

# GROUNDWATER SAMPLING EVENT

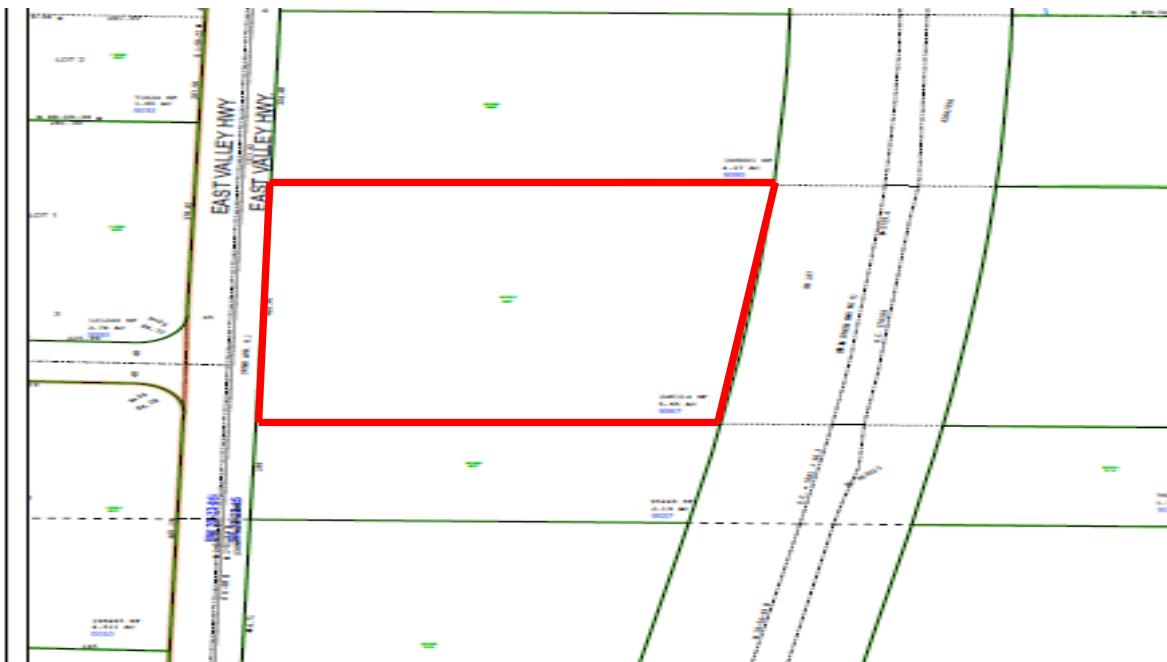
## ROUND 6

### AUGUST 25, 2020

Walker Property (former South End Auto property)  
3400 East Valley Road  
Renton, Washington 98057

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Prepared for: D&C Investments, LLC  
555 SW Grady Way  
Renton, Washington 98057



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Project Number 18-10001

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## TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY .....	5
1. SITE BACKGROUND .....	7
2. INTRODUCTION .....	7
3. GROUNDWATER SAMPLING AND ANALYTICAL RESULTS .....	7
3.1 FIELD DATA.....	7
3.2 GROUNDWATER SAMPLING AND ANALYTICAL RESULTS .....	8
4. HISTORIC GROUNDWATER DATA .....	9
5. CONCLUSIONS AND RECOMMENDATIONS .....	10

### APPENDIX A – FIGURES

Figure 1. Site location. Walker property. 3400 East Valley Road, Renton, Washington.

Figure 2. Groundwater monitoring well locations. Walker property. 3400 East Valley Road, Renton, Washington.

### APPENDIX B – TABLES

Table 1. Groundwater field measurements. Walker property. 3400 East Valley Road, Renton. August 25, 2020.

Table 2. Groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Table 3. Groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Table 4. Groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).



## **TABLE OF CONTENTS (continued)**

### **APPENDIX B – TABLES (continued)**

- Table 5. Groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 6. Groundwater analytical results. Metals, filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 7. Groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 8. Groundwater analytical results. PCBs, Ethylene Glycol and TOC. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 9. Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 10. Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 11. Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 12. Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 13. Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).
- Table 14. Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).



## **TABLE OF CONTENTS (continued)**

### **APPENDIX B – TABLES (continued)**

Table 15. Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

### **APPENDIX C – GROUNDWATER ANALYTICAL RESULTS. WALKER PROPERTY. ROUND 6, AUGUST 25, 2020.**



## **EXECUTIVE SUMMARY**

On Tuesday, August 25, 2020, samples were collected from 8 groundwater monitoring wells on the subject Walker property (former South End Auto property) located at 3400 East Valley Road in Renton, Washington.

One sample was collected from each well and analyzed for Gasoline, VOCs, Diesel, Oil, metals (Arsenic, Barium, Cadmium, Copper, total Chromium, Hexavalent Chrome, Lead, Mercury, Nickel, Selenium, Silver and Zinc), PAHs, PCBs, Ethylene Glycol and TOC.

From these samples, using a Silica-gel wash prior to analyzing the groundwater for Diesel and Oil content minimizes the interference of an organic peat underlying the entire subject property, resulting in Diesel and Oil concentrations in all the samples that are below Ecology's cleanup standard.

Except for wells MW-1, MW-2 and MW-5, filtering the groundwater prior to analysis for metals minimizes interference from sediment in the sample, resulting in metals concentrations in all the samples that are below Ecology's cleanup standards. Even after filtering, however, Arsenic was detected in wells MW-1, MW-2 and MW-5 during this sampling round at concentrations that are above the Ecology cleanup standard.

The following recommendations are made for future groundwater monitoring events:

1. Stop analysis of samples for Gasoline. Gasoline has only been detected in one well during one prior sampling round (MW-5, September, 2019), and at a concentration that is only slightly above the analytical detection limit. Gasoline has not been detected in any other wells during any other sampling rounds.
2. Only analyze samples for Diesel and Oil after using a Silica-gel wash. This method minimizes the interference of the organic peat layer that underlies the subject property with the analytical results.
3. Stop analysis of samples for Hexavalent Chrome. Hexavalent Chrome has only been detected during one prior sampling round (wells MW-1, MW-2, MW-3, MW-6, MW-7 and MW-8, November, 2019) at concentrations that are above Ecology's cleanup standard. However, for this sampling round, Hexavalent Chrome was detected in the laboratory's Continued Calibration Blank. As a result, these detections are likely due to laboratory interference. Hexavalent Chrome was detected in well MW-5 during the November, 2019 sampling round, but at a concentration that is below Ecology's cleanup standard. Hexavalent Chrome has not been detected in any other wells during any other sampling rounds.
4. Only analyze samples for metals after filtering the water. This method minimizes the interference of the sediment in the water with the analytical results.



5. Stop analysis of samples for PAHs. PAHs have not been detected in wells MW-2 or MW-6 during any of the sampling rounds. PAHs have been detected in the other wells during various sampling rounds, but at concentrations that are below Ecology's cleanup standards.
6. Stop analysis of samples for PCBs. PCBs have not been detected in any of the wells during any of the sampling rounds.
7. Stop analysis of samples for Ethylene Glycol. Ethylene Glycol has only been detected in one well during 2 sampling rounds (MW-2, December, 2018 and November, 2019), and at concentrations that are only slightly above the analytical detection limit. Ethylene Glycol has not been detected in any other wells during any other sampling rounds.



## **1. SITE BACKGROUND**

The subject Walker property is located at 3400 East Valley Road in the southeast quarter of Section 30, Township 23, Range 5 in Renton, King County, Washington (Figure 1, Appendix A).

The property consists of approximately 5.65 acres (246,114 square feet) of commercial land situated between East Valley Road to the west and a wetland area and Highway 167 to the east (see Figure 1, Appendix A). A 75-foot wide wetland buffer area extends along the entire eastern portion of the property (see Figure 1, Appendix A).

The property was used as an automobile salvage yard from approximately the mid-1950s to 2018 (former South End Auto property). All vehicles and structures have since been removed. Except within the wetland buffer area, remediation was conducted until all soil verification samples met the Washington State Department of Ecology's (Ecology's) MTCA (Model Toxics Control Act) cleanup standards based on unrestricted (residential) land use. The wetland buffer area cannot be developed, and was thereby not included as part of the soil cleanup effort.

The property is currently being re-developed for use as a car dealership.

## **2. INTRODUCTION**

On Tuesday, August 25, 2020, samples were collected from 8 onsite groundwater monitoring wells (wells MW-1 through MW-8) (Figure 2, Appendix A).

The purpose of this sampling is to document groundwater quality at the property. This is Round 6 of groundwater monitoring at the site.

## **3. GROUNDWATER SAMPLING AND ANALYTICAL RESULTS**

### **3.1 FIELD DATA**

Prior to sampling, water level measurements were collected from each monitoring well (Table 1, Appendix B). Based on these measurements, the general direction of shallow groundwater flow beneath the subject property appears to be toward the northwest.



Groundwater was then purged from each well (approximately 3 – 4 casing volumes each) until field measurements of pH, temperature and/or conductivity were believed to have stabilized (see Table 1, Appendix B). Once this occurred, groundwater samples were collected.

### **3.2 GROUNDWATER SAMPLING AND ANALYTICAL RESULTS**

Groundwater samples were collected using a low-flow peristaltic pump and dedicated polyethylene and silicone tubing. All samples were analyzed for Gasoline, volatile organic compounds (VOCs), Diesel, Oil, metals (Arsenic, Barium, Cadmium, Copper, total Chromium, Hexavalent Chrome, Lead, Mercury, Nickel, Selenium, Silver and Zinc), PAHs, PCBs, Ethylene Glycol and total organic carbon (TOC).

A layer of organic peat underlies the entire subject property and surrounding area. As a result, samples for Diesel and Oil were analyzed both with and without using a Silica-gel wash to determine whether this organic layer interferes with the analytical results. Also, samples for metals were analyzed both with and without filtering to determine whether sediment in the water interferes with the analytical results.

Groundwater analytical results are attached as Appendix C and summarized in Tables 2 through 8 (see Appendix B). As applicable, these tables also list Ecology's MTCA cleanup standards based on unrestricted (residential) land use.

From Table 1, groundwater in well MW-4 had the highest turbidity, possibly due to soil intrusion from prior damage and repairs. Well MW-4 was damaged during construction activities sometime after the September, 2019 sampling event, and had not been sampled since that time.

From Table 2, Naphthalene was detected in well MW-5, but at a concentration that is below Ecology's cleanup standard. There were no other VOCs detected in this sample.

Cis-1,2-Dichloroethene was detected in well MW-6, but at a concentration that is below Ecology's cleanup standard. There were no other VOCs detected in this sample.

Dichlorodifluoromethane was detected in well MW-7, but at a concentration that is below Ecology's cleanup standard. There were no other VOCs detected in this sample.

There were no VOCs detected in samples collected from the other wells.

There was no Gasoline detected in any of the wells.

From Table 3, Diesel and Oil were detected in wells MW-1, MW-3, MW-4, MW-5, MW-7 and MW-8 at concentrations that are above Ecology's cleanup standard.



Diesel was detected in wells MW-2 and MW-6, but at concentrations that are below Ecology's cleanup standard. There was no Oil detected in these 2 wells.

A Silica-gel wash was not used prior to analyzing any of the samples.

From Table 4, Diesel was detected in well MW-5, but at a concentration that is below Ecology's cleanup standard. There was no Oil detected in this sample. There was no Diesel or Oil detected in the other wells. A Silica-gel wash was used prior to analyzing all the samples.

From Table 5, Arsenic was detected in wells MW-1, MW-2, MW-3, MW-4 and MW-5 at concentrations that are above Ecology's cleanup standard.

Total Chromium and Lead were detected in well MW-4 at concentrations that are above Ecology's cleanup standards.

Various other metals were detected in all the wells, but at concentrations that are below Ecology's cleanup standards.

None of the groundwater samples were filtered prior to analysis.

From Table 6, Arsenic was detected in wells MW-1, MW-2 and MW-5 at concentrations that are above Ecology's cleanup standard. Various other metals were detected in all the wells, but at concentrations that are below Ecology's cleanup standards. All the samples were filtered prior to analysis.

From Table 7, various PAHs were detected in wells MW-1, MW-3, MW-4, MW-5, MW-7 and MW-8, but at concentrations that are below Ecology's cleanup standards. There were no PAHs detected wells MW-2 or MW-6.

From Table 8, there was no Ethylene Glycol or PCBs detected in any of the wells.

Groundwater samples from wells MW-2, MW-3, MW-5 and MW-6 had the highest TOC content.

#### **4. HISTORIC GROUNDWATER DATA**

A comparison of historic data to data discussed herein for the subject groundwater wells is presented in Tables 9 through 15 (see Appendix B). As applicable, these tables also list Ecology's MTCA cleanup standards based on unrestricted (residential) land use.



## 5. CONCLUSIONS AND RECOMMENDATIONS

A layer of organic peat underlies the entire subject property. Using a Silica-gel wash prior to analyzing the groundwater for Diesel and Oil content minimizes the interference of this organic layer, resulting in Diesel and Oil concentrations in all the samples that are below Ecology's cleanup standard.

Except for wells MW-1, MW-2 and MW-5, filtering the groundwater prior to analysis for metals minimizes interference from sediment in the sample, resulting in metals concentrations in all the samples that are below Ecology's cleanup standards. Even after filtering, however, Arsenic was detected in wells MW-1, MW-2 and MW-5 during this sampling round at concentrations that are above the Ecology cleanup standard.

The following recommendations are made for future groundwater monitoring events:

1. Stop analysis of samples for Gasoline. Gasoline has only been detected in one well during one prior sampling round (MW-5, September, 2019), and at a concentration that is only slightly above the analytical detection limit. Gasoline has not been detected in any other wells during any other sampling rounds.
2. Only analyze samples for Diesel and Oil after using a Silica-gel wash. This method minimizes the interference of the organic peat layer that underlies the subject property with the analytical results.
3. Stop analysis of samples for Hexavalent Chrome. Hexavalent Chrome has only been detected during one prior sampling round (wells MW-1, MW-2, MW-3, MW-6, MW-7 and MW-8, November, 2019) at concentrations that are above Ecology's cleanup standard. However, for this sampling round, Hexavalent Chrome was detected in the laboratory's Continued Calibration Blank. As a result, these detections are likely due to laboratory interference. Hexavalent Chrome was detected in well MW-5 during the November, 2019 sampling round, but at a concentration that is below Ecology's cleanup standard. Hexavalent Chrome has not been detected in any other wells during any other sampling rounds.
4. Only analyze samples for metals after filtering the water. This method minimizes the interference of the sediment in the water with the analytical results.
5. Stop analysis of samples for PAHs. PAHs have not been detected in wells MW-2 or MW-6 during any of the sampling rounds. PAHs have been detected in the other wells during various sampling rounds, but at concentrations that are below Ecology's cleanup standards.
6. Stop analysis of samples for PCBs. PCBs have not been detected in any of the wells during any of the sampling rounds.



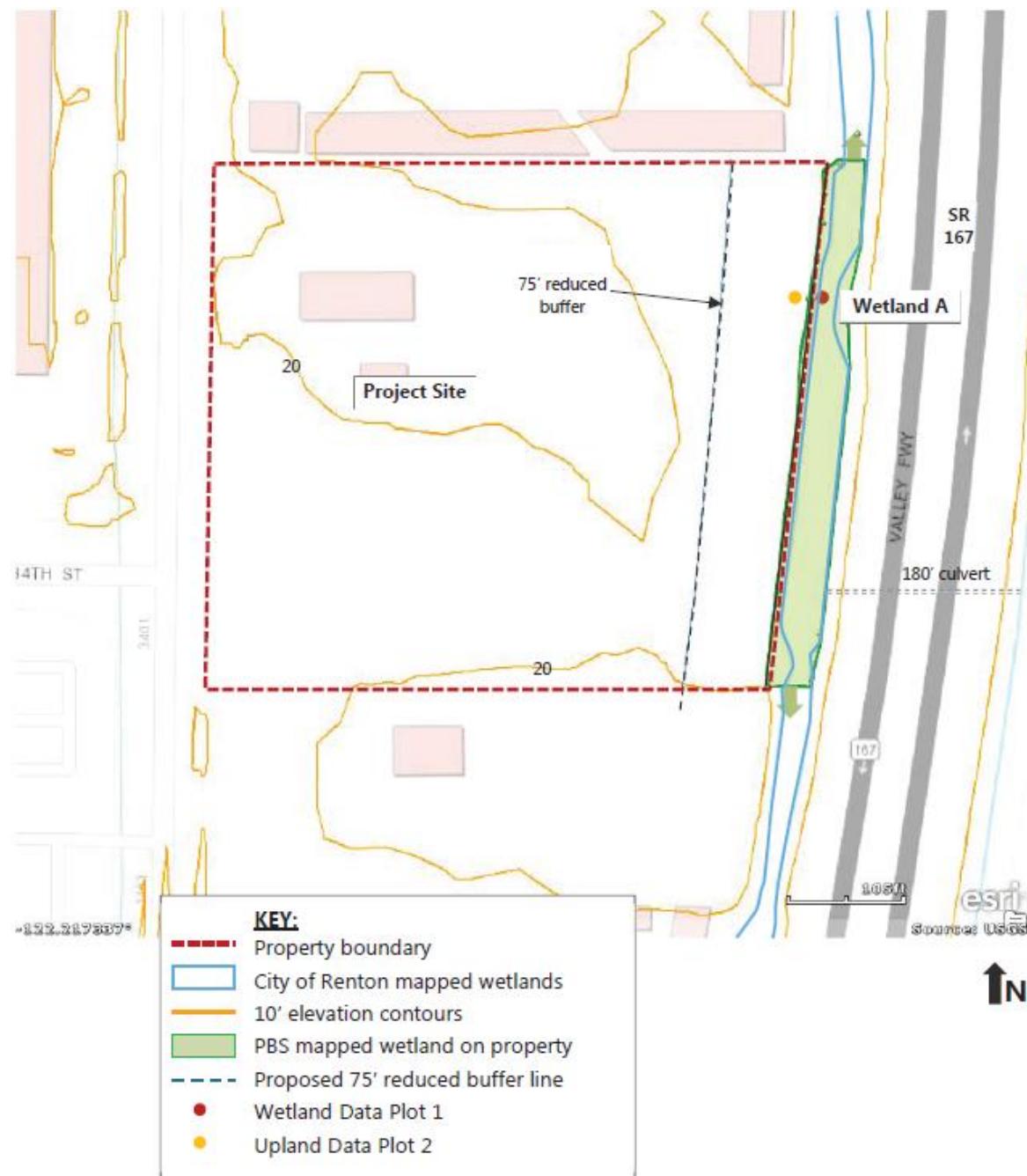
7. Stop analysis of samples for Ethylene Glycol. Ethylene Glycol has only been detected in one well during 2 sampling rounds (MW-2, December, 2018 and November, 2019), and at concentrations that are only slightly above the analytical detection limit. Ethylene Glycol has not been detected in any other wells during any other sampling rounds.



## **APPENDIX A**

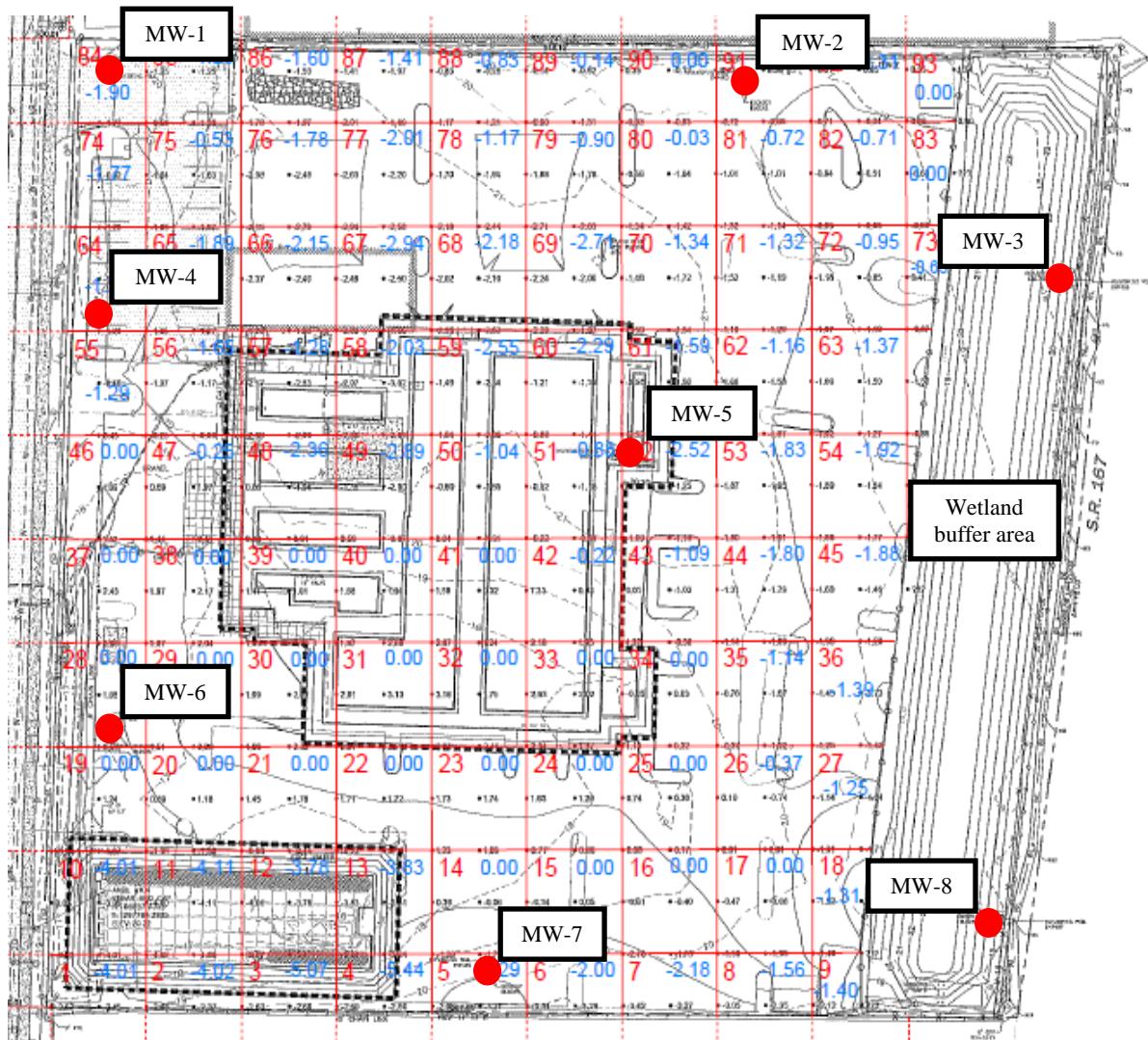
### **FIGURES**

Figure 1. Site location. Walker property. 3400 East Valley Road, Renton.



Source: PBS Environmental. April, 2018.

Figure 2. Groundwater monitoring well locations. Walker property. 3400 East Valley Road, Renton, Washington.



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N

Not to scale

## **APPENDIX B**

### **TABLES**

Table 1. Groundwater field measurements. Walker property. 3400 East Valley Road, Renton, Washington. August 25, 2020.

	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8
Total depth of well from top of PVC well casing (feet)	18.7	23	23	18.9	20.05	22	23.2	23.3
Depth to water from top of PVC well casing (feet)	5.85	7.85	5.55	10.0	9.5	8.75	4.25	6.65
Depth of water (feet)	12.85	15.15	17.45	8.9	10.55	13.25	18.95	16.65
Temperature (start/finish) (°C)	14.2/ 14.9	13.4/ 13.4	12.8/ 13.4	17.2/ 14.8	13.3/ 13.3	13.4/ 13.4	18.9/ 18.2	13.2/ 14.8
Dissolved oxygen (start/finish) (%)	6.9/ 2.1	3.3/ 1.4	6/ 1.3	4.7/ 1.7	2/ 1.4	3.2/ 1.7	3.4/ 1.8	2.9/ 1.8
Specific Conductivity (start/finish) (uS/cm)	810/ 894	977/ 933	1237/ 1241	615/ 807	2127/ 1630	1155/ 1148	799/ 796	1070/ 1055
pH (start/finish)	6.55/ 6.53	6.39/ 6.38	6.32/ 6.27	6.65/ 6.51	6.47/ 6.51	6.47/ 6.38	7.13/ 7.13	7.23/ 7.26
Oxidation/reduction potential (start/finish) (mV)	-65.4/ -119.6	-80.8/ -108	-53.3/ -85.4	39.5/ -52.5	-98.3/ -115.3	-80.3/ -93.9	-103.2/ -118.9	-134.2/ -157.3
Turbidity (start/finish) (NTU)	58.89/ 155.85	27.45/ 13.47	164.27/ 339.35	449.84/ 1057.34	194.86/ 129.81	56.15/ 24.13	75.84/ 8.64	63.75/ 48.53

Table 2. Groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1.1	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	69	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	ND	ND	NA

ND(100) Not detected above the analytical detection limit of 100 ppb.

a Ecology cleanup standard if Benzene has been detected at the site.

NA Cleanup standard has not been established, or is not applicable since the contaminant was not detected in the sample.

ND Not detected.

Table 3. Groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
Diesel	570 <sup>x</sup>	340 <sup>x</sup>	550 <sup>x</sup>	380 <sup>x</sup>	1400 <sup>x</sup>	220 <sup>x</sup>	380 <sup>x</sup>	790 <sup>x</sup>	
Oil	370 <sup>x</sup>	ND(250)	530 <sup>x</sup>	360 <sup>x</sup>	750 <sup>x</sup>	ND(250)	350 <sup>x</sup>	650 <sup>x</sup>	
<b>Total Diesel and Oil</b>	<b>940<sup>x</sup></b>	340 <sup>x</sup>	<b>1080<sup>x</sup></b>	<b>740<sup>x</sup></b>	<b>2150<sup>x</sup></b>	220 <sup>x</sup>	<b>730<sup>x</sup></b>	<b>1440<sup>x</sup></b>	<b>500</b>

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

ND(250) Not detected above the analytical detection limit of 250 ppb.

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

Table 4. Groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
Diesel	ND(50)	ND(50)	ND(50)	ND(50)	240 <sup>x</sup>	ND(50)	ND(50)	ND(50)	
Oil	ND(250)	ND(250)	ND(250)	ND(250)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	ND	ND	ND	ND	240 <sup>x</sup>	ND	ND	ND	500

ND(50) Not detected above the analytical detection limit of 50 ppb.

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

ND Not detected.

Table 5. Groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
<b>Arsenic</b>	<b>10.4</b>	<b>8.95</b>	<b>20.4</b>	<b>99</b>	<b>34.1</b>	3.1	2.89	3.27	<b>5</b>
Barium	123	40.8	240 <sup>ca</sup>	1710	198 <sup>ca</sup>	54	115	166	3200
Cadmium	ND(1)	5							
<b>Total Chromium</b>	2.45 <sup>J</sup>	ND(1) <sup>J</sup>	29.8	<b>52.9</b>	11.7	ND(1) <sup>J</sup>	ND(1)	1.29	<b>50</b>
Copper	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	20.4 <sup>J</sup>	34.3 <sup>J</sup>	12.1 <sup>J</sup>	ND(5) <sup>J</sup>	ND(5)	ND(5)	640
<b>Lead</b>	1.45	ND(1)	13.7	<b>56.6</b>	4.06	ND(1)	4.28	3.4	<b>15</b>
Mercury	ND(1)	2							
Nickel	5.43 <sup>J</sup>	1.02 <sup>J</sup>	33.9	68	19.5	1.31 <sup>J</sup>	5.45	8.03	320
Selenium	ND(1)	1.54	3.13	3.83	5.79	8.27	ND(1)	1.18	80
Silver	ND(1)	80							
Zinc	5.19 <sup>J</sup>	ND(5) <sup>J</sup>	17.5 <sup>J</sup>	24.5 <sup>J</sup>	12.5 <sup>J</sup>	ND(5) <sup>J</sup>	15.2	70	4800
Hexavalent Chrome	ND(45) <sup>H</sup>	48							

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

ND(1) Not detected above the analytical detection limit of 1 ppb.

J Estimated concentration.

H Holding times for preparation or analysis exceeded.

Table 6. Groundwater analytical results. Metals, filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
<b>Arsenic</b>	<b>6.94</b>	<b>6.01</b>	4.86	2.81	<b>19.4</b>	3.1	1.17	1.76	<b>5</b>
Barium	76.9 <sup>ca</sup>	17.7 <sup>ca</sup>	44.4	46 <sup>ca</sup>	43.9	23.9	102	144 <sup>ca</sup>	3200
Cadmium	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Total Chromium	ND(1)	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1) <sup>J</sup>	ND(1)	ND(1)	50
Copper	10.5 <sup>ca</sup>	ND(5) <sup>ca, J</sup>	ND(5) <sup>ca, J</sup>	7.83 <sup>ca</sup>	6.13 <sup>ca</sup>	ND(5) <sup>ca, J</sup>	ND(5) <sup>ca</sup>	ND(5) <sup>ca</sup>	640
Lead	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	15
Mercury	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2
Nickel	3.64	1.16 <sup>J</sup>	2.45 <sup>J</sup>	3.47	7.85	1.47 <sup>J</sup>	6.39	7.63	320
Selenium	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	1.58 <sup>ca</sup>	1.73 <sup>ca</sup>	5.68 <sup>ca</sup>	8.36 <sup>ca</sup>	ND(1) <sup>ca</sup>	1.37 <sup>ca</sup>	80
Silver	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	ND(1) <sup>ca</sup>	80
Zinc	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5)	ND(5)	4800
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	NA	NA

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

ND(1) Not detected above the analytical detection limit of 1 ppb.

J Estimated concentration.

NA Not analyzed, or not applicable.

Table 7. Groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
Benzo(a)anthracene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.16	ND(0.02)	ND(0.02)	ND(0.02)	
Chrysene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.19	ND(0.02)	ND(0.02)	ND(0.02)	
Benzo(a)pyrene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.064	ND(0.02)	ND(0.02)	ND(0.02)	
Benzo(b)fluoranthene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.091	ND(0.02)	ND(0.02)	ND(0.02)	
Benzo(k)fluoranthene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.034	ND(0.02)	ND(0.02)	ND(0.02)	
Indeno(1,2,3-cd)pyrene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.026	ND(0.02)	ND(0.02)	ND(0.02)	
Dibenzo(a,h)anthracene	<u>ND(0.02)</u>	<u>ND(0.02)</u>	<u>ND(0.02)</u>	<u>ND(0.02)</u>	<u>ND(0.02)</u>	<u>ND(0.02)</u>	<u>ND(0.02)</u>	<u>ND(0.02)</u>	
Total TEC PAHs <sup>a</sup>	ND	ND	ND	ND	0.097	ND	ND	ND	0.1 <sup>b</sup>
Naphthalene	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	60	ND(0.2)	0.21	ND(0.2)	160
Acenaphthylene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.12	ND(0.02)	ND(0.02)	ND(0.02)	NA
Acenaphthene	0.053	ND(0.02)	ND(0.02)	ND(0.02)	8.8	ND(0.02)	1.1	0.082	960
Fluorene	0.051	ND(0.02)	ND(0.02)	0.022	5.4	ND(0.02)	0.41	0.051	640
Phenanthrene	0.026	ND(0.02)	0.034	ND(0.02)	4.7	ND(0.02)	0.1	0.034	NA
Anthracene	ND(0.02)	ND(0.02)	ND(0.02)	ND(0.02)	0.77	ND(0.02)	ND(0.02)	ND(0.02)	4800
Fluoranthene	ND(0.02)	ND(0.02)	ND(0.02)	0.035	1.1	ND(0.02)	0.023	ND(0.02)	640
Pyrene	ND(0.02)	ND(0.02)	ND(0.02)	0.061	0.98	ND(0.02)	0.024	ND(0.02)	480
Benzo(g,h,i)perylene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	NA

ND(0.02) Not detected above the analytical detection limit of 0.02 ppb.

a Total toxic equivalent concentration (TEC) of carcinogenic PAHs (Benzo[a]anthracene, Chrysene, Benzo(a)pyrene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Indeno[1,2,3-cd]pyrene and Dibenzo[a,h]anthracene). WAC 173-340-708(8)(e)(ii) and -708(8)(e)(iii).

ND Not detected.

b MTCA Method A cleanup standard for carcinogenic PAHs based on Benzo(a)pyrene. WAC 173-340-708(8)(e)(iii).

NA Cleanup standard has not been established, or is not applicable since the contaminant was not detected in the sample.

Table 8. Groundwater analytical results. PCBs, Ethylene Glycol and TOC. Walker property. 3400 East Valley Road, Renton. August 25, 2020. All concentrations in parts-per-billion (ppb) (ug/L).

Analyte	Well/Sample Number								Ecology Cleanup Standard
	MW-1/ MW1-6	MW-2/ MW2-6	MW-3/ MW3-6	MW-4/ MW4-6	MW-5/ MW5-6	MW-6/ MW6-6	MW-7/ MW7-6	MW-8/ MW8-6	
PCBs	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.1
Ethylene Glycol	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	16000
TOC	15700	30900	34100	23500	79400 <sup>D</sup>	35900	6710	19900	NA

ND(0.1) Not detected above the analytical detection limit of 0.1 ppb.

D Dilution was required.

NA Cleanup standard has not been established, or is not applicable since the contaminant was not detected in the sample.

Table 9. Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-1						
	MW-1/ 12-18	MW1-2/ 3-19	MW1-3/ 9-19	MW1-4 11-19	MW1-5 5-20	MW1-6 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-2						
	MW-2/ 12-18	MW2-2/ 3-19	MW2-3/ 9-19	MW2-4 11-19	MW2-5 5-20	MW2-6 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-3						
	MW-3/ 12-18	MW3-2/ 3-19	MW3-3/ 9-19	MW3-4/ 11-19	MW3-5/ 5-20	MW3-6/ 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-4						
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	-	-	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	-	-	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	-	-	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1)	ND(1)	-	-	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	-	-	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	-	-	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	-	-	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	-	-	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	-	-	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	-	-	ND(1)	160
Other VOCs	ND	ND	ND	-	-	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-5						
	MW-5/ 12-18	MW5-2/ 3-19	MW5-3/ 9-19	MW5-4/ 11-19	MW5-5/ 5-20	MW5-6/ 8-20	
Gasoline	ND(100)	ND(100)	160	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	0.46	ND(0.35)	0.37	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	42	67	160	13	55	69	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-6						
	MW-6/ 12-18	MW6-2/ 3-19	MW6-3/ 9-19	MW6-4/ 11-19	MW6-5/ 5-20	MW6-6/ 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1600
<b>Vinyl Chloride</b>	ND(0.2)	<b>1</b>	ND(0.2)	<b>19</b>	<b>6.4</b>	ND(0.2)	<b>0.2</b>
Chloroethane	1.5	2.9 <sup>j</sup>	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	2.5	ND(1)	ND(1)	400
<b>cis-1,2-Dichloroethene</b>	ND(1)	ND(1)	ND(1)	<b>77</b>	<b>28</b>	1	<b>16</b>
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	2.5	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-7						
	MW-7/ 12-18	MW7-2/ 3-19	MW7-3/ 9-19	MW7-4/ 11-19	MW7-5/ 5-20	MW7-6/ 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	3.2	9.2	3	1.1	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	8.7	1.7	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

Table 9 (continued). Comparison of historic to current groundwater analytical results. Gasoline and VOCs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-8						
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20	
Gasoline	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	800 <sup>a</sup>
Dichlorodifluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	1600
Vinyl Chloride	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.2)	0.2
Chloroethane	ND(1)	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	NA
Trichlorofluoromethane	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2400
1,1-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	400
cis-1,2-Dichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	16
Benzene	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	ND(0.35)	5
Trichloroethene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Naphthalene	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	160
Other VOCs	ND	ND	ND	ND	ND	ND	NA

ND(100) Not detected above the analytical detection limit of 100 ppb.

a Ecology cleanup standard if Benzene has been detected at the site.

NA Cleanup standard has not been established, or is not applicable since the contaminant was not detected in the sample.

ND Not detected.

J Estimated concentration.

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

Table 10. Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-1						
MW-1/ 12-18	MW1-2/ 3-19	MW1-3/ 9-19	MW1-4/ 11-19	MW1-5/ 5-20	MW1-6/ 8-20		
Diesel	270 <sup>x</sup>	360 <sup>x</sup>	290 <sup>x</sup>	360 <sup>x</sup>	530 <sup>x</sup>	570 <sup>x</sup>	
Oil	ND(250)	ND(300)	ND(250)	280 <sup>x</sup>	330 <sup>x</sup>	370 <sup>x</sup>	
<b>Total Diesel and Oil</b>	270 <sup>x</sup>	360 <sup>x</sup>	290 <sup>x</sup>	<b>640<sup>x</sup></b>	<b>860<sup>x</sup></b>	<b>940<sup>x</sup></b>	<b>500</b>

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-2						
	MW-2/ 12-18	MW2-2/ 3-19	MW2-3/ 9-19	MW2-4/ 11-19	MW2-5/ 5-20	MW2-6/ 8-20	
Diesel	390 <sup>x</sup>	580 <sup>x</sup>	440 <sup>x</sup>	680 <sup>x</sup>	480 <sup>x</sup>	340 <sup>x</sup>	
Oil	ND(300)	310 <sup>x</sup>	280 <sup>x</sup>	450 <sup>x</sup>	320 <sup>x</sup>	ND(250)	
<b>Total Diesel and Oil</b>	390 <sup>x</sup>	<b>890<sup>x</sup></b>	<b>720<sup>x</sup></b>	<b>1130<sup>x</sup></b>	<b>800<sup>x</sup></b>	340 <sup>x</sup>	<b>500</b>

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-3						
	MW-3/ 12-18	MW3-2/ 3-19	MW3-3/ 9-19	MW3-4/ 11-19	MW3-5/ 5-20	MW3-6/ 8-20	
Diesel	340 <sup>x</sup>	510 <sup>x</sup>	520 <sup>x</sup>	710 <sup>x</sup>	370 <sup>x</sup>	550 <sup>x</sup>	
Oil	ND(250)	390 <sup>x</sup>	490 <sup>x</sup>	730 <sup>x</sup>	450 <sup>x</sup>	530 <sup>x</sup>	
<b>Total Diesel and Oil</b>	<b>340<sup>x</sup></b>	<b>900<sup>x</sup></b>	<b>1010<sup>x</sup></b>	<b>1440<sup>x</sup></b>	<b>820<sup>x</sup></b>	<b>1080<sup>x</sup></b>	<b>500</b>

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-4							
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20		
Diesel	1200 <sup>x</sup>	1300 <sup>x</sup>	880 <sup>x</sup>	-	-	380 <sup>x</sup>		
Oil	750 <sup>x</sup>	750 <sup>x</sup>	500 <sup>x</sup>	-	-	360 <sup>x</sup>		
<b>Total Diesel and Oil</b>	<b>1950<sup>x</sup></b>	<b>2050<sup>x</sup></b>	<b>1380<sup>x</sup></b>	-	-	<b>740<sup>x</sup></b>	<b>500</b>	

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-5							
	MW-5/ 12-18	MW5-2/ 3-19	MW5-3/ 9-19	MW5-4/ 11-19	MW5-5/ 5-20	MW5-6/ 8-20		
Diesel	220 <sup>x</sup>	920 <sup>x</sup>	1400 <sup>x</sup>	520 <sup>x</sup>	1400 <sup>x</sup>	1400 <sup>x</sup>		
Oil	ND(300)	400 <sup>x</sup>	650 <sup>x</sup>	550 <sup>x</sup>	620 <sup>x</sup>	750 <sup>x</sup>		
<b>Total Diesel and Oil</b>	<b>220<sup>x</sup></b>	<b>1320<sup>x</sup></b>	<b>2050<sup>x</sup></b>	<b>1070<sup>x</sup></b>	<b>2020<sup>x</sup></b>	<b>2150<sup>x</sup></b>	<b>500</b>	

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-6						
	MW-6/ 12-18	MW6-2/ 3-19	MW6-3/ 9-19	MW6-4/ 11-19	MW6-5/ 5-20	MW6-6/ 8-20	
Diesel	240 <sup>x</sup>	470 <sup>x</sup>	180 <sup>x</sup>	380 <sup>x</sup>	190 <sup>x</sup>	220 <sup>x</sup>	
Oil	ND(250)	340 <sup>x</sup>	ND(250)	310 <sup>x</sup>	ND(250)	ND(250)	
<b>Total Diesel and Oil</b>	240 <sup>x</sup>	<b>810<sup>x</sup></b>	180 <sup>x</sup>	<b>690<sup>x</sup></b>	190 <sup>x</sup>	220 <sup>x</sup>	<b>500</b>

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-7							
	MW-7/ 12-18	MW7-2/ 3-19	MW7-3/ 9-19	MW7-4/ 11-19	MW7-5/ 5-20	MW7-6/ 8-20		
Diesel	250 <sup>x</sup>	570 <sup>x</sup>	330 <sup>x</sup>	360 <sup>x</sup>	250 <sup>x</sup>	380 <sup>x</sup>		
Oil	310 <sup>x</sup>	550 <sup>x</sup>	330 <sup>x</sup>	380 <sup>x</sup>	ND(250)	350 <sup>x</sup>		
<b>Total Diesel and Oil</b>	<b>560<sup>x</sup></b>	<b>1120<sup>x</sup></b>	<b>660<sup>x</sup></b>	<b>740<sup>x</sup></b>	250 <sup>x</sup>	<b>730<sup>x</sup></b>	<b>500</b>	

Table 10 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash not used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-8						
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20	
Diesel	850 <sup>x</sup>	1500 <sup>x</sup>	1400 <sup>x</sup>	1300 <sup>x</sup>	780 <sup>x</sup>	790 <sup>x</sup>	
Oil	830 <sup>x</sup>	1300 <sup>x</sup>	1200 <sup>x</sup>	1100 <sup>x</sup>	670 <sup>x</sup>	650 <sup>x</sup>	
<b>Total Diesel and Oil</b>	<b>1680<sup>x</sup></b>	<b>2800<sup>x</sup></b>	<b>2600<sup>x</sup></b>	<b>2400<sup>x</sup></b>	<b>1450<sup>x</sup></b>	<b>1440<sup>x</sup></b>	<b>500</b>

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

ND(250) Not detected above the analytical detection limit of 250 ppb.

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

Table 11. Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-1						
MW-1/ 12-18	MW1-2/ 3-19	MW1-3/ 9-19	MW1-4/ 11-19	MW1-5/ 5-20	MW1-6/ 8-20		
Diesel	NA	ND(60)	ND(50)	ND(50)	ND(100)	ND(50)	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	ND	ND	ND	ND	ND	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis.  
 Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-2						
MW-2/ 12-18	MW2-2/ 3-19	MW2-3/ 9-19	MW2-4/ 11-19	MW2-5/ 5-20	MW2-6/ 8-20		
Diesel	NA	ND(60)	ND(50)	ND(50)	ND(100)	ND(50)	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	ND	ND	ND	ND	ND	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis.  
 Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-3						
	MW-3/ 12-18	MW3-2/ 3-19	MW3-3/ 9-19	MW3-4/ 11-19	MW3-5/ 5-20	MW3-6/ 8-20	
Diesel	NA	ND(60)	ND(50)	ND(50)	ND(100)	ND(50)	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	ND	ND	ND	ND	ND	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis.  
 Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-4						
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20	
Diesel	NA	110 <sup>j</sup>	ND(50)	-	-	ND(50)	
Oil	NA	ND(300)	ND(250)	-	-	ND(250)	
Total Diesel and Oil	NA	110 <sup>j</sup>	ND	-	-	ND	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-5						
	MW-5/ 12-18	MW5-2/ 3-19	MW5-3/ 9-19	MW5-4/ 11-19	MW5-5/ 5-20	MW5-6/ 8-20	
Diesel	NA	180 <sup>x</sup>	330 <sup>x</sup>	ND(50)	350 <sup>x</sup>	240 <sup>x</sup>	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	180 <sup>x</sup>	330 <sup>x</sup>	ND	350 <sup>x</sup>	240 <sup>x</sup>	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis.  
 Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-6						
	MW-6/ 12-18	MW6-2/ 3-19	MW6-3/ 9-19	MW6-4/ 11-19	MW6-5/ 5-20	MW6-6/ 8-20	
Diesel	NA	ND(60)	ND(50)	ND(50)	ND(100)	ND(50)	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	ND	ND	ND	ND	ND	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-7						
	MW-7/ 12-18	MW7-2/ 3-19	MW7-3/ 9-19	MW7-4/ 11-19	MW7-5/ 5-20	MW7-6/ 8-20	
Diesel	NA	ND(60)	ND(50)	ND(50)	ND(100)	ND(50)	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	ND	ND	ND	ND	ND	500

Table 11 (continued). Comparison of historic to current groundwater analytical results. Diesel and Oil, Silica-gel wash used prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-8						
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20	
Diesel	NA	ND(60)	ND(50)	ND(50)	ND(100)	ND(50)	
Oil	NA	ND(300)	ND(250)	ND(250)	ND(250)	ND(250)	
Total Diesel and Oil	NA	ND	ND	ND	ND	ND	500

NA Not analyzed.

ND(60) Not detected above the analytical detection limit of 60 ppb.

ND Not detected.

J Estimated concentration.

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

Table 12. Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-1							
	MW-1/ 12-18	MW1-2/ 3-19	MW1-3/ 9-19	MW1-4/ 11-19	MW1-5/ 5-20	MW1-6/ 8-20		
<b>Arsenic</b>	<b>8.88</b>	4.22	<b>11.8</b>	<b>13.2</b>	<b>9.7</b>	<b>10.4</b>	<b>5</b>	
Barium	133	98.3	166	127	78.6	123	3200	
Cadmium	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	7.62	ND(1)	ND(1)	ND(1)	2.59 <sup>ca</sup>	2.45 <sup>j</sup>	50	
Copper	9.56	ND(5)	ND(5)	ND(5)	7.2	ND(5) <sup>j</sup>	640	
Lead	2.14	ND(1)	ND(1)	ND(1)	1.51	1.45	15	
Mercury	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	3.39	3.42	4.74	5.39	5.43 <sup>j</sup>	320	
Selenium	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80	
Silver	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80	
Zinc	13.6	ND(5)	ND(5)	ND(5)	5.25	5.19 <sup>j</sup>	4800	
<b>Hexavalent Chrome</b>	ND(45)	ND(45)	ND(45)	<b>48.8<sup>B*, H</sup></b>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	<b>48</b>	

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-2							
	MW-2/ 12-18	MW2-2/ 3-19	MW2-3/ 9-19	MW2-4/ 11-19	MW2-5/ 5-20	MW2-6/ 8-20		
<b>Arsenic</b>	<b>14.7</b>	<b>11.7</b>	<b>13</b>	<b>11.8</b>	<b>9.66</b>	<b>8.95</b>	<b>5</b>	
Barium	54.8	41.8	48.9	34.3	32	40.8	3200	
Cadmium	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	50	
Copper	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	640	
Lead	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	1.22 <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	1.02 <sup>J</sup>	320	
Selenium	2.02	2.1	ND(5)	1.45	1.31	1.54	80	
Silver	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80	
Zinc	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	4800	
<b>Hexavalent Chrome</b>	ND(45)	ND(45)	ND(45)	<b>80.4<sup>B*,H</sup></b>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	<b>48</b>	

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-3							
	MW-3/ 12-18	MW3-2/ 3-19	MW3-3/ 9-19	MW3-4/ 11-19	MW3-5/ 5-20	MW3-6/ 8-20		
<b>Arsenic</b>	<b>12.6<sup>J</sup></b>	<b>20.5</b>	<b>12.8</b>	<b>17.4</b>	<b>18.3</b>	<b>20.4</b>	<b>5</b>	
Barium	115	230	115	161	167	240 <sup>ca</sup>	3200	
Cadmium	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	1.53 <sup>J</sup>	20	2.84 <sup>J</sup>	22.1	25.3	29.8	50	
Copper	ND(5) <sup>J</sup>	63.8	7.75 <sup>J</sup>	17.5 <sup>J</sup>	83.1	20.4 <sup>J</sup>	640	
Lead	1.36 <sup>J</sup>	12.9	3.02	12.6	14.1	13.7	15	
Mercury	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	26.2	4.31 <sup>J</sup>	24.5	29.3	33.9	320	
Selenium	3.82 <sup>J</sup>	4.43	ND(5)	2.79	2.95	3.13	80	
Silver	ND(1) <sup>J</sup>	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80	
Zinc	ND(5) <sup>J</sup>	59.4	6.69 <sup>J</sup>	14.3 <sup>J</sup>	67	17.5 <sup>J</sup>	4800	
<b>Hexavalent Chrome</b>	ND(45)	ND(45)	ND(45)	<b>80<sup>B*, H</sup></b>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	<b>48</b>	

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-4						
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20	
<b>Arsenic</b>	<b>30.6<sup>J</sup></b>	<b>27.3</b>	<b>12.2</b>	-	-	<b>99</b>	<b>5</b>
Barium	136	106	78.1	-	-	1710	3200
Cadmium	ND(1) <sup>J</sup>	ND(1)	ND(1)	-	-	ND(1)	5
<b>Total Chromium</b>	1.97	1.56	ND(1)	-	-	<b>52.9</b>	<b>50</b>
Copper	ND(5)	ND(5)	ND(5)	-	-	34.3 <sup>J</sup>	640
<b>Lead</b>	ND(1) <sup>J</sup>	ND(1)	ND(1)	-	-	<b>56.6</b>	<b>15</b>
Mercury	ND(1) <sup>J</sup>	ND(1)	ND(1)	-	-	ND(1)	2
Nickel	NA	5.86	3.09	-	-	68	320
Selenium	3.9 <sup>J</sup>	2.28	ND(5)	-	-	3.83	80
Silver	ND(1) <sup>J</sup>	ND(1)	ND(5)	-	-	ND(1)	80
Zinc	ND(5)	ND(5)	ND(5)	-	-	24.5 <sup>J</sup>	4800
Hexavalent Chrome	ND(45)	ND(45)	ND(45)	-	-	ND(45) <sup>H</sup>	48

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-5						
	MW-5/ 12-18	MW5-2/ 3-19	MW5-3/ 9-19	MW5-4/ 11-19	MW5-5/ 5-20	MW5-6/ 8-20	
<b>Arsenic</b>	<b>27.5<sup>J</sup></b>	<b>15.1<sup>J</sup></b>	<b>17.9</b>	<b>6.64</b>	<b>26.6</b>	<b>34.1</b>	<b>5</b>
Barium	421	257	226	104	121	198 <sup>ca</sup>	3200
Cadmium	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	5
<b>Total Chromium</b>	<b>58.4</b>	28.2	18.6	9.71	6.32 <sup>ca</sup>	11.7	<b>50</b>
Copper	134	55.2	22.7 <sup>J</sup>	19.1	10.6	12.1 <sup>J</sup>	640
<b>Lead</b>	<b>33.8</b>	12.5	6.65	4.4	2.8	4.06	<b>15</b>
Mercury	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2
Nickel	NA	30.9	22.1	12.8	11.8	19.5	320
Selenium	3.97 <sup>J</sup>	4.38 <sup>J</sup>	ND(5)	1.45	3.74	5.79	80
Silver	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(5)	ND(1)	ND(1)	ND(1)	80
Zinc	128	60.5	22 <sup>J</sup>	18.9	9.28	12.5 <sup>J</sup>	4800
Hexavalent Chrome	ND(45)	ND(45)	ND(45)	46.3 <sup>B*, H</sup>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	48

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-6							
	MW-6/ 12-18	MW6-2/ 3-19	MW6-3/ 9-19	MW6-4/ 11-19	MW6-5/ 5-20	MW6-6/ 8-20		
<b>Arsenic</b>	<b>8.61<sup>J</sup></b>	<b>5.75</b>	ND(5)	2.96 <sup>ca</sup>	1.92	3.1	<b>5</b>	
Barium	86.2	96.1	64	51.7	41.9	54	3200	
Cadmium	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	50	
Copper	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	640	
Lead	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	ND(1) <sup>J</sup>	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	1.74 <sup>J</sup>	ND(1) <sup>J</sup>	1.28 <sup>J</sup>	ND(1) <sup>J</sup>	1.31 <sup>J</sup>	320	
Selenium	7.12 <sup>J</sup>	7.02	ND(5)	3.58	3.24	8.27	80	
Silver	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	ND(5)	ND(1)	ND(1)	ND(1)	80	
Zinc	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	4800	
<b>Hexavalent Chrome</b>	ND(45)	ND(45)	ND(45)	<b>89.7<sup>B*, H</sup></b>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	<b>48</b>	

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-7							
	MW-7/ 12-18	MW7-2/ 3-19	MW7-3/ 9-19	MW7-4/ 11-19	MW7-5/ 5-20	MW7-6/ 8-20		
<b>Arsenic</b>	2.44	1.92	<b>5.94</b>	2.22	2.4	2.89	<b>5</b>	
Barium	115	78.9	254	104	75.5	115	3200	
Cadmium	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	ND(1)	ND(1)	ND(1)	ND(1)	1.55 <sup>ca</sup>	ND(1)	50	
Copper	ND(5)	ND(5)	ND(5)	ND(5)	7.57	ND(5)	640	
Lead	4.09	1.88	ND(1)	ND(1)	2.22	4.28	15	
Mercury	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	3.01	4.55	4.18	5.55	5.45	320	
Selenium	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80	
Silver	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80	
Zinc	50.6	21.1	ND(5)	ND(5)	16.4	15.2	4800	
<b>Hexavalent Chrome</b>	ND(45)	ND(45)	ND(45)	<b>49.4<sup>B*, H</sup></b>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	<b>48</b>	

Table 12 (continued). Comparison of historic to current groundwater analytical results. Metals, not filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-8						
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20	
<b>Arsenic</b>	1.35	2.86	ND(5)	3.66	1.56	3.27	<b>5</b>
Barium	136	119	318	179	117	166	3200
Cadmium	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	5
Total Chromium	ND(1)	ND(1)	2.42	ND(1)	ND(1)	1.29	50
Copper	ND(5)	ND(5)	8.92	ND(5)	ND(5)	ND(5)	640
Lead	ND(1)	2.03	6.88	2.84	ND(1)	3.4	15
Mercury	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	2
Nickel	NA	5.74	16.6	12.5	5.62	8.03	320
Selenium	1.6	2.31	ND(5)	1.57	ND(1)	1.18	80
Silver	ND(1)	ND(1)	ND(5)	ND(1)	ND(1)	ND(1)	80
Zinc	63.9	93.8	160	189	64.1	70	4800
<b>Hexavalent Chrome</b>	ND(45)	ND(45)	ND(45)	<b>48.3<sup>B*, H</sup></b>	ND(45) <sup>H</sup>	ND(45) <sup>H</sup>	<b>48</b>

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

ND(1) Not detected above the analytical detection limit of 1 ppb.

ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

J Estimated concentration.

B\* Detected in the Continued Calibration Blank (CCB).

H Holding times for preparation or analysis exceeded.

Table 13. Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-1							
	MW-1/ 12-18	MW1-2/ 3-19	MW1-3/ 9-19	MW1-4/ 11-19	MW1-5/ 5-20	MW1-6/ 8-20		
<b>Arsenic</b>	NA	1.11	ND(5)	2.64	4.25	<b>6.94</b>	<b>5</b>	
Barium	NA	NA	71.6	74.3	61.5	76.9 <sup>ca</sup>	3200	
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	50	
Copper	NA	NA	ND(5)	ND(5)	ND(5)	10.5 <sup>ca</sup>	640	
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	NA	4.55	5.98	3.04	3.64	320	
Selenium	NA	NA	ND(5)	ND(1)	ND(1)	ND(1) <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	ND(5)	ND(5)	ND(5)	4800	
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-2							
	MW-2/ 12-18	MW2-2/ 3-19	MW2-3/ 9-19	MW2-4/ 11-19	MW2-5/ 5-20	MW2-6/ 8-20		
<b>Arsenic</b>	NA	1.24	ND(5)	1.06	4.91	<b>6.01</b>	<b>5</b>	
Barium	NA	NA	11.7	2.11	15.6	17.7 <sup>ca</sup>	3200	
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	NA	NA	ND(1)	ND(1)	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	50	
Copper	NA	NA	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>ca, J</sup>	640	
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	NA	1.59	2.38	1.03 <sup>J</sup>	1.16 <sup>J</sup>	320	
Selenium	NA	NA	ND(5)	1.58	1.29	ND(1) <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	4800	
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-3							
	MW-3/ 12-18	MW3-2/ 3-19	MW3-3/ 9-19	MW3-4/ 11-19	MW3-5/ 5-20	MW3-6/ 8-20		
Arsenic	NA	1.96	ND(5)	1.25	4.62	4.86	5	
Barium	NA	NA	29.7	7.47	49.4	44.4	3200	
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	NA	NA	ND(1)	ND(1)	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	50	
Copper	NA	NA	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>ca,J</sup>	640	
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	NA	2.88	4.22	2.1	2.45 <sup>J</sup>	320	
Selenium	NA	NA	ND(5)	2.31	2.22 <sup>J</sup>	1.58 <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	4800	
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-4							
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20		
Arsenic	NA	2	ND(5)	-	-	2.81	5	
Barium	NA	NA	36.3	-	-	46 <sup>ca</sup>	3200	
Cadmium	NA	NA	ND(1)	-	-	ND(1)	5	
Total Chromium	NA	NA	ND(1)	-	-	ND(1)	50	
Copper	NA	NA	ND(5)	-	-	7.83 <sup>ca</sup>	640	
Lead	NA	NA	ND(1)	-	-	ND(1)	15	
Mercury	NA	NA	ND(1)	-	-	ND(1)	2	
Nickel	NA	NA	5.09	-	-	3.47	320	
Selenium	NA	NA	ND(5)	-	-	1.73 <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	-	-	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	-	-	ND(5)	4800	
Hexavalent Chrome	NA	NA	NA	-	-	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-5							
	MW-5/ 12-18	MW5-2/ 3-19	MW5-3/ 9-19	MW5-4/ 11-19	MW5-5/ 5-20	MW5-6/ 8-20		
<b>Arsenic</b>	NA	2.7	ND(5)	1.54	<b>12.1</b>	<b>19.4</b>	<b>5</b>	
Barium	NA	NA	48.8	40.9	67.1	43.9	3200	
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	NA	NA	1.11	ND(1)	1.36	ND(1)	50	
Copper	NA	NA	ND(5)	ND(5)	ND(5)	6.13 <sup>ca</sup>	640	
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	NA	7.67	5.83	9.34	7.85	320	
Selenium	NA	NA	ND(5)	1.27	4.08	5.68 <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	ND(5)	ND(5)	ND(5)	4800	
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-6							
	MW-6/ 12-18	MW6-2/ 3-19	MW6-3/ 9-19	MW6-4/ 11-19	MW6-5/ 5-20	MW6-6/ 8-20		
Arsenic	NA	2.73	ND(5)	1.53	1.77	3.1	5	
Barium	NA	NA	11	4.91	24.7	23.9	3200	
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	NA	NA	ND(1)	ND(1)	ND(1) <sup>J</sup>	ND(1) <sup>J</sup>	50	
Copper	NA	NA	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>ca,J</sup>	640	
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	NA	1.43	2.76	ND(1) <sup>J</sup>	1.47 <sup>J</sup>	320	
Selenium	NA	NA	ND(5)	3.8	3.43	8.36 <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	ND(5)	ND(5) <sup>J</sup>	ND(5) <sup>J</sup>	4800	
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-7							
	MW-7/ 12-18	MW7-2/ 3-19	MW7-3/ 9-19	MW7-4/ 11-19	MW7-5/ 5-20	MW7-6 8-20		
Arsenic	NA	ND(1)	ND(5)	1.58	ND(1)	1.17	5	
Barium	NA	NA	142	120	62.4	102	3200	
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5	
Total Chromium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	50	
Copper	NA	NA	ND(5)	ND(5)	ND(5)	ND(5) <sup>ca</sup>	640	
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15	
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2	
Nickel	NA	NA	6.43	15.9	3.97	6.39	320	
Selenium	NA	NA	ND(5)	1.36	ND(1)	ND(1) <sup>ca</sup>	80	
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80	
Zinc	NA	NA	ND(5)	ND(5)	ND(5)	ND(5)	4800	
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA	

Table 13 (continued). Comparison of historic to current groundwater analytical results. Metals, filtered prior to analysis. Walker property.  
3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard
	MW-8						
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20	
Arsenic	NA	1.6	ND(5)	ND(1)	ND(1)	1.76	5
Barium	NA	NA	136	83.4	94.7	144 <sup>ca</sup>	3200
Cadmium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	5
Total Chromium	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	50
Copper	NA	NA	ND(5)	ND(5)	ND(5)	ND(5) <sup>ca</sup>	640
Lead	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	15
Mercury	NA	NA	ND(1)	ND(1)	ND(1)	ND(1)	2
Nickel	NA	NA	6.2	5.02	7.75	7.63	320
Selenium	NA	NA	ND(5)	ND(1)	1	1.37 <sup>ca</sup>	80
Silver	NA	NA	ND(5)	ND(1)	ND(5)	ND(1) <sup>ca</sup>	80
Zinc	NA	NA	ND(5)	ND(5)	5.47	ND(5)	4800
Hexavalent Chrome	NA	NA	NA	NA	NA	NA	NA

NA Not analyzed, or not applicable.

ND(5) Not detected above the analytical detection limit of 5 ppb.

**Highlighted** concentration exceeds the Ecology cleanup standard based on unrestricted (residential) land use.

ca The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

J Estimated concentration.

Table 14. Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) ( $\mu\text{g/L}$ ).

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-4							
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20		
Benzo(a)anthracene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)		
Chrysene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)		
Benzo(a)pyrene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)		
Benzo(b)fluoranthene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)		
Benzo(k)fluoranthene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)		
Indeno(1,2,3-cd)pyrene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)		
<u>Dibenzo(a,h)anthracene</u>	<u>ND(0.04)</u>	<u>ND(0.04)</u>	<u>ND(0.04)</u>	-	-	<u>ND(0.02)</u>		
Total TEC PAHs <sup>a</sup>	ND	ND	ND	-	-	ND	0.1 <sup>b</sup>	
Naphthalene	ND(0.4)	ND(0.4)	ND(0.4)	-	-	ND(0.2)	160	
Acenaphthylene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)	NA	
Acenaphthene	0.39	0.5	0.052	-	-	ND(0.02)	960	
Fluorene	0.091	0.2	0.069	-	-	0.022	640	
Phenanthrene	0.073 <sup>b</sup>	0.21	0.063	-	-	ND(0.02)	NA	
Anthracene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.02)	4800	
Fluoranthene	ND(0.04)	0.062	ND(0.04)	-	-	0.035	640	
Pyrene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	0.061	480	
Benzo(g,h,i)perylene	ND(0.04)	ND(0.04)	ND(0.04)	-	-	ND(0.04)	NA	

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 14 (continued). Comparison of historic to current groundwater analytical results. PAHs. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-8							
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20		
Benzo(a)anthracene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)		
Chrysene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)		
Benzo(a)pyrene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)		
Benzo(b)fluoranthene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)		
Benzo(k)fluoranthene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)		
Indeno(1,2,3-cd)pyrene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)		
<u>Dibenzo(a,h)anthracene</u>	<u>ND(0.04)</u>	<u>ND(0.04)</u>	<u>ND(0.04)</u>	<u>ND(0.04)</u>	<u>ND(0.04)</u>	<u>ND(0.02)</u>		
Total TEC PAHs <sup>a</sup>	ND	ND	ND	ND	ND	ND	0.1 <sup>b</sup>	
Naphthalene	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.2)	160	
Acenaphthylene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)	NA	
Acenaphthene	0.055	0.1	0.09	0.061	0.07	0.082	960	
Fluorene	ND(0.04)	0.061	0.054	ND(0.04)	ND(0.04)	0.051	640	
Phenanthrene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.06)	0.034	NA	
Anthracene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)	4800	
Fluoranthene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)	640	
Pyrene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.02)	480	
Benzo(g,h,i)perylene	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	ND(0.04)	NA	

ND(0.04) Not detected above the analytical detection limit of 0.04 ppb.

a Total toxic equivalent concentration (TEC) of carcinogenic PAHs (Benzo[a]anthracene, Chrysene, Benzo(a)pyrene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Indeno[1,2,3-cd]pyrene and Dibenzo[a,h]anthracene). WAC 173-340-708(8)(e)(ii) and -708(8)(e)(iii).

ND Not detected.

b MTCA Method A cleanup standard for carcinogenic PAHs based on Benzo(a)pyrene. WAC 173-340-708(8)(e)(iii).

fb Analyte was also detected in the laboratory method blank.

NA Cleanup standard has not been established, or is not applicable since the contaminant was not detected in the sample.

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

Table 15. Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) ( $\mu\text{g/L}$ ).

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-2							
	MW-2/ 12-18	MW2-2/ 3-19	MW2-3/ 9-19	MW2-4/ 11-19	MW2-5/ 5-20	MW2-6/ 8-20		
PCBs	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.1	
Ethylene Glycol	10700	ND(10000)	ND(10000)	10600	ND(10000)	ND(10000)	16000	

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-4							
	MW-4/ 12-18	MW4-2/ 3-19	MW4-3/ 9-19	MW4-4/ 11-19	MW4-5/ 5-20	MW4-6/ 8-20		
PCBs	ND(0.1)	ND(0.1)	ND(0.1)	-	-	ND(0.1)	0.1	
Ethylene Glycol	ND(10000)	ND(10000)	ND(10000)	-	-	ND(10000)	16000	

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Table 15 (continued). Comparison of historic to current groundwater analytical results. PCBs and Ethylene Glycol. Walker property. 3400 East Valley Road, Renton. All concentrations in parts-per-billion (ppb) (ug/L).

Sample Number/ Date	Well						Ecology Cleanup Standard	
	MW-8							
	MW-8/ 12-18	MW8-2/ 3-19	MW8-3/ 9-19	MW8-4/ 11-19	MW8-5/ 5-20	MW8-6/ 8-20		
PCBs	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)	0.1	
Ethylene Glycol	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	ND(10000)	16000	

ND(0.1)      Not detected above the analytical detection limit of 0.1 ppb.

**APPENDIX C**  
**GROUNDWATER ANALYTICAL RESULTS**  
**WALKER PROPERTY**  
**ROUND 6, AUGUST 25, 2020**

**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.

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September 4, 2020

Bill Kane, Project Manager  
Eco Compliance  
1823 Bremerton Ave NE  
Renton, WA 98059

Dear Mr Kane:

Included are the results from the testing of material submitted on August 25, 2020 from the Walker, F&BI 008381 project. There are 74 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days, or as directed by the Chain of Custody document. 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  
ECP0904R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 25, 2020 by Friedman & Bruya, Inc. from the Eco Compliance Walker, F&BI 008381 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Eco Compliance</u>
008381 -01	MW1-6
008381 -02	MW2-6
008381 -03	MW3-6
008381 -04	MW4-6
008381 -05	MW5-6
008381 -06	MW6-6
008381 -07	MW7-6
008381 -08	MW8-6

The samples were sent to Fremont Analytical for TOC, hexavalent chromium, and ethylene glycol analyses. The report will be forwarded upon receipt.

The dissolved metals samples were filtered at Friedman and Bruya on August 26, 2020 at 10:14 AM. The data were flagged accordingly.

6020B calibration standards and internal standards failed the acceptance criteria for several analytes. The samples were reanalyzed with similar results, indicating that the matrix is causing the failure of the calibration standards. The samples were diluted and reanalyzed with acceptable results. Both data sets were reported.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

Date Extracted: 08/26/20

Date Analyzed: 08/27/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
USING METHOD NWTPH-Gx**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 51-134)
MW1-6 008381-01	<100	86
MW2-6 008381-02	<100	88
MW3-6 008381-03	<100	87
MW4-6 008381-04	<100	89
MW5-6 008381-05	<100	94
MW6-6 008381-06	<100	92
MW7-6 008381-07	<100	93
MW8-6 008381-08	<100	94
Method Blank 00-1806 MB	<100	90

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

Date Extracted: 08/26/20

Date Analyzed: 08/27/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**  
**Sample Extracts Passed Through a  
Silica Gel Column Prior to Analysis**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> (% Recovery) (Limit 41-152)
MW1-6 008381-01	<50	<250	102
MW2-6 008381-02	<50	<250	85
MW3-6 008381-03	<50	<250	93
MW4-6 008381-04	<50	<250	56
MW5-6 008381-05	240 x	<250	84
MW6-6 008381-06	<50	<250	100
MW7-6 008381-07	<50	<250	99
MW8-6 008381-08	<50	<250	78
Method Blank 00-1922 MB	<50	<250	86

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

Date Extracted: 08/26/20

Date Analyzed: 08/26/20

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL  
USING METHOD NWTPH-Dx**  
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	Surrogate (% Recovery) (Limit 47-140)
MW1-6 008381-01	570 x	370 x	104
MW2-6 008381-02	340 x	<250	76
MW3-6 008381-03	550 x	530 x	80
MW4-6 008381-04	380 x	360 x	51
MW5-6 008381-05	1,400 x	750 x	73
MW6-6 008381-06	220 x	<250	106
MW7-6 008381-07	380 x	350 x	103
MW8-6 008381-08	790 x	650 x	76
Method Blank 00-1922 MB	<50	<250	94

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW1-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-01
Date Analyzed:	08/31/20	Data File:	008381-01.125
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.94
Barium	76.9 ca
Cadmium	<1
Chromium	<1
Copper	10.5 ca
Lead	<1
Mercury	<1
Nickel	3.64
Selenium	<1 ca
Silver	<1 ca
Zinc	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW1-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-01 x10
Date Analyzed:	09/02/20	Data File:	008381-01 x10.113
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<10
Copper	<50
Selenium	<10
Silver	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW2-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-02
Date Analyzed:	08/31/20	Data File:	008381-02.126
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	6.01
Barium	17.7 ca
Cadmium	<1
Chromium	<1 J
Copper	<5 ca J
Lead	<1
Mercury	<1
Nickel	1.16 J
Selenium	<1 ca
Silver	<1 ca
Zinc	<5 J

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Dissolved Metals By EPA Method 6020B**

Client ID:	MW2-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-02 x10
Date Analyzed:	09/02/20	Data File:	008381-02 x10.114
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Barium	16.9
Chromium	<10
Copper	<50
Nickel	<10
Selenium	<10
Silver	<10
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW3-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-03
Date Analyzed:	08/31/20	Data File:	008381-03.127
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	4.86
Barium	43.4 ca
Cadmium	<1
Chromium	<1 J
Copper	<5 ca J
Lead	<1
Mercury	<1
Nickel	2.45 J
Selenium	1.58 ca
Silver	<1 ca
Zinc	<5 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW3-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-03 x10
Date Analyzed:	09/02/20	Data File:	008381-03 x10.115
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Barium	44.4
Chromium	<10
Copper	<50
Nickel	<10
Selenium	<10
Silver	<10
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW4-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-04
Date Analyzed:	08/31/20	Data File:	008381-04.128
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.81
Barium	46.0 ca
Cadmium	<1
Chromium	<1
Copper	7.83 ca
Lead	<1
Mercury	<1
Nickel	3.47
Selenium	1.73 ca
Silver	<1 ca
Zinc	<5

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Dissolved Metals By EPA Method 6020B**

Client ID:	MW4-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-04 x10
Date Analyzed:	09/02/20	Data File:	008381-04 x10.118
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Barium	41.1
Copper	<50
Selenium	<10
Silver	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW5-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-05
Date Analyzed:	08/31/20	Data File:	008381-05.136
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	19.4
Barium	43.9
Cadmium	<1
Chromium	<1
Copper	6.13 ca
Lead	<1
Mercury	<1
Nickel	7.85
Selenium	5.68 ca
Silver	<1 ca
Zinc	<5

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Dissolved Metals By EPA Method 6020B**

Client ID:	MW5-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-05 x10
Date Analyzed:	09/02/20	Data File:	008381-05 x10.119
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Copper	<50
Selenium	<10
Silver	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW6-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-06
Date Analyzed:	08/31/20	Data File:	008381-06.137
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.10
Barium	23.9
Cadmium	<1
Chromium	<1 J
Copper	<5 ca J
Lead	<1
Mercury	<1
Nickel	1.47 J
Selenium	8.36 ca
Silver	<1 ca
Zinc	<5 J

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Dissolved Metals By EPA Method 6020B**

Client ID:	MW6-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-06 x10
Date Analyzed:	09/02/20	Data File:	008381-06 x10.120
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Chromium	<10
Copper	<50
Nickel	<10
Selenium	<10
Silver	<10
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW7-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-07
Date Analyzed:	08/31/20	Data File:	008381-07.138
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.17
Barium	102
Cadmium	<1
Chromium	<1
Copper	<5 ca
Lead	<1
Mercury	<1
Nickel	6.39
Selenium	<1 ca
Silver	<1 ca
Zinc	<5

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Dissolved Metals By EPA Method 6020B**

Client ID:	MW7-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-07 x10
Date Analyzed:	09/02/20	Data File:	008381-07 x10.122
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Copper	<50
Selenium	<10
Silver	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW8-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-08
Date Analyzed:	08/31/20	Data File:	008381-08.139
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	1.76
Barium	144 ca
Cadmium	<1
Chromium	<1
Copper	<5 ca
Lead	<1
Mercury	<1
Nickel	7.63
Selenium	1.37 ca
Silver	<1 ca
Zinc	<5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW8-6 f	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	008381-08 x10
Date Analyzed:	09/02/20	Data File:	008381-08 x10.121
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Barium	134
Copper	<50
Selenium	<10
Silver	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank f	Client:	Eco Compliance
Date Received:	NA	Project:	Walker, F&BI 008381
Date Extracted:	08/31/20	Lab ID:	I0-504 mb
Date Analyzed:	08/31/20	Data File:	I0-504 mb.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Nickel	<1
Selenium	<1
Silver	<1
Zinc	<5

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Total Metals By EPA Method 6020B**

Client ID:	MW1-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-01
Date Analyzed:	08/26/20	Data File:	008381-01.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	10.4
Barium	123
Cadmium	<1
Chromium	2.45 J
Copper	<5 J
Lead	1.45
Mercury	<1
Nickel	5.43 J
Selenium	<1
Silver	<1
Zinc	5.19 J

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Total Metals By EPA Method 6020B**

Client ID:	MW1-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-01 x10
Date Analyzed:	08/26/20	Data File:	008381-01 x10.065
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Chromium	<10
Copper	<50
Nickel	<10
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW2-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-02
Date Analyzed:	08/26/20	Data File:	008381-02.045
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	8.95
Barium	40.8
Cadmium	<1
Chromium	<1 J
Copper	<5 J
Lead	<1
Mercury	<1
Nickel	1.02 J
Selenium	1.54
Silver	<1
Zinc	<5 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW2-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-02 x10
Date Analyzed:	08/26/20	Data File:	008381-02 x10.066
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Chromium	<10
Copper	<50
Nickel	<10
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW3-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-03
Date Analyzed:	08/26/20	Data File:	008381-03.055
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	20.5
Barium	240 ca
Cadmium	<1
Chromium	6.95 J
Copper	20.4 J
Lead	13.7
Mercury	<1
Nickel	8.19 J
Selenium	3.13
Silver	<1
Zinc	17.5 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW3-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-03 x20
Date Analyzed:	08/27/20	Data File:	008381-03 x20.035
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
----------	-----------------------------

Barium	237
Chromium	29.8
Copper	<100
Nickel	33.9
Zinc	<100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW4-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-04
Date Analyzed:	08/26/20	Data File:	008381-04.057
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	99.0
Barium	1,530 ca ve
Cadmium	<1
Chromium	10.9 J
Copper	34.3 J
Lead	56.6
Mercury	<1
Nickel	12.7 J
Selenium	3.83
Silver	<1
Zinc	24.5 J

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW4-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-04 x50
Date Analyzed:	08/27/20	Data File:	008381-04 x50.040
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Barium	1,710
Chromium	52.9
Copper	<250
Nickel	68.0
Zinc	<250

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Total Metals By EPA Method 6020B**

Client ID:	MW5-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-05
Date Analyzed:	08/26/20	Data File:	008381-05.058
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	34.1
Barium	198 ca
Cadmium	<1
Chromium	7.92 J
Copper	12.1 J
Lead	4.06
Mercury	<1
Nickel	11.1 J
Selenium	5.79
Silver	<1
Zinc	12.5 J

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Total Metals By EPA Method 6020B**

Client ID:	MW5-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-05 x10
Date Analyzed:	08/27/20	Data File:	008381-05 x10.041
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Barium	192
Chromium	11.7
Copper	<50
Nickel	19.5
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW6-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-06
Date Analyzed:	08/26/20	Data File:	008381-06.059
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	3.10
Barium	52.8 ca
Cadmium	<1
Chromium	<1 J
Copper	<5 J
Lead	<1
Mercury	<1
Nickel	1.31 J
Selenium	8.27
Silver	<1
Zinc	<5 J

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Total Metals By EPA Method 6020B**

Client ID:	MW6-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-06 x10
Date Analyzed:	08/27/20	Data File:	008381-06 x10.042
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Barium	54.0
Chromium	<10
Copper	<50
Zinc	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW7-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-07
Date Analyzed:	08/27/20	Data File:	008381-07.043
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	2.89
Barium	115
Cadmium	<1
Chromium	<1
Copper	<5
Lead	4.28
Mercury	<1
Nickel	5.45
Selenium	<1
Silver	<1
Zinc	15.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	MW8-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-08
Date Analyzed:	08/27/20	Data File:	008381-08.044
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	3.27
Barium	166
Cadmium	<1
Chromium	1.29
Copper	<5
Lead	3.40
Mercury	<1
Nickel	8.03
Selenium	1.18
Silver	<1
Zinc	70.0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Eco Compliance
Date Received:	NA	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	I0-495 mb
Date Analyzed:	08/26/20	Data File:	I0-495 mb.039
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
Barium	<1
Cadmium	<1
Chromium	<1
Copper	<5
Lead	<1
Mercury	<1
Nickel	<1
Selenium	<1
Silver	<1
Zinc	<5

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW1-6  
 Date Received: 08/25/20  
 Date Extracted: 06/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-01  
 Data File: 082624.D  
 Instrument: GCMS4  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	97	63	127
4-Bromofluorobenzene	95	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW2-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-02  
 Data File: 082609.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW3-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-03  
 Data File: 082610.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	50	150
Toluene-d8	94	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW4-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-04  
 Data File: 082611.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	94	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW5-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-05  
 Data File: 082616.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	69
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW6-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-06  
 Data File: 082612.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	92	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	1.0	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW7-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-07  
 Data File: 082613.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	1.1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID: MW8-6  
 Date Received: 08/25/20  
 Date Extracted: 08/26/20  
 Date Analyzed: 08/26/20  
 Matrix: Water  
 Units: ug/L (ppb)

Client: Eco Compliance  
 Project: Walker, F&BI 008381  
 Lab ID: 008381-08  
 Data File: 082614.D  
 Instrument: GCMS13  
 Operator: AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	91	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For Volatile Compounds By EPA Method 8260D**

Client Sample ID:	Method Blank	Client:	Eco Compliance
Date Received:	Not Applicable	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	00-1868 mb
Date Analyzed:	08/26/20	Data File:	082609.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	AEN

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	96	60	133

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<1	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<5	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<50	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Hexane	<5	o-Xylene	<1
Methylene chloride	<5	Styrene	<1
Methyl t-butyl ether (MTBE)	<1	Isopropylbenzene	<1
trans-1,2-Dichloroethene	<1	Bromoform	<5
1,1-Dichloroethane	<1	n-Propylbenzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1
cis-1,2-Dichloroethene	<1	1,3,5-Trimethylbenzene	<1
Chloroform	<1	1,1,2,2-Tetrachloroethane	<1
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<1	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<1	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<1	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<1	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<1	1,2,2-Dibromo-3-chloropropane	<1
cis-1,3-Dichloropropene	<1	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<1
trans-1,3-Dichloropropene	<1	Naphthalene	<1
1,1,2-Trichloroethane	<1	1,2,3-Trichlorobenzene	<1
2-Hexanone	<1		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID: MW1-6  
Date Received: 08/25/20  
Date Extracted: 08/26/20  
Date Analyzed: 08/27/20  
Matrix: Water  
Units: ug/L (ppb)

Client: Eco Compliance  
Project: Walker, F&BI 008381  
Lab ID: 008381-01  
Data File: 082616.D  
Instrument: GCMS9  
Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	21	15	33
Phenol-d6	13	10	20
Nitrobenzene-d5	63	17	143
2-Fluorobiphenyl	59	50	150
2,4,6-Tribromophenol	73	50	150
Terphenyl-d14	65	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	0.053
Fluorene	0.051
Phenanthrene	0.026
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW2-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-02
Date Analyzed:	08/27/20	Data File:	082617.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	22	15	33
Phenol-d6	14	10	20
Nitrobenzene-d5	80	17	143
2-Fluorobiphenyl	82	50	150
2,4,6-Tribromophenol	93	50	150
Terphenyl-d14	85	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID: MW3-6  
Date Received: 08/25/20  
Date Extracted: 08/26/20  
Date Analyzed: 08/27/20  
Matrix: Water  
Units: ug/L (ppb)

Client: Eco Compliance  
Project: Walker, F&BI 008381  
Lab ID: 008381-03  
Data File: 082618.D  
Instrument: GCMS9  
Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	23	15	33
Phenol-d6	18	10	20
Nitrobenzene-d5	76	17	143
2-Fluorobiphenyl	78	50	150
2,4,6-Tribromophenol	89	50	150
Terphenyl-d14	79	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	0.034
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW4-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-04
Date Analyzed:	08/27/20	Data File:	082619.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	11 ip	15	33
Phenol-d6	10	10	20
Nitrobenzene-d5	25	17	143
2-Fluorobiphenyl	17 ip	50	150
2,4,6-Tribromophenol	26 ip	50	150
Terphenyl-d14	16 ip	50	150

Compounds:	Concentration ug/L (ppb)
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Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	0.022
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	0.035
Pyrene	0.061
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW5-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-05
Date Analyzed:	08/27/20	Data File:	082710.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	21	15	33
Phenol-d6	17	10	20
Nitrobenzene-d5	72	17	143
2-Fluorobiphenyl	74	50	150
2,4,6-Tribromophenol	82	50	150
Terphenyl-d14	88	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	50 ve
Acenaphthylene	0.12
Acenaphthene	8.8
Fluorene	5.4
Phenanthrene	4.7
Anthracene	0.77
Fluoranthene	1.1
Pyrene	0.98
Benz(a)anthracene	0.16
Chrysene	0.19
Benzo(a)pyrene	0.064
Benzo(b)fluoranthene	0.091
Benzo(k)fluoranthene	0.034
Indeno(1,2,3-cd)pyrene	0.026
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW5-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-05 1/10
Date Analyzed:	08/28/20	Data File:	082811.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	21 d	15	33
Phenol-d6	15 d	10	20
Nitrobenzene-d5	62 d	17	143
2-Fluorobiphenyl	72 d	50	150
2,4,6-Tribromophenol	91 d	50	150
Terphenyl-d14	76 d	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	60

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID: MW6-6  
Date Received: 08/25/20  
Date Extracted: 08/26/20  
Date Analyzed: 08/27/20  
Matrix: Water  
Units: ug/L (ppb)

Client: Eco Compliance  
Project: Walker, F&BI 008381  
Lab ID: 008381-06  
Data File: 082711.D  
Instrument: GCMS9  
Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	23	15	33
Phenol-d6	18	10	20
Nitrobenzene-d5	83	17	143
2-Fluorobiphenyl	85	50	150
2,4,6-Tribromophenol	89	50	150
Terphenyl-d14	102	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	MW7-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	008381-07
Date Analyzed:	08/27/20	Data File:	082712.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	9 ip	15	33
Phenol-d6	10	10	20
Nitrobenzene-d5	76	17	143
2-Fluorobiphenyl	83	50	150
2,4,6-Tribromophenol	37 ip	50	150
Terphenyl-d14	104	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	0.21
Acenaphthylene	<0.02
Acenaphthene	1.1
Fluorene	0.41
Phenanthrene	0.10
Anthracene	<0.02
Fluoranthene	0.023
Pyrene	0.024
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID: MW8-6  
Date Received: 08/25/20  
Date Extracted: 08/26/20  
Date Analyzed: 08/27/20  
Matrix: Water  
Units: ug/L (ppb)

Client: Eco Compliance  
Project: Walker, F&BI 008381  
Lab ID: 008381-08  
Data File: 082713.D  
Instrument: GCMS9  
Operator: ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	21	15	33
Phenol-d6	15	10	20
Nitrobenzene-d5	79	17	143
2-Fluorobiphenyl	80	50	150
2,4,6-Tribromophenol	90	50	150
Terphenyl-d14	93	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	0.082
Fluorene	0.051
Phenanthrene	0.034
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270E

Client Sample ID:	Method Blank	Client:	Eco Compliance
Date Received:	Not Applicable	Project:	Walker, F&BI 008381
Date Extracted:	08/26/20	Lab ID:	00-1923 mb
Date Analyzed:	08/26/20	Data File:	082608.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	28	15	33
Phenol-d6	17	10	20
Nitrobenzene-d5	81	17	143
2-Fluorobiphenyl	81	50	150
2,4,6-Tribromophenol	81	50	150
Terphenyl-d14	92	50	150

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.2
Acenaphthylene	<0.02
Acenaphthene	<0.02
Fluorene	<0.02
Phenanthrene	<0.02
Anthracene	<0.02
Fluoranthene	<0.02
Pyrene	<0.02
Benz(a)anthracene	<0.02
Chrysene	<0.02
Benzo(a)pyrene	<0.02
Benzo(b)fluoranthene	<0.02
Benzo(k)fluoranthene	<0.02
Indeno(1,2,3-cd)pyrene	<0.02
Dibenz(a,h)anthracene	<0.02
Benzo(g,h,i)perylene	<0.04

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For PCBs By EPA Method 8082A**

Client Sample ID:	MW1-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-01
Date Analyzed:	08/27/20	Data File:	082723.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	46	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For PCBs By EPA Method 8082A**

Client Sample ID:	MW2-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-02
Date Analyzed:	08/27/20	Data File:	082724.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	33	24	127

Compounds:	Concentration ug/L (ppb)
------------	-----------------------------

Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For PCBs By EPA Method 8082A**

Client Sample ID:	MW3-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-03
Date Analyzed:	08/27/20	Data File:	082725.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	39	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	MW4-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-04
Date Analyzed:	08/27/20	Data File:	082726.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	2 ip	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	MW5-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-05
Date Analyzed:	08/27/20	Data File:	082727.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	30	24	127

Compounds:	Concentration ug/L (ppb)
------------	-----------------------------

Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	MW6-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-06
Date Analyzed:	08/27/20	Data File:	082728.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	52	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

**Analysis For PCBs By EPA Method 8082A**

Client Sample ID:	MW7-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-07
Date Analyzed:	08/27/20	Data File:	082729.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	46	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	MW8-6	Client:	Eco Compliance
Date Received:	08/25/20	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	008381-08
Date Analyzed:	08/27/20	Data File:	082730.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	39	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For PCBs By EPA Method 8082A

Client Sample ID:	Method Blank	Client:	Eco Compliance
Date Received:	Not Applicable	Project:	Walker, F&BI 008381
Date Extracted:	08/27/20	Lab ID:	00-1924 mb
Date Analyzed:	08/27/20	Data File:	082704.D
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	33	24	127

Compounds:	Concentration ug/L (ppb)
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Aroclor 1221	<0.1
Aroclor 1232	<0.1
Aroclor 1016	<0.1
Aroclor 1242	<0.1
Aroclor 1248	<0.1
Aroclor 1254	<0.1
Aroclor 1260	<0.1
Aroclor 1262	<0.1
Aroclor 1268	<0.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TPH AS GASOLINE  
USING METHOD NWTPH-Gx**

Laboratory Code: 008354-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	116	69-134

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

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

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	84	92	63-142	9

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	88	92	61-133	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: 008342-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<1	100	100	75-125	0
Barium	ug/L (ppb)	50	7.26	100	102	75-125	2
Cadmium	ug/L (ppb)	5	<1	99	101	75-125	2
Chromium	ug/L (ppb)	20	<1	98	100	75-125	2
Copper	ug/L (ppb)	20	<5	93	96	75-125	3
Lead	ug/L (ppb)	10	<1	95	95	75-125	0
Mercury	ug/L (ppb)	5	<1	101	103	75-125	2
Nickel	ug/L (ppb)	20	1.76	95	100	75-125	5
Selenium	ug/L (ppb)	5	<1	106	106	75-125	0
Silver	ug/L (ppb)	5	<1	94	97	75-125	3
Zinc	ug/L (ppb)	50	<5	96	104	75-125	8

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	94	80-120
Barium	ug/L (ppb)	50	100	80-120
Cadmium	ug/L (ppb)	5	97	80-120
Chromium	ug/L (ppb)	20	94	80-120
Copper	ug/L (ppb)	20	97	80-120
Lead	ug/L (ppb)	10	95	80-120
Mercury	ug/L (ppb)	5	98	80-120
Nickel	ug/L (ppb)	20	95	80-120
Selenium	ug/L (ppb)	5	98	80-120
Silver	ug/L (ppb)	5	97	80-120
Zinc	ug/L (ppb)	50	95	80-120

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES  
FOR DISSOLVED METALS USING EPA METHOD 6020B**

Laboratory Code: 008381-02 x20 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Arsenic	ug/L (ppb)	10	<20	101	101	75-125	0
Barium	ug/L (ppb)	50	38.3	103	104	75-125	1
Cadmium	ug/L (ppb)	5	<20	102	99	75-125	3
Chromium	ug/L (ppb)	20	<20	97	102	75-125	5
Copper	ug/L (ppb)	20	<100	93	91	75-125	2
Lead	ug/L (ppb)	10	<20	102	100	75-125	2
Mercury	ug/L (ppb)	5	<20	96	95	75-125	1
Nickel	ug/L (ppb)	20	<20	96	96	75-125	0
Selenium	ug/L (ppb)	5	<20	84	90	75-125	7
Silver	ug/L (ppb)	5	<20	86	86	75-125	0
Zinc	ug/L (ppb)	50	<100	93	102	75-125	9

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	91	80-120
Barium	ug/L (ppb)	50	97	80-120
Cadmium	ug/L (ppb)	5	96	80-120
Chromium	ug/L (ppb)	20	99	80-120
Copper	ug/L (ppb)	20	97	80-120
Lead	ug/L (ppb)	10	91	80-120
Mercury	ug/L (ppb)	5	95	80-120
Nickel	ug/L (ppb)	20	99	80-120
Selenium	ug/L (ppb)	5	95	80-120
Silver	ug/L (ppb)	5	98	80-120
Zinc	ug/L (ppb)	50	95	80-120

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

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

Laboratory Code: 008381-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Recovery MS	Percent Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<1	77	10-172
Chloromethane	ug/L (ppb)	50	<1	83	25-166
Vinyl chloride	ug/L (ppb)	50	<0.2	87	36-166
Bromomethane	ug/L (ppb)	50	<5	104	47-169
Chloroethane	ug/L (ppb)	50	<1	98	46-160
Trichlorofluoromethane	ug/L (ppb)	50	<1	96	44-165
Acetone	ug/L (ppb)	250	<50	91	10-182
1,1-Dichloroethene	ug/L (ppb)	50	<1	95	60-136
Hexane	ug/L (ppb)	50	<5	88	52-150
Methylene chloride	ug/L (ppb)	50	<5	94	67-132
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	97	74-127
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	93	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	93	70-128
2,2-Dichloropropane	ug/L (ppb)	50	<1	75	36-154
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	96	71-127
Chloroform	ug/L (ppb)	50	<1	96	65-132
2-Butanone (MEK)	ug/L (ppb)	250	<20	91	10-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	94	48-149
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	91	60-146
1,1-Dichloropropene	ug/L (ppb)	50	<1	96	69-133
Carbon tetrachloride	ug/L (ppb)	50	<1	90	56-152
Benzene	ug/L (ppb)	50	<0.35	94	76-125
Trichloroethene	ug/L (ppb)	50	<1	88	66-135
1,2-Dichloropropane	ug/L (ppb)	50	<1	89	78-125
Bromodichloromethane	ug/L (ppb)	50	<1	87	61-150
Dibromomethane	ug/L (ppb)	50	<1	91	66-141
4-Methyl-2-pentanone	ug/L (ppb)	250	<1	95	10-185
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	87	72-132
Toluene	ug/L (ppb)	50	<1	93	76-122
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	89	76-130
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	83	68-131
2-Hexanone	ug/L (ppb)	250	<1	97	10-185
1,3-Dichloropropane	ug/L (ppb)	50	<1	96	71-128
Tetrachloroethene	ug/L (ppb)	50	<1	93	10-226
Dibromochloromethane	ug/L (ppb)	50	<1	89	70-139
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	96	69-134
Chlorobenzene	ug/L (ppb)	50	<1	97	77-122
Ethylbenzene	ug/L (ppb)	50	<1	95	69-135
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	93	73-137
m,p-Xylene	ug/L (ppb)	100	<2	96	69-135
o-Xylene	ug/L (ppb)	50	<1	96	60-140
Styrene	ug/L (ppb)	50	<1	91	71-133
Isopropylbenzene	ug/L (ppb)	50	<1	96	65-142
Bromoform	ug/L (ppb)	50	<5	96	65-142
n-Propylbenzene	ug/L (ppb)	50	<1	94	58-144
Bromobenzene	ug/L (ppb)	50	<1	94	75-124
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	94	66-137
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	101	51-154
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	93	53-150
2-Chlorotoluene	ug/L (ppb)	50	<1	94	66-127
4-Chlorotoluene	ug/L (ppb)	50	<1	95	65-130
tert-Butylbenzene	ug/L (ppb)	50	<1	93	65-137
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	95	59-146
sec-Butylbenzene	ug/L (ppb)	50	<1	94	64-140
p-Isopropyltoluene	ug/L (ppb)	50	<1	94	65-141
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	96	72-123
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	95	69-126
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	96	69-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<1	89	32-164
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	93	66-136
Hexachlorobutadiene	ug/L (ppb)	50	<1	92	60-143
Naphthalene	ug/L (ppb)	50	<1	91	44-164
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	97	69-148

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	91	89	25-158	2
Chloromethane	ug/L (ppb)	50	94	92	45-156	2
Vinyl chloride	ug/L (ppb)	50	112	112	50-154	0
Bromomethane	ug/L (ppb)	50	103	101	55-143	2
Chloroethane	ug/L (ppb)	50	102	100	58-146	2
Trichlorofluoromethane	ug/L (ppb)	250	101	100	50-150	1
Acetone	ug/L (ppb)	250	100	100	22-155	0
1,1-Dichloroethene	ug/L (ppb)	50	98	96	67-136	2
Hexane	ug/L (ppb)	50	97	92	57-137	5
Methylene chloride	ug/L (ppb)	50	94	93	39-148	1
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	99	96	64-147	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	98	96	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	96	97	74-135	1
2,2-Dichloropropane	ug/L (ppb)	50	100	99	55-143	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	99	98	74-136	1
Chloroform	ug/L (ppb)	50	92	91	74-134	1
2-Butanone (MEK)	ug/L (ppb)	250	98	97	37-150	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	99	99	66-129	0
1,1,1-Trichloroethane	ug/L (ppb)	50	101	99	74-142	2
1,1-Dichloropropene	ug/L (ppb)	50	98	95	77-129	3
Carbon tetrachloride	ug/L (ppb)	50	97	96	75-158	1
Benzene	ug/L (ppb)	50	92	91	69-134	1
Trichloroethene	ug/L (ppb)	50	90	89	67-133	1
1,2-Dichloropropane	ug/L (ppb)	50	90	88	71-134	2
Bromodichloromethane	ug/L (ppb)	50	94	94	76-132	0
Dibromomethane	ug/L (ppb)	50	94	95	68-132	1
4-Methyl-2-pentanone	ug/L (ppb)	250	96	94	65-138	2
cis-1,3-Dichloropropene	ug/L (ppb)	50	97	94	74-140	3
Toluene	ug/L (ppb)	50	99	98	72-122	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	84	83	80-136	1
1,1,2-Trichloroethane	ug/L (ppb)	50	96	96	75-124	0
2-Hexanone	ug/L (ppb)	250	99	98	60-136	1
1,3-Dichloropropane	ug/L (ppb)	50	98	98	76-126	0
Tetrachloroethene	ug/L (ppb)	50	93	91	76-121	2
Dibromochloromethane	ug/L (ppb)	50	99	98	84-133	1
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	101	99	82-115	2
Chlorobenzene	ug/L (ppb)	50	100	98	83-114	2
Ethylbenzene	ug/L (ppb)	50	98	95	77-124	3
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	101	99	84-127	2
m,p-Xylene	ug/L (ppb)	100	101	100	81-112	1
o-Xylene	ug/L (ppb)	50	96	94	81-121	2
Styrene	ug/L (ppb)	50	102	101	84-119	1
Isopropylbenzene	ug/L (ppb)	50	100	97	80-117	3
Bromoform	ug/L (ppb)	50	99	100	74-136	1
n-Propylbenzene	ug/L (ppb)	50	98	98	74-126	0
Bromobenzene	ug/L (ppb)	50	100	100	80-121	0
1,3,5-Trimethylbenzene	ug/L (ppb)	50	105	106	78-123	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	97	98	66-126	1
1,2,3-Trichloropropane	ug/L (ppb)	50	100	100	67-124	0
2-Chlorotoluene	ug/L (ppb)	50	98	99	77-127	1
4-Chlorotoluene	ug/L (ppb)	50	100	99	78-128	1
tert-Butylbenzene	ug/L (ppb)	50	101	100	80-123	1
1,2,4-Trimethylbenzene	ug/L (ppb)	50	100	100	79-122	0
sec-Butylbenzene	ug/L (ppb)	50	101	100	80-116	1
p-Isopropyltoluene	ug/L (ppb)	50	101	101	81-123	0
1,3-Dichlorobenzene	ug/L (ppb)	50	100	99	83-113	1
1,4-Dichlorobenzene	ug/L (ppb)	50	101	100	81-112	1
1,2-Dichlorobenzene	ug/L (ppb)	50	92	94	84-112	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	102	101	57-141	1
1,2,4-Trichlorobenzene	ug/L (ppb)	50	104	104	72-130	0
Hexachlorobutadiene	ug/L (ppb)	50	97	98	53-141	1
Naphthalene	ug/L (ppb)	50	104	104	64-133	0
1,2,3-Trichlorobenzene	ug/L (ppb)	50	91	86	65-136	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270E**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	5	83	80	70-130	4
Acenaphthylene	ug/L (ppb)	5	95	90	70-130	5
Acenaphthene	ug/L (ppb)	5	90	85	70-130	6
Fluorene	ug/L (ppb)	5	96	91	70-130	5
Phenanthrene	ug/L (ppb)	5	91	89	70-130	2
Anthracene	ug/L (ppb)	5	95	90	70-130	5
Fluoranthene	ug/L (ppb)	5	102	96	70-130	6
Pyrene	ug/L (ppb)	5	95	92	70-130	3
Benz(a)anthracene	ug/L (ppb)	5	95	91	70-130	4
Chrysene	ug/L (ppb)	5	96	92	70-130	4
Benz(a)pyrene	ug/L (ppb)	5	103	99	70-130	4
Benz(b)fluoranthene	ug/L (ppb)	5	106	101	70-130	5
Benz(k)fluoranthene	ug/L (ppb)	5	102	101	70-130	1
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	5	82	94	70-130	14
Dibenz(a,h)anthracene	ug/L (ppb)	5	79	85	70-130	7
Benzo(g,h,i)perylene	ug/L (ppb)	5	78	83	70-130	6

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 09/04/20

Date Received: 08/25/20

Project: Walker, F&BI 008381

**QUALITY ASSURANCE RESULTS  
FOR THE ANALYSIS OF WATER SAMPLES FOR  
POLYCHLORINATED BIPHENYLS AS  
AROCLOR 1016/1260 BY EPA METHOD 8082A**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	0.25	55	48	25-111	14
Aroclor 1260	ug/L (ppb)	0.25	67	56	23-123	18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

**Data Qualifiers & Definitions**

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

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

ca - The calibration results for the analyte were outside of acceptance criteria. The value reported is an estimate.

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

cf - The sample was centrifuged prior to analysis.

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

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

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte 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 due to sample matrix effects.

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.



**Fremont**  
*Analytical*

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**Friedman & Bruya**  
Michael Erdahl  
3012 16th Ave. W.  
Seattle, WA 98119

**RE: 008381**  
**Work Order Number: 2008343**

September 02, 2020

**Attention Michael Erdahl:**

Fremont Analytical, Inc. received 8 sample(s) on 8/26/2020 for the analyses presented in the following report.

**Glycols by SW8015**

**Hexavalent Chromium by SM 3500 Cr B**

**Total Organic Carbon by SM 5310C**

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes  
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing  
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing  
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

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Original

[www.fremontanalytical.com](http://www.fremontanalytical.com)



Date: 09/02/2020

**CLIENT:** Friedman & Bruya  
**Project:** 008381  
**Work Order:** 2008343

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2008343-001	MW1-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-002	MW2-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-003	MW3-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-004	MW4-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-005	MW5-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-006	MW6-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-007	MW7-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM
2008343-008	MW8-6	08/25/2020 12:00 AM	08/26/2020 9:31 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original



## Case Narrative

WO#: 2008343

Date: 9/2/2020

---

**CLIENT:** Friedman & Bruya  
**Project:** 008381

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### I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

**Qualifiers:**

- \* - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

**Acronyms:**

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



## Analytical Report

Work Order: 2008343

Date Reported: 9/2/2020

**CLIENT:** Friedman & Bruya

**Project:** 008381

**Lab ID:** 2008343-001

**Collection Date:** 8/25/2020

**Client Sample ID:** MW1-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Ethylene glycol	ND	10.0		mg/L	1	9/1/2020 3:30:05 PM
Surr: 2,4,6-Tribromophenol	110	22.2 - 154		%Rec	1	9/1/2020 3:30:05 PM

### Total Organic Carbon by SM 5310C

Total Organic Carbon	15.7	0.500		mg/L	1	8/31/2020 6:29:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

				Batch ID: R61546	Analyst: SS
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Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 11:25:00 AM
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**Lab ID:** 2008343-002

**Collection Date:** 8/25/2020

**Client Sample ID:** MW2-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

				Batch ID: 29547	Analyst: DW
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Ethylene glycol	ND	10.0		mg/L	1	9/1/2020 3:44:04 PM
Surr: 2,4,6-Tribromophenol	110	22.2 - 154		%Rec	1	9/1/2020 3:44:04 PM

### Total Organic Carbon by SM 5310C

				Batch ID: R61546	Analyst: SS
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Total Organic Carbon	30.9	0.500		mg/L	1	8/31/2020 8:10:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

				Batch ID: R61431	Analyst: WF
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Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 10:31:00 AM
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## Analytical Report

Work Order: 2008343

Date Reported: 9/2/2020

**CLIENT:** Friedman & Bruya

**Project:** 008381

**Lab ID:** 2008343-003

**Collection Date:** 8/25/2020

**Client Sample ID:** MW3-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Ethylene glycol	ND	10.0	mg/L	1	9/1/2020 3:58:03 PM
Surr: 2,4,6-Tribromophenol	110	22.2 - 154	%Rec	1	9/1/2020 3:58:03 PM

### Total Organic Carbon by SM 5310C

Total Organic Carbon	34.1	0.500	mg/L	1	8/31/2020 9:21:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 10:51:00 AM
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**Lab ID:** 2008343-004

**Collection Date:** 8/25/2020

**Client Sample ID:** MW4-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Ethylene glycol	ND	10.0	mg/L	1	9/1/2020 4:12:02 PM
Surr: 2,4,6-Tribromophenol	112	22.2 - 154	%Rec	1	9/1/2020 4:12:02 PM

### Total Organic Carbon by SM 5310C

Total Organic Carbon	23.5	0.500	mg/L	1	8/31/2020 9:44:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 11:01:00 AM
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## Analytical Report

Work Order: **2008343**

Date Reported: **9/2/2020**

**CLIENT:** Friedman & Bruya

**Project:** 008381

**Lab ID:** 2008343-005

**Collection Date:** 8/25/2020

**Client Sample ID:** MW5-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Batch ID: 29547 Analyst: DW

Ethylene glycol	ND	10.0		mg/L	1	9/1/2020 4:41:30 PM
Surr: 2,4,6-Tribromophenol	106	22.2 - 154		%Rec	1	9/1/2020 4:41:30 PM

### Total Organic Carbon by SM 5310C

Batch ID: R61546 Analyst: SS

Total Organic Carbon	79.4	2.00	D	mg/L	4	9/1/2020 10:48:00 AM
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### Hexavalent Chromium by SM 3500 Cr B

Batch ID: R61431 Analyst: WF

Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 11:05:00 AM
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**Lab ID:** 2008343-006

**Collection Date:** 8/25/2020

**Client Sample ID:** MW6-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Batch ID: 29547 Analyst: DW

Ethylene glycol	ND	10.0		mg/L	1	9/1/2020 4:55:21 PM
Surr: 2,4,6-Tribromophenol	115	22.2 - 154		%Rec	1	9/1/2020 4:55:21 PM

### Total Organic Carbon by SM 5310C

Batch ID: R61546 Analyst: SS

Total Organic Carbon	35.9	0.500		mg/L	1	8/31/2020 10:30:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

Batch ID: R61431 Analyst: WF

Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 11:20:00 AM
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## Analytical Report

Work Order: 2008343

Date Reported: 9/2/2020

**CLIENT:** Friedman & Bruya

**Project:** 008381

**Lab ID:** 2008343-007

**Collection Date:** 8/25/2020

**Client Sample ID:** MW7-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Ethylene glycol	ND	10.0	mg/L	1	9/1/2020 5:09:19 PM
Surr: 2,4,6-Tribromophenol	114	22.2 - 154	%Rec	1	9/1/2020 5:09:19 PM

### Total Organic Carbon by SM 5310C

Total Organic Carbon	6.71	0.500	mg/L	1	8/31/2020 10:52:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

Batch ID: R61431 Analyst: WF

Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 10:56:00 AM
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**Lab ID:** 2008343-008

**Collection Date:** 8/25/2020

**Client Sample ID:** MW8-6

**Matrix:** Water

<b>Analyses</b>	<b>Result</b>	<b>RL</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
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### Glycols by SW8015

Batch ID: 29547 Analyst: DW

Ethylene glycol	ND	10.0	mg/L	1	9/1/2020 5:23:14 PM
Surr: 2,4,6-Tribromophenol	111	22.2 - 154	%Rec	1	9/1/2020 5:23:14 PM

### Total Organic Carbon by SM 5310C

Batch ID: R61546 Analyst: SS

Total Organic Carbon	19.9	0.500	mg/L	1	8/31/2020 11:25:00 PM
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### Hexavalent Chromium by SM 3500 Cr B

Batch ID: R61431 Analyst: WF

Chromium, Hexavalent	ND	0.0450	H	mg/L	1	8/26/2020 11:39:00 AM
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Date: 9/2/2020

Work Order: 2008343

CLIENT: Friedman &amp; Bruya

Project: 008381

## QC SUMMARY REPORT

## Hexavalent Chromium by SM 3500 Cr B

Sample ID: MBL-R61431	SampType: MBLK	Units: mg/L			Prep Date: 8/26/2020			RunNo: 61431			
Client ID: MBLKW	Batch ID: R61431				Analysis Date: 8/26/2020			SeqNo: 1232329			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.0450									

Sample ID: LCS-R61431	SampType: LCS	Units: mg/L			Prep Date: 8/26/2020			RunNo: 61431			
Client ID: LCSW	Batch ID: R61431				Analysis Date: 8/26/2020			SeqNo: 1232330			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	0.237	0.0450	0.2500	0	94.8	88.9	106				

Sample ID: 2008343-002BDUP	SampType: DUP	Units: mg/L			Prep Date: 8/26/2020			RunNo: 61431			
Client ID: MW2-6	Batch ID: R61431				Analysis Date: 8/26/2020			SeqNo: 1232332			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.0450							0	20	H

Sample ID: 2008343-002BMS	SampType: MS	Units: mg/L			Prep Date: 8/26/2020			RunNo: 61431			
Client ID: MW2-6	Batch ID: R61431				Analysis Date: 8/26/2020			SeqNo: 1232333			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.0450	0.2500	0	0	69.6	124				SH

## NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID: 2008343-002BMSD	SampType: MSD	Units: mg/L			Prep Date: 8/26/2020			RunNo: 61431			
Client ID: MW2-6	Batch ID: R61431				Analysis Date: 8/26/2020			SeqNo: 1232334			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium, Hexavalent	ND	0.0450	0.2500	0	0	69.6	124		0	20	SH

## NOTES:

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



Date: 9/2/2020

Work Order: 2008343

CLIENT: Friedman &amp; Bruya

Project: 008381

**QC SUMMARY REPORT****Total Organic Carbon by SM 5310C**

Sample ID: MBL-R61546	SampType: MBLK	Units: mg/L			Prep Date: 8/31/2020			RunNo: 61546			
Client ID: MBLKW	Batch ID: R61546				Analysis Date: 8/31/2020			SeqNo: 1234909			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	ND	0.500									

Sample ID: LCS-R61546	SampType: LCS	Units: mg/L			Prep Date: 8/31/2020			RunNo: 61546			
Client ID: LCSW	Batch ID: R61546				Analysis Date: 8/31/2020			SeqNo: 1234910			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	4.65	0.500	5.000	0	93.0	90	118				

Sample ID: 2008343-001CDUP	SampType: DUP	Units: mg/L			Prep Date: 8/31/2020			RunNo: 61546			
Client ID: MW1-6	Batch ID: R61546				Analysis Date: 8/31/2020			SeqNo: 1234912			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	15.7	0.500							15.72	0.140	20

Sample ID: 2008343-001CMS	SampType: MS	Units: mg/L			Prep Date: 8/31/2020			RunNo: 61546			
Client ID: MW1-6	Batch ID: R61546				Analysis Date: 8/31/2020			SeqNo: 1234913			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	20.1	0.500	5.000	15.72	87.5	80.9	124				

Sample ID: 2008343-001CMSD	SampType: MSD	Units: mg/L			Prep Date: 8/31/2020			RunNo: 61546			
Client ID: MW1-6	Batch ID: R61546				Analysis Date: 8/31/2020			SeqNo: 1234914			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Organic Carbon	19.8	0.500	5.000	15.72	80.6	80.9	124	20.10	1.74	30	S

**NOTES:**

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.



Date: 9/2/2020

Work Order: 2008343

CLIENT: Friedman &amp; Bruya

Project: 008381

## QC SUMMARY REPORT Glycols by SW8015

Sample ID:	MB-29547	SampType:	MBLK	Units: mg/L		Prep Date: 9/1/2020		RunNo: 61563	
Client ID:	MBLKW	Batch ID:	29547			Analysis Date: 9/1/2020		SeqNo: 1235081	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Ethylene glycol	ND	10.0							
Surr: 2,4,6-Tribromophenol	72.3		64.00		113	22.2	154		
Sample ID:	LCS-29547	SampType:	LCS	Units: mg/L		Prep Date: 9/1/2020		RunNo: 61563	
Client ID:	LCSW	Batch ID:	29547			Analysis Date: 9/1/2020		SeqNo: 1235079	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Ethylene glycol	411	10.0	400.0	0	103	47	143		
Surr: 2,4,6-Tribromophenol	72.1		64.00		113	22.2	154		
Sample ID:	LCSD-29547	SampType:	LCSD	Units: mg/L		Prep Date: 9/1/2020		RunNo: 61563	
Client ID:	LCSW02	Batch ID:	29547			Analysis Date: 9/1/2020		SeqNo: 1235080	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Ethylene glycol	426	10.0	400.0	0	106	47	143	410.7	3.62 30
Surr: 2,4,6-Tribromophenol	71.8		64.00		112	22.2	154		0
Sample ID:	2008343-001AMS	SampType:	MS	Units: mg/L		Prep Date: 9/1/2020		RunNo: 61563	
Client ID:	MW1-6	Batch ID:	29547			Analysis Date: 9/1/2020		SeqNo: 1235068	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Ethylene glycol	357	10.0	400.0	3.964	88.3	14.9	163		
Surr: 2,4,6-Tribromophenol	75.0		64.00		117	22.2	154		



## Sample Log-In Check List

Client Name: **FB**  
Logged by: **Gabrielle Coeuille**

Work Order Number: **2008343**

Date Received: **8/26/2020 9:31:00 AM**

### Chain of Custody

1. Is Chain of Custody complete? Yes  No  Not Present   
2. How was the sample delivered? Client

### Log In

3. Coolers are present? Yes  No  NA   
4. Shipping container/cooler in good condition? Yes  No   
5. Custody Seals present on shipping container/cooler?  
(Refer to comments for Custody Seals not intact) Yes  No  Not Present   
6. Was an attempt made to cool the samples? Yes  No  NA   
7. Were all items received at a temperature of >2°C to 6°C \* Yes  No  NA   
8. Sample(s) in proper container(s)? Yes  No   
9. Sufficient sample volume for indicated test(s)? Yes  No   
10. Are samples properly preserved? Yes  No   
11. Was preservative added to bottles? Yes  No  NA   
H2SO4  
12. Is there headspace in the VOA vials? Yes  No  NA   
13. Did all samples containers arrive in good condition(unbroken)? Yes  No   
14. Does paperwork match bottle labels? Yes  No   
  
15. Are matrices correctly identified on Chain of Custody? Yes  No   
16. Is it clear what analyses were requested? Yes  No   
17. Were all holding times able to be met? Yes  No

### Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	Michael Erdahl	Date:	8/26/2020
By Whom:	Gabrielle Coeuille	Via:	<input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	No sample times provided, Hex Chrome possibly out of hold.		
Client Instructions:	Assume they are out of hold. and proceed.		

19. Additional remarks:

### Item Information

Item #	Temp °C
Sample 1	0.3

\* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

## SUBCONTRACT SAMPLE CHAIN OF CUSTODY

2008343

Page # 1 of 1

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Company Friedman and Bruya, Inc

Address 3012 16th Ave W

City State ZIP Seattle, WA 98119

Phone # (206) 385-8283 [merdah@friedmanandbrava.com](mailto:merdah@friedmanandbrava.com)

SUBCONTRACTER	<i>frment</i>
PROJECT NAME/NO.	PO #
008381	A-345
REMARKS	Please Email Results

<b>SAMPLE DISPOSAL</b>	<b>TURNAROUND TIME</b>
<input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions	<input checked="" type="checkbox"/> Standard TAT <input type="checkbox"/> RUSH Rush charges authorized by: _____

