R TRANSPORT R TRANSPORT
Vehicle# R69
Container
Driver JERRY ELY
Check#
Billing# 0000451
Grid

Volume

	Time	Scale	Operator	Inbound
In	03/23/2016 14:06:57	SCALE 1	lmercer	
Out	03/23/2016 14:34:39	SCALE 1	lmercer	

Gross	71000 lb
Tare	42940 lb
Net	28060 lb
Tons	14.03

Comments RT - LM (CAN# 008775 2/24 - 3/23/16 = 28 DAYS)

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	14.03	Tons				SNOHOMISH
2	CONTAINER RENTAL/DAY-CON	100	28	Each				
3	GONDOLA T-GONDOLA TON	100	14.03	Tons				
4	LINER-CONTAINER LINER	100	1	Each				
5	LOCAL TRANS-LOCAL TRANS	100	1	Load				

Total Tax
Total Ticket

Driver's Signature

203/WM

WASTE MANAGEMENT

Alaska Street
70 S Alaska Street
Seattle, WA, 98134

Original
Ticket# 119108

Ph: 206 763 5025

Customer Name DH ENVIRONMENTAL DH ENVIRONME
Ticket Date 03/23/2016
Payment Type Credit Account
Manual Ticket#
Route AK
Hauling Ticket#
Destination
PO# 1212160R

Carrier R TRANSPORT R TRANSPORT
Vehicle# R69
Container
Driver JERRY ELY
Check#
Billing# 0000451
Grid

Volume

	Time	Scale	Operator	Inbound
In	03/23/2016 10:14:34	SCALE 1	lmercer	
Out	03/23/2016 10:47:59	SCALE 1	lmercer	

Gross	48080 lb
Tare	41920 lb
Net	6160 lb
Tons	3.08

Comments RT - LM (CAN# 008685 2/24 - 3/23/16 = 28 DAYS)

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	Daily Cover-PCS-Tons-Pet	100	3.08	Tons				SNOHOMISH
2	CONTAINER DELIVERY-CONTA	100	1	Load				SNOHOMISH
3	CONTAINER RENTAL/DAY-CON	100	28	Each				SNOHOMISH
4	GONDOLA T-GONDOLA TON	100	3.08	Tons				SNOHOMISH
5	LINER-CONTAINER LINER	100	1	Each				SNOHOMISH

Total Tax
Total Ticket

Driver's Signature

203/WM

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: None Required
2. Page 1 of: 1
3. Emergency Response Phone: 8003377455
4. Manifest Tracking Number: 015121226 JJK

GENERATOR

5. Generator's Name and Mailing Address: Skotdal Real Estate
2707 Colby Ave #1200 POBox 5267
Everett WA 98206

Generator's Site Address (if different than mailing address)
1419 Avenue D
Snohomish WA 98290

Generator's Phone:

6. Transporter 1 Company Name: DH Environmental
U.S. EPA ID Number: WAH000047217

7. Transporter 2 Company Name: Chemical Waste Management
U.S. EPA ID Number: ORD089452353

8. Designated Facility Name and Site Address: Chemical Waste Management Inc
17629 Cedar Springs LN
Arlington OR 97812
U.S. EPA ID Number: ORD089452353

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Material Not Regulated by DOT (Low Soil)	006	DM	4800	P	
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
JOR330474

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: On Behalf of Skotdal Travis Forslund
Signature: [signature]
Month: 4 Day: 12 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Travis Forslund
Signature: [signature]
Month: 4 Day: 12 Year: 16

Transporter 2 Printed/Typed Name: Lori Mercer
Signature: Lori Mercer
Month: 04 Day: 12 Year: 16

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name Signature Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

TRANSPORTER'S COPY

INVOICE

DH Environmental Inc

DATE: May 10, 2016
INVOICE: 5265

Fed. ID # 57-1160277
WA UBI# 602 284 251
WA CLB# DHENVEI871NB

BILL TO:
Debra Hill
Skotdal Real Estate
2707 Colby Avenue, Suite 1200
Everett, WA 98201

REMIT TO:
DH Environmental, Inc.
1011 SW Klickitat Way
Suite 210
Seattle, WA 98134
Contact: Scott St. John at (206) 327-0026 or scottstjohn@dhenviro.com

Project Reference: Skotdal Real Estate

DESCRIPTION	Qty	Unit	Rate	Amount
Dates of Service: May 2016 **IDW Transportation and Disposal - 1419 Avenue D, Snohomish, WA**				
Mini-Frac Tank Rental & F002 Water Disposal				
Transportation: Tank Mob/Demob	10	Hour	$ 135.00	$ 1,350.00
Transportation: Vacuum Truck to Chemical Waste Management - Arlington, OR	16	Each	$ 155.00	$ 2,480.00
Per Diem for Driver	1	Each	$ 125.00	$ 125.00
Tank Rental	55	Days	$ 35.00	$ 1,925.00
F002 Water Disposal Fee at CWM Arlington	2600	Gallons	$ 0.57	$ 1,482.00
Empty Drum Recycling	22	Each	$ 10.00	$ 220.00
Transportation: F002 Water Drums	8	Each	$ 55.00	$ 440.00
Disposal: F002 Water Drums	8	Each	$ 175.00	$ 1,400.00
		INVOICE SUBTOTAL		$ 9,422.00
THANK YOU FOR YOUR BUSINESS		**SALES TAX**		
		TOTAL INVOICE		$ 9,422.00

Please pay this amount

Payment Terms: Net 30 Days.
See attached for additional information

***Please update your records with our new remittance address, thank you!

Scott St. John — **Director of Project Services**
Direct Phone: 206-327-0026
Email: scottstjohn@dhenviro.com

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD988489217

2. Page 1 of: 1

3. Emergency Response Phone: 800-337-7455

4. Manifest Tracking Number: 015121236 JJK

GENERATOR

5. Generator's Name and Mailing Address
Skordal Real Estate
2707 Colby Avenue Suite 1200 PO Box 5267
Everett WA 98206
Attn: Josh Bernthal
Generator's Phone: 425 241 6400

Generator's Site Address (if different than mailing address)
Skordal Real Estate
1419 Avenue D
Snohomish WA 98290

6. Transporter 1 Company Name
Chemical Waste Management

U.S. EPA ID Number: ORD089452353

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812
Facility's Phone: 541 454-2643

U.S. EPA ID Number: ORD089452353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3082, Hazardous waste, liquid, n.o.s. (Trichloroethylene, Tetrachloroethylene) 9, PGIII	001	TT	2,000	G	F002
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
TNT) OR330656-Bulk ERG#171

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: On behalf of Skordal Travis Barlow

Signature

Month: 5 Day: 2 Year: 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month: 5 Day: 2 Year: 16

Transporter 2 Printed/Typed Name

Signature

Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)

Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name

Signature

Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD988480217
2. Page 1 of: 1
3. Emergency Response Phone: 800-337-7455
4. Manifest Tracking Number: 015121237 JJK

GENERATOR

5. Generator's Name and Mailing Address
Sound Real Estate
2707 Colby Avenue Suite 1200 PO Box 5267
Everett WA 98206
Generator's Phone: 425 241 5400

Generator's Site Address (if different than mailing address)
Sound Real Estate
1419 Avenue D
Snohomish WA 98290

6. Transporter 1 Company Name: DT Environmental Inc
U.S. EPA ID Number: WAH0000047217

7. Transporter 2 Company Name: Chemical Waste Management
U.S. EPA ID Number: ORD089452353

8. Designated Facility Name and Site Address: CHEMICAL WASTE MANAGEMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812
541 454-2643
U.S. EPA ID Number: ORD089452353

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3082, Hazardous waste, liquid, n.o.s. (Trichloroethylene, Tetrachloroethylene) 9, PGIII	011	DM	4000	P	F002
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Travis Forslow — Signature — Month: 5 Day: Year:

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brandy — Signature — Month: 5 Day: 3 Year: 16

Transporter 2 Printed/Typed Name: Edward J. Warpick — Signature — Month: 5 Day: 5 Year: 16

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: WAD988489217
2. Page 1 of: 1
3. Emergency Response Phone: [illegible]
4. Manifest Tracking Number: 015121235 JJK

GENERATOR

5. Generator's Name and Mailing Address
[illegible] Naval Station
2707 Colby Avenue Suite 1200 PO Box 5267
Everett WA 98206
Generator's Phone: 425 241-5400

Generator's Site Address (if different than mailing address)
[illegible] Naval Reserve Center
1419 Avenue D
Snohomish WA 98290

6. Transporter 1 Company Name: [illegible] Environmental Inc
U.S. EPA ID Number: WAR000047217

7. Transporter 2 Company Name: Chemical Waste Management
U.S. EPA ID Number: ORD089462353

8. Designated Facility Name and Site Address: [illegible] EMENT, INC
17629 CEDAR SPRINGS LANE
ARLINGTON OR 97812
Facility's Phone: 541 454-2643
U.S. EPA ID Number: ORD089462353

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3082, Hazardous waste, liquid, n.o.s. (Trichloroethylene, Tetrachloroethylene) 9, PGIII	008	DM	3,200	P	F002
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
~~OR330656~~ OR330656

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: [illegible] On Behalf Of Travis Forsley
Signature: [signature]
Month 3 Day 2 Year 16

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Travis Forsley
Signature: [signature]
Month 3 Day 2 Year 16

Transporter 2 Printed/Typed Name: Richard Wormack
Signature: [signature]
Month 3 Day 2 Year 16

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
WAD988489217	1	800-337-7455	MT-SNO-050316

GENERATOR

5. Generator's Name and Mailing Address

Skotdal Real Estate
Att: Josh Bernthal
2707 Colby Avenue Suite 1200 PO Box 5267
Everett WA 98206
Generator's Phone: 425 241-5400

Generator's Site Address (if different than mailing address)

Skotdal Real Estate
1419 Avenue D
Snohomish WA 98290

6. Transporter 1 Company Name — U.S. EPA ID Number

DH Environmental Inc. — WAH000047217

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

~~Petroleum Reclaiming Service Inc~~
~~3003 Taylor Way~~
~~Tacoma WA 98421~~
(23)
Seattle Barrel
4716 Airport Way S.
Seattle WA 98108
(71)
Facility's Phone:

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Material Not Regulated By DOT (Previously contained IDW Soil/Water)	022	DM	850	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

1) 5181-B

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: On Behalf of Skotdal Travis Foisy — Signature — Month: 5 — Day: 3 — Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brian Lilly — Signature — Month: 05 — Day: 03 — Year: 16

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

Remit to:
Adler Tank Rentals
P.O. Box 45081
San Francisco, CA 94145-0081

Invoice

Invoice:	4173410
Contract:	140455
Customer PO:	N/A
Invoice Date:	11-MAR-16

Customer Information

DH Environmental, Inc.
1011 SW Klickitat Way Ste 210C
Seattle, WA 98134-1162

Questions about this invoice?

Contact Name:	ATR-Ginger Allman
Email:	ginger.allman@mgrc.com
Phone:	281-715-2023
Fax:	866-431-3255
All Other Inquiries:	509-724-6797
Salesperson:	Ross Fricke
Branch:	Tacoma, WA

Location:
1419 Avenue D
Snohomish, WA 98290

Asset #	Description	Tax	Qty	Days	Price Per	Total
	Mobilization - Hourly Mob for A6780 on 03/10/16	Y	5		125.00	625.00

Sub Total:	**$625.00**
Taxes:	**$55.00**
Remit Total:	**$680.00**

SPECIAL INSTRUCTIONS

ENTERED 3.20.16

TERMS: NET DUE UPON RECEIPT
This transaction is subject to the terms and conditions of Adler Tank Rentals.

FOR PROPER CREDIT - PLEASE DETACH AND RETURN WITH PAYMENT TO THE REMIT TO ADDRESS ABOVE.

REMITTANCE COPY for DH Environmental, Inc.

Amount enclosed $_____
Please explain if the amount is different from the invoice amount:

Account:	65237
Invoice:	4173410
Contract:	140455
Invoice Date:	11-MAR-16
Remit Total:	**$680.00**

Thank you for the opportunity to serve you. We appreciate your business.

ADLER TANK RENTALS

Remit to:
Adler Tank Rentals
P.O. Box 45081
San Francisco, CA 94145-0081

ENTERED 4-11-16

Invoice

Invoice:	4178212
Contract:	140455
Customer PO:	N/A
Invoice Date:	31-MAR-16

Customer Information

DH Environmental, Inc.
1011 SW Klickitat Way Ste 210C
Seattle, WA 98134-1162

Questions about this invoice?

Contact Name:	ATR-Ginger Allman
Email:	ginger.allman@mgrc.com
Phone:	281-715-2023
Fax:	866-431-3255
All Other Inquiries:	509-724-6797
Salesperson:	Ross Fricke
Branch:	Tacoma, WA

Location:
1419 Avenue D
Snohomish, WA 98290

Asset #	Description	Tax	Qty	Days	Price Per	Total
A6780	Mini Frac Tank - Rent 03/10/2016 to 03/31/2016	Y	1	22	26.00	572.00

Sub Total:	**$572.00**
Taxes:	**$50.34**
Remit Total:	**$622.34**

SPECIAL INSTRUCTIONS

TERMS: NET DUE UPON RECEIPT

This transaction is subject to the terms and conditions of Adler Tank Rentals

FOR PROPER CREDIT - PLEASE DETACH AND RETURN WITH PAYMENT TO THE REMIT TO ADDRESS ABOVE.

REMITTANCE COPY for DH Environmental, Inc.

Amount enclosed $_____
Please explain if the amount is different from the invoice amount

ADLER TANK RENTALS

Account:	65237
Invoice:	4178212
Contract:	140455
Invoice Date:	31-MAR-16
Remit Total:	**$622.34**

Thank you for the opportunity to serve you. We appreciate your business

Remit to:
Adler Tank Rentals
PO Box 45081
SAN FRANCISCO, CA 94145-0081

Invoice

Invoice:	4184765
Contract:	140455
Customer PO:	N/A
Invoice Date:	30-Apr-2016

Customer Information

DH Environmental, Inc.
1011 SW Klickitat Way Suite 210C
SEATTLE, WA 98134

Location:
1419 Avenue D
SNOHOMISH, WA 98290

Questions about this invoice?

Contact Name:	ATR-Ginger Allman
Email:	ginger.allman@mgrc.com
Phone:	281-715-2023
Fax:	866-431-3255
All Other Inquiries:	509-724-6797
Salesperson:	Ross Fricke
Branch:	Tacoma, WA

Serial Number	Description	Tax	Qty.	Days	Price Per	Total
A6780	Mini Frac Tank - Rent 04/01/2016 to 04/30/2016	Yes	1	30	26.00	780.00

Sub Total:	**$780.00**
Tax:	**$70.98**
Remit Total:	**$850.98**

SPECIAL INSTRUCTIONS

TERMS: NET DUE UPON RECEIPT
This transaction is subject to the terms and conditions of Adler Tank Rentals.
FOR PROPER CREDIT, PLEASE DETACH & RETURN WITH PAYMENT TO THE REMIT TO ADDRESS ABOVE.

Remittance for: DH Environmental, Inc.

Amount enclosed $_____
Please explain if the amount is different from the invoice amount:

Account:	65237
Invoice:	4184765
Contract:	140455
Invoice Date:	30-Apr-2016
Remit Total:	**$850.98**

Thank you for the opportunity to serve you. We appreciate your business.

Remit to:
Adler Tank Rentals
PO Box 45081
SAN FRANCISCO, CA 94145-0081

Invoice

Invoice:	4185431
Contract:	140455
Customer PO:	N/A
Invoice Date:	05-May-2016

Customer Information

DH Environmental, Inc.
1011 SW Klickitat Way Suite 210C
SEATTLE, WA 98134

Location:
1419 Avenue D
SNOHOMISH, WA 98290

Questions about this invoice?

Contact Name:	ATR-Ginger Allman
Email:	ginger.allman@mgrc.com
Phone:	281-715-2023
Fax:	866-431-3255
All Other Inquiries:	509-724-6797
Salesperson:	Ross Fricke
Branch:	Tacoma, WA

Serial Number	Description	Tax	Qty.	Days	Price Per	Total
A6780	Mini Frac Tank - Rent 05/01/2016 to 05/03/2016	Yes	1	3	26.00	78.00
	Demobilization - Hourly	Yes	5		125.00	625.00
	Demob A6780 on 05/03/16					

Sub Total:	**$703.00**
Tax:	**$63.98**
Remit Total:	**$766.98**

SPECIAL INSTRUCTIONS

TERMS: NET DUE UPON RECEIPT
This transaction is subject to the terms and conditions of Adler Tank Rentals.
FOR PROPER CREDIT, PLEASE DETACH & RETURN WITH PAYMENT TO THE REMIT TO ADDRESS ABOVE.

Remittance for: DH Environmental, Inc.

Amount enclosed $_____
Please explain if the amount is different from the invoice amount:

Account:	65237
Invoice:	4185431
Contract:	140455
Invoice Date:	05-May-2016
Remit Total:	**$766.98**

Thank you for the opportunity to serve you. We appreciate your business.