

# WHITMAN Environmental Sciences

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January 30, 2024

Centric Partners LLC  
c/o Trent Development  
1420 Fifth Avenue, Suite 2200  
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Attention: Mr. Michael Pollard

Subject: 4<sup>th</sup> Quarter 2023 Groundwater Monitoring Summary  
104-124 12<sup>th</sup> Avenue & 1209 E. Fir Street  
Seattle, Washington

Dear Mr. Pollard:

As you have authorized, **Whitman Environmental Sciences, (WES)** has conducted additional groundwater sampling at the above referenced site in Seattle, Washington. Figure 1 shows the site location and surrounding area. This letter summarizes the sampling and results of laboratory testing on the groundwater samples taken during the 4<sup>th</sup> Quarter of 2023.

The findings of this round of sampling indicate that no groundwater from any of the nine tested wells contained detectable vinyl chloride or any other volatile organic compounds (VOCs). The vinyl chloride reporting limit was 0.02 ug/l (units equivalent to parts per billion (ppb)); well below the Washington State Method A groundwater cleanup level of 0.2 ug/l under the Model Toxics Control Act (MTCA), Chapter 173-340 WAC.

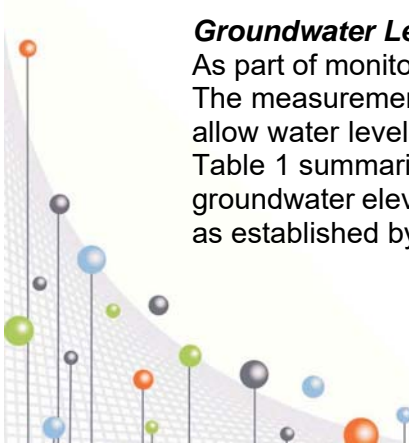
Ten wells were sampled for dissolved concentrations of arsenic. Samples from six of these wells exceeded the 5 ug/l MTCA Method A groundwater cleanup criteria for arsenic and four exceeded the 8 ug/l Puget Sound Basin threshold value of the natural background level of arsenic as calculated in Ecology publication "Natural Background Groundwater Arsenic Concentrations in Washington State" (Publication 14-09-044), dated January 2022.

## **GROUNDWATER MONITORING**

A total of ten monitoring wells were sampled as part of this monitoring event; wells MW-1R, MW-5R, MW-10, MW-13, MW-15R, MW-17, MW-18, MW-19, GEO B-7R and GEO B-9R. Figure 2 shows the approximate locations of the wells in relation to the former features of the property. One site well could not be sampled. Monitoring well MW-12R was inaccessible throughout the 4<sup>th</sup> Quarter due to construction activities.

### **Groundwater Level Measurements**

As part of monitoring, WES measured the depth to groundwater in the sampled monitoring wells. The measurements were obtained after the wells caps had been removed for a period of time to allow water levels to stabilize and before any of the wells were purged of standing groundwater. Table 1 summarizes the depth to groundwater at each well, top-of-pipe elevation and calculated groundwater elevation at each of the sampled wells. Table 1 notes the final top-of-pipe elevations as established by a licensed surveyor in November 2023.



The current measurements show that groundwater was at depths of 4.44 to 14.88 feet below the current top of pipe of the monitoring wells, corresponding to elevations ranging from 186.96 to 197.33 feet above Mean Sea Level based on City of Seattle Datum. There is a significant difference in water elevation from the highest elevations in the northwest to lowest levels in the southeast, indicating a relatively strong overall gradient of 0.03 foot/foot to the southeast across most of the site, steepening considerably in the southeastern-most corner of the site.

Figure 3 shows the inferred contour of the groundwater surface from the measured water level elevations, and the anticipated direction of migration for the time of measurement. The inferred gradient of groundwater migration is consistent with that interpreted from prior measurements from 2017 to the present.

### **Groundwater Sampling**

Passive diffusion bag samplers (PDBS) were used to obtain representative samples for volatile organic compounds in nine of the sampled wells. The PDBS were filled with laboratory-prepared de-ionized water and suspended mid-screen in each well. The samplers were allowed to equilibrate in the wells for a period of at least three weeks before removal. After removing each bag from the well, the sampler was opened and the water was transferred to laboratory-prepared 40-ml septum sealed vials. The samples were labeled, chilled and transported to the laboratory under chain-of-custody for analyses.

Monitoring well MW-19 was sampled for petroleum-related compounds using a peristaltic pump with dedicated polyethylene tubing. A portion of the sample was placed in laboratory-prepared 40-ml septum sealed vials for analysis.

Samples for dissolved arsenic were taken using a peristaltic pump with dedicated polyethylene tubing. Samples were taken directly from the tubing at a low flow rate, filtered through 0.45 micron single-use filters in the field, before preservation. Field measurements of pH, ORP, dissolved oxygen and conductivity were used to evaluate when stabilized conditions were reached in the pump discharge water.

### **LABORATORY ANALYTICAL PROGRAM**

All samples were submitted to Friedman & Bruya, Inc., a Washington-state certified laboratory, for environmental analyses following Washington State approved methods.

Nine groundwater samples were analyzed for a list of 63 VOCs by EPA Method 8260D. The sample from monitoring well MW-19 was analyzed for total petroleum hydrocarbons in the gasoline range (TPH-G) by Washington accepted method NWTPH-G and concentrations of benzene, toluene, ethylbenzene and xylenes (BTEX) by EPA Method 8021B. Ten samples were analyzed for dissolved arsenic by EPA Method 6020B.

All laboratory testing met the quality assurance/quality control requirements of the project. The sample analyses were completed within holding times, with reporting limits that allowed direct comparison to Department of Ecology established groundwater cleanup levels.

### **Laboratory Analytical Results**

The results of laboratory testing on groundwater samples are summarized in Table 2 and illustrated in Figure 3. The laboratory reports of the analytical results are included in Appendix A.

The groundwater samples from all nine of the tested monitoring wells contained no detectable VOCs. The results of this testing indicate the groundwater remedial actions have been effective to reduce groundwater concentrations of VOCs.

The sample from MW-19 contained no detectable gasoline range petroleum hydrocarbons or BTEX compounds. This suggests no upgradient contamination extends onto the subject property from the closest known upgradient contaminated site, an historical gas station formerly located directly north of E. Fir Street.

Dissolved arsenic concentrations ranged from non-detectable (less than 1 ug/l) to 47 ug/l. Concentrations above the MTCA Method A groundwater cleanup level of 5 ug/l were reported in six of the ten tested wells. Four of the samples exceeded the 8 ug/l Puget Sound Basin threshold value of the natural arsenic background level. Monitoring well MW-12R (a well that has consistently shown elevated arsenic concentrations) could not be sampled this quarter due to construction access limitations.

Monitoring well MW-1R, near the northeastern corner of the building and east of the groundwater cleanup area, contained a dissolved arsenic concentration of 8.22 ug/l.

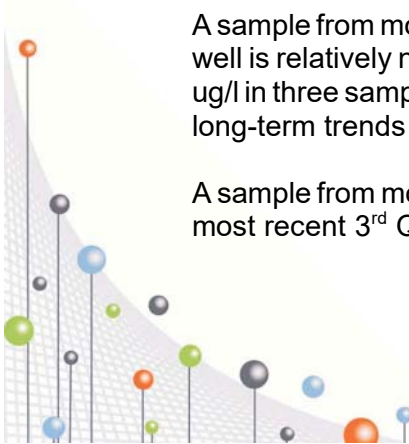
Monitoring wells MW-5R and GEO B-7R, both located near the King County warehouse building along the northern edge of the groundwater cleanup area, found dissolved arsenic concentrations levels of 3.12 and 1.87 ug/l, both below the MTCA Method A cleanup level. MW-15R, a deeper well in this area used to define the lower limit of the previously VOC impacted groundwater plume, found an arsenic concentration of 47.0 ug/l. Well GEO B-9, near the northeastern corner of the building, at the eastern edge of the former VOC groundwater plume found an arsenic concentration of 41.1 ug/l.

A sample from monitoring well MW-10, in the southeastern corner of the site found no detectable dissolved arsenic, at a reporting limit of 1 ug/l. In the most recent prior analysis (3<sup>rd</sup> Quarter 2023) the sample from this well contained 20 ug/l.

A sample from MW-13 contained a reported arsenic concentration of 5.57 ug/l. In the prior 3<sup>rd</sup> Quarter analysis, the sample from this well contained 29.4 ug/l of dissolved arsenic, exceeding the MTCA Method A cleanup level for the first time after seven prior analyses meeting the MTCA cleanup level. This current sampling suggests the 3<sup>rd</sup> Quarter sampling may have reflected a seasonal or transient effect related to the immediately adjacent construction.

A sample from monitoring well MW-17 contained a reported arsenic concentration of 7.77 ug/l. This well is relatively new and had previously shown increasing concentrations ranging from 168 to 749 ug/l in three samples dating from 1<sup>st</sup> Quarter 2023. Additional monitoring will be needed to establish long-term trends in arsenic concentrations in this well.

A sample from monitoring well MW-18 contained a reported arsenic concentration of 40.3 ug/l. The most recent 3<sup>rd</sup> Quarter 2023 sampling found a reported concentration of 29.6 ug/l. This well is



also relatively new and had initially shown concentrations of 14.2 and 14.1 ug/l in the first two samples dating from 1<sup>st</sup> and 2<sup>nd</sup> Quarters 2023. The 3<sup>rd</sup> Quarter result and current result suggest an increasing trend.

A sample from upgradient monitoring well MW-19 contained a reported arsenic concentration of 1.86 ug/l. Previously, three prior samples from this well demonstrated elevated arsenic in groundwater ranging from 9.43 to 27.0 ug/l, indicating upgradient groundwater contains arsenic at concentrations that exceed the MTCA Method A cleanup level, unrelated to any on-site condition.

Table 3 summarizes the groundwater sample analytical results from all wells in our prior monitoring events along with the current data.

Time trend plots for arsenic in monitoring wells MW-5R, MW-10, MW-12R, MW-13, MW-15R, MW-17, MW-18, MW-19, GEO B-7R and GEO B-9R are included in Appendix B. All other wells have been decommissioned or do not have sufficient data to demonstrate longer-term trends.

The plots suggest that monitoring wells MW-5R, MW-10 and MW-15R show at least some indications of seasonal variations of arsenic concentrations, with elevated levels occurring periodically in the Fall or Winter sampling. Seven wells demonstrate concentrations lower than the prior 3<sup>rd</sup> Quarter round of testing. Two wells, MW-15 and MW-18, show concentrations higher than the prior 3<sup>rd</sup> Quarter testing.

## **CONCLUSIONS**

Groundwater sampling and analysis are important parts of compliance monitoring for this site. In accordance with the Compliance Monitoring Plan Update, sampling has demonstrated compliance with all MTCA groundwater cleanup levels for VOCs for four or more consecutive quarters in all monitoring wells. Monitoring well MW-1R, only in place for two sampling events has not detected any VOCs in either sampling event. Based on this finding, it is our opinion that sampling for VOCs can be reduced in most wells in accordance with the extended confirmational monitoring schedule in the CMP Update. MW-1R should be sampled quarterly until at least four consecutive quarters of data have been obtained meeting MTCA cleanup levels for VOCs.

Additional quarterly monitoring for dissolved arsenic will continue.

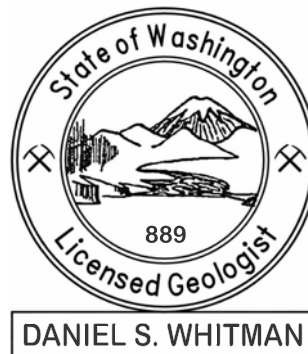
### **Closure**

Thank you for the opportunity to be of service to you in this matter. If you have any questions regarding this letter, or if I may be of any further assistance, please feel free to contact me.

Respectfully submitted,  
**Whitman Environmental Sciences**



Daniel S. Whitman  
Principal

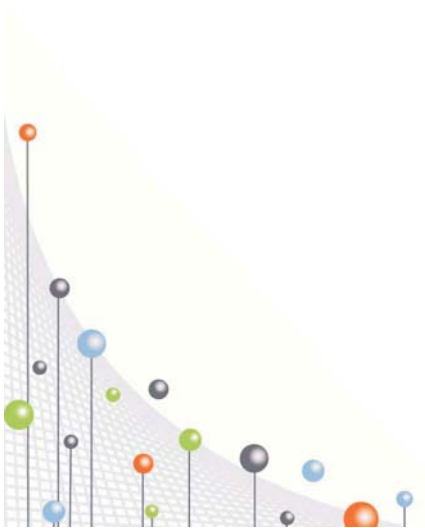


**TABLES**

- Table 1 - Summary of 4<sup>th</sup> Quarter 2023 Groundwater Level Measurements
- Table 2 - Summary of 4<sup>th</sup> Quarter 2023 Groundwater Sample Analytical Results
- Table 3 - 2017-2023 Summary of Groundwater Sample Analytical Results

**FIGURES**

- Figure 1 - Site Location Map
  - Figure 2 - Site and Monitoring Well Location Plan
  - Figure 3 - 4<sup>th</sup> Quarter 2023 Groundwater Sampling Analytical Results
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- Appendix A - Laboratory Analytical Reports - Friedman & Bruya, Inc.
  - Appendix B - Arsenic Concentration Time Series Plots



**TABLE 1**  
**Q4 2023 Summary of Groundwater Level Measurements**  
**104 - 124 12<sup>th</sup> Avenue and 1209 E. Fir Street, Seattle, Washington**

<i>Monitoring Well</i>	<i>Date</i>	<i>Top of Pipe Elevation*</i>	<i>Water Level Below T.O.P.</i>	<i>Water Elevation</i>	<i>Comments</i>
MW-1R	11/26/2023	199.04	-8.30	190.74	2" Well, 21' deep
MW-5R	11/26/2023	202.67	-8.87	193.80	2" Well, 20' deep
MW-10	11/26/2023	197.37	-10.41	186.96	2" Well, 15' deep
MW-12R	11/26/2023	– No Survey yet	Inaccessible		2" Well, 20' deep
MW-13	11/26/2023	201.87	-7.92	193.95	2" Well, 20' deep
MW-15R	11/26/2023	199.72	-6.05	193.67	2" Well, 25' deep
MW-17	11/26/2023	197.68	-6.35	191.33	2" Well, 20' deep
MW-18	11/26/2023	198.09	-5.23	192.86	2" Well, 20' deep
MW-19	11/26/2023	212.21	-14.88	197.33	2" Well, 20' deep
GEO B-7R	11/26/2023	199.65	-4.44	195.21	2" Well, 20' deep
GEO B-9	11/26/2023	199.66	-6.69	192.97	2" Well, 20' deep

Table Notes:

\*Top of Pipe elevations established by W.G. Clark (November 2023), except MW-12R pipe elevation by WES, back-sighted to previously surveyed monitoring wells.

**TABLE 2**  
**4<sup>th</sup> Quarter 2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Other VOCs	Arsenic (Dissolved)
MW-1	Decommissioned Q4 2021						
MW-1S	Decommissioned Q1 2022						
MW-1D	Decommissioned Q1 2022						
MW-1R	6/30/23	Installed Replacement Well					
	12/29/23	<1	<0.5	<1	<0.02	ND	<b>8.22</b>
MW-2	Decommissioned Q3 2021						
MW-3	Decommissioned Q1 2021						
MW-4	Decommissioned Q2 2021						
MW-5R	12/23/21	Installed Replacement Well					
	12/29/23	<1	<0.5	<1	<0.02	ND	3.12
MW-6	Decommissioned Q1 2021						
MW-7	Decommissioned Q1 2021						
MW-8	Decommissioned Q1 2021						
MW-9	Decommissioned Q1 2021						
MW-10	12/29/23	<1	<0.5	<1	< 0.02	ND	<1
MW-11	Decommissioned Q3 2022						
MW-12R	12/23/21	Installed Replacement Well					
	Inaccessible Throughout 4 <sup>th</sup> Quarter						
MW-13	12/29/23	<1	<0.5	<1	< 0.02	ND	<b>5.57</b>
MW-14	Decommissioned Q1 2021						
MW-15R	12/23/21	Installed Replacement Well					
	12/29/23	<1	<0.5	<1	<0.02	ND	<b>47.0</b>
MW-16	Q1 2022	Decommissioned Q1 2022					
MW-17	3/18/23	Installed Well					
	12/29/23	<1	<0.5	<1	<0.02	ND	<b>7.77</b>
MW-18	3/18/23	Installed Well					
	12/29/23	<1	<0.5	<1	<0.02	ND	<b>40.3</b>
MW-19	3/18/23	Installed Well					
	12/29/23	NA	NA	NA	NA	ND	1.86
GEO B-7R	12/23/21	Installed Replacement Well					
	12/29/23	<1	<0.5	<1	<0.02	ND	1.87
GEO B-8	Decommissioned Q1 2021						
GEO B-9R	12/23/21	Installed Replacement Well					
	12/29/23	<1	<0.5	<1	< 0.02	ND	<b>41.1</b>
<b>MTCA Groundwater Cleanup Levels</b>		<b>5<sup>A</sup></b>	<b>5<sup>A</sup></b>	<b>16<sup>B</sup></b>	<b>0.2<sup>A</sup></b>	--	<b>5<sup>A</sup></b>
<b>Puget Sound Basin Natural Background Arsenic Concentration</b>							<b>8</b>

Table Notes:

<XXX - Parameter not detected at concentrations at or above the noted reporting limit.

Volatile organic compounds by EPA Method 8260C. See laboratory report for full list of analyzed parameters.

Dissolved arsenic by EPA Method 6020B on field filtered samples using 0.45 micron single-use filters.

ND - No other volatile organic compounds detected.

NA - Not analyzed for the listed compound.

MTCA Groundwater cleanup criteria per Chapter 173-340-720 WAC. Method A criteria presented where available. Method B standard formula values shown where no Method A criteria available. Method B standard formula values from Dept. of Ecology August 2023 Cleanup Levels and Risk Calculation (CLARC) database.

A - Method A listed or State or Federal MCL

B - Method B Direct Contact

Puget Sound Basin Natural Background Arsenic Concentration from Department of Ecology study "*Natural Background Groundwater Arsenic Concentrations in Washington State*" Ecology Publication No. 14-09-044, 2022

Sample results exceeding applicable cleanup criteria are noted in ***Bold Italic***.

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-1	6/30/17	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	0.20	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	10/30/17	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<b>0.27</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/6/18	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/22/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	2.1	<b>0.55</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/4/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	2.3	<b>0.73</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>13</b>	NA	<1	<1	
	3/5/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	1.8	<b>0.47</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>9.49</b>	<b>10.8</b>	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	31	<1	<1	<1	<1	<1	<1	ND	<1	<1	NA	NA	
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	29	<1	<1	<1	<1	<1	<1	ND	<1	<1	NA	NA	
	3/18/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	30	<1	<1	<1	<1	<1	<1	ND	1.59	<1	NA	NA	
	5/24/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<1	NA	NA	
	Q3 2021	Inaccessible due to Construction																											
11/22/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	1.11	NA	NA		
11/22/21	Well Decommissioned for Construction																												
MW-1S	8/6/19	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<b>0.21</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/5/19	<100	72 <sup>x</sup>	340	<0.35	<1	<1	<3	<1	<1	<1	<b>0.29</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>16.5</b>	NA	<1	1.16	
	2/26/20	<100	100 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	51 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<b>0.21</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>12.5</b>	<b>13.3</b>	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	33	<1	<1	<1	<1	<1	<1	ND	<b>47.4</b>	<b>50.8</b>	NA	NA	
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	86	<5	<1	46	<1	<1	<1	<1	<1	<1	ND	<b>39.2</b>	<b>41.0</b>	NA	NA	
	3/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	20	<1	<1	<1	<1	<1	<1	ND	<b>24.4</b>	<b>21.5</b>	NA	NA	
	5/12/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>14.4</b>	NA	NA	
	9/14/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>23.7</b>	NA	NA	
	12/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	2.78	NA	NA	
Q1 2022	Inaccessible Due to Construction																												
3/16/22	Well Decommissioned for Construction																												

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-1D	8/6/19	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/5/19	<100	<50	340	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>9.14</b>	NA	<1	<1	
	3/3/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>10.3</b>	NA	<1	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>9.65</b>	<b>10.1</b>	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>10.1</b>	<b>9.68</b>	NA	NA
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>11.1</b>	<b>10.3</b>	NA	NA
	3/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>9.41</b>	<b>9.56</b>	NA	NA
	5/12/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>9.34</b>	NA	NA
	9/14/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>9.94</b>	NA	NA
	12/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>9.04</b>	NA	NA
	3/9/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>9.64</b>	NA	NA
3/16/22	Well Decommissioned for Construction																												
MW-1R PDBS	9/13/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>6.93</b>	NA	NA	
	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>8.22</b>	NA	NA	
MW-2	4/4/17	NA	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	10/30/17	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/22/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/4/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	3/17/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	82	<1	<1	<1	<1	<1	<1	ND	2.88	1.21	NA	NA	
	12/9/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	47	<1	<1	<1	<1	<1	<1	ND	<b>44.5</b>	<b>30.8</b>	NA	NA	
	3/16/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>105</b>	<b>90.7</b>	NA	NA	
	6/4/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>20.6</b>	NA	NA	
7/16/21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.24	NA	NA	
7/16/21	Well Decommissioned for Construction																												

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-3	4/3/17	110	400 <sup>x</sup>	<250	<0.35	2.5	<1	7.9	<1	<1	<1	<b>0.34</b>	<1	11	<1	<1	<10	<1	4.7	<1	<1	4.9	1.1	ND	NA	NA	NA	NA	
	10/30/17	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	210 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	2/25/19	<100	400 <sup>x</sup>	<300	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>5.35</b>	NA	<1	NA	
	4/3/19	NA	420 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/23/19	<100	170 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	<1	NA	
	12/4/19	<100	280 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	3/17/20	<100	210 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	390 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<b>10.2</b>	<b>9.15</b>	NA	NA
	12/23/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	2.11	1.79	NA	NA
Q1 2021	Inaccessible due to Construction																												
3/30/21	Well Decommissioned for Construction																												
MW-4	4/5/17	NA	67 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	10/30/17	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/23/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/9/19	<100	180 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	3/17/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>66.8</b>	<b>64.9</b>	NA	NA	
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>78.0</b>	<b>53.5</b>	NA	NA	
	3/26/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>64.6</b>	<b>64.1</b>	NA	NA	
	4/30/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>18.9</b>	NA	NA	
Q3 2021	Well Decommissioned for Construction																												

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-5	4/5/17	NA	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	12	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	10/30/17	NA	NA	NA	<0.35	<1	<1	<3	1.4	<b>9.1</b>	10	<b>0.29</b>	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	<50	<250	<0.35	<1	<1	<3	1.3	5.0	8.3	<b>0.25</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/6/18	NA	NA	NA	<0.35	<1	<1	<3	2.1	<b>11</b>	8.4	<b>0.37</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/22/19	<100	<50	<250	<0.35	<1	<1	<3	1.1	<b>6.5</b>	10	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	<1	NA	
	12/4/19	<100	52 <sup>x</sup>	<250	<0.35	<1	<1	<3	1.3	2.2	3.5	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	3/5/20	<100	<50	<250	<0.35	<1	<1	<3	<1	2.2	1.4	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	2.8	3.6	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>5.85</b>	4.07	NA	NA	
	3/16/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>8.23</b>	<b>5.54</b>	NA	NA	
	5/24/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	4.49	NA	NA	
	9/30/21	NA	NA	NA	<0.35	<1	<1	<3	<1	1.1	4.3	<b>0.27</b>	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>10.8</b>	NA	NA	
	11/15/21	NA	NA	NA	<0.35	<1	<1	<3	<1	1.4	3.8	<b>0.41</b>	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>5.04</b>	NA	NA	
11/22/21	NA	NA	NA	<0.35	<1	<1	<3	<1	1.9	4.6	<b>0.61</b>	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	1.49	NA	NA		
11/22/21	Well Decommissioned for Construction - Replaced with Well MW-5R on 12/23/2021																												
MW-5R	2/18/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<b>0.60</b>	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	2.50	NA	NA	
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<b>0.21</b>	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>5.44</b>	NA	NA	
	PDBS 9/23/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>14.4</b>	NA	NA	
	PDBS 12/16/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>6.70</b>	NA	NA	
	PDBS 3/21/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	3.59	NA	NA	
	PDBS 6/16/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	4.68	NA	NA	
	PDBS 9/13/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>15.3</b>	NA	NA	
	PDBS 12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	3.12	NA	NA	
MW-6	4/5/17	NA	<50	<250	<0.35	1.2	<1	5.5	<1	<1	1.3	<0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	3.4	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	<50	<250	<0.35	<1	<1	<3	1.2	<1	9.6	<0.2	1.1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/23/19	<100	<50	<250	<0.35	<1	<1	<3	<1	1.7	<b>17</b>	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-6 Continued	12/4/19	<100	78 <sup>x</sup>	<250	<0.35	<1	<1	<3	1.3	<1	5.7	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	3/17/20	<100	<50	<250	<0.35	<1	<1	<3	1.1	<1	3.3	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	1.1	<1	4.5	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	1.65	1.21	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	3.5	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/23/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	4.3	<0.2	3.8	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	2.15	2.16	NA	NA
	3/18/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	10	< 0.2	1.6	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	2.44	1.92	NA	NA
3/30/21	Well Decommissioned for Construction																												
MW-7	6/30/17	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	6/14/18	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/23/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/4/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	3/17/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<b>189</b>	<b>153</b>	NA	NA
	12/23/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>109</b>	<b>117</b>	NA	NA
	3/18/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>127</b>	<b>127</b>	NA	NA
3/30/21	Well Decommissioned for Construction																												
MW-8	8/30/17	<b>3,200</b>	<b>790<sup>x</sup></b>	<250	<b>11</b>	<1	71	419	<1	<1	<1	< 0.2	<1	<10	<1	12	<10	24	8.9	1.1	1.8	<b>180</b>	59	ND	NA	NA	NA	NA	
	6/28/18	<b>2,400</b>	160 <sup>x</sup>	<250	2.9	<1	85	384	<1	<1	<1	< 0.2	<1	<50	<1	14	<10	33	1.6	1.1	1.9	<b>150</b>	54	ND	NA	NA	NA	NA	
	7/23/19	740	64 <sup>x</sup>	<250	<0.35	<1	10	96	<1	<1	<1	< 0.2	<1	<50	<1	3.1	<10	8.1	<1	<1	1.0	67	27	ND	NA	NA	<1	NA	
	12/9/19	350	62 <sup>x</sup>	<250	<0.35	<1	4.3	49.7	<1	<1	<1	< 0.2	<1	<50	<1	1.3	<10	2.1	<1	<1	<1	34	14	ND	<b>9.21</b>	NA	<1	<1	
	2/24/20	640	79 <sup>x</sup>	<250	0.64	<1	7.5	74	<1	<1	<1	< 0.2	<1	<50	<1	3.2	<10	4.0	<1	<1	<1	57	23	ND	NA	NA	NA	NA	
	5/19/20	700	96 <sup>x</sup>	<250	0.52	<1	3.2	69	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	26	20	ND	4.93	3.44	NA	NA	
	9/28/20	130	NA	NA	0.47	<1	4.7	20	<1	<1	<1	< 0.2	<1	<50	<5	1.1	<20	1.3	<1	<1	<1	7.3	2.8	ND	NA	NA	NA	NA	
	12/1/20	100	NA	NA	<1	<1	2.4	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<b>9.01</b>	<b>8.72</b>	NA	NA	
	3/26/21	220	130 <sup>x</sup>	<250	<0.35	<1	6.0	20.9	<1	<1	<1	< 0.2	<1	<50	<5	1.9	<20	2.6	<1	<1	<1	9.6	2.9	ND	<b>9.51</b>	<b>10.6</b>	NA	NA	
3/30/21	Well Decommissioned for Construction																												

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-9	8/3/17	500	270 <sup>X</sup>	<250	<b>6.8</b>	1.3	6.3	4.3	<1	<1	<1	< 0.2	<1	<10	4.3	7.2	<10	17	<1	<1	1.5	1.3	1.4	ND	NA	NA	NA	NA	
	7/13/18	470	180 <sup>X</sup>	<250	5.0	<1	8.5	3.2	<1	<1	<1	< 0.2	<1	<50	<1	12	<10	23	<1	<1	1.9	1.1	<1	ND	NA	NA	NA	NA	
	7/23/19	500	210 <sup>X</sup>	<250	2.1	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	1.4	16	<10	48	<1	<1	3.9	<1	<1	ND	NA	NA	<1	NA	
	12/5/19	<b>2,900</b>	<b>620<sup>X</sup></b>	<250	<b>9.5</b>	4.3	31	9.3	<1	<1	<1	< 0.2	<1	<50	10	82	<10	210	1.2	1.4	19	1.7	<1	ND	NA	NA	NA	NA	
	2/24/20	<b>3,900</b>	<b>1,100<sup>X</sup></b>	<250	<b>9.5</b>	3.7	43	6.7	<1	<1	<1	< 0.2	<1	<50	7.2	110	<10	310	<1	<1	22	1.7	<1	ND	NA	NA	NA	NA	
	5/19/20	<b>2,100</b>	<b>1,200<sup>X</sup></b>	290 <sup>X</sup>	<b>5.5</b>	2.3	17	5.0	<1	<1	<1	< 0.2	<1	<50	14	74	<10	220	<1	1.5	16	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	<b>910</b>	270 <sup>X</sup>	<250	<b>8.0</b>	9.3	1.6	6.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/20	<b>3,700</b>	<b>1,100<sup>X</sup></b>	<250	<b>11</b>	37	48	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/26/21	<b>1,400</b>	<b>680<sup>X</sup></b>	<250	<b>6.5</b>	8.0	7.2	6.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<b>15.8</b>	NA	NA
	3/30/21	Well Decommissioned for Construction																											
MW-10	11/3/17	<100	69 <sup>X</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA
	6/14/18	<100	66 <sup>X</sup>	<250	<0.35	<1	<1	<3	<1	<1	1.2	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA
	7/22/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	ND	NA	NA	<1	NA
	12/5/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	ND	<b>9.3</b>	NA	<1	<1
	2/26/20	<100	66 <sup>X</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	ND	<b>5.41</b>	<b>5.18</b>	NA	NA
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>16.6</b>	<b>15.0</b>	NA	NA
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	1.4	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>6.50</b>	<b>6.06</b>	NA	NA
	3/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	1.1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	<b>8.69</b>	<b>7.00</b>	NA	NA
	5/12/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	1.0	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>6.58</b>	NA	NA
	9/14/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	1.17	NA	NA
	12/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>5.71</b>	NA	NA
	3/9/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>9.62</b>	NA	NA
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	4.74	NA	NA
PDBS	9/23/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	<b>7.69</b>	NA	NA
PDBS	12/16/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	<1	ND	NA	1.19	NA	NA

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)		
MW-10 PDBS Continued PDBS PDBS	3/21/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	12.0	NA	NA		
	6/30/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	9.63	NA	NA		
	9/5/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	20.0	NA	NA		
	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<1	NA	NA		
MW-11	8/15/19	<100	400 <sup>x</sup>	370 <sup>x</sup>	<0.35	<1	<1	<3	<1	<1	1.9	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	12/5/19	<100	61 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	2.9	<b>0.22</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	15	NA	<1	<1		
	3/3/20	<100	130 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	2.8	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	5/19/20	<100	99 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	3.1	<b>0.27</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	8.96	7.98	NA	NA		
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	69	<5	<1	170	<1	<1	<1	<1	<1	<1	ND	69.3	55.7	NA	NA		
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	82	<5	<1	130	<1	<1	<1	<1	<1	<1	ND	569	728	NA	NA		
	3/23/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	61	<5	<1	77	<1	<1	<1	<1	<1	<1	ND	966	776	NA	NA		
	5/14/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	38	<1	<1	<1	<1	<1	<1	ND	NA	267	NA	NA		
	9/30/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	67.6	NA	NA		
	Q4 2021	Inaccessible Due to Construction - *Well Damaged and Filled with Dirt - Only partially cleared and remains turbid																												
	3/25/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.039	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	327*	NA	NA		
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	210*	NA	NA		
8/4/2022	Well Decommissioned for Construction																													
MW-12	8/19/19	<100	140 <sup>x</sup>	270 <sup>x</sup>	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	12/4/19	<100	120 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	4.53	NA	<1	<1		
	3/17/20	<100	120 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	5/19/20	<100	130 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	4.40	4.39	NA	NA		
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	240	<5	<1	130	<1	<1	<1	<1	<1	<1	ND	1,240	506	NA	NA		
	12/1/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	94	<5	<1	59	<1	<1	<1	<1	<1	<1	ND	1,380	1,260	NA	NA		
	3/18/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	33	<1	<1	<1	<1	<1	<1	ND	1,900	2,110	NA	NA		
	6/4/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	1,600	NA	NA		
	Q3 2021	Inaccessible Due to Construction																												
12/23/21	Well Damaged and Inaccessible - Decommissioned For Construction- Replaced with Well MW-12R on 12/23/2021																													

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)		
MW-12R	3/8/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.1	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>845</b>	NA	NA		
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>468</b>	NA	NA		
	9/23/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>909</b>	NA	NA		
	12/16/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.031	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>1,090</b>	NA	NA		
	3/21/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.022	<1	<50	<5	<1	24	<1	<1	<1	<1	<1	<1	ND	NA	<b>1,100</b>	NA	NA		
	6/16/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.029	<1	<50	<5	<1	24	<1	<1	<1	<1	<1	<1	ND	NA	<b>1,220</b>	NA	NA		
	9/5/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>201</b>	NA	NA		
	Q4 2023	Inaccessible Due to Construction																												
MW-13	10/3/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	12/9/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	3/17/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<10	<1	<1	<1	<1	<1	<1	ND	<b>11.5</b>	<b>5.75</b>	NA	NA		
	12/23/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	1.91	2.06	NA	NA		
	3/26/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<5	<5	NA	NA		
	5/26/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	3.50	NA	NA		
	9/29/21	Well Dry due to Nearby Dewatering Wells																												
	12/23/21	Well Dry due to Nearby Dewatering Wells																												
	3/8/22	Well Dry due to Nearby Dewatering Wells																												
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	2.11	NA	NA		
	Q3/22	Inaccessible due to Construction																												
	11/4/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	2.20	NA	NA		
	3/28/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<1	NA	NA		
6/30/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	3.20	NA	NA			
9/19/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>29.4</b>	NA	NA			
12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>5.57</b>	NA	NA			

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
MW-14	8/15/19	<100	130 <sup>x</sup>	<250	1.8	<1	<1	<3	<1	<1	2.3	<b>0.65</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/4/19	<100	110 <sup>x</sup>	<250	1.3	<1	<1	<3	<1	<1	1.8	<b>0.25</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	2/24/20	<100	64 <sup>x</sup>	<250	1.8	<1	<1	<3	<1	<1	2.1	<b>0.66</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	110 <sup>x</sup>	<250	0.89	<1	<1	<3	<1	<1	1.3	<b>0.28</b>	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	0.74	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/1/20	NA	NA	NA	0.57	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>60.4</b>	<b>45.4</b>	NA	NA	
	3/26/21	Inaccessible due to Construction																											
	3/30/21	Well Decommissioned for Construction																											
MW-15	4/2/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	1.3	<b>0.23</b>	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>14.6</b>	<b>11.1</b>	NA	NA	
	12/9/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>11.9</b>	<b>11.7</b>	NA	NA	
	3/16/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<b>11.6</b>	<b>11.4</b>	NA	NA	
	5/26/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>12.7</b>	NA	NA	
	7/1/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>9.91</b>	NA	NA	
	Q4 2021	Well Damaged - Decommissioned For Construction- Replaced with Well MW-15R on 12/23/2021																											
MW-15R  PDBS PDBS PDBS PDBS PDBS PDBS	3/2/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	1.1	0.14	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>13.1</b>	NA	NA	
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	0.59	<1	0.036	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>10.6</b>	NA	NA	
	9/23/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.096	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>58.2</b>	NA	NA	
	12/16/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>32.7</b>	NA	NA	
	3/21/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>23.7</b>	NA	NA	
	6/16/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>18.3</b>	NA	NA	
	9/5/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>29.1</b>	NA	NA	
	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>47.0</b>	NA	NA	

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)		
MW-16	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	71	<5	<1	28	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	12/9/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	120	<5	<1	62	<1	<1	<1	<1	<1	<1	ND	289	299	NA	NA		
	3/26/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	24	<1	<1	<1	<1	<1	<1	ND	218	29.4	NA	NA		
	6/4/2021	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	140	NA	NA		
	Q3 2021	Inaccessible due to Construction																												
	Q4 2021	Well Decommissioned For Construction																												
MW-17 PDBS	3/28/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	168	NA	NA		
	6/30/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	327	NA	NA		
	9/13/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.069	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	794	NA	NA		
	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	7.77	NA	NA		
MW-18 PDBS	3/28/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.021	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	14.2	NA	NA		
	6/30/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	14.1	NA	NA		
	9/13/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	29.6	NA	NA		
	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	40.3	NA	NA		
MW-19	3/30/23	<100	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	23.2	NA	NA		
	4/25/23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.43	NA	NA	
	9/19/23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.0	NA	NA	
	12/29/23	<100	NA	NA	<0.35	<1	<1	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	1.86	NA	NA		
GEO B-7	12/6/18	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	1.1	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	7/22/19	<100	<50	<250	<0.35	<1	<1	<3	<1	2.3	3.0	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	12/4/19	<100	<50	<250	<0.35	<1	<1	<3	<1	1.8	2.7	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	3/5/20	<100	<50	<250	<0.35	<1	<1	<3	<1	2.9	3.2	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	5/19/20	<100	<50	<250	<0.35	<1	<1	<3	<1	1.8	2.5	<0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA		
	12/9/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	27.0	29.0	NA	NA		
	3/16/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	<0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	20.6	16.0	NA	NA		

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
GEO B-7	5/24/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	24.8	NA	NA	
	6/15/21	Well Decommissioned for Construction - Replaced with Well GEO B-7R on 12/23/2021																											
GEO B-7R	3/2/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	4.0	1.1	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	33.8	NA	NA	
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	1.6	1.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	92.5	NA	NA	
PDBS	9/23/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	0.022	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	163	NA	NA	
PDBS	12/16/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	9.93	NA	NA	
PDBS	3/21/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	10.9	NA	NA	
PDBS	6/16/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	5.94	NA	NA	
PDBS	9/5/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	2.47	NA	NA	
PDBS	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	1.87	NA	NA	
GEO B-8	12/6/18	<100	210 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	1.1	<10	1.8	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/23/19	<100	140 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	<1	NA	
	12/5/19	150	410 <sup>x</sup>	360 <sup>x</sup>	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	4.0	<10	7.1	<1	<1	1.1	<1	<1	ND	NA	NA	NA	NA	
	2/28/20	110	180 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	1.4	<10	2.7	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	380 <sup>x</sup>	350 <sup>x</sup>	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	<100	150 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/1/20	<100	NA	NA	<1	<1	<1	<3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.6	74.1	NA	NA	
	3/26/21	<100	310 <sup>x</sup>	320 <sup>x</sup>	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	2.5	<20	8.8	<1	<1	<1	<1	<1	ND	NA	14.7	NA	NA	
	3/30/21	Well Decommissioned for Construction																											
GEO B-9	12/6/18	<100	76 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	2.4	0.36	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	7/23/19	<100	59 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	1.4	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/4/19	<100	<50	<250	<0.35	<1	<1	<3	<1	<1	1.5	0.22	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	2/28/20	<100	73 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	1.1	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	5/19/20	<100	63 <sup>x</sup>	<250	<0.35	<1	<1	<3	<1	<1	1.0	< 0.2	<1	<50	<1	<1	<10	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	9/28/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	56	<1	<1	<1	<1	<1	<1	ND	NA	NA	NA	NA	
	12/9/20	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	<1	<1	NA	NA	

**TABLE 3**  
**2017-2023 Summary of Groundwater Sample Analytical Results**  
**104 - 124 12<sup>th</sup> Avenue & 1209 E. Fir Street, Seattle, Washington**

Well ID	Sample Date	TPH-G	TPH-D	TPH-O	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	TCE	Cis 1,2 DCE	Vinyl Chloride	Chloroform	Acetone	Hexane	Cumene	MEK	n-propylbenzene	Naphthalene	p-isopropyltoluene	sec-butylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Other VOCs	Arsenic (Total)	Arsenic (Dissolved)	Lead (Total)	Chromium (Total)	
GEO B-9 Continued	3/18/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	1.27	<1	NA	NA	
	5/24/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<1	<1	< 0.2	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	1.58	NA	NA	
	9/30/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	33	<1	<1	<1	<1	<1	<1	ND	NA	2.12	NA	NA	
	11/22/21	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	1.61	NA	NA	
	11/22/21	Well Decommissioned For Construction- Replaced with Well GEO B-9R on 12/23/2021																											
GEO B-9R PBS PBS PBS PBS PBS PBS	3/2/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>5.30</b>	NA	NA	
	6/30/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	< 0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>56.8</b>	NA	NA	
	9/23/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>25.5</b>	NA	NA	
	12/16/22	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>21.4</b>	NA	NA	
	3/21/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>44.1</b>	NA	NA	
	6/16/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>34.3</b>	NA	NA	
	9/5/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>56.0</b>	NA	NA	
	12/29/23	NA	NA	NA	<0.35	<1	<1	<3	<1	<0.5	<1	<0.02	<1	<50	<5	<1	<20	<1	<1	<1	<1	<1	<1	ND	NA	<b>41.1</b>	NA	NA	
<b>MTCA Groundwater Cleanup Levels</b>		<b>800<sup>A</sup></b>	<b>500<sup>A</sup></b>	<b>500<sup>A</sup></b>	<b>5<sup>A</sup></b>	<b>1,000<sup>A</sup></b>	<b>700<sup>A</sup></b>	<b>1,000<sup>A</sup></b>	<b>5<sup>A</sup></b>	<b>5<sup>A</sup></b>	<b>16<sup>B</sup></b>	<b>0.2<sup>A</sup></b>	<b>80<sup>A</sup></b>	<b>7,200<sup>B</sup></b>	<b>480<sup>B</sup></b>	<b>800<sup>B</sup></b>	<b>4,800<sup>B</sup></b>	<b>800<sup>B</sup></b>	<b>160<sup>B</sup></b>	<b>NV</b>	<b>800<sup>B</sup></b>	<b>80<sup>B</sup></b>	<b>80<sup>B</sup></b>	<b>--</b>	<b>5<sup>A</sup></b>	<b>5<sup>A</sup></b>	<b>15<sup>A</sup></b>	<b>50<sup>A</sup></b>	
																									<b>Puget Sound Basin Natural Background Arsenic Concentration</b>			<b>8<sup>NB</sup></b>	<b>8<sup>NB</sup></b>

Table Notes:

<XXX - Parameter not detected at concentrations at or above the noted reporting limit.

NA - Sample not analyzed for the listed parameter.

Gasoline Range Total Petroleum Hydrocarbons by Method NWTPH-G.

Diesel and Motor Oil Range Total Petroleum Hydrocarbons by Method NWTPH-D(x).

x - Indicates sample chromatogram does not resemble fuel standard used for analysis. Most likely carry over from gasoline range hydrocarbons, or non-petroleum organic matter.

<sup>PBS</sup> Volatile organic compound samples collected using passive diffusion bag samplers, suspended in the wells for a minimum of three weeks prior to removal.

Volatile Organic Compounds by EPA Method 8260C or 8021B. All detected compounds summarized here. See laboratory report for full list of analyzed parameters.

Total Lead and Chromium on unfiltered samples by EPA Method 6020B.

Dissolved and total arsenic by EPA Method 6020B. Total arsenic on unfiltered samples. Dissolved arsenic on field filtered samples using 0.45 micron single-use filters.

MTCA Groundwater cleanup criteria per Chapter 173-340-720 WAC. Method A criteria presented where available. Method B standard formula values shown where no Method A criteria available. Method B standard formula values from Dept. of Ecology 2022 Cleanup Levels and Risk Calculation (CLARC) database. NV indicates no value available from CLARC.

A - Method A listed or State or Federal MCL

B - Method B Direct Contact

NV - No published value

NB - Puget Sound Basin Natural Background Concentration from Department of Ecology study "Natural Background Groundwater Arsenic Concentrations in Washington State" Ecology Publication No. 14-09-044, 2022

Sample results exceeding applicable cleanup criteria are noted in **Bold Italic**.



North



Scale 1 : 24,000

From USGS

Figure 1 - Site Map

104-124 12th Avenue & 1209 E. Fir Street  
Seattle, Washington 98122

Project No. WES - 1591

Date June 11, 2017

File ID. 1591F1

**WHITMAN**  
Environmental Sciences

**Legend**





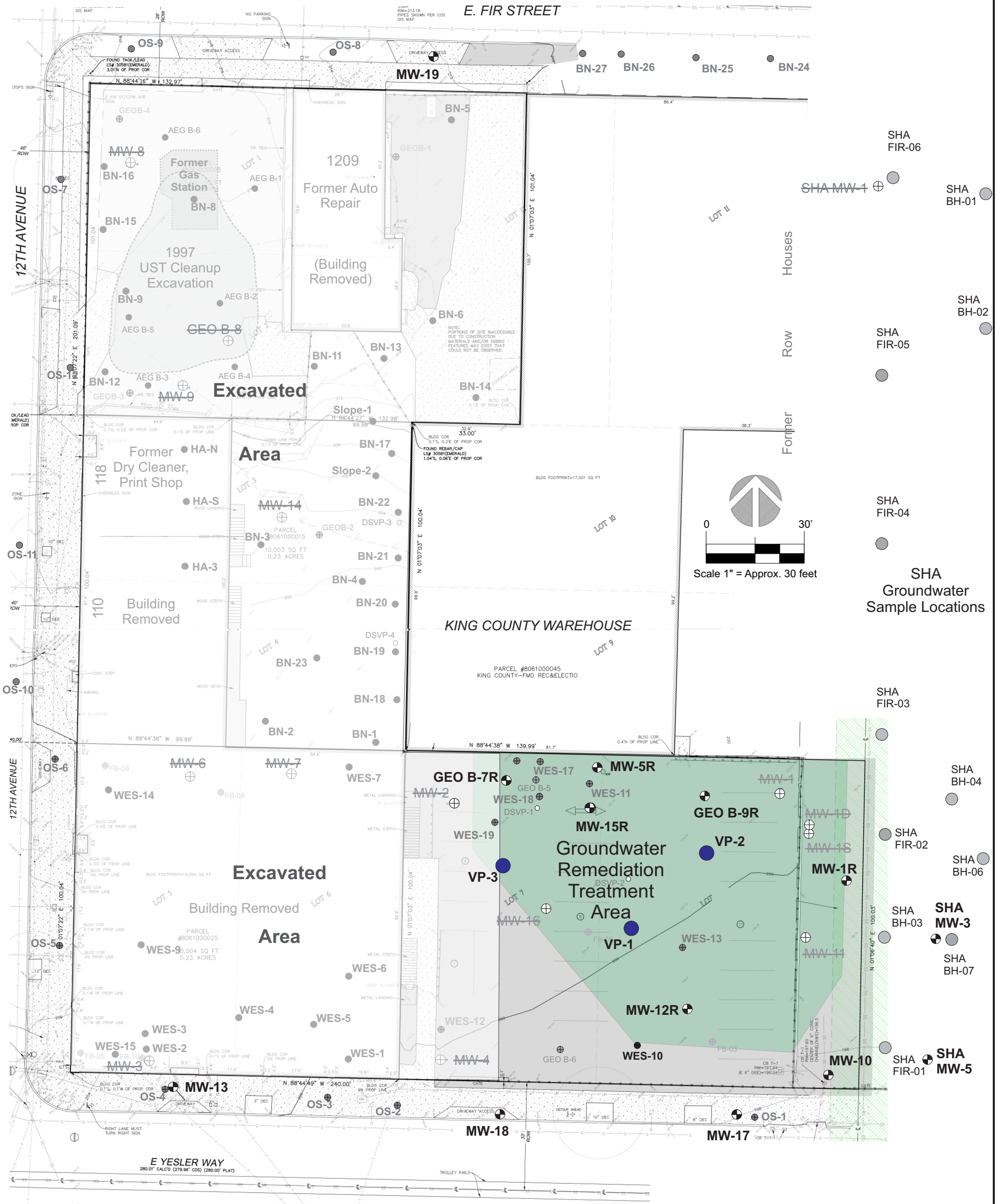
-  Approximate Location of Monitoring Well
-  Approximate Location of Soil Borings (2016 -2020)
-  Approximate Location and I.D. of Decommissioned Monitoring Well
-  Approximate Location of Sub-Slab Vapor Monitoring Point Under New Construction

Figure 2 - Site and Sample Location Plan

12th & Yesler Redevelopment Property  
104-124 12th Avenue & 1209 E. Fir Street  
Seattle, WA

Project No.	WES - 1591A
Date	July 5, 2023
File ID.	1591F2

**WHITMAN**  
Environmental Sciences



**Legend**

- Approximate Location of Monitoring Well
- Approximate Location of Sub-Slab Vapor Monitoring Point

**GEO B-7**  
**195.21'**  
 TCE - XXX  
 C12DCE - XX  
 As (D) - XXX  
**Sample Location I.D.**  
**Groundwater Elevation**  
 Analytical Parameter  
 Concentrations (ug/l)  
 (Detected Compounds Only)  
***Bold Italic Exceeds CUL***





 Inferred Groundwater Elevation Contour based on Measurements on 11/24/2023

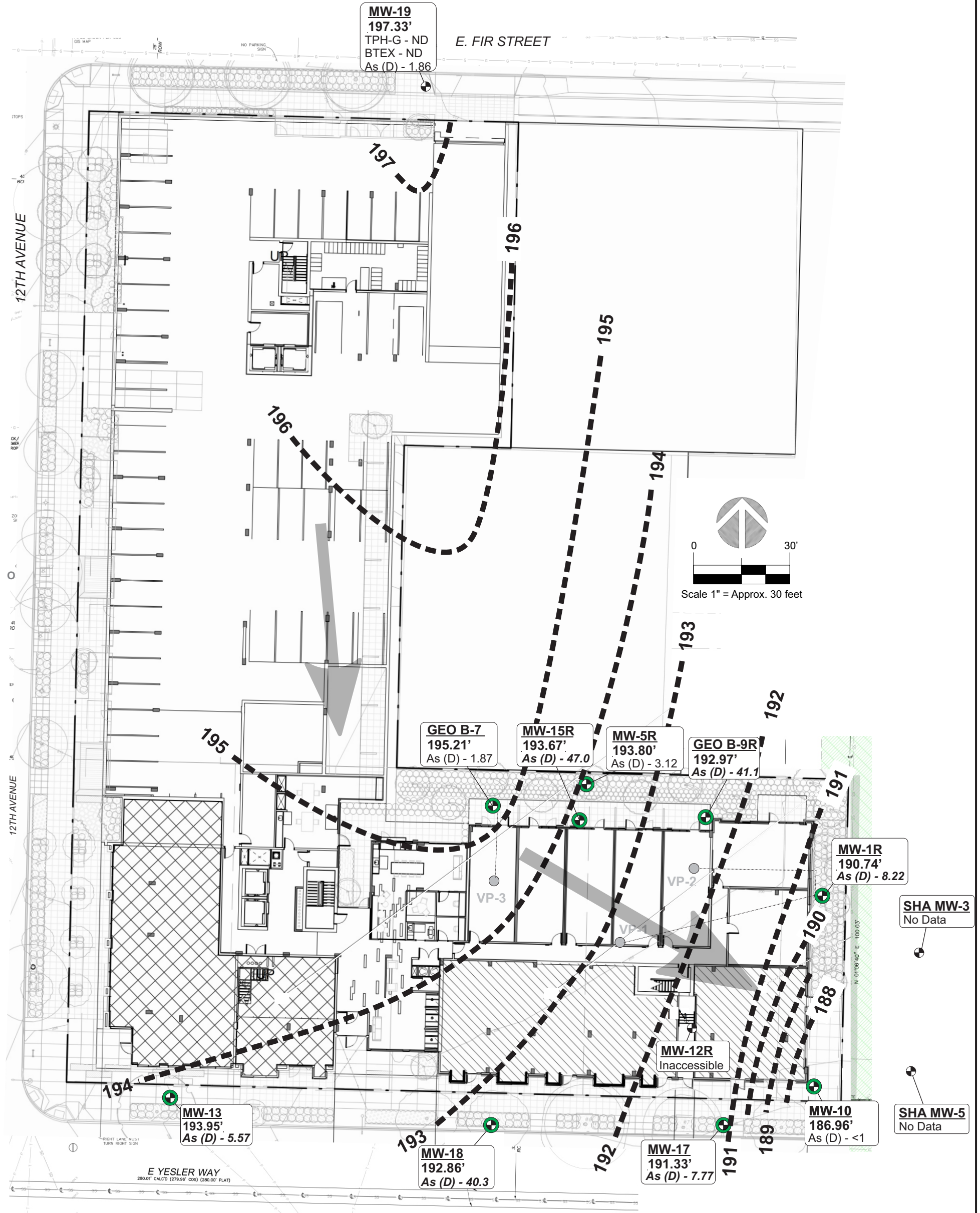
Figure 3 - 4th Quarter 2023 Groundwater Sampling Analytical Results

12th & Yesler Redevelopment Property  
 104-124 12th Avenue & 1209 E. Fir Street  
 Seattle, WA

Project No.	WES - 1591A
Date	Jan 12, 2024
File ID.	1591Q423F3

**WHITMAN**  
 Environmental Sciences

-  Monitoring Well with No Detected CVOCs or Petroleum Compounds in Groundwater in 4th Quarter 2023 Sampling
-  Monitoring Well with Detected CVOCs or Petroleum Compounds in Groundwater in 4th Quarter 2023 Sampling (None)
-  Monitoring Well with CVOCs or Petroleum Compounds above MTCA Method A in Groundwater in 4th Quarter 2023 Sampling (None)



## ***Appendix A***

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***Laboratory Analytical Reports  
Friedman & Bruya, Inc.***

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

5500 4th Avenue South  
Seattle, WA 98108  
(206) 285-8282  
fbi@isomedia.com  
www.friedmanandbruya.com

January 8, 2024

Dan Whitman, Project Manager  
Whitman Environmental Sciences  
6812 16<sup>th</sup> Ave NE  
Seattle, WA 98115

Dear Mr Whitman:

Included are the results from the testing of material submitted on December 29, 2023 from the 12th + Yesler WES-1591, F&BI 312484 project. There are 28 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 should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
WES0108R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 29, 2023 by Friedman & Bruya, Inc. from the Whitman Environmental Sciences 12th + Yesler WES-1591, F&BI 312484 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Whitman Environmental Sciences</u>
312484 -01	MW-1R-GW
312484 -02	MW-5R-GW
312484 -03	MW-10-GW
312484 -04	MW-13-GW
312484 -05	MW-15R-GW
312484 -06	MW-17-GW
312484 -07	MW-18-GW
312484 -08	MW-19-GW
312484 -09	GEO-B7R-GW
312484 -10	GEO-B9R-GW

EDB was detected in the 8260D method blank. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/08/24  
Date Received: 12/29/23  
Project: 12th + Yesler WES-1591, F&BI 312484  
Date Extracted: 01/03/24  
Date Analyzed: 01/03/24

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

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 50-150)
MW-19-GW 312484-08	<1	<1	<1	<3	<100	67
Method Blank 04-0003 MB	<1	<1	<1	<3	<100	69

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-1R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-01
Date Analyzed:	01/03/24	Data File:	312484-01.038
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	8.22
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-5R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-02
Date Analyzed:	01/03/24	Data File:	312484-02.041
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	3.12
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-10-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-03
Date Analyzed:	01/03/24	Data File:	312484-03.042
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-13-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-04
Date Analyzed:	01/03/24	Data File:	312484-04.048
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	5.57
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-15R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-05
Date Analyzed:	01/03/24	Data File:	312484-05.049
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	47.0
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-17-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-06
Date Analyzed:	01/03/24	Data File:	312484-06.050
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	7.77
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FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-18-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-07
Date Analyzed:	01/03/24	Data File:	312484-07.051
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
Arsenic	40.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	MW-19-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-08
Date Analyzed:	01/03/24	Data File:	312484-08.052
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	1.86
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	GEO-B7R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-09
Date Analyzed:	01/03/24	Data File:	312484-09.053
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	1.87
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	GEO-B9R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-10
Date Analyzed:	01/03/24	Data File:	312484-10.054
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

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

Arsenic	41.1
---------	------

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Dissolved Metals By EPA Method 6020B

Client ID:	Method Blank	Client:	Whitman Environmental Sciences
Date Received:	NA	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	I4-005 mb
Date Analyzed:	01/03/24	Data File:	I4-005 mb.036
Matrix:	Water	Instrument:	ICPMS2
Units:	ug/L (ppb)	Operator:	SP

Analyte:	Concentration ug/L (ppb)
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Arsenic	<1
---------	----

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-1R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-01
Date Analyzed:	01/02/24	Data File:	010217.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	78	126
Toluene-d8	99	84	115
4-Bromofluorobenzene	106	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-5R-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-02
Date Analyzed:	01/02/24	Data File:	010218.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	96	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: MW-10-GW	Client: Whitman Environmental Sciences
Date Received: 12/29/23	Project: 12th + Yesler WES-1591, F&BI 312484
Date Extracted: 01/02/24	Lab ID: 312484-03
Date Analyzed: 01/02/24	Data File: 010219.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	104	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: MW-13-GW	Client: Whitman Environmental Sciences
Date Received: 12/29/23	Project: 12th + Yesler WES-1591, F&BI 312484
Date Extracted: 01/02/24	Lab ID: 312484-04
Date Analyzed: 01/02/24	Data File: 010220.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	78	126
Toluene-d8	97	84	115
4-Bromofluorobenzene	99	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: MW-15R-GW	Client: Whitman Environmental Sciences
Date Received: 12/29/23	Project: 12th + Yesler WES-1591, F&BI 312484
Date Extracted: 01/02/24	Lab ID: 312484-05
Date Analyzed: 01/02/24	Data File: 010221.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	109	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	100	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: MW-17-GW	Client: Whitman Environmental Sciences
Date Received: 12/29/23	Project: 12th + Yesler WES-1591, F&BI 312484
Date Extracted: 01/02/24	Lab ID: 312484-06
Date Analyzed: 01/02/24	Data File: 010222.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	78	126
Toluene-d8	100	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	MW-18-GW	Client:	Whitman Environmental Sciences
Date Received:	12/29/23	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	312484-07
Date Analyzed:	01/02/24	Data File:	010223.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	78	126
Toluene-d8	103	84	115
4-Bromofluorobenzene	100	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: GEO-B7R-GW	Client: Whitman Environmental Sciences
Date Received: 12/29/23	Project: 12th + Yesler WES-1591, F&BI 312484
Date Extracted: 01/02/24	Lab ID: 312484-09
Date Analyzed: 01/02/24	Data File: 010224.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	78	126
Toluene-d8	101	84	115
4-Bromofluorobenzene	102	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID: GEO-B9R-GW	Client: Whitman Environmental Sciences
Date Received: 12/29/23	Project: 12th + Yesler WES-1591, F&BI 312484
Date Extracted: 01/02/24	Lab ID: 312484-10
Date Analyzed: 01/02/24	Data File: 010225.D
Matrix: Water	Instrument: GCMS11
Units: ug/L (ppb)	Operator: IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	112	78	126
Toluene-d8	98	84	115
4-Bromofluorobenzene	97	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	<0.01
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260D Dual Acquisition

Client Sample ID:	Method Blank	Client:	Whitman Environmental Sciences
Date Received:	Not Applicable	Project:	12th + Yesler WES-1591, F&BI 312484
Date Extracted:	01/02/24	Lab ID:	04-0041 mb
Date Analyzed:	01/02/24	Data File:	010208.D
Matrix:	Water	Instrument:	GCMS11
Units:	ug/L (ppb)	Operator:	IJL

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	78	126
Toluene-d8	102	84	115
4-Bromofluorobenzene	100	72	130

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.02	Dibromochloromethane	<0.5
Bromomethane	<5	1,2-Dibromoethane (EDB)	0.010 lc
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	<0.2
2-Butanone (MEK)	<20	1,2,3-Trichloropropane	<1
1,2-Dichloroethane (EDC)	<0.2	2-Chlorotoluene	<1
1,1,1-Trichloroethane	<1	4-Chlorotoluene	<1
1,1-Dichloropropene	<1	tert-Butylbenzene	<1
Carbon tetrachloride	<0.5	1,2,4-Trimethylbenzene	<1
Benzene	<0.35	sec-Butylbenzene	<1
Trichloroethene	<0.5	p-Isopropyltoluene	<1
1,2-Dichloropropane	<1	1,3-Dichlorobenzene	<1
Bromodichloromethane	<0.5	1,4-Dichlorobenzene	<1
Dibromomethane	<1	1,2-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dibromo-3-chloropropane	<10
cis-1,3-Dichloropropene	<0.4	1,2,4-Trichlorobenzene	<1
Toluene	<1	Hexachlorobutadiene	<0.5
trans-1,3-Dichloropropene	<0.4	Naphthalene	<1
1,1,2-Trichloroethane	<0.5	1,2,3-Trichlorobenzene	<1
2-Hexanone	<10		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/08/24

Date Received: 12/29/23

Project: 12th + Yesler WES-1591, F&BI 312484

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

Laboratory Code: 312484-08 (Duplicate)

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	
			Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	88	70-130
Toluene	ug/L (ppb)	50	86	70-130
Ethylbenzene	ug/L (ppb)	50	88	70-130
Xylenes	ug/L (ppb)	150	87	70-130
Gasoline	ug/L (ppb)	1,000	99	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/08/24

Date Received: 12/29/23

Project: 12th + Yesler WES-1591, F&BI 312484

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

Laboratory Code: 312484-01 (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	8.22	107 b	107 b	75-125	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Arsenic	ug/L (ppb)	10	99	80-120

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/08/24

Date Received: 12/29/23

Project: 12th + Yesler WES-1591, F&BI 312484

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

Laboratory Code: 312484-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Dichlorodifluoromethane	ug/L (ppb)	10	<1	104	30-221
Chloromethane	ug/L (ppb)	10	<10	101	50-150
Vinyl chloride	ug/L (ppb)	10	<0.02	110	50-150
Bromomethane	ug/L (ppb)	10	<5	102	50-150
Chloroethane	ug/L (ppb)	10	<1	106	50-150
Trichlorofluoromethane	ug/L (ppb)	10	<1	100	50-150
Acetone	ug/L (ppb)	50	<50	58	18-161
1,1-Dichloroethene	ug/L (ppb)	10	<1	99	50-150
Hexane	ug/L (ppb)	10	<5	98	50-150
Methylene chloride	ug/L (ppb)	10	<5	97	50-150
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	<1	106	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	10	<1	101	50-150
1,1-Dichloroethane	ug/L (ppb)	10	<1	104	50-150
2,2-Dichloropropane	ug/L (ppb)	10	<1	109	43-171
cis-1,2-Dichloroethene	ug/L (ppb)	10	<1	104	10-211
Chloroform	ug/L (ppb)	10	<1	99	50-150
2-Butanone (MEK)	ug/L (ppb)	50	<20	89	10-192
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	<0.2	108	50-150
1,1,1-Trichloroethane	ug/L (ppb)	10	<1	106	50-150
1,1-Dichloropropene	ug/L (ppb)	10	<1	103	50-150
Carbon tetrachloride	ug/L (ppb)	10	<0.5	118	50-150
Benzene	ug/L (ppb)	10	<0.35	106	50-150
Trichloroethene	ug/L (ppb)	10	<0.5	101	35-149
1,2-Dichloropropane	ug/L (ppb)	10	<1	102	50-150
Bromodichloromethane	ug/L (ppb)	10	<0.5	100	50-150
Dibromomethane	ug/L (ppb)	10	<1	99	50-150
4-Methyl-2-pentanone	ug/L (ppb)	50	<10	101	50-150
cis-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	90	50-150
Toluene	ug/L (ppb)	10	<1	105	50-150
trans-1,3-Dichloropropene	ug/L (ppb)	10	<0.4	90	50-150
1,1,2-Trichloroethane	ug/L (ppb)	10	<0.5	103	50-150
2-Hexanone	ug/L (ppb)	50	<10	110	50-150
1,3-Dichloropropane	ug/L (ppb)	10	<1	103	50-150
Tetrachloroethene	ug/L (ppb)	10	<1	103	50-150
Dibromochloromethane	ug/L (ppb)	10	<0.5	96	50-150
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	<0.01	105	50-150
Chlorobenzene	ug/L (ppb)	10	<1	101	50-150
Ethylbenzene	ug/L (ppb)	10	<1	108	50-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	<1	102	50-150
m,p-Xylene	ug/L (ppb)	20	<2	103	50-150
o-Xylene	ug/L (ppb)	10	<1	101	50-150
Styrene	ug/L (ppb)	10	<1	97	50-150
Isopropylbenzene	ug/L (ppb)	10	<1	100	50-150
Bromoform	ug/L (ppb)	10	<5	81	50-150
n-Propylbenzene	ug/L (ppb)	10	<1	104	50-150
Bromobenzene	ug/L (ppb)	10	<1	100	50-150
1,3,5-Trimethylbenzene	ug/L (ppb)	10	<1	102	50-150
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	<0.2	104	50-150
1,2,3-Trichloropropane	ug/L (ppb)	10	<1	107	50-150
2-Chlorotoluene	ug/L (ppb)	10	<1	100	50-150
4-Chlorotoluene	ug/L (ppb)	10	<1	101	50-150
tert-Butylbenzene	ug/L (ppb)	10	<1	100	50-150
1,2,4-Trimethylbenzene	ug/L (ppb)	10	<1	101	50-150
sec-Butylbenzene	ug/L (ppb)	10	<1	102	50-150
p-Isopropyltoluene	ug/L (ppb)	10	<1	100	50-150
1,3-Dichlorobenzene	ug/L (ppb)	10	<1	100	50-150
1,4-Dichlorobenzene	ug/L (ppb)	10	<1	101	50-150
1,2-Dichlorobenzene	ug/L (ppb)	10	<1	100	50-150
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	<10	98	50-150
1,2,4-Trichlorobenzene	ug/L (ppb)	10	<1	96	50-150
Hexachlorobutadiene	ug/L (ppb)	10	<0.5	93	50-150
Naphthalene	ug/L (ppb)	10	<1	96	50-150
1,2,3-Trichlorobenzene	ug/L (ppb)	10	<1	95	50-150

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 01/08/24

Date Received: 12/29/23

Project: 12th + Yesler WES-1591, F&BI 312484

**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)	10	103	105	46-206	2
Chloromethane	ug/L (ppb)	10	107	104	59-132	3
Vinyl chloride	ug/L (ppb)	10	109	108	64-142	1
Bromomethane	ug/L (ppb)	10	107	110	50-197	3
Chloroethane	ug/L (ppb)	10	110	109	70-130	1
Trichlorofluoromethane	ug/L (ppb)	10	95	100	51-159	5
Acetone	ug/L (ppb)	50	59	58	10-140	2
1,1-Dichloroethene	ug/L (ppb)	10	101	99	64-140	2
Hexane	ug/L (ppb)	10	86	91	54-136	6
Methylene chloride	ug/L (ppb)	10	105	101	43-134	4
Methyl t-butyl ether (MTBE)	ug/L (ppb)	10	108	107	70-130	1
trans-1,2-Dichloroethene	ug/L (ppb)	10	102	101	70-130	1
1,1-Dichloroethane	ug/L (ppb)	10	105	104	70-130	1
2,2-Dichloropropane	ug/L (ppb)	10	111	116	64-148	4
cis-1,2-Dichloroethene	ug/L (ppb)	10	102	101	70-130	1
Chloroform	ug/L (ppb)	10	100	97	70-130	3
2-Butanone (MEK)	ug/L (ppb)	50	81	83	47-112	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	10	104	104	70-130	0
1,1,1-Trichloroethane	ug/L (ppb)	10	106	106	70-130	0
1,1-Dichloropropene	ug/L (ppb)	10	97	101	70-130	4
Carbon tetrachloride	ug/L (ppb)	10	123	123	70-130	0
Benzene	ug/L (ppb)	10	102	102	70-130	0
Trichloroethene	ug/L (ppb)	10	98	98	70-130	0
1,2-Dichloropropane	ug/L (ppb)	10	95	96	70-130	1
Bromodichloromethane	ug/L (ppb)	10	99	99	70-130	0
Dibromomethane	ug/L (ppb)	10	96	98	70-130	2
4-Methyl-2-pentanone	ug/L (ppb)	50	99	100	68-130	1
cis-1,3-Dichloropropene	ug/L (ppb)	10	89	92	69-131	3
Toluene	ug/L (ppb)	10	98	96	70-130	2
trans-1,3-Dichloropropene	ug/L (ppb)	10	95	93	70-130	2
1,1,2-Trichloroethane	ug/L (ppb)	10	94	93	70-130	1
2-Hexanone	ug/L (ppb)	50	98	97	45-138	1
1,3-Dichloropropane	ug/L (ppb)	10	91	94	70-130	3
Tetrachloroethene	ug/L (ppb)	10	95	94	70-130	1
Dibromochloromethane	ug/L (ppb)	10	96	96	60-148	0
1,2-Dibromoethane (EDB)	ug/L (ppb)	10	97	96	70-130	1
Chlorobenzene	ug/L (ppb)	10	96	94	70-130	2
Ethylbenzene	ug/L (ppb)	10	103	101	70-130	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	10	96	96	70-130	0
m,p-Xylene	ug/L (ppb)	20	98	96	70-130	2
o-Xylene	ug/L (ppb)	10	98	96	70-130	2
Styrene	ug/L (ppb)	10	92	92	70-130	0
Isopropylbenzene	ug/L (ppb)	10	99	96	70-130	3
Bromoform	ug/L (ppb)	10	87	88	69-138	1
n-Propylbenzene	ug/L (ppb)	10	95	95	70-130	0
Bromobenzene	ug/L (ppb)	10	93	97	70-130	4
1,3,5-Trimethylbenzene	ug/L (ppb)	10	93	95	70-130	2
1,1,2,2-Tetrachloroethane	ug/L (ppb)	10	100	98	70-130	2
1,2,3-Trichloropropane	ug/L (ppb)	10	101	101	70-130	0
2-Chlorotoluene	ug/L (ppb)	10	95	95	70-130	0
4-Chlorotoluene	ug/L (ppb)	10	95	94	70-130	1
tert-Butylbenzene	ug/L (ppb)	10	93	95	70-130	2
1,2,4-Trimethylbenzene	ug/L (ppb)	10	95	94	70-130	1
sec-Butylbenzene	ug/L (ppb)	10	95	96	70-130	1
p-Isopropyltoluene	ug/L (ppb)	10	95	95	70-130	0
1,3-Dichlorobenzene	ug/L (ppb)	10	95	95	70-130	0
1,4-Dichlorobenzene	ug/L (ppb)	10	96	94	70-130	2
1,2-Dichlorobenzene	ug/L (ppb)	10	97	97	70-130	0
1,2-Dibromo-3-chloropropane	ug/L (ppb)	10	97	98	70-130	1
1,2,4-Trichlorobenzene	ug/L (ppb)	10	92	91	70-130	1
Hexachlorobutadiene	ug/L (ppb)	10	87	88	70-130	1
Naphthalene	ug/L (ppb)	10	91	92	70-130	1
1,2,3-Trichlorobenzene	ug/L (ppb)	10	91	92	70-130	1

# 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, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. 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 standard reporting limit. 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.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- 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.

312484

SAMPLE CHAIN OF CUSTODY

12/29/23

L4/VW4

SAMPLERS (signature)

Page #

of

Report To Paul Williams

Company CHRISTMAS ENV. SERVICES

Address 6818 BIRCH AVE NE

City, State, ZIP SEATTLE, WA 98115

Phone 206-261-2000 Email PAUL.WILLIAMS@CHRISTMAS-ENV.COM

PROJECT NAME

17TH & 163RD

PO #

15191

REMARKS

12/29/23  
Project specific RIs? - Yes / No

INVOICE TO

TURNAROUND TIME

Standard turnaround  
 RUSH  
Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

Archive samples  
 Other \_\_\_\_\_  
Default: Dispose after 30 days

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of Jars	NWTPH-Dx	NWTPH-Gx	BTEX EPA 8021	NWTPH-HCID	VOCs EPA 8260	PAHs EPA 8270	PCBs EPA 8082	Notes
MW-1R-010	Q1 A-D	12-29	11:55	AREA 4	4					X		<u>DISPOSAL ARSENIC</u>	<u>NO SAMPLES</u>
MW-5R-010	Q2		12:40							X			<u>ALBERT</u>
MW-10-010	Q3		11:15							X			<u>FILTERED</u>
MW-13-010	Q4		11:05							X			
MW-15R-010	Q5		12:25							X			
MW-17-010	Q6		10:50							X			
MW-18-010	Q7		10:30							X			
MW-19-010	Q8		1:25					X		X			
MW-57R-010	Q9		12:35							X			
MW-59R-010	Q10		12:20							X			

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Relinquished by:

[Signature]

[Signature]

CRS

12-29-23

3:55

Received by:

[Signature]

Liz Webber-Bryce

CRS

12/29/23

1558

Relinquished by:

[Signature]

Liz Webber-Bryce

CRS

12/29/23

1558

Received by:

[Signature]

Liz Webber-Bryce

CRS

12/29/23

1558

Friedman & Bryna, Inc.  
Ph. (206) 285-8282

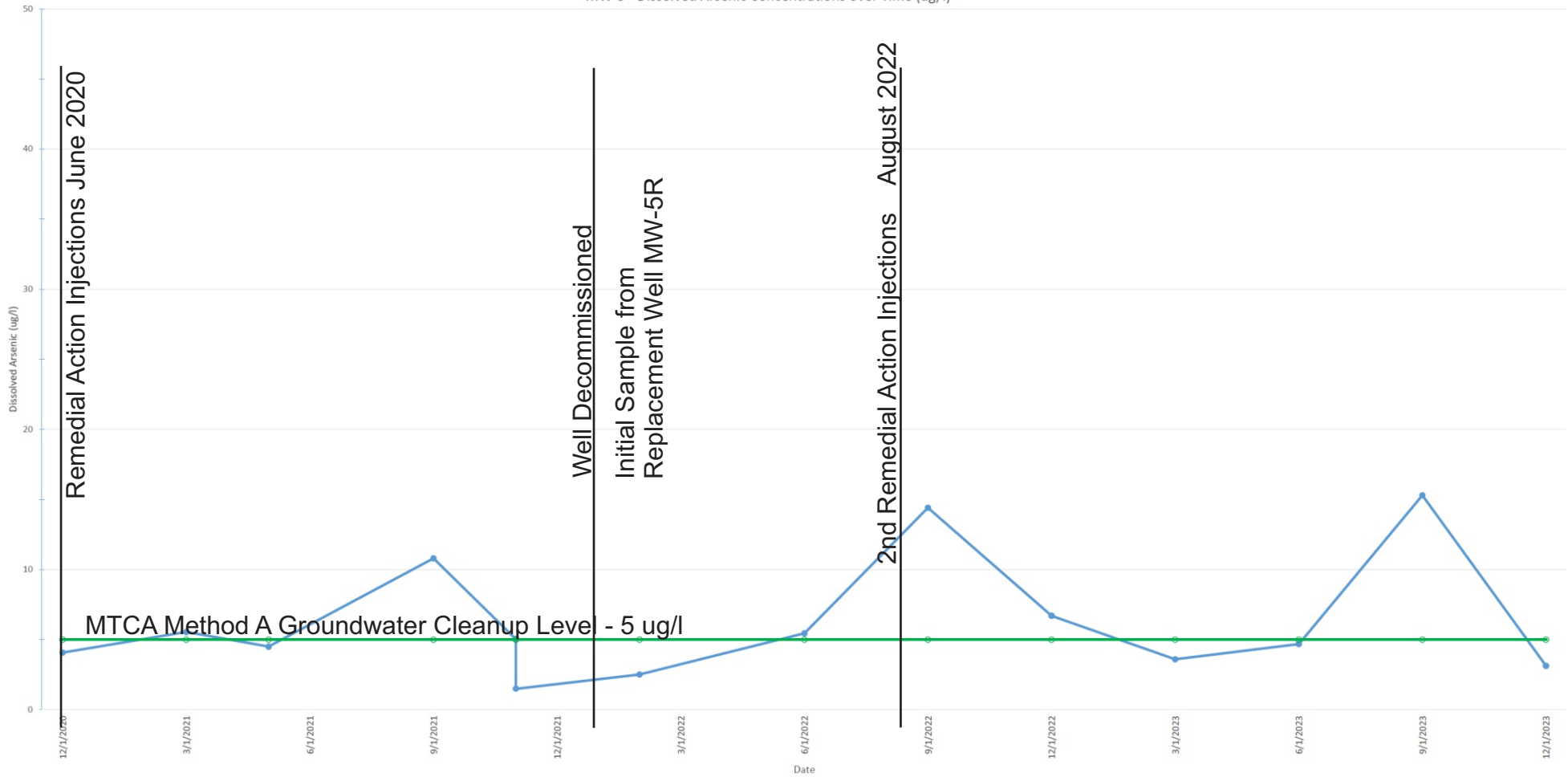
samples received at 4 °C

## ***Appendix B***

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### ***Dissolved Arsenic Time Series Plots***

MW-5 - Dissolved Arsenic Concentrations over Time (ug/l)



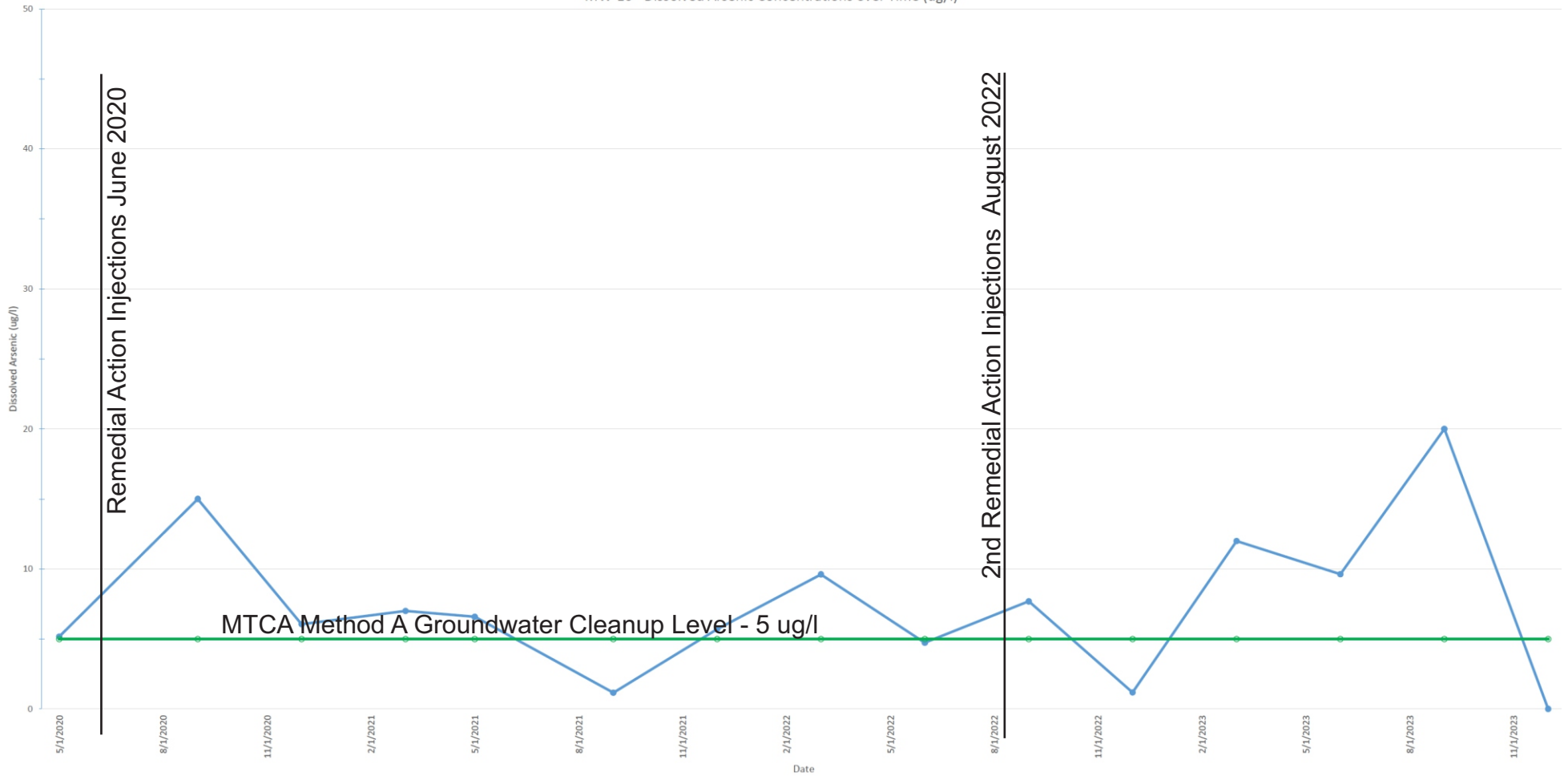
Dissolved Arsenic Over Time - MW-5/5R

Proposed Redevelopment Property  
 104-124 12th Avenue & 1209 E. Fir Street  
 Seattle, WA

Project No.	WES - 1591A
Date	Jan 20, 2024
File ID.	1591TSMW5

**WHITMAN**  
 Environmental Sciences

MW-10 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - MW-10

Proposed Redevelopment Property  
 104-124 12th Avenue & 1209 E. Fir Street  
 Seattle, WA

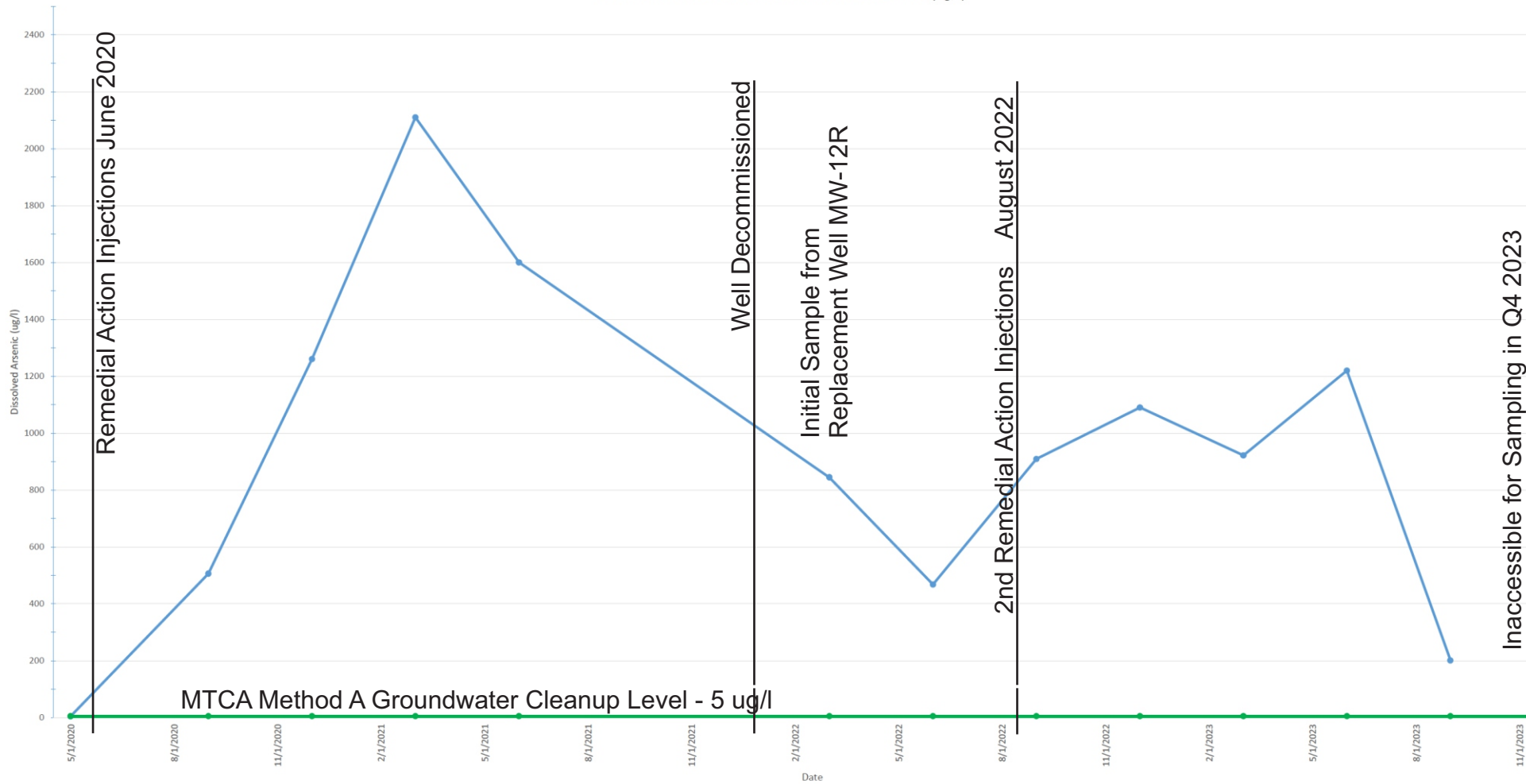
Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW10

**WHITMAN**  
 Environmental Sciences

MW-12 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - MW-12/12R

Proposed Redevelopment Property  
 104-124 12th Avenue & 1209 E. Fir Street  
 Seattle, WA

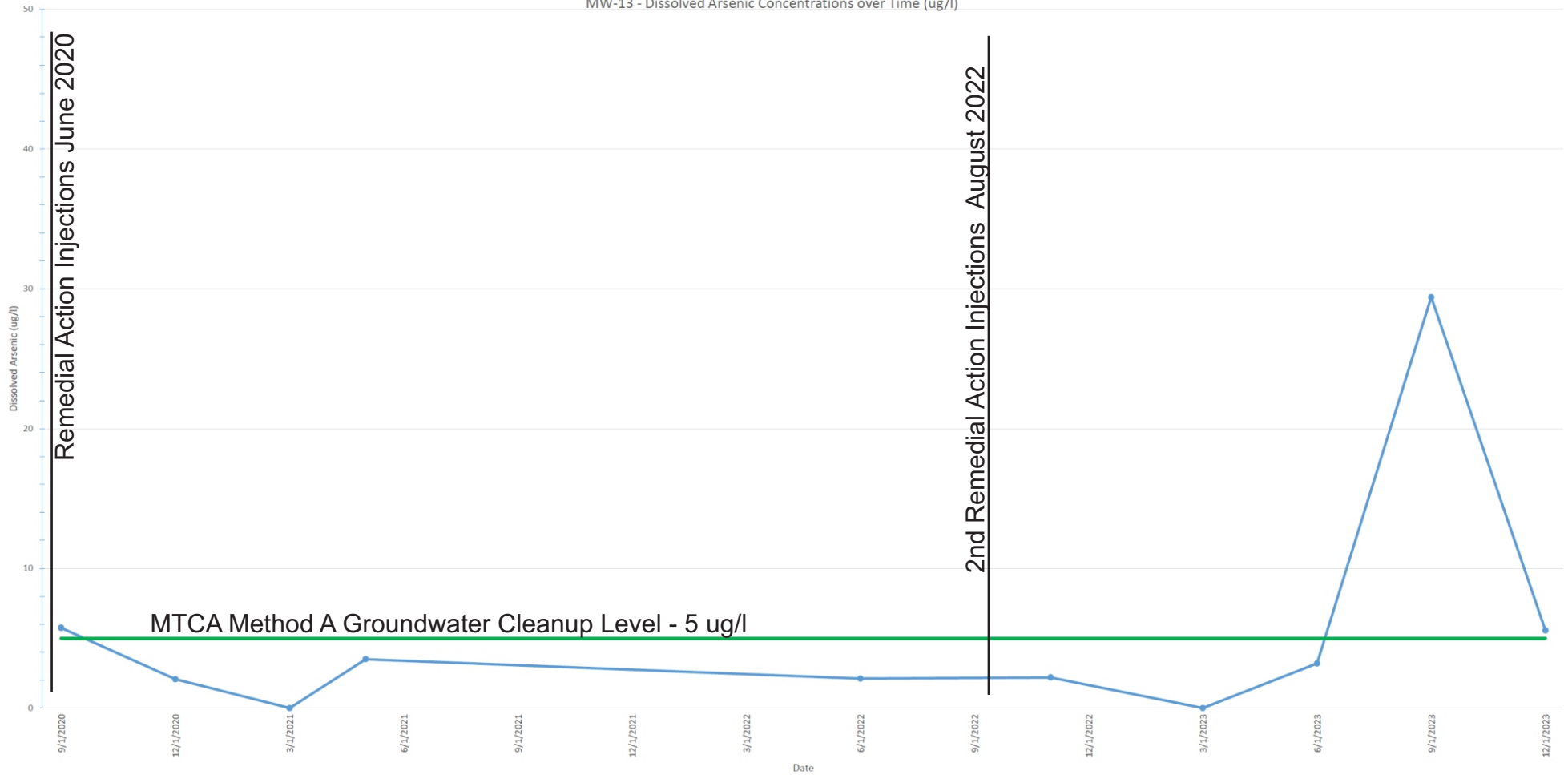
Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW12

**WHITMAN**  
 Environmental Sciences

MW-13 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - MW-13

Proposed Redevelopment Property  
104-124 12th Avenue & 1209 E. Fir Street  
Seattle, WA

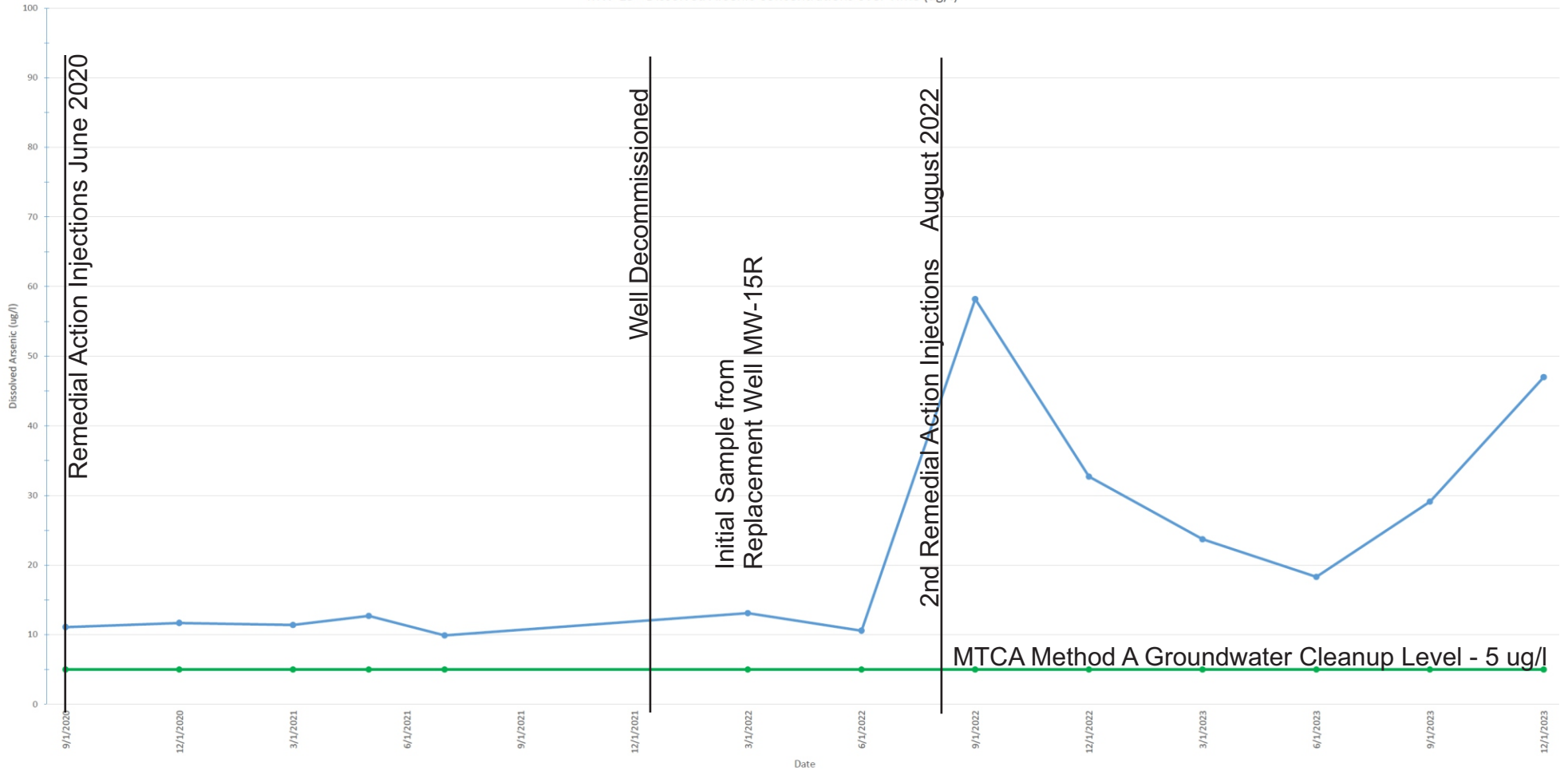
Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW13

**WHITMAN**  
Environmental Sciences

MW-15 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - MW-15/15R

Proposed Redevelopment Property  
 104-124 12th Avenue & 1209 E. Fir Street  
 Seattle, WA

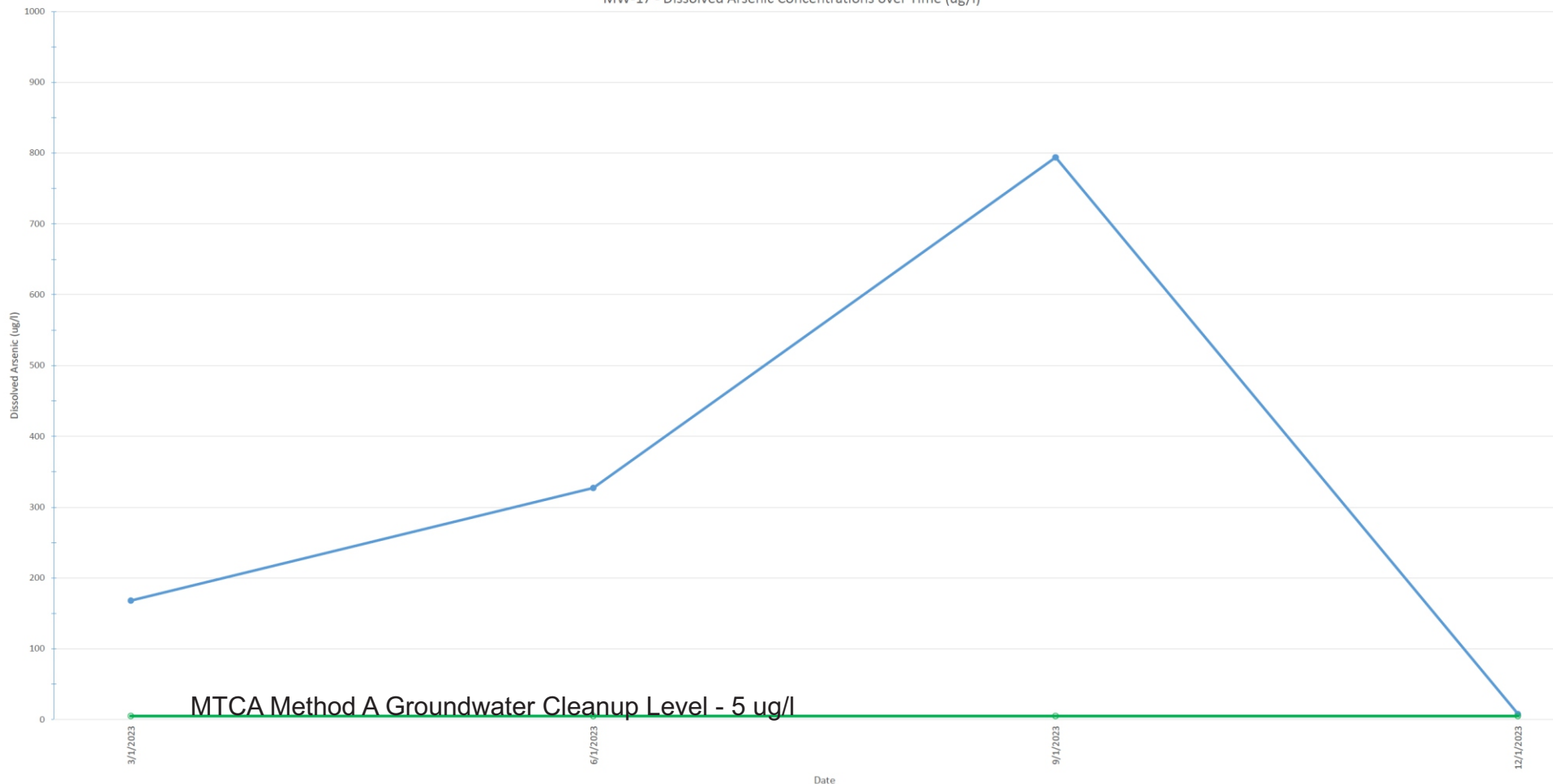
Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW15

**WHITMAN**  
 Environmental Sciences

MW-17 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - MW-17

Proposed Redevelopment Property  
104-124 12th Avenue & 1209 E. Fir Street  
Seattle, WA

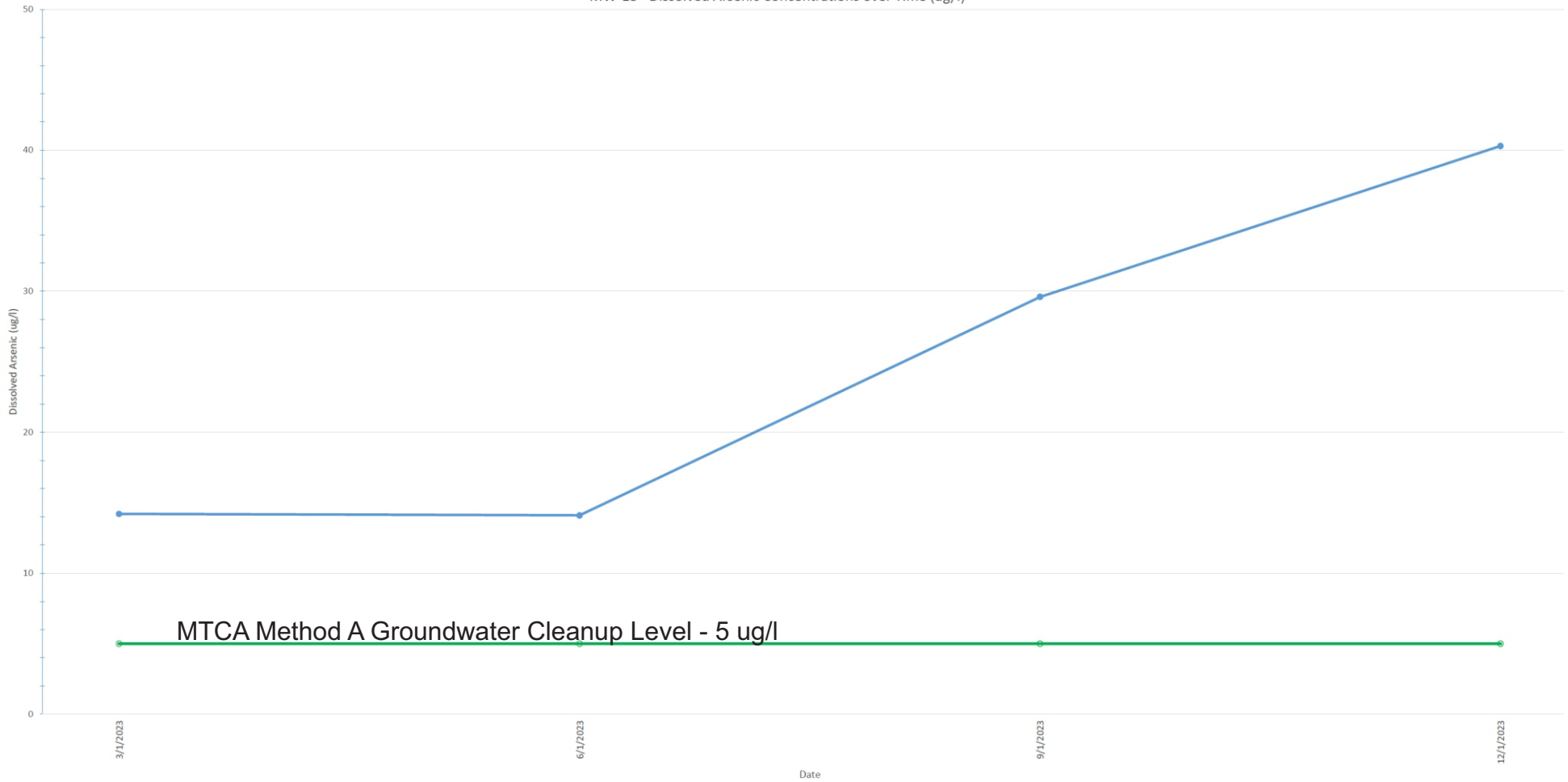
Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW17

**WHITMAN**  
Environmental Sciences

MW-18 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - MW-18

Proposed Redevelopment Property  
104-124 12th Avenue & 1209 E. Fir Street  
Seattle, WA

Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW18

**WHITMAN**  
Environmental Sciences

MW-19 - Dissolved Arsenic Concentrations over Time (ug/l)



MTCA Method A Groundwater Cleanup Level - 5 ug/l

Dissolved Arsenic Over Time - MW-19

Proposed Redevelopment Property  
104-124 12th Avenue & 1209 E. Fir Street  
Seattle, WA

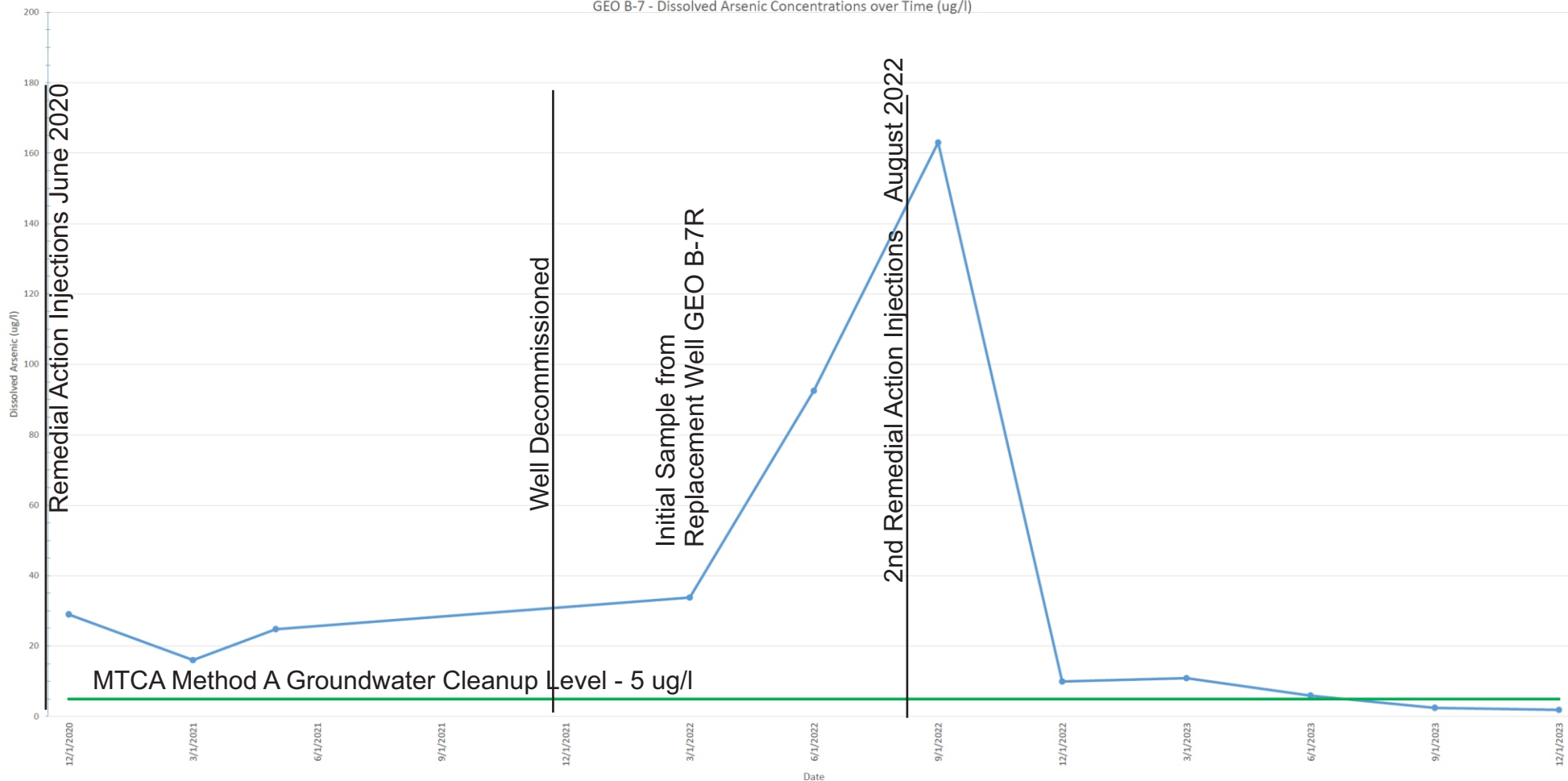
Project No. WES - 1591A

Date Jan 20, 2024

File ID. 1591TSMW19

**WHITMAN**  
Environmental Sciences

GEO B-7 - Dissolved Arsenic Concentrations over Time (ug/l)



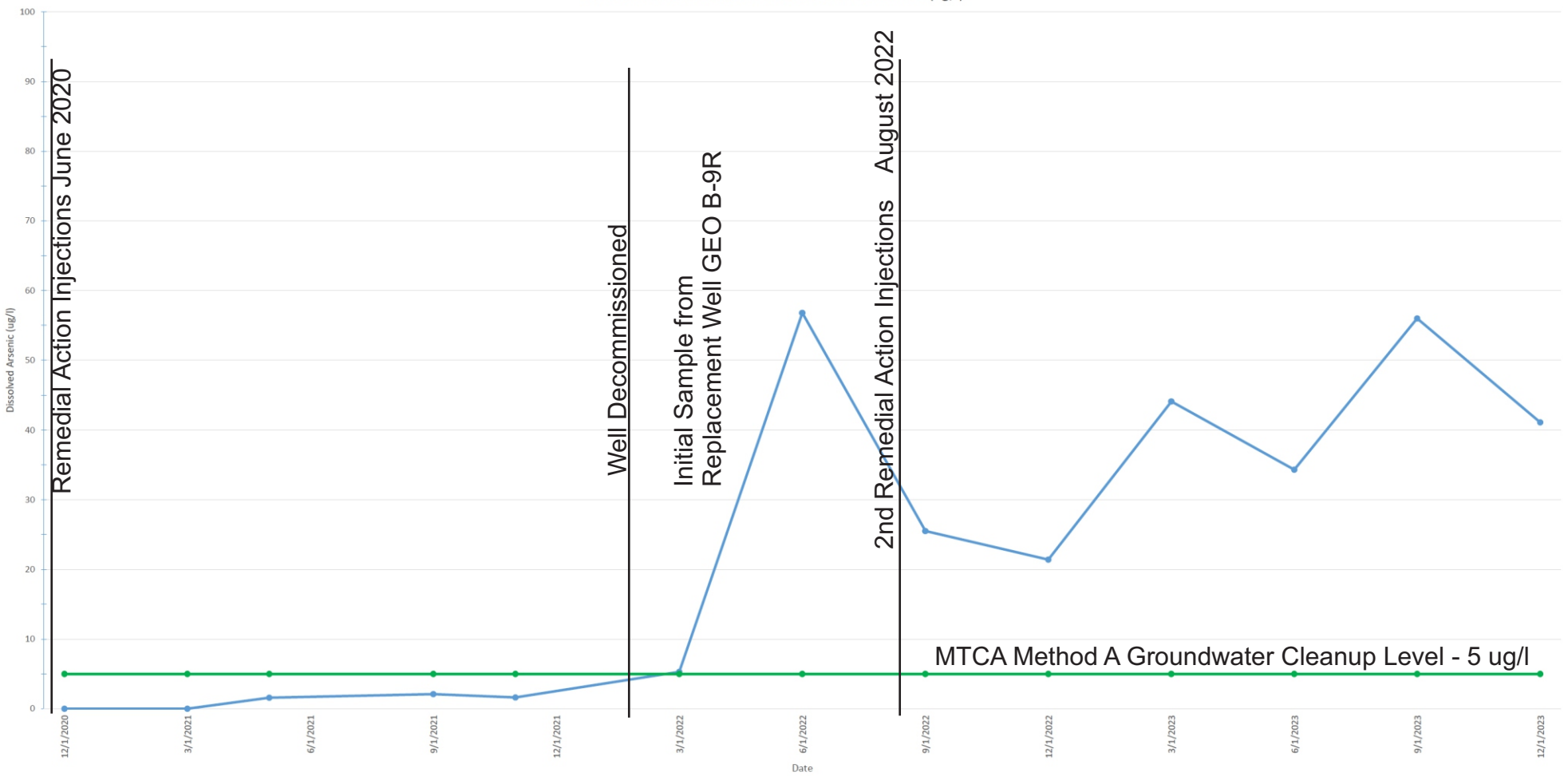
Dissolved Arsenic over Time - GEO B-7

Proposed Redevelopment Property  
 104-124 12th Avenue & 1209 E. Fir Street  
 Seattle, WA

Project No.	WES - 1591A
Date	Jan 20, 2024
File ID.	1591TSGEOB7

**WHITMAN**  
 Environmental Sciences

GEO B-9 - Dissolved Arsenic Concentrations over Time (ug/l)



Dissolved Arsenic Over Time - GEO B-9/9R

Proposed Redevelopment Property  
104-124 12th Avenue & 1209 E. Fir Street  
Seattle, WA

Project No. WES - 1591A	<b>WHITMAN</b> Environmental Sciences
Date Jan 20, 2024	
File ID. 1591TSGE0B9	