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# Third Quarterly Groundwater Monitoring Report

**Atex 213  
3501 Isleta Boulevard, SW  
Albuquerque, NM**

**PSTB Facility #31815, Release ID #28  
Work Plan ID #4298, Deliverable ID #4298-3  
Contract #20-667-3200-0020**

Submitted to:



**New Mexico Environment Department  
Petroleum Storage Tank Bureau  
121 Tijeras Ave. NE, Ste. 1000  
Albuquerque, New Mexico 87102-3400**

Submitted by:

**EA Engineering, Science, and Technology, Inc., PBC**

**320 Gold Avenue SW, Suite 1300  
Albuquerque, NM 87102  
Telephone: 505-224-9013**



**EA Engineering, Science,  
and Technology, Inc., PBC**

**October 28, 2023**

October 28, 2023

Mr. Corey Jarrett  
Geoscientist - Supervisor  
Remedial Action Program  
New Mexico Environment Department  
Petroleum Storage Tank Bureau  
2905 Rodeo Park Dr. East, Building 1  
Santa Fe, NM 87505

**Third Quarterly Groundwater Monitoring Report  
Atex 213, 3501 Isleta Boulevard, SW, Albuquerque, NM  
Release ID #: 28 Facility #: 31815 Work Plan 4298 Deliverable ID 4298-3  
Contract #: 22 667 3200 0020**

Dear Mr. Jarrett:

EA Engineering, Science, and Technology, Inc. PBC (EA) prepared this report to present the results of groundwater monitoring performed by EA on September 6, 2023, at Atex 213 located at 3501 Isleta Boulevard, SW, Albuquerque, New Mexico (**Figure 1**). This is the third monitoring event after the injection of PetroFix® in September 2022.

## 1. BACKGROUND

### 1.1 Release, PetroFix® Injection, Hydrogeology

- Atex Gas, Inc. was owned and operated by Bell Station 213.
- **In 1981**, inventory records indicated that approximately **43,000 gallons of unleaded gasoline** were released.
- In June 2021, **benzene** groundwater concentrations exceeded the standard in wells **NMW-1** (56 micrograms per liter [ $\mu\text{g/L}$ ]) and **RNMW-2** (13  $\mu\text{g/L}$ ); the **total naphthalenes** concentration exceeded the standard in **MW-1R** (37  $\mu\text{g/L}$ ).
- In June 2022, EA prepared and submitted to NMED PSTB a **Final Remediation Plan** to inject **PetroFix® with nitrate and sulfate electron donor amendments** into the impacted saturated zone around **MW-1R**, **RNMW-2**, and **NMW-1** using direct push methodology (EA, Jun 6, 2022).
- In September 2022, **EA injected 1,464 pounds of PetroFix® (150 gallons) mixed with water (total solution volume of 1,066 gallons) around wells NMW-1, MW-1R, and RNMW-2**.
- Groundwater in the area of concern is located approximately **9-11 feet below the ground surface (bgs)**. The groundwater flow direction is to the **south-southeast at a** gradient of approximately **0.001-0.002**.
- The soil in the vadose and saturated zones consists primarily of poorly to well-graded **fine to coarse sands, silty sand near the surface, and lenses of silt/clay**.

## 1.2 April 2022 Baseline Groundwater Elevations and Geochemical Parameters

Well ID	Depth to Water	Casing Elevation	Groundwater Elevation	Groundwater Temperature	Specific Conductance	pH	Oxidation-Reduction Potential	Dissolved Oxygen
Units	feet toc	feet amsl	feet amsl	degrees Celsius	µS/cm	S.U.	mV	µg/L
MW-1R	9.27	4,932.08	4,922.81	18.44	1,786	7.16	-117	1.98
MW-38	9.06	4,931.87	4,922.81	17.63	1,633	6.86	-81	1.17
MW-4R	10.68	4,933.42	4,922.74	19.44	1,418	7.21	-116	1.06
MW-6RR	11.01	4,933.90	4,922.89	18.74	1,207	7.26	21	1.77
NMW-1	9.72	4,932.63	4,922.91	18.21	2,006	6.75	-135	0.82
NMW-4R	10.03	4,932.53	4,922.50	19.16	1,307	7.03	-54	1.05
RNMW-2	10.62	4,933.45	4,922.83	18.88	1,709	6.86	-71	0.83
RNMW-3	10.38	4,933.22	4,922.84	19.03	1,667	2.02	-63	1.02

Notes:

µS/cm = micro-Siemens per centimeter

amsl = above the mean sea level

mV = millivolts

µg/L = micrograms per liter

toc = top of the well casing

S.U. = standard units

## 1.3 April 2022 Baseline Groundwater Contaminant Concentrations

Historically, the primary contaminants of concern (COCs) at the site have been petroleum hydrocarbons that included **benzene, toluene, ethylbenzene, total xylene (BTEX), methyl tertiary-butyl ether (MTBE), and total naphthalenes**. Recently, benzene and total naphthalene concentrations have been above the standards.

**In April 2022, the benzene concentration was 32 µg/L in NMW-1 and 44 µg/L in RNMW-2,** above the NMWQCC standard of 5 µg/L. All other COCs were below their associated standards. A summary of the results is provided in the table below:

Well ID	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Total Naphthalenes	Nitrate	Sulfate	TDS
Standard	5	1,000	700	620	100	30	10	600	1,000
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L
MW-1R	<1.0	<1.0	<1.0	<1.5	<1.0	4.3	<0.50	0.2	-
MW-38	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.50	130	-
MW-4R	<1.0	<1.0	<1.0	<1.5	1.7	<10	<0.50	100	-
MR-6RR	<1.0	<1.0	<1.0	<1.5	<1.0	<10	<0.50	95	-
NMW-1	32	<1.0	1.4	3.4	4.5	8.4	<0.50	200	-
NMW-4R	<1.0	<1.0	<1.0	<1.5	1.9	<10	<0.50	91	-
RNMW-2	44	<2.0	<2.0	<3.0	51	13	<0.50	68	-
RNMW-3	<1.0	<1.0	<1.0	<1.5	5.5	<10	<0.10	100	586

Notes:

**Bold** indicates concentration above the New Mexico Administrative Code 20.6.2.3103 Human Health Standards for Groundwater.

MTBE = Methyl tertiary butyl ether

TDS = Total dissolved solids

## 2. SCOPE AND EXECUTION

On September 6, 2023, EA personnel completed the following scope of work for the 3<sup>rd</sup> quarterly post-injection groundwater monitoring event:

- Gauged water levels in wells **MW-1R, MW-4R, MW-6RR, MW-38, NMW-1, NMW-4R, RNMW-2, and RNMW-3**. Field records are provided in *Appendix A* and gauging results are in *Table 1*.
- Before sampling, wells were purged using dedicated, clean, disposable bailers and twine. During purging, **dissolved oxygen (DO), oxygen-reduction potential (ORP), pH, temperature, and specific conductivity (SpC) were measured** using a calibrated water quality meter. Field records are provided in *Appendix A* and groundwater geochemical parameter results are in *Table 2*.
- Collected groundwater samples from **MW-1R, MW-4R, MW-6RR, MW-38, NMW-1, NMW-4R, RNMW-2, and RNMW-3**. Samples were collected into clean sealed containers supplied by Hall Environmental Analysis Laboratory (HEAL), labeled, placed into coolers packed with ice, entered into a chain of custody, and delivered to HEAL under direct custody.
- Submitted groundwater samples to Hall Environmental Analysis Laboratory for volatile organic compounds (**VOCs**) analysis by the U.S. Environmental Protection Agency (EPA) **Method 8260B**. Laboratory results are provided in *Appendix B*, sample quality control requirements are in *Table 3*, and groundwater geochemical parameter results are in *Table 4*.
- Prepared and submitted this report.

### 3. RESULTS

#### 3.1 Groundwater Levels, Flow Direction, and Gradient

Provided below is a summary of groundwater gauging performed on September 6, 2023. Historical data are provided in **Table 1**.

Units	mm/dd/yy	feet amsl	feet btoc	feet amsl
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation
MW-1R	09/06/23	4932.08	8.98	4923.10
MW-4R	09/06/23	4933.42	10.52	4922.90
MW-6RR	09/06/23	4933.90	10.88	4923.02
MW-38	09/06/23	4931.87	8.93	4922.94
NMW-1	09/06/23	4932.63	9.49	4923.14
NMW-4R	09/06/23	4932.53	9.84	4922.69
RNMW-2	09/06/23	4933.45	10.39	4923.06
RNMW-3	09/06/23	4933.22	10.22	4923.00

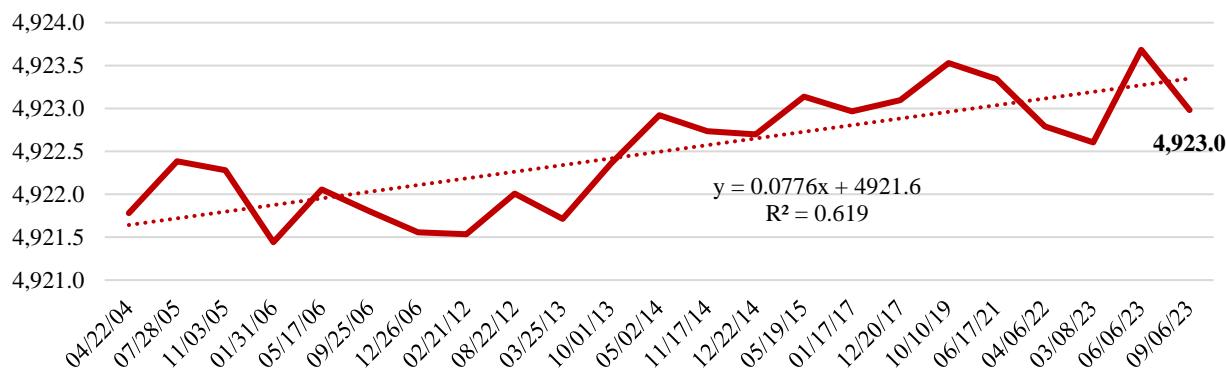
feet amsl = feet above mean sea level

feet bloc = feet below the top of the well casing

mm/dd/yy = month/date/year

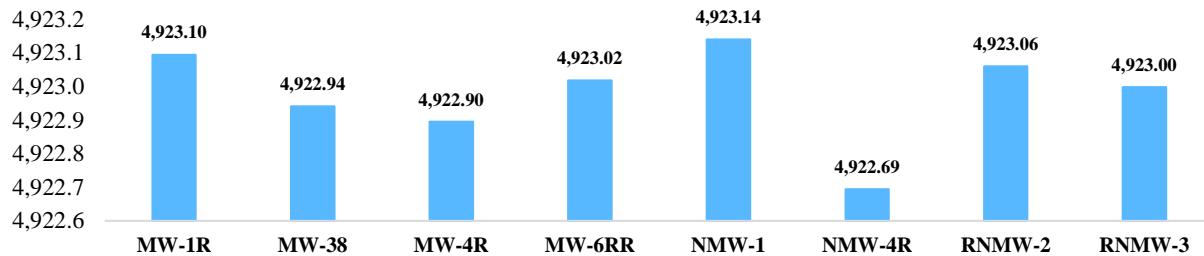
The average water level was 9.9 feet below the surface and the average groundwater elevation was 4,923.0 feet above the mean sea level (amsl), within the levels observed since 2014. The groundwater level trend since 2004 has been increasing.

#### Average Groundwater Elevation, feet amsl



The groundwater levels ranged from 4,922.69 in NMW-4R feet amsl and 4,923.14 feet amsl in NMW-1.

#### September 9, 2023, Groundwater Elevations, feet amsl



When compared to June 2023, the average elevation increased by 0.7 feet. The groundwater flow was to the **south-southeast at an average gradient of 0.015 (Figure 2)**.

### 3.2 Groundwater Geochemical Conditions

Provided below is a summary of the groundwater geochemical conditions.

Groundwater Geochemical Parameters							
Units	mm/dd/yy	S.U.	$\mu\text{S}/\text{cm}$	°C	mg/L	mV	
Well	Date	pH	SpC	Temp	DO	ORP	
RNMW-3	09/06/23	7.41	1,840	24.7	0.35	3	
MW-4R	09/06/23	7.45	1,387	24.0	0.26	-34	
RNMW-2	09/06/23	7.36	1,680	24.1	0.31	36	
MW-6RR	09/06/23	7.49	1,357	21.4	0.25	21	
MW-1R	09/06/23	7.70	1,314	24.1	0.21	-5	
NMW-1	09/06/23	7.00	1,924	26.0	0.26	-114	
MW-38	09/06/23	7.04	1,546	24.8	0.30	13	
NMW-4R	09/06/23	7.16	759	22.2	0.26	21	
Average	09/06/23	7.33	1,476	23.9	0.28	-7	

NOTES:

DO = Dissolved oxygen in milligrams per liter (mg/L)

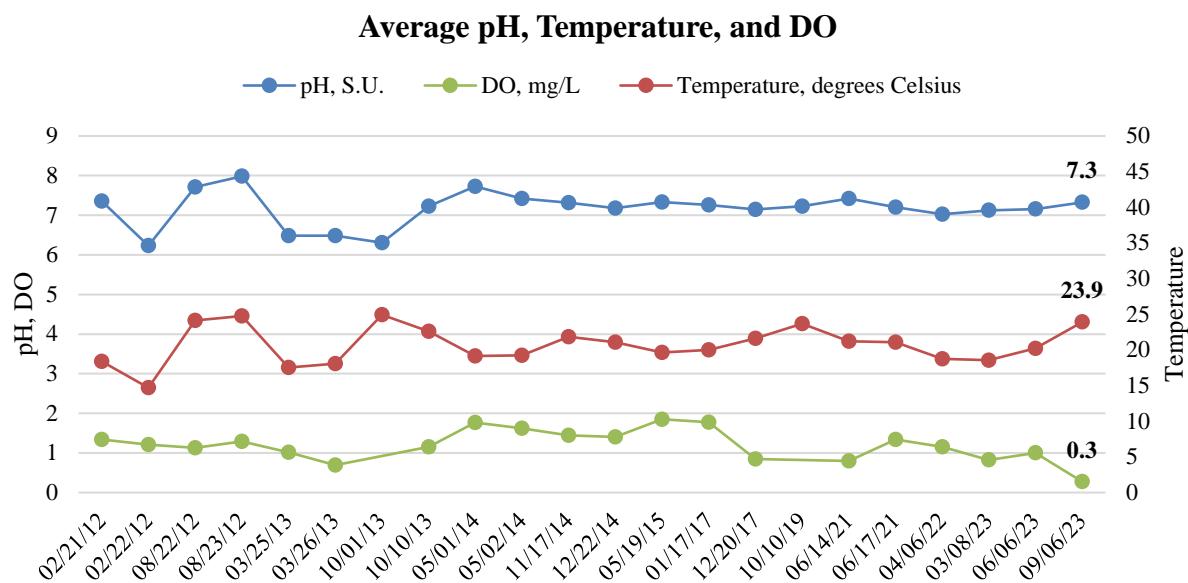
ORP = Oxidation-Reduction Potential in millivolts (mVs)

pH = Potential of Hydrogen, standard units (S.U.)

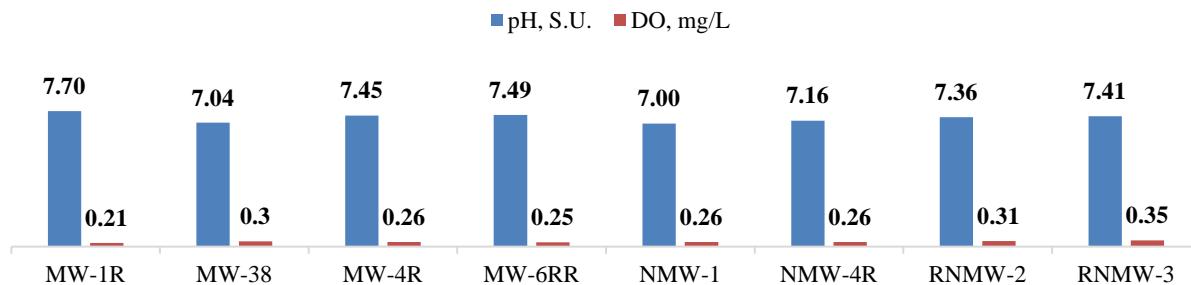
SpC = Specific conductance in micro-siemens per centimeter ( $\mu\text{S}/\text{cm}$ )

Temp = Temperature in degrees Celsius (°C)

The average **pH was near neutral** at 7.3 standard units, the **DO was slightly aerobic** at an average of 0.3 milligrams per liter (mg/L), **ORP averaged -7.3 millivolts (mVs)**, and the **temperature was conducive to biodegradation** at an average of 23.9 degrees Celsius in line with the seasonal variation.

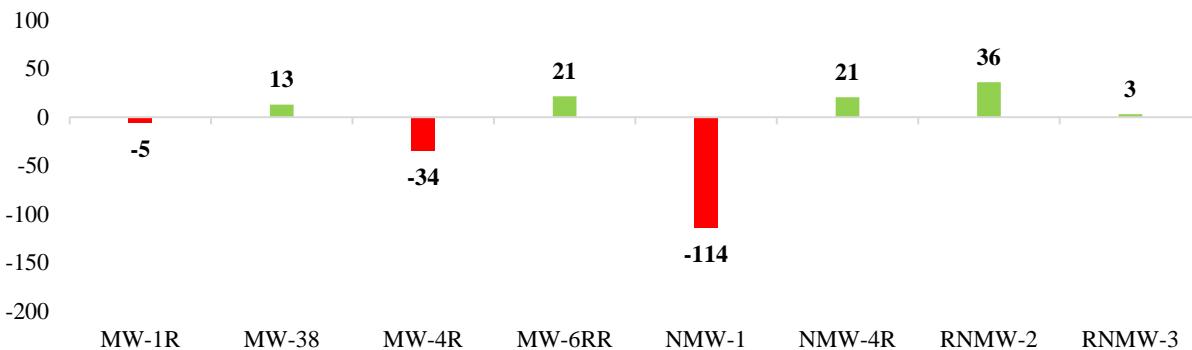


### September 6, 2023 pH and DO

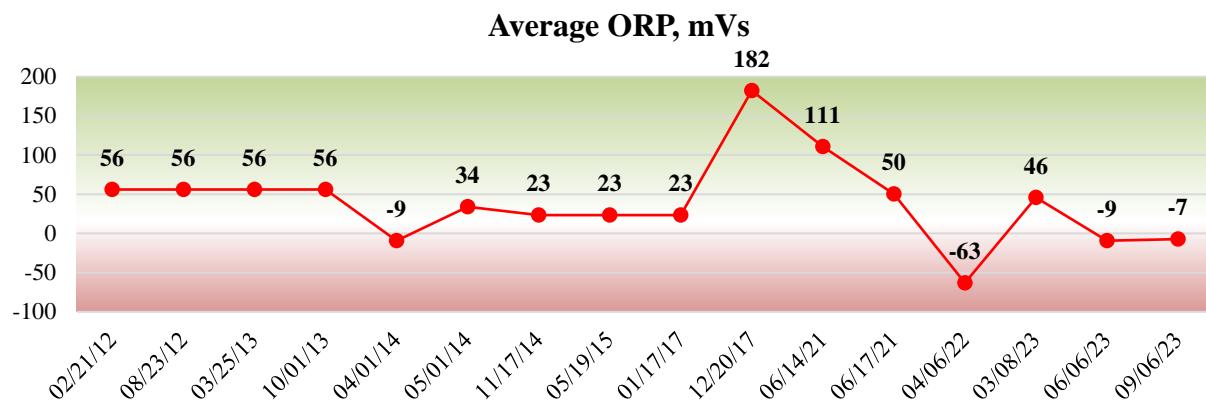


The ORP ranged from reducing in NMW-1, MW-4R, and MW-1R to oxidizing in RNMW-2, NMW-4R, MW-6RR, MW-38, and RNMW-3. ORP was the most reducing (-114 mVs) in NMW-1 in which benzene concentrations were above the standard.

### September 6, 2023 ORP



The average site ORP was similar to that of June 2023.

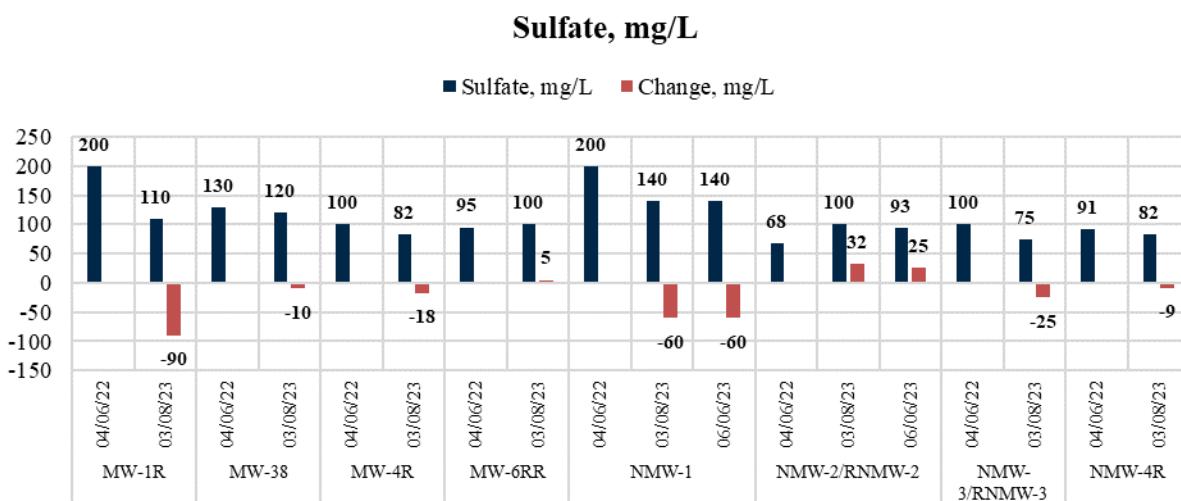


### 3.3 Nitrate, Sulfate, and TDS Concentration in Groundwater

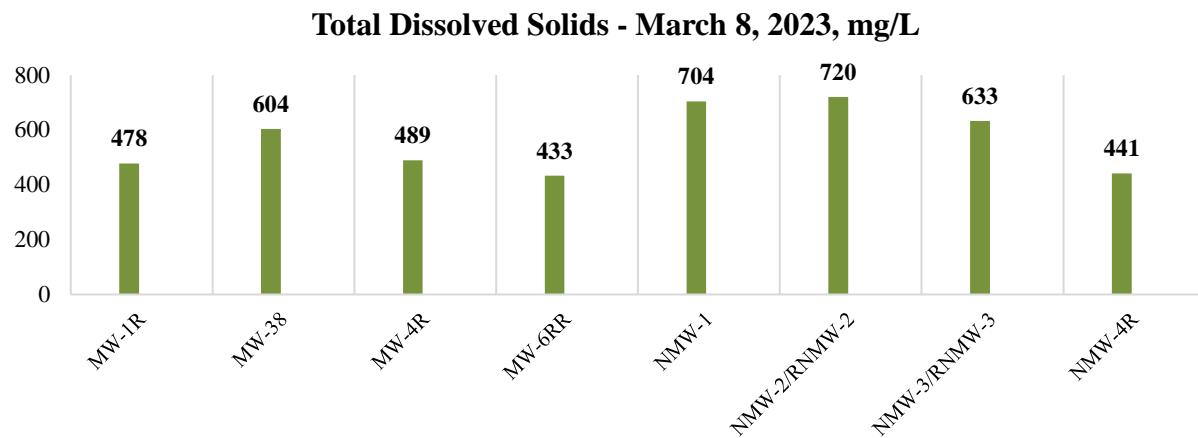
Nitrate and sulfate were added as electron acceptors during the injection of PetroFix®. **Nitrate concentrations were below** the laboratory limits in NMW-1 and RNMW-2 indicating that nitrate was depleted during the biodegradation of petroleum hydrocarbons through nitrate **respiration**.

Nitrate, sulfate, and TDS were not analyzed during this quarter. The discussion below pertains to the previously collected data.

Between April 2022 and March 2023, **sulfate concentrations decreased in MW-1R and NMW-1**, around which sulfate was injected with PetroFix®. The decrease indicates that petroleum hydrocarbons were likely biodegraded through **sulfate respiration**. However, since March 2023, concentrations in NMW-1 did not change indicating that the sulfate reduction did not proceed further. The injection of sulfate around RNMW-2 is likely masking sulfate respiration as the pre-injection concentrations were about one-third of those in MW-1R and NMW-1.



In March 2023, the Total Dissolved Solids (TDS) concentrations ranged from 433 mg/L in MW-6RR to 720 mg/L in RNMW-2.



### 3.4 Volatile Organic Compounds in the Groundwater

Provided below is a summary of the September 6, 2023, results. Historical data are presented in **Table 4**.

NMAC 20.6.2.3103	5	1,000	700	620	100	30
Well	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	TN
MW-1R	<b>10</b>	< 20	< 20	< 30	< 20	< 500
MW-4R	< 2.0	< 2.0	< 2.0	< 3.0	2.9	< 10
MW-6RR	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10
MW-38	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10
NMW-1	<b>41</b>	< 2.0	< 2.0	< 3.0	5.4	11
RNMW-2	< 1.0	< 1.0	< 1.0	< 1.5	22	< 10
/RNMW-3	< 1.0	< 1.0	< 1.0	< 1.5	20	< 10
NMW-4R	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10

Concentrations are in micrograms per liter.

MW-1R had PetroFix® and was diluted in the laboratory due to matrix interference.

< = less than the laboratory reporting limit

MTBE = methyl tertiary butyl ether

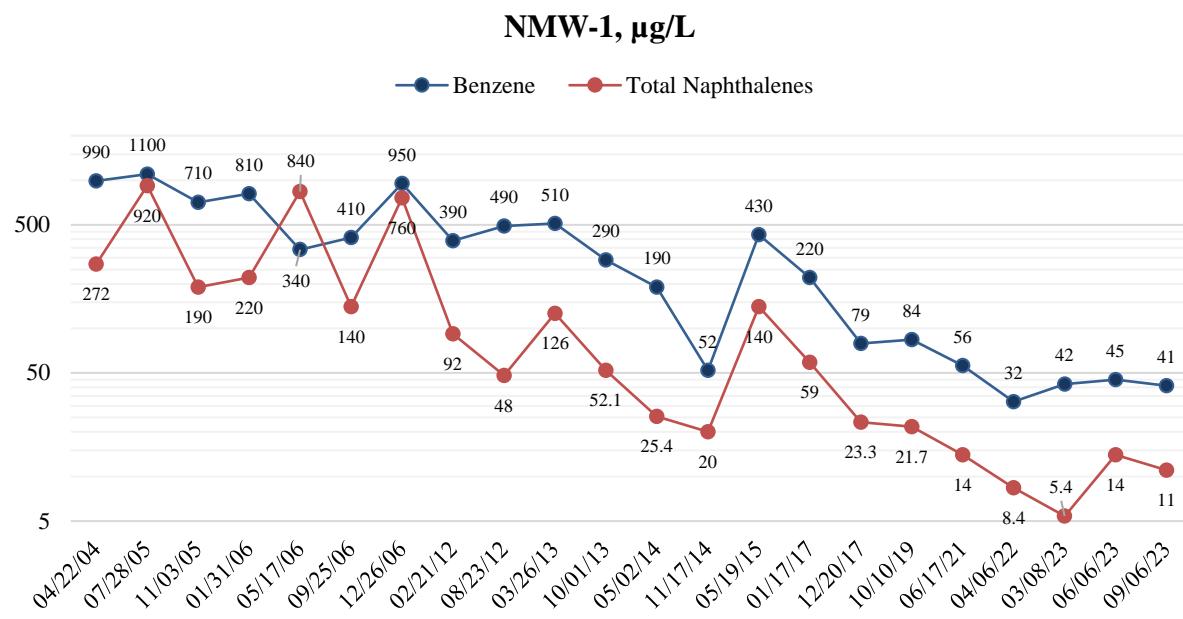
TN = total naphthalenes

**The benzene concentration of 41 micrograms per liter ( $\mu\text{g/L}$ ) in NMW-1 and 10  $\mu\text{g/L}$  in MW-1R** exceeded the New Mexico Administrative Code (NMAC) 20.6.2.3103 human health standards for groundwater. In June 2023, benzene concentration in NMW-1 was 45  $\mu\text{g/L}$  and in MW-1R was below 1.0  $\mu\text{g/L}$ .

#### 3.4.1 VOCs in NMW-1

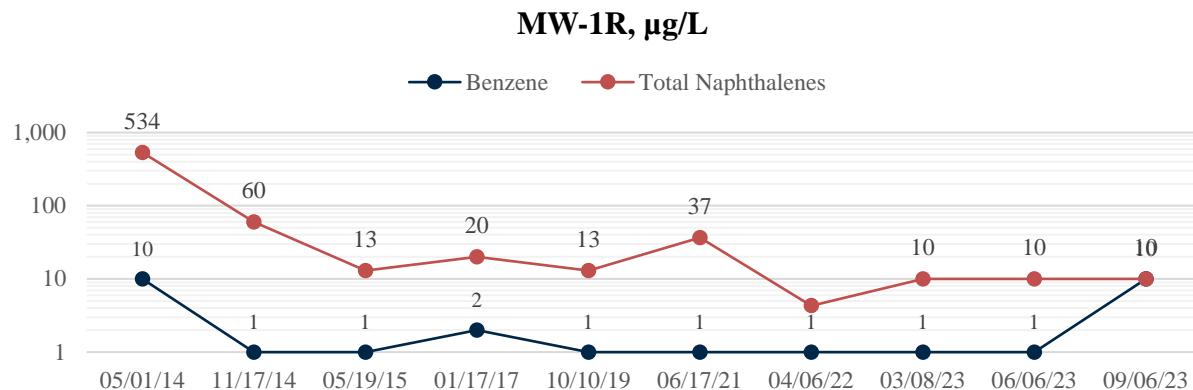
**The overall benzene and total naphthalene concentration trends in NMW-1 are decreasing. However, after the September 2022 injection, there was not a noticeable change in concentrations which indicates that the influence of the injection was limited or insufficient to affect contaminant concentrations. An additional injection in the vicinity of the well is recommended.**

A rapid decrease in ORP after the injection may indicate that hydraulic displacement of impacted groundwater occurred during the injection. The increased groundwater elevation may also influence concentrations. Initial aerobic conditions that decreased to near anoxic and reducing and evidence of nitrate and sulfate respiration indicate that biodegradation was likely ongoing. Microbial evaluation using Bio-Traps® and QuantArray Petro® would provide direct evidence of the types and degrees of biodegradation.



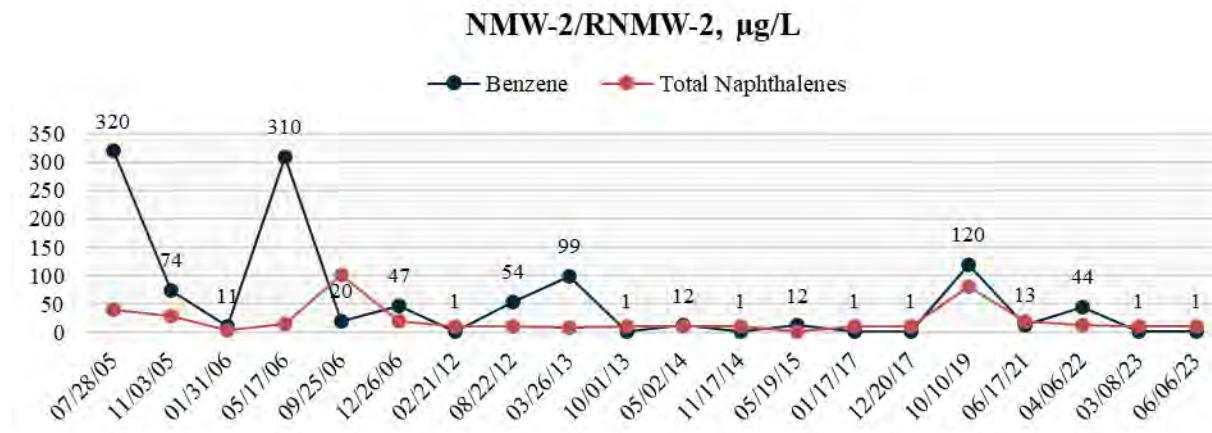
### 3.4.2 VOCs in MW-1R

After the injection, benzene and total naphthalene concentrations in MW-1R remained below the standards. PetroFix® was present in the well causing matrix interference that led to a high dilution factor of the sample and high laboratory detection limits. The graph below shows concentration trends.



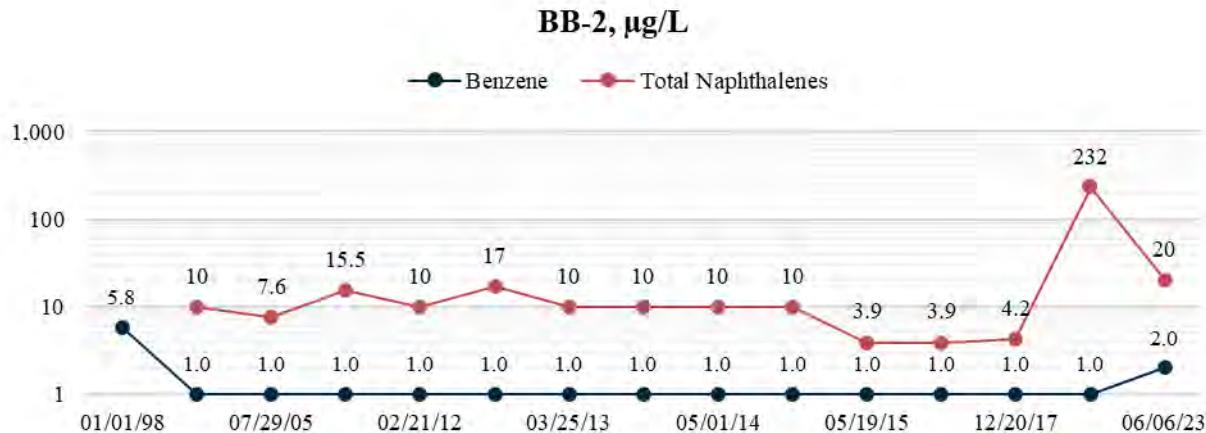
### 3.4.3 VOCs in NMW-2/RNMW-2

After the injection, benzene concentration in RNMW-2 decreased to below the standard and total naphthalene concentration remained below the standard.



### 3.4.3 VOCs in BB-2

In BB-2, the total naphthalene concentrations decreased from 232 µg/L in October 2019 to below the standard of 30 µg/L in June 2023, and benzene concentrations remained below the standard of 5 µg/L. BB-2 was not sampled in September 2023.



## 4.0 SUMMARY AND RECOMMENDATIONS

### 4.1. Summary

- The average depth to water was 9.9 feet bgs and the average groundwater elevation was 4,923.0 feet amsl, within the upper bound of levels observed since 2014. The groundwater flow was to the south-southeast at an average gradient of 0.015. The groundwater level trend since 2004 has been increasing.
- The pH was near neutral, DO was slightly aerobic, ORP ranged from reducing to oxidizing, and the temperature was conducive to biodegradation.
- After becoming oxidizing following the injection of PetroFix, the average ORP decreased into a slightly reduced range which may indicate that aerobic processes are likely decreased.
- After the injection, nitrate was not detected although it was injected. This indicates that nitrate respiration took place degrading hydrocarbon and denitrifying nitrates.
- Between the injection and March 2023, sulfate concentrations decreased indicating that sulfate respiration occurred and was likely degrading petroleum hydrocarbons by anaerobic bacteria. However, sulfate concentrations were largely unchanged between March 2023 and June 2023 indicating that sulfate respiration may have slowed or stalled.
- The TDS concentrations were within the expected range for the Rio Grande floodplain concentration range.
- ***The benzene concentration of 41 micrograms per liter ( $\mu\text{g}/\text{L}$ ) in NMW-1 and 10  $\mu\text{g}/\text{L}$  in MW-1R*** exceeded the New Mexico Administrative Code (NMAC) 20.6.2.3103 human health standards for groundwater.
- After the injection, benzene and total naphthalene concentrations in MW-1R decreased to below the standards; however, benzene concentration increased to 10  $\mu\text{g}/\text{L}$  in September 2023. In RNMW-2, benzene total naphthalene concentrations decreased to below the standards.
- In BB-2, in October 2019, naphthalene concentration decreased from 232  $\mu\text{g}/\text{L}$  to below the standard of 30  $\mu\text{g}/\text{L}$ .

### 4.2 Recommendations

- Continue groundwater monitoring. One groundwater monitoring event remains under Work Plan 4298. The inclusion of BB-2 into the sampling regimen is recommended.
- Consider Quant-Array Petro® microbial analysis in the key wells to better understand the type and degree of biodegradation occurring at the site.
- Consider re-injection around wells NMW-1 and MW-1R.

Please feel free to contact me at (505) 296-1070 or [vmustafin@eaest.com](mailto:vmustafin@eaest.com) if you have questions or comments.

Sincerely,

**EA Engineering, Science, and Technology, Inc., PBC**

A handwritten signature in black ink, appearing to read "Jyf V. Mustafin".

Vener Mustafin, P.E.  
Project Manager/Engineer

## ATTACHMENTS

- Table 1 Fluid Gauging Data  
Table 2 Groundwater Geochemical Parameters  
Table 3 Analytes, Methods, Containers, Preservation, Handling, and Holding Time  
Table 4 Groundwater Analytical Results
- Figure 1 Site Layout  
Figure 2 Groundwater Contour Map  
Figure 3 Volatile Organic Compounds
- Appendix A Field Records  
Appendix B Laboratory Report

## Tables

**TABLE 1. FLUID GAUGING DATA**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Units		feet amsl	feet btoc	feet amsl	
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation	Notes
BB-2	04/22/04	4,934.64	10.88	4923.76	
BB-2	07/28/05	4,934.64	11.34	4923.30	
BB-2	11/03/05	4,934.64	11.56	4923.08	
BB-2	01/31/06	4,934.64	12.36	4922.28	
BB-2	05/17/06	4,934.64	11.66	4922.98	
BB-2	09/25/06	4,934.64	11.72	4922.92	
BB-2	12/26/06	4,934.64	12.04	4922.60	
BB-2	02/21/12	4,934.64	12.24	4922.40	
BB-2	08/22/12	4,934.64	11.69	4922.95	
BB-2	03/25/13	4,934.64	12.05	4922.59	
BB-2	10/01/13	4,934.64	11.70	4922.94	
BB-2	05/02/14	4,934.64	11.81	4922.83	
BB-2	11/17/14	4,934.64	12.06	4922.58	
BB-2	05/19/15	4,934.64	11.56	4923.08	
BB-2	01/17/17	4,934.64	11.82	4922.82	
BB-2	12/20/17	4,934.64	11.69	4922.95	
BB-2	10/10/19	4,934.64	11.18	4923.46	
BB-2	06/06/23	4,934.64	11.01	4923.63	
MW-1	04/22/04	4,929.78	9.25	4920.53	
MW-1	07/28/05	4,929.78		Dry	
MW-1	11/03/05	4,929.78		Dry	
MW-1	01/31/06	4,929.78		Dry	
MW-1	05/17/06	4,929.78		Dry	
MW-1	09/25/06	4,929.78		Dry	
MW-1	12/26/06	4,929.78		Dry	
MW-1	02/21/12	4,929.78		Dry	
MW-1	08/22/12	4,929.78		Dry	
MW-1	03/25/13	4,929.78		Dry	
MW-1	10/01/13	4,929.78		Dry	
MW-1	04/29/14	4,929.78		Plugged	
MW-10	04/22/04	4,930.98		Plugged	
MW-1R	05/02/14	4,932.08	9.06	4923.02	
MW-1R	11/17/14	4,932.08	9.19	4922.89	***
MW-1R	05/19/15	4,932.08	8.86	4923.22	
MW-1R	01/17/17	4,932.08	8.98	4923.10	
MW-1R	12/20/17	4,932.08	8.87	4923.21	
MW-1R	10/10/19	4,932.08	8.45	4923.63	
MW-1R	06/17/21	4,932.08	8.63	4923.45	
MW-1R	04/06/22	4,932.08	9.27	4922.81	
MW-1R	03/08/23	4,932.08	9.34	4922.74	
MW-1R	06/06/23	4,932.08	8.32	4923.76	
MW-1R	09/06/23	4,932.08	8.98	4923.10	
MW-2	04/22/04	4,934.72	11.43	4923.29	
MW-2	07/28/05	4,934.72	11.39	4923.33	
MW-2	11/03/05	4,934.72	11.45	4923.27	
MW-2	01/31/06	4,934.72	12.27	4922.45	
MW-2	05/17/06	4,934.72	11.72	4923.00	
MW-2	09/25/06	4,934.72	11.82	4922.90	
MW-2	12/26/06	4,934.72	11.94	4922.78	
MW-2	02/21/12	4,934.72	12.13	4922.59	
MW-2	08/22/12	4,934.72	11.68	4923.04	
MW-2	03/25/13	4,934.72	11.96	4922.76	
MW-2	10/01/13	4,934.72	11.64	4923.08	
MW-2	05/02/14	4,934.72	11.74	4922.98	
MW-2	11/17/14	4,934.72	11.96	4922.76	
MW-2	05/19/15	4,934.72	11.59	4923.13	
MW-2	01/17/17	4,934.72	11.73	4922.99	
MW-2	12/20/17	4,934.72	11.61	4923.11	
MW-2	10/10/19	4,934.72	11.17	4923.55	

**TABLE 1. FLUID GAUGING DATA**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Units		feet amsl	feet btoc	feet amsl	
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation	Notes
MW-2	06/17/21	4,934.72			Could not locate well
MW-29	04/22/04	4,930.19	9.60	4920.59	
MW-29	07/28/05	4,930.19	9.56	4920.63	
MW-29	11/03/05	4,930.19	9.66	4920.53	
MW-29	01/31/06	4,930.19	10.45	4919.74	
MW-29	05/17/06	4,930.19	9.89	4920.30	
MW-29	09/25/06	4,930.19	10.01	4920.18	
MW-29	12/26/06	4,930.19	11.14	4919.05	
MW-29	02/21/12	4,930.19	10.32	4919.87	
MW-29	08/22/12	4,930.19	9.87	4920.32	
MW-29	03/25/13	4,930.19	10.11	4920.08	
MW-29	10/01/13	4,930.19	9.81	4920.38	
MW-29	05/01/14	4,930.19			
MW-3	04/22/04	4,932.98	9.71	4923.27	
MW-3	07/28/05	4,932.98	9.65	4923.33	
MW-3	11/03/05	4,932.98	9.78	4923.20	
MW-3	01/31/06	4,932.98	10.57	4922.41	
MW-3	05/17/06	4,932.98	10.02	4922.96	
MW-3	09/25/06	4,932.98	10.05	4922.93	
MW-3	12/26/06	4,932.98	10.27	4922.71	
MW-3	02/21/12	4,932.98	10.42	4922.56	
MW-3	08/22/12	4,932.98	9.92	4923.06	
MW-3	03/25/13	4,932.98	10.25	4922.73	
MW-3	10/01/13	4,932.98	9.80	4923.18	
MW-3	05/02/14	4,932.98	10.00	4922.98	
MW-3	11/17/14	4,932.98	10.19	4922.79	
MW-3	05/19/15	4,932.98	9.82	4923.16	
MW-3	01/17/17	4,932.98	9.98	4923.00	
MW-3	12/20/17	4,932.98	9.87	4923.11	
MW-3	10/10/19	4,932.98			Could not locate well
MW-3	06/17/21	4,932.98			Destroyed
MW-38	04/22/04	4,931.87	8.62	4923.25	
MW-38	07/28/05	4,931.87	8.56	4923.31	
MW-38	11/03/05	4,931.87	8.70	4923.17	
MW-38	01/31/06	4,931.87	9.49	4922.38	
MW-38	05/17/06	4,931.87	8.90	4922.97	
MW-38	09/25/06	4,931.87	8.97	4922.90	
MW-38	12/26/06	4,931.87	9.19	4922.68	
MW-38	02/21/12	4,931.87	9.38	4922.49	
MW-38	08/22/12	4,931.87	8.88	4922.99	
MW-38	03/25/13	4,931.87	9.15	4922.72	
MW-38	10/01/13	4,931.87	8.85	4923.02	
MW-38	05/02/14	4,931.87	8.96	4922.91	
MW-38	11/17/14	4,931.87	9.18	4922.69	
MW-38	05/19/15	4,931.87	8.78	4923.09	
MW-38	01/17/17	4,931.87	8.96	4922.91	
MW-38	12/20/17	4,931.87	8.83	4923.04	
MW-38	10/10/19	4,931.87	8.36	4923.51	
MW-38	06/17/21	4,931.87	8.58	4923.29	
MW-38	04/06/22	4,931.87	9.06	4922.81	
MW-38	03/08/23	4,931.87	9.29	4922.58	
MW-38	06/06/23	4,931.87	8.18	4923.69	
MW-38	09/06/23	4,931.87	8.93	4922.94	
MW-4	04/22/04	4,932.55	12.07	4920.48	
MW-4	07/28/05	4,932.55	12.03	4920.52	
MW-4	11/03/05	4,932.55	12.19	4920.36	
MW-4	01/31/06	4,932.55	12.94	4919.61	
MW-4	05/17/06	4,932.55	12.35	4920.20	
MW-4	09/25/06	4,932.55	12.42	4920.13	

**TABLE 1. FLUID GAUGING DATA**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Units		feet amsl	feet btoc	feet amsl	
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation	Notes
MW-4	12/26/06	4,932.55	12.64	4919.91	
MW-4	02/21/12	4,932.55	12.81	4919.74	
MW-4	08/22/12	4,932.55	12.32	4920.23	
MW-4	03/25/13	4,932.55	12.64	4919.91	
MW-4	04/29/14	4,932.55			<i>Plugged</i>
MW-4R	05/02/14	4,933.42	10.56	4922.86	
MW-4R	11/17/14	4,933.42	10.74	4922.68	
MW-4R	05/19/15	4,933.42	10.36	4923.06	
MW-4R	01/17/17	4,933.42	10.57	4922.85	
MW-4R	12/20/17	4,933.42	10.39	4923.03	
MW-4R	10/10/19	4,933.42	9.94	4923.48	
MW-4R	06/17/21	4,933.42	10.13	4923.29	
MW-4R	04/06/22	4,933.42	10.68	4922.74	
MW-4R	03/08/23	4,933.42	10.87	4922.55	
MW-4R	06/06/23	4,933.42	9.76	4923.66	
MW-4R	09/06/23	4,933.42	10.52	4922.90	
MW-5	04/22/04	4,931.85	11.44	4920.41	
MW-5	07/28/05	4,931.85	10.78	4921.07	
MW-5	11/03/05	4,931.85	11.00	4920.85	
MW-5	01/31/06	4,931.85	11.83	4920.02	
MW-5	05/17/06	4,931.85	11.12	4920.73	
MW-5	09/25/06	4,931.85	11.15	4920.70	
MW-5	12/26/06	4,931.85	11.54	4920.31	
MW-5	02/21/12	4,931.85			<i>Dry</i>
MW-5	08/22/12	4,931.85			<i>Dry</i>
MW-5	03/25/13	4,931.85			<i>Dry</i>
MW-5	10/01/13	4,931.85			<i>Dry</i>
MW-5	05/01/14	4,931.85			<i>Plugged</i>
MW-6	04/22/04	4,931.51	11.04		
MW-6	07/28/05	4,931.51	11.03		
MW-6	11/03/05	4,931.51	11.22		
MW-6	01/31/06	4,931.51	11.92		
MW-6	05/17/06	4,931.51	11.31		
MW-6	09/25/06	4,931.51	11.37		
MW-6	12/26/06	4,931.51	11.89		
MW-6	02/21/12	4,931.51	11.58		
MW-6	08/22/12	4,931.51	13.00		
MW-6	03/25/13	4,931.51	13.14		
MW-6	10/01/13	4,931.51	13.18		
MW-6	04/29/14	4,931.51			<i>Plugged</i>
MW-6R	05/02/14	4,934.26	11.36	4922.90	
MW-6R	11/17/14	4,934.26			<i>Destroyed</i>
MW-6RR	12/22/14	4,933.90	11.20	4922.70	
MW-6RR	05/19/15	4,933.90	10.73	4923.17	
MW-6RR	01/17/17	4,933.90	10.90	4923.00	
MW-6RR	12/20/17	4,933.90	10.78	4923.12	
MW-6RR	10/10/19	4,933.90	10.34	4923.56	
MW-6RR	06/17/21	4,933.90	10.50	4923.40	
MW-6RR	04/06/22	4,933.90	11.01	4922.89	
MW-6RR	03/08/23	4,933.90	11.29	4922.61	
MW-6RR	06/06/23	4,933.90	10.22	4923.68	
MW-6RR	09/06/23	4,933.90	10.88	4923.02	
NMW-1	04/22/04	4,932.63	9.24	4923.39	
NMW-1	07/28/05	4,932.63	9.22	4923.41	
NMW-1	11/03/05	4,932.63	9.31	4923.32	
NMW-1	01/31/06	4,932.63	10.70	4921.93	
NMW-1	05/17/06	4,932.63	9.53	4923.10	
NMW-1	09/25/06	4,932.63	9.62	4923.01	
NMW-1	12/26/06	4,932.63	9.75	4922.88	

**TABLE 1. FLUID GAUGING DATA**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Units		feet amsl	feet btoc	feet amsl	
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation	Notes
NMW-1	02/21/12	4,932.63	9.93	4922.70	
NMW-1	08/22/12	4,932.63	9.48	4923.15	
NMW-1	03/25/13	4,932.63	9.75	4922.88	
NMW-1	10/01/13	4,932.63	9.41	4923.22	
NMW-1	05/02/14	4,932.63	9.55	4923.08	
NMW-1	11/17/14	4,932.63	9.72	4922.91	***
NMW-1	05/19/15	4,932.63	9.38	4923.25	
NMW-1	01/17/17	4,932.63	9.57	4923.06	
NMW-1	12/20/17	4,932.63	9.39	4923.24	
NMW-1	10/10/19	4,932.63	8.96	4923.67	
NMW-1	06/17/21	4,932.63	9.16	4923.47	
NMW-1	04/06/22	4,932.63	9.72	4922.91	
NMW-1	03/08/23	4,932.63	9.87	4922.76	
NMW-1	06/06/23	4,932.63	8.79	4923.84	
NMW-1	09/06/23	4,932.63	9.49	4923.14	
NMW-2	04/22/04	4,930.38	10.03	4920.35	
NMW-2	07/28/05	4,930.38			Destroyed
NMW-3	04/22/04	4,930.56	10.28		
NMW-3	07/28/05	4,930.56			Destroyed
NMW-4	04/22/04	4,929.02	10.33	4918.69	
NMW-4	07/28/05	4,929.02			NM
NMW-4	11/03/05	4,929.02			NM
NMW-4	01/31/06	4,929.02			NM
NMW-4	05/17/06	4,929.02			NM
NMW-4	09/25/06	4,929.02	9.59	4919.43	
NMW-4	12/26/06	4,929.02	10.94	4918.08	
NMW-4	02/21/12	4,929.02	10.12	4918.90	
NMW-4	08/22/12	4,929.02	9.59	4919.43	
NMW-4	03/25/13	4,929.02	9.90	4919.12	
NMW-4	10/01/13	4,929.02	9.59	4919.43	
NMW-4	04/30/14	4,929.02			Plugged
NMW-4R	05/02/14	4,932.53	9.91	4922.62	
NMW-4R	11/17/14	4,932.53	10.12	4922.41	
NMW-4R	05/19/15	4,932.53	9.68	4922.85	
NMW-4R	01/17/17	4,932.53	9.88	4922.65	
NMW-4R	12/20/17	4,932.53	9.75	4922.78	
NMW-4R	10/10/19	4,932.53	9.24	4923.29	
NMW-4R	06/17/21	4,932.53	9.47	4923.06	
NMW-4R	04/06/22	4,932.53	10.03	4922.50	
NMW-4R	03/08/23	4,932.53	10.20	4922.33	
NMW-4R	06/06/23	4,932.53	9.09	4923.44	
NMW-4R	09/06/23	4,932.53	9.84	4922.69	
RNMW-2	07/28/05	4,933.45	10.33	4923.12	
RNMW-2	11/03/05	4,933.45	10.44	4923.01	
RNMW-2	01/31/06	4,933.45	11.23	4922.22	
RNMW-2	05/17/06	4,933.45	10.64	4922.81	
RNMW-2	09/25/06	4,933.45	10.72	4922.73	
RNMW-2	12/26/06	4,933.45	10.92	4922.53	
RNMW-2	02/21/12	4,933.45	11.09	4922.36	
RNMW-2	08/22/12	4,933.45	10.61	4922.84	
RNMW-2	03/25/13	4,933.45	10.90	4922.55	
RNMW-2	10/01/13	4,933.45	10.57	4922.88	
RNMW-2	05/02/14	4,933.45	10.70	4922.75	
RNMW-2	11/17/14	4,933.45	10.87	4922.58	***
RNMW-2	05/19/15	4,933.45	10.27	4923.18	
RNMW-2	01/17/17	4,933.45	10.44	4923.01	
RNMW-2	12/20/17	4,933.45	10.31	4923.14	
RNMW-2	10/10/19	4,933.45	9.88	4923.57	
RNMW-2	06/17/21	4,933.45	10.04	4923.41	

**TABLE 1. FLUID GAUGING DATA**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Units		feet amsl	feet btoc	feet amsl	
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation	Notes
RNMW-2	04/06/22	4,933.45	10.62	4922.83	**
RNMW-2	03/08/23	4,933.45	10.79	4922.66	
RNMW-2	06/06/23	4,933.45	9.72	4923.73	
RNMW-2	09/06/23	4,933.45	10.39	4923.06	
RNMW-3	07/28/05	4,933.22	9.89	4923.33	
RNMW-3	11/03/05	4,933.22	9.99	4923.23	
RNMW-3	01/31/06	4,933.22	10.80	4922.42	
RNMW-3	05/17/06	4,933.22	10.20	4923.02	
RNMW-3	09/25/06	4,933.22	10.27	4922.95	
RNMW-3	12/26/06	4,933.22	10.49	4922.73	
RNMW-3	02/21/12	4,933.22	10.65	4922.57	
RNMW-3	08/22/12	4,933.22	10.17	4923.05	
RNMW-3	03/25/13	4,933.22	10.45	4922.77	
RNMW-3	10/01/13	4,933.22	10.12	4923.10	
RNMW-3	05/02/14	4,933.22	10.23	4922.99	
RNMW-3	11/17/14	4,933.22	10.45	4922.77	
RNMW-3	05/19/15	4,933.22	10.06	4923.16	
RNMW-3	01/17/17	4,933.22	10.22	4923.00	
RNMW-3	12/20/17	4,933.22	10.09	4923.13	
RNMW-3	10/10/19	4,933.22	9.65	4923.57	
RNMW-3	06/17/21	4,933.22	9.84	4923.38	
RNMW-3	04/06/22	4,933.22	10.38	4922.84	**
RNMW-3	03/08/23	4,933.22	10.59	4922.63	
RNMW-3	06/06/23	4,933.22	9.49	4923.73	
RNMW-3	09/06/23	4,933.22	10.22	4923.00	
W-34	04/22/04	4,928.70	7.92	4920.78	
W-34	07/28/05	4,928.70	8.09	4920.61	
W-34	11/03/05	4,928.70	8.11	4920.59	
W-34	01/31/06	4,928.70	8.92	4919.78	
W-34	05/17/06	4,928.70	8.40	4920.30	
W-34	09/25/06	4,928.70	8.51	4920.19	
W-34	12/26/06	4,928.70	8.61	4920.09	
W-34	02/21/12	4,928.70	8.77	4919.93	
W-34	08/22/12	4,928.70	8.33	4920.37	
W-34	03/25/13	4,928.70	8.61	4920.09	
W-34	10/01/13	4,928.70			Paved over
W-34	05/01/14	4,928.70			Plugged
W-35	04/22/04	4,931.50	8.14	4923.36	
W-35	07/28/05	4,931.50	8.29	4923.21	
W-35	11/03/05	4,931.50	8.31	4923.19	
W-35	01/31/06	4,931.50	9.14	4922.36	
W-35	05/17/06	4,931.50	8.64	4922.86	
W-35	09/25/06	4,931.50	8.74	4922.76	
W-35	12/26/06	4,931.50	8.83	4922.67	
W-35	02/21/12	4,931.50	8.99	4922.51	
W-35	08/22/12	4,931.50	8.55	4922.95	
W-35	03/25/13	4,931.50	8.85	4922.65	
W-35	10/01/13	4,931.50			Paved over
W-35	05/02/14	4,931.50	8.65	4922.85	
W-35	11/17/14	4,931.50	8.78	4922.72	
W-35	05/19/15	4,931.50	8.44	4923.06	
W-35	01/17/17	4,931.50	8.56	4922.94	
W-35	12/20/17	4,931.50	8.47	4923.03	
W-35	10/10/19	4,931.50			Destroyed
W-36	04/22/04	4,932.00	8.31	4923.69	
W-36	07/28/05	4,932.00	8.48	4923.52	
W-36	11/03/05	4,932.00	8.50	4923.50	
W-36	01/31/06	4,932.00	9.30	4922.70	
W-36	05/17/06	4,932.00	8.79	4923.21	

**TABLE 1. FLUID GAUGING DATA**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Units		feet amsl	feet btoc	feet amsl	
Well	Date	Casing Elevation	Depth to Water	Groundwater Elevation	Notes
W-36	09/25/06	4,932.00	8.92	4923.08	
W-36	12/26/06	4,932.00	8.97	4923.03	
W-36	02/21/12	4,932.00	9.15	4922.85	
W-36	08/22/12	4,932.00	8.72	4923.28	
W-36	03/25/13	4,932.00	9.01	4922.99	
W-36	10/01/13	4,932.00			Paved over
W-36	05/02/14	4,932.00	8.80	4923.20	
W-36	11/17/14	4,932.00	8.97	4923.03	
W-36	05/19/15	4,932.00	8.62	4923.38	
W-36	01/17/17	4,932.00	8.76	4923.24	
W-36	12/20/17	4,932.00	8.63	4923.37	
W-36	10/10/19	4,932.00			Destroyed
W-37	04/22/04	4,930.10	9.26	4920.84	
W-37	07/28/05	4,930.10	9.43	4920.67	
W-37	11/03/05	4,930.10	9.49	4920.61	
W-37	01/31/06	4,930.10	10.22	4919.88	
W-37	05/17/06	4,930.10	9.74	4920.36	
W-37	09/25/06	4,930.10	9.90	4920.20	
W-37	12/26/06	4,930.10	8.78	4921.32	
W-37	02/21/12	4,930.10	10.09	4920.01	
W-37	08/22/12	4,930.10	9.67	4920.43	
W-37	03/25/13	4,930.10	9.97	4920.13	
W-37	10/01/13	4,930.10			Paved over
W-37	05/01/14	4,930.10			Plugged

**NOTES:**

The top of casing elevation for wells MW-2 and MW-3 were adjusted by -0.17 and -0.89, respectively, from the survey point on top of steel plate on pipe.

Horizontal control to NM State Plane Coordinates Central NAD83 Grid Coordinates (in feet)

Vertical Control to NAVD88 Datum in feet above mean sea level

Measured in feet below the top of casing at survey point on north side of well

\* = Well Destroyed during source area excavation

\*\* = Replacement well installed 4/27/05

\*\*\* = Surface completion/casing damaged at time of measurement

NM = not measured

**TABLE 2. GROUNDWATER GEOCHEMICAL PARAMETERS  
ATEX 213, ALBUQUERQUE, NEW MEXICO**

<i>Units</i>	<i>dd/mm/yy</i>	<i>S.U.</i>	<i>µS/cm</i>	<i>°C</i>	<i>mg/L</i>	<i>mV</i>	
<i>Well</i>	<i>Date</i>	<i>pH</i>	<i>SpC</i>	<i>Temp</i>	<i>DO</i>	<i>ORP</i>	<i>Notes</i>
BB-2	02/21/12		798	17.5		2.32	
BB-2	08/23/12	7.61	1,002	26.9		1.19	
BB-2	03/25/13	6.43	1,009	17.1		1.47	
BB-2	10/01/13	6.27	952	23.2			
BB-2	05/01/14	7.77	945	17.7		1.74	
BB-2	11/17/14	7.37	862	19.8		1.92	
BB-2	05/19/15	7.44	882	18.1		2.39	
BB-2	01/17/17	7.47	838	18.7		2.40	
BB-2	12/20/17	7.26	824	20.5		1.11	189
BB-2	10/10/19	7.28	864	22.4			
BB-2	06/06/23	7.49	603	19.4		1.15	6
MW-1	02/21/12						Dry
MW-1	08/22/12						Dry
MW-1	03/25/13						Dry
MW-1	10/01/13						Dry
MW-1	04/01/14						Plugged
MW-1R	05/01/14	7.80	803	19.4		1.55	
MW-1R	11/17/14	7.56	913	21.8		1.18	
MW-1R	05/19/15						Bailed dry
MW-1R	01/17/17						Bailed dry
MW-1R	12/20/17						Not enough water
MW-1R	10/10/19	7.42	1,041	23.4			
MW-1R	06/17/21	7.54	823	20.4		1.86	26
MW-1R	06/17/21	7.54	823	20.4		1.86	26
MW-1R	04/06/22	7.16	1,786	18.4		1.98	-117
MW-1R	03/08/23	7.36	562	18.6		1.22	26
MW-1R	06/06/23	7.32	557	19.9		1.08	-19
MW-1R	09/06/23	7.70	1,314	24.1		0.21	-5
MW-2	02/21/12	7.36	761	19.7		1.35	
MW-2	08/22/12	8.17	950	24.5		1.31	
MW-2	03/25/13	6.29	1,111	18.4		1.04	
MW-2	10/01/13	6.31	1,023	25.5			
MW-2	05/01/14	7.63	981	18.8		1.40	
MW-2	11/17/14	7.10	1,009	22.9		1.70	
MW-2	05/19/15	7.21	816	19.1		1.86	
MW-2	01/17/17	7.11	1,060	20.6		2.02	
MW-2	12/20/17	6.82	1,225	22.6		1.14	206
MW-2	10/10/19	7.19	960	24.1			
MW-3	02/21/12		898	18.4		1.15	
MW-3	08/23/12	8.48	963	20.9		1.07	
MW-3	03/25/13	6.64	1,021	17.6		0.97	
MW-3	10/10/13	7.23	942	22.6		1.15	
MW-3	05/01/14	7.70	1,043	19.1		1.77	
MW-3	11/17/14	7.45	941	20.9		1.35	
MW-3	05/19/15	7.52	994	19.8		3.33	
MW-3	01/17/17	7.37	907	20.6		1.55	
MW-3	12/20/17	7.21	934	21.8		0.48	164
MW-3	10/10/19						Could not locate well
MW-4	02/22/12	6.09	981	13.8		1.21	
MW-4	08/23/12	8.11	980	24.9		1.38	
MW-4	03/25/13	6.42	946	18.0		1.20	
MW-4	10/01/13						Destroyed
MW-4	04/01/14						Plugged
MW-4R	05/01/14	7.69	922	20.0		2.18	
MW-4R	11/17/14	7.50	649	21.6		0.85	
MW-4R	05/19/15	7.60	664	19.8		1.32	
MW-4R	01/17/17	7.35	864	20.3		1.73	
MW-4R	12/20/17	7.35	771	22.5		1.04	193
MW-4R	10/10/19	7.48	779	22.6			
MW-4R	06/14/21	7.42	832	21.2		0.80	111
MW-4R	06/17/21	7.42	832	21.2		0.80	111
MW-4R	04/06/22	7.21	1,418	19.9		1.06	-78
MW-4R	03/08/23	7.25	542	19.1		0.61	
MW-4R	06/06/23	7.40	567	20.2		1.47	0
MW-4R	09/06/23	7.45	1,387	24.0		0.26	-34
MW-5	02/21/12						Dry
MW-5	08/22/12						Dry
MW-5	03/25/13						Dry

**TABLE 2. GROUNDWATER GEOCHEMICAL PARAMETERS  
ATEX 213, ALBUQUERQUE, NEW MEXICO**

<i>Units</i> <i>Well</i>	<i>dd/mm/yy</i> <i>Date</i>	<i>S.U.</i> <i>pH</i>	<i>µS/cm</i> <i>SpC</i>	<i>°C</i> <i>Temp</i>	<i>mg/L</i> <i>DO</i>	<i>mV</i> <i>ORP</i>	<i>Notes</i>
MW-5	10/01/13						Dry
MW-5	04/01/14						Dry
MW-6	02/22/12	6.37	631	15.6			
MW-6	04/01/14						Dry
MW-6	04/29/14						Dry
MW-6R	05/01/14	7.93	880	20.0	2.19		
MW-6R	11/17/14						Destroyed
MW-6RR	12/22/14	7.18	815	21.1	1.40		
MW-6RR	05/19/15	7.54	734	19.7	1.10		
MW-6RR	01/17/17	7.37	780	21.0	1.63		
MW-6RR	12/20/17	7.39	770	22.0	1.00	194	
MW-6RR	10/10/19	7.51	783	23.3			
MW-6RR	06/17/21	7.42	775	20.9	0.97	56	
MW-6RR	06/17/21	7.42	775	20.9	0.97	56	
MW-6RR	04/06/22	7.26	1,207	18.7	1.27	21	
MW-6RR	03/08/23	7.18	505	19.6	0.69	56	
MW-6RR	06/06/23	7.03	567	20.1	0.68	7	
MW-6RR	09/06/23	7.49	1,357	21.4	0.25	21	
MW-29	02/21/12		884	16.7	1.82	56	
MW-29	08/23/12	7.18	1,179	26.3	0.99	56	
MW-29	03/25/13	6.35	1,231	16.2	1.34	56	
MW-29	10/01/13	6.29	1,024	24.9		56	
MW-29	05/01/14						56 Plugged
MW-38	02/21/12		859	17.8	1.08	56	
MW-38	08/23/12	7.79	1,090	25.1	2.10	56	
MW-38	03/25/13	6.41	1,034	17.4	0.77	56	
MW-38	10/01/13	6.13	1,003	25.4		56	
MW-38	05/01/14	7.59	984	19.0	1.53	56	
MW-38	11/17/14	7.20	880	21.7	1.76	56	
MW-38	05/19/15	7.06	488	19.3	2.82	56	
MW-38	01/17/17	6.96	950	19.1	1.48	56	
MW-38	12/20/17	6.87	975	18.9	1.60	183	
MW-38	10/10/19	7.13	897	23.4			
MW-38	06/17/21	6.93	937	21.0	1.20	126	
MW-38	06/17/21	6.93	937	21.0	1.20	126	
MW-38	04/06/22	6.86	1,633	17.6	1.17	-8	
MW-38	03/08/23	7.19	720	18.0	0.98	126	
MW-38	06/06/23	7.07	647	20.4	1.01	20	
MW-38	09/06/23	7.04	1,546	24.8	0.30	13	
NMW-1	02/21/12		904	18.2	1.18		
NMW-1	08/23/12	8.43	1,066	24.1	1.11		
NMW-1	03/26/13	6.31	1,124	17.1	0.63		
NMW-1	10/01/13	6.30	1,091	26.0			
NMW-1	05/02/14	7.29	1,174	19.0	1.31		
NMW-1	11/17/14	7.09	986	23.1	1.06		
NMW-1	05/19/15	6.92	1,015	19.9	1.22		
NMW-1	01/17/17	7.03	948	20.1	1.42		
NMW-1	12/20/17	6.85	1,097	22.6	0.28	150	
NMW-1	10/10/19	7.03	889	25.5			
NMW-1	06/17/21	6.80	1,311	21.8	0.50	-9	
NMW-1	06/17/21	6.80	1,311	21.8	0.50	-9	
NMW-1	04/06/22	6.75	2,006	18.3	0.82	-135	
NMW-1	03/08/23	6.78	827	17.8	1.19	-9	
NMW-1	06/06/23	6.95	839	20.8	0.96	-56	
NMW-1	09/06/23	7.00	1,924	26.0	0.26	-114	
NMW-4	04/01/14						-9 Plugged
NMW-4R	05/01/14						-9 Developed at 4 gpm. 180 gallons removed.
NMW-4R	11/17/14	7.36	513	20.9	1.31	-9	
NMW-4R	05/19/15	7.44	784	19.2	2.12	-9	
NMW-4R	01/17/17	7.42	567	19.3	1.75	-9	
NMW-4R	12/20/17	7.28	433	21.4	0.37	192	
NMW-4R	10/10/19	6.82	529	22.6			
NMW-4R	06/17/21	7.32	615	20.4	2.52	65	
NMW-4R	06/17/21	7.32	615	20.4	2.52	65	
NMW-4R	04/06/22	7.05	1,307	19.2	1.05	-54	
NMW-4R	03/08/23	7.25	542	19.1	0.61	65	
NMW-4R	06/06/23	7.37	524	20.2	1.16	-41	
NMW-4R	09/06/23	7.16	759	22.2	0.26	21	
RNMW-2	02/21/12		852	19.3	1.14		
RNMW-2	08/22/12	7.84	1,176	23.1	1.28		

**TABLE 2. GROUNDWATER GEOCHEMICAL PARAMETERS  
ATEX 213, ALBUQUERQUE, NEW MEXICO**

<i>Units</i> <i>Well</i>	<i>dd/mm/yy</i> <i>Date</i>	<i>S.U.</i> <i>pH</i>	<i>µS/cm</i> <i>SpC</i>	<i>°C</i> <i>Temp</i>	<i>mg/L</i> <i>DO</i>	<i>mV</i> <i>ORP</i>	<i>Notes</i>
RNMW-2	03/26/13	6.43	1,048	18.6	0.74		
RNMW-2	10/01/13	6.49	1,051	24.5			
RNMW-2	05/02/14	7.47	1,053	19.2	1.30		
RNMW-2	11/17/14	7.32	871	22.2	0.56		
RNMW-2	05/19/15	7.35	847	19.7	1.33		
RNMW-2	01/17/17	7.26	933	20.4	1.78		
RNMW-2	12/20/17	7.04	1,232	22.0	1.30	165	
RNMW-2	10/10/19	7.13	1,015	24.5			
RNMW-2	06/17/21	7.08	967	21.4	1.20	7	
RNMW-2	06/17/21	7.08	967	21.4	1.20	7	
RNMW-2	04/06/22	6.86	1,709	18.9	0.83	-71	
RNMW-2	03/08/23	6.92	1,235	18.2	0.57	7	
RNMW-2	06/06/23	6.64	617	20.2	0.72	19	
RNMW-2	09/06/23	7.36	1,680	24.1	0.31	36	
RNMW-3	02/21/12		976	19.1	1.52		
RNMW-3	08/23/12	8.28	1,128	25.2	1.21		
RNMW-3	03/26/13	6.71	1,002	18.5	0.70		
RNMW-3	10/01/13	6.37	1,065	25.0			
RNMW-3	05/02/14	7.53	1,009	19.7	1.54		
RNMW-3	11/17/14	7.32	1,007	22.5	1.48		
RNMW-3	05/19/15	7.36	889	20.3	1.31		
RNMW-3	01/17/17	7.25	628	20.8	2.01		
RNMW-3	12/20/17	7.23	1,117	21.2	0.40	178	
RNMW-3	10/10/19	7.32	1,038	24.9			
RNMW-3	06/17/21	7.20	1,087	21.7	1.40	51	
RNMW-3	06/17/21	7.20	1,087	21.7	1.40	51	
RNMW-3	04/06/22	7.02	1,667	19.0	1.02	-63	
RNMW-3	03/08/23	7.05	920	18.0	0.73	51	
RNMW-3	06/06/23	7.14	680	20.8	0.77	-19	
RNMW-3	09/06/23	7.41	1,840	24.7	0.35	3	
W-34	02/21/12		820	18.5	1.07		
W-34	08/22/12	7.59	822	23.4	1.02		
W-34	03/25/13	6.55	1,129	17.3	0.77		
W-34	10/01/13					Paved over	
W-34	05/01/14					Plugged	
W-35	02/21/12		852	17.7	0.97		
W-35	08/22/12	7.73	1,091	25.0	0.96		
W-35	03/25/13	6.63	1,238	16.7	0.84		
W-35	10/01/13					Paved over. Uncovered in May 2014	
W-35	05/02/14	7.44	1,148	19.5	0.91	Uncovered	
W-35	11/17/14	7.28	1,065	22.6	2.48		
W-35	05/19/15	7.37	889	21.0	1.78		
W-35	01/17/17	7.31	818	19.6	1.69		
W-35	12/20/17	7.25	960	22.1	0.92	189	
W-35	10/10/19					Could not locate well	
W-36	02/21/12		863	18.0	1.25		
W-36	08/22/12	8.14	976	24.6	1.06		
W-36	03/25/13	6.24	1,143	17.5	0.75		
W-36	10/01/13					Paved over. Uncovered in May 2014	
W-36	05/02/14	7.39	878	18.8	3.03		
W-36	11/17/14	7.24	847	22.1	1.66		
W-36	05/19/15	7.22	677	19.6	1.63		
W-36	01/17/17	7.19	862	19.6	1.82		
W-36	12/20/17	7.20	990	21.8	0.55	184	
W-36	10/10/19					Could not locate well	
W-37	02/21/12		819	19.9	1.21		
W-37	08/22/12	6.82	1,012	24.3	1.15		
W-37	03/25/13	6.86	1,085	19.1	1.04		
W-37	10/01/13					Paved over	
W-37	05/01/14					Plugged	

**NOTES:**

*DO* = Dissolved oxygen in milligrams per liter (*mg/L*)

*ORP* = Oxidation-Reduction Potential in millivolts (*mV*s)

*pH* = Potential of Hydrogen, standard units (*S.U.*)

*SpC* = Specific conductance in microsiemens per centimeter ( $\mu\text{S}/\text{cm}$ )

**TABLE 3. ANALYTES, METHODS, CONTAINERS, PRESERVATION, HANDLING, AND HOLDING TIME**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Target Analytes	Matrix	Analytical Method	Sample Container	Preservative and Handling	Holding Time
Volatile Organic Compounds	Groundwater	EPA 8260B	3 x 40-mL glass vials	Mercuric Chloride; Place on Ice	14 days
Nitrate	Groundwater	EPA 300.0	125-mL plastic	Sulfuric Acid	48 hours unpreserved 28 days preserved
Sulfate	Groundwater	EPA 300.0	125-mL plastic	Place on Ice	28 days
Total Dissolved Solids	Groundwater	SM2540C Modified	250-mL plastic	Place on Ice	7 days

*Notes:*

°C = Degrees Celcius

EPA = U.S. Environmental Protection Agency

mL = Milliliters

SM = Standard Method

**TABLE 4. GROUNDWATER ANALYTICAL RESULTS**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

NMAC 20.6.2.3103		5	1,000	700	620	100	30	5	0.05	EDC	EDB	Nitrate	Sulfate	TDS	Notes
Well	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	Total Naphthalenes	BTEXMN							
BB-2	01/01/98	5.8	< 5.0	50	21	1,200		1,282							
BB-2	04/22/04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	15							
BB-2	07/29/05	< 1.0	< 1.0	4.6	< 1.0	< 2.0	7.6	17							
BB-2	09/25/06	< 1.0	< 1.0	1.1	< 1.0	< 1.5	16	21							
BB-2	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	290	< 10	305							
BB-2	08/23/12	< 1.0	< 1.0	1.3	< 1.5	94	17	116							
BB-2	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	150	< 10	165							
BB-2	10/01/13	< 1.0	< 1.0	< 1.0	< 1.5	53	< 10	68							
BB-2	05/01/14	< 1.0	< 1.0	< 1.0	< 1.5	17	< 10	32							
BB-2	11/17/14	< 1.0	< 1.0	< 1.0	< 1.5	26	< 10	41							
BB-2	05/19/15	< 1.0	< 1.0	< 1.0	< 1.5	27	3.9	35							
BB-2	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	41	3.9	49	< 1.0	< 1.0					
BB-2	12/20/17	< 1.0	< 1.0	< 1.0	< 1.5	20	4.2	29	< 1.0	< 1.0					
BB-2	10/10/19	< 1.0	< 1.0	3.8	< 1.5	17	232	256	< 1.0	< 1.0					
BB-2	06/17/21							0							Obstruction
BB-2	06/06/23	< 2.0	< 2.0	< 2.0	< 3.0	3.4	< 20	32	< 2.0	< 2.0					
MW-1	01/01/98	< 5.0	110	320	370	2,200		3,005							
MW-1	04/22/04	< 1.0	< 1.0	4.8	< 1.0	< 1.0	4.3	13	< 1.0	< 0.010					
MW-1	07/28/05							0							Dry
MW-1	11/03/05							0							Dry
MW-1	01/31/06							0							Dry
MW-1	05/17/06							0							Dry
MW-1	09/25/06							0							Dry
MW-1	12/26/06							0							Dry
MW-1	02/21/12							0							Dry
MW-1	08/22/12							0							Dry
MW-1	10/01/13							0							Dry
MW-1	04/29/14							0							Plugged
MW-1R	05/01/14	< 10	< 10	440	260	< 10	534	1,264							
MW-1R	11/17/14	< 1.0	1.6	50	4.6	< 1.0	60	118							
MW-1R	05/19/15	< 1.0	< 1.0	21	< 1.5	< 1.0	13	39							
MW-1R	01/17/17	< 2.0	< 2.0	< 2.0	< 3.0	< 2.0	< 20	31	< 1.0	< 1.0					Dry
MW-1R	12/20/17							0							
MW-1R	10/10/19	< 1.0	< 1.0	1.5	< 1.5	< 1.0	13	19	< 1.0	< 1.0					
MW-1R	06/17/21	< 1.0	< 1.0	2.2	< 1.5	< 1.0	37	43	< 1.0	< 1.0					
MW-1R	04/06/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	4.3	9.8	< 1.0	< 1.0	< 0.50	200			Adjusted results for plotting
MW-1R	03/08/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16	< 1.0	< 1.0	< 0.50	110	478		Adjusted results for plotting
MW-1R	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16	< 1.0	< 1.0	< 0.50	110			Adjusted results for plotting
MW-1R	09/06/23	10	< 20	< 1.0	< 1.5	< 1.0	< 10	44	< 1.0	< 1.0					
MW-1R Diluted	03/08/23	< 50	< 50	< 50	< 75	< 50	< 500	775	< 1.0	< 1.0					Actual 50-x diluted reported results. Matrix interference due to presence of PetroFix®
MW-1R Diluted	06/06/23	< 8.0	< 20	< 20	< 30	< 20	< 500	598	< 8.0	< 20					Actual 20-x diluted reported results. Matrix interference due to presence of PetroFix®
MW-1R Diluted	09/06/23	10	< 20	< 20	< 30	< 20	< 500	600	< 20	< 20					Actual 20-x diluted reported results. Matrix interference due to presence of PetroFix ®
MW-2	01/01/98	1.9	< 5.0	0.7	0.7	10		18							
MW-2	04/22/04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	15	< 1.0	< 0.010					
MW-2	07/28/05	< 1.0	< 1.0	< 1.0	< 1.0	3.6	< 10	18	< 1.0	< 0.010					
MW-2	01/31/06	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	15	< 1.0	< 0.010					
MW-2	05/17/06	< 1.0	< 1.0	< 1.0	< 1.0	3.0	< 10	18	< 1.0	< 0.010					
MW-2	09/25/06	< 1.0	< 1.0	< 1.0	< 3.0	2.5	< 10	19	< 1.0	< 0.010					
MW-2	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16							
MW-2	08/22/12	< 1.0	< 1.0	< 1.0	< 1.5	3.0	< 10	18							
MW-2	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16							
MW-2	10/01/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16							
MW-2	05/01/14	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16							
MW-2	11/17/14	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16							
MW-2	05/19/15	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16							
MW-2	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16	< 1.0	< 1.0					
MW-2	12/20/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16	< 1.0	< 1.0					
MW-2	10/10/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	16	< 1.0	< 1.0					
MW-2	06/17/21							0							Could not locate well
MW-3	01/01/98	2,400	110	320	370	2,200		5,400							
MW-3	04/22/04	100	< 10	25	11	320	98	564	< 10	< 0.010					
MW-3	07/28/05	52	< 10	14	< 10	410	90	586	< 10	< 0.010					
MW-3	11/03/05	180	9.7	58	47	920	438	1,653	< 5.0	< 0.010					
MW-3	01/31/06	60	< 20	83	110	500	170	943	< 20	< 0.010					
MW-3	05/17/06	46	6.5	29	55	230	142	509	< 5.0	< 0.010					
MW-3	09/25/06	62	11	37	100	230	180	620	< 5.0	< 0.010					
MW-3	12/26/06	160	58	220	460	530	610	2,038	< 5.0	< 0.010					
MW-3	02/21/12	7.4	< 5.0	37	55	< 5.0	142	251							
MW-3	08/23/12	6.4	< 5.0	19	28	< 5.0	60	123							

**TABLE 4. GROUNDWATER ANALYTICAL RESULTS**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

NMAC 20.6.2.3103		5	1,000	700	620	100	30	5	0.05					
Well	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	Total Naphthalenes	BTEXMN	EDC	EDB	Nitrate	Sulfate	TDS	Notes
MW-3	03/26/13	3.7	1.8	18	22	< 1.0	108	1	155					
MW-3	05/01/14	< 1.0	< 1.0	3.6	2.4	< 1.0	25	1	34	< 5.0	< 0.010			
MW-3	11/17/14	3.5	< 2.0	17	8.6	< 2.0	119	1	152					
MW-3	05/19/15	2.3	1.4	12	8.4	< 1.0	127	1	152					
MW-3	01/17/17	1.7	1.6	16	7.2	< 1.0	166	1	194	< 2.0	< 2.0			
MW-3	12/20/17	2.4	1.4	17	7.1	< 1.0	190	1	219	< 1.0	< 1.0			
MW-4	04/22/04	590	< 10	< 10	< 10	1,400	< 100	1	2,120	< 10	< 0.010			
MW-4	07/28/05	< 1.0	< 1.0	< 1.0	< 1.0	720	< 10	1	734	< 1.0	< 0.010			
MW-4	11/03/05	< 5.0	< 5.0	< 5.0	< 5.0	500	< 50	1	570	< 5.0	< 0.010			
MW-4	01/31/06	< 1.0	< 1.0	< 1.0	< 1.0	220	< 10	1	234	< 1.0	< 0.010			
MW-4	05/17/06	< 1.0	< 1.0	< 1.0	< 3.0	180	< 10	1	196	< 1.0	< 0.010			
MW-4	09/25/06	< 1.0	< 1.0	< 1.0	< 3.0	580	< 10	1	596	< 1.0	< 0.010			
MW-4	12/26/06	93	< 10	< 10	< 30	790	< 100	1	1,033	< 10	< 0.010			
MW-4	02/22/12	< 1.0	< 1.0	< 1.0	< 1.5	18	< 10	1	33					
MW-4	08/23/12	< 1.0	< 1.0	< 1.0	< 1.5	46	< 10	1	61					
MW-4	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	62	< 10	1	77					
MW-4	10/01/13						0							
MW-4	04/29/14						0		< 10	< 0.010	Destroyed Plugged			
MW-4R	05/01/14	29	< 1.0	3.8	< 1.5	55	65	1	155					
MW-4R	11/17/14	< 1.0	< 1.0	< 1.0	< 1.5	8.0	< 10	1	23					
MW-4R	05/19/15	< 1.0	< 1.0	< 1.0	< 1.5	3.5	< 10	1	18					
MW-4R	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	7.0	< 10	1	22	< 1.0	< 1.0			
MW-4R	12/20/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-4R	10/10/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-4R	06/17/21	< 1.0	< 1.0	< 1.0	< 1.5	1.3	< 10	1	16	< 1.0	< 1.0			
MW-4R	04/06/22	< 1.0	< 1.0	< 1.0	< 1.5	1.7	< 10	1	16	< 1.0	< 1.0	< 0.50	100	
MW-4R	03/08/23	1.7	< 1.0	< 1.0	< 1.5	4.3	< 10	1	20	< 1.0	< 1.0	< 0.50	82	489
MW-4R	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-4R	09/06/23	< 2.0	< 2.0	< 2.0	< 3.0	2.9	< 10	1	22	< 2.0	< 2.0			
MW-5	06/01/94	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5			4.5					
MW-5	04/22/04	< 1.0	< 1.0	< 1.0	< 1.0	280	< 10	1	294	< 1.0	< 0.010			
MW-5	07/29/05	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 10	1	16	< 1.0	< 0.010			
MW-5	11/03/05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15	< 1.0	< 0.010			
MW-5	01/31/06	< 1.0	< 1.0	< 1.0	< 1.0	190	< 10	1	204	< 1.0	< 0.010			
MW-5	05/17/06	< 1.0	< 1.0	< 1.0	< 3.0	< 1.5	< 10	1	18	< 1.0	< 0.010			
MW-5	09/25/06	< 1.0	< 1.0	< 1.0	< 3.0	< 1.5	< 10	1	18	< 10	< 0.010			
MW-5	12/26/06	< 1.0	< 1.0	< 1.0	< 3.0	25	< 10	1	41					
MW-5	02/21/12						0				Dry			
MW-5	08/22/12						0				Dry			
MW-5	03/25/13						0				Dry			
MW-5	10/01/13						0				Dry			
MW-5	05/01/14						0		< 10	< 0.010	Plugged			
MW-6	04/23/04	50	< 10	14	15	830	140	1	1,059	< 0.010				
MW-6	07/29/05	45	< 20	< 20	< 20	800	210	1	1,115	< 0.010				
MW-6	11/03/05	46	< 5.0	28	16	570	380	1	1,045	< 0.010				
MW-6	01/31/06	24	< 10	20	13	730	253	1	1,050	< 0.010				
MW-6	05/17/06	20	< 10	11	< 30	490	160	1	721	< 0.010				
MW-6	09/25/06	84	< 5.0	32	15	1,200	630	1	1,966	< 0.010				
MW-6	12/26/06	33	< 10	16	< 30	720	395	1	1,204	< 0.010				
MW-6	02/22/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-6	08/22/12	< 1.0	< 1.0	< 1.0	< 1.5	1.8	< 10	1	16					
MW-6	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	1.1	< 10	1	16					
MW-6	10/01/13						0				Dry			
MW-6	04/29/14						0		< 0.010		Plugged			
MW-6R	05/01/14	1.6	< 1.0	6.6	< 1.5	6.2	56	1	72					
MW-6R	11/17/14						0				Destroyed			
MW-6RR	12/22/14	< 5.0	< 5.0	130	27	13	262	1	442	< 5.0	< 5.0			
MW-6RR	05/19/15	< 1.0	< 1.0	24	3.2	4.6	39	1	73					
MW-6RR	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	4.3		9.8					
MW-6RR	12/20/17	3.4	< 1.0	< 1.0	< 1.5	1.5	7.2	1	16	< 1.0	< 1.0			
MW-6RR	10/10/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-6RR	06/17/21	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-6RR	04/06/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0	< 0.50	95	
MW-6RR	03/08/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0	< 0.50	100	433
MW-6RR	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-6RR	09/06/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-29	06/01/94	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5			4.5					
MW-29	04/22/04	< 1.0	< 1.0	< 1.0	< 1.0	14	< 10	1	28					
MW-29	07/29/05	< 1.0	< 1.0	< 1.0	< 1.0	6.8	< 10	1	21					
MW-29	09/25/06	< 1.0	< 1.0	< 1.0	< 1.0	7.5	< 10	1	22					
MW-29	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-29	08/23/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					

**TABLE 4. GROUNDWATER ANALYTICAL RESULTS**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

NMAC 20.6.2.3103		5	1,000	700	620	100	30	5	0.05					
Well	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	Total Naphthalenes	BTEXMN	EDC	EDB	Nitrate	Sulfate	TDS	Notes
MW-29	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-29	10/01/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-29	05/01/14							0						Plugged
MW-38	01/01/98	<b>46</b>	1.2	8.1	7.6	9.0		1	72					
MW-38	04/22/04	1.7	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	16					
MW-38	07/29/05	1.4	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15					
MW-38	11/03/05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15					
MW-38	01/31/06	2.5	< 1.0	< 1.0	< 1.0	< 1.0	2.5		9.0					
MW-38	05/17/06	1.4	< 1.0	< 1.0	< 3.0	< 1.5	< 10	1	18					
MW-38	09/25/06	1.5	< 1.0	< 1.0	< 3.0	< 1.5	3.1	1	11					
MW-38	12/26/06	<b>13</b>	< 1.0	2.5	< 3.0	< 1.5	12	1	33					
MW-38	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-38	08/23/12	1.5	< 1.0	< 1.0	< 1.5	1.2	15	1	21					
MW-38	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-38	10/01/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-38	05/01/14	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-38	11/17/14	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-38	05/01/15	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
MW-38	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-38	12/20/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-38	10/10/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-38	06/17/21	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
MW-38	04/06/22	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0	< 0.50	130	
MW-38	03/08/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0	< 0.50	120	604
MW-38	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
NMW-1	01/01/98							0						NAPL
NMW-1	04/22/04	<b>990</b>	200	28	<b>1,100</b>	<b>580</b>	<b>272</b>		3,170					
NMW-1	07/28/05	<b>1,100</b>	390	< 50	<b>3,600</b>	<b>840</b>	<b>920</b>		6,900					
NMW-1	11/03/05	<b>710</b>	170	< 50	<b>640</b>	<b>480</b>	<b>190</b>		2,240					
NMW-1	01/31/06	<b>810</b>	56	< 50	<b>1,100</b>	<b>570</b>	<b>220</b>		2,806					
NMW-1	05/17/06	<b>340</b>	95	< 20	<b>1,700</b>	<b>320</b>	<b>840</b>		3,315					
NMW-1	09/25/06	<b>410</b>	< 10	< 10	86	<b>420</b>	<b>140</b>		1,076					
NMW-1	12/26/06	<b>950</b>	55	44	<b>900</b>	<b>750</b>	<b>760</b>		3,459					
NMW-1	02/21/12	<b>390</b>	< 10	33	38	<b>110</b>	<b>92</b>		673					
NMW-1	08/23/12	<b>490</b>	< 10	23	70	94	<b>48</b>		735					
NMW-1	03/26/13	<b>510</b>	17	22	71	<b>130</b>	<b>126</b>		876					
NMW-1	10/01/13	<b>290</b>	8.4	3.1	39	44	<b>52</b>		437					
NMW-1	05/02/14	<b>190</b>	1.6	5.9	6.3	35	25		264					
NMW-1	11/17/14	<b>52</b>	< 5.0	5.3	19	9.3	< 20		111					
NMW-1	05/19/15	<b>430</b>	11	100	140	62	<b>140</b>		883					
NMW-1	01/17/17	<b>220</b>	< 5.0	47	32	16	<b>59</b>	1	379	< 5.0	< 5.0			
NMW-1	12/20/17	<b>79</b>	1.0	3.0	4.7	11	23	1	122	< 1.0	< 1.0			
NMW-1	10/10/19	<b>84</b>	1.0	3.6	13	12	22	1	135	< 1.0	< 1.0			
NMW-1	06/17/21	<b>56</b>	< 1.0	3.1	< 1.5	11	14	1	87	< 1.0	< 1.0			
NMW-1	04/06/22	<b>32</b>	< 1.0	1.4	3.4	4.5	8.4	1	51	< 1.0	< 1.0	< 0.50	200	
NMW-1	03/08/23	<b>42</b>	< 2.0	< 2.0	< 3.0	8.0	5.4	1	62	< 2.0	< 2.0	< 0.50	140	704
NMW-1	06/06/23	<b>45</b>	< 2.0	2.5	< 3.0	8.3	14	1	75	< 2.0	< 2.0	< 0.50	140	
NMW-1	09/06/23	<b>41</b>	< 2.0	< 2.0	< 3.0	5.4	11	1	64	< 2.0	< 2.0			
NMW-4	06/01/94	< 0.5	< 0.5	< 0.5	< 2.5				4.5					
NMW-4	04/23/04	< 1.0	< 1.0	< 1.0	< 1.0	2.7	< 10	1	17					
NMW-4	07/29/05	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 10	1	16					
NMW-4	11/03/05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15					
NMW-4	01/31/06	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15					
NMW-4	05/17/06	< 1.0	< 1.0	< 1.0	< 3.0	9.7	< 10	1	26					
NMW-4	09/25/06	< 1.0	< 1.0	< 1.0	< 3.0	< 1.5	< 10	1	18					
NMW-4	12/26/06	< 1.0	< 1.0	< 1.0	< 3.0	< 1.5	< 10	1	18					
NMW-4	02/22/12	< 1.0	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16				
NMW-4	08/23/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
NMW-4	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
NMW-4	10/01/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16					
NMW-4	04/30/14							0						Plugged
NMW-4R	05/01/14	<b>8.0</b>	2.6	< 1.0	< 1.5	11	< 10	1	34					
NMW-4R	11/17/14	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 10	1	16					
NMW-4R	05/19/15	< 1.0	< 1.0	< 1.0	< 1.5	18	< 10	1	33					
NMW-4R	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	2.0	< 10	1	17	< 1.0	< 1.0			
NMW-4R	12/20/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
NMW-4R	10/10/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0			
NMW-4R	06/17/21	< 1.0	< 1.0	< 1.0	< 1.5	3.1	< 10	1	18	< 1.0	< 1.0			
NMW-4R	04/06/22	< 1.0	< 1.0	< 1.0	< 1.5	1.9	< 10	1	16	< 1.0	< 1.0	< 0.50	91	
NMW-4R	03/08/23	< 2.0	< 2.0	< 2.0	< 3.0	< 2.0	< 20	1	31	< 2.0	< 2.0	< 0.50	82	441
NMW-4R	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	3.1	< 10	1	18	< 1.0	< 1.0			

**TABLE 4. GROUNDWATER ANALYTICAL RESULTS**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

NMAC 20.6.2.3103		5	1,000	700	620	100	30	5	0.05	EDC	EDB	Nitrate	Sulfate	TDS	Notes
Well	Date	Benzene	Toluene	Ethyl benzene	Total Xylenes	MTBE	Total Naphthalenes	BTEXMN							
NMW-4R	09/06/23	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16	< 1.0	< 1.0				
W-34	01/01/98	1.2	< 5.0	7.6	7.2	< 2.5		1	24						
W-34	05/06/04	< 1.0	< 1.0	6.7	3.4	< 1.0	< 10	1	23						
W-34	07/28/05	< 1.0	< 1.0	3.7	1.3	< 1.0	< 10	1	18						
W-34	09/25/06	< 1.0	< 1.0	< 1.0	< 3.0	< 1.5	< 10	1	18						
W-34	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-34	08/22/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-34	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-34	10/01/13								0						
W-34	05/01/14								0						Paved over Plugged
W-35	01/01/98	< 5.0	190	1,700	5,600	< 10		1	7,505						
W-35	05/06/04	< 1.0	< 1.0	110	96	< 1.0	164	1	373						
W-35	07/28/05	< 5.0	< 5.0	250	42	< 5.0	400	1	707						
W-35	09/25/06	< 1.0	< 1.0	12	< 3.0	< 1.5	188	1	207						
W-35	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-35	08/22/12	< 1.0	< 1.0	6.9	< 1.5	< 1.0	55	1	67						
W-35	03/25/13	< 1.0	< 1.0	32	< 1.5	< 1.0	399	1	436						
W-35	10/01/13								0						Paved over
W-35	05/02/14	< 1.0	< 1.0	7.5	< 1.5	< 1.0	124	1	136						
W-35	11/17/14	< 1.0	< 1.0	15	< 1.5	< 1.0	99	1	118						
W-35	05/19/15	< 1.0	< 1.0	3.6	< 1.5	< 1.0	45	1	53						
W-35	01/17/17	< 1.0	< 1.0	16	< 1.5	< 1.0	525	1	546	< 1.0	< 1.0				
W-35	12/20/17	< 2.0	< 2.0	5.2	< 3.0	< 2.0	128	1	142	< 2.0	< 2.0				
W-35	10/01/19								0						Could not locate well
W-36	01/01/98	< 5.0	4.4	39	56	12		1	116						
W-36	05/06/04	< 10	< 10	190	390	< 10	230	1	840						
W-36	07/28/05	< 1.0	< 1.0	55	77	< 1.0	77	1	212						
W-36	11/03/05	< 1.0	< 1.0	2.9	3.6	< 1.0	3.3	1	13						
W-36	01/31/06	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15						
W-36	05/17/06	< 1.0	< 1.0	3.0	< 3.0	< 1.5	4.1	1	14						
W-36	09/25/06	< 1.0	< 1.0	23	3.0	< 1.5	82	1	111						
W-36	12/26/06	< 1.0	< 1.0	15	4.5	< 1.5	55	1	78						
W-36	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-36	08/22/12	< 1.0	< 1.0	2.3	< 1.5	< 1.0	11	1	18						
W-36	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-36	10/01/13								0						Paved over
W-36	05/02/14	< 1.0	< 1.0	2.4	< 1.5	< 1.0	12	1	19						
W-36	11/17/14	< 1.0	< 1.0	3.8	< 1.5	< 1.0	17	1	25						
W-36	05/19/15	< 1.0	< 1.0	2.6	< 1.5	< 1.0	31	1	38						
W-36	01/17/17	< 1.0	< 1.0	1.1	< 1.5	< 1.0	18	1	24	< 1.0	< 1.0				Could not locate well
W-36	12/20/17	< 1.0	< 1.0	4.1	< 1.5	< 1.0	70	1	79	< 1.0	< 1.0				
W-36	10/10/19								0						Could not locate well
W-37	06/01/94	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5			4.5						
W-37	05/06/04	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15						
W-37	07/28/05	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	1	15						
W-37	09/25/06	< 1.0	< 1.0	12	< 3.0	< 1.5	< 10	1	29						
W-37	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-37	08/22/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-37	03/25/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 10	1	16						
W-37	10/01/13								0						Paved over
W-37	05/01/14								0						Plugged NAPL
NMW-2/RNMW-2	04/23/04								0						
NMW-2/RNMW-2	07/28/05	320	11	710	120	1,300	39	1	2,500						
NMW-2/RNMW-2	11/03/05	74	1.1	160	52	590	27	1	905						
NMW-2/RNMW-2	01/31/06	11	< 1.0	45	4.1	560	3.0	1	624						
NMW-2/RNMW-2	05/17/06	310	< 1.0	31	19	550	14	1	925						
NMW-2/RNMW-2	09/25/06	20	< 10	16	< 30	1,300	< 100	1	1,476						
NMW-2/RNMW-2	12/26/06	47	< 10	< 10	< 30	1,000	20	1	1,117						
NMW-2/RNMW-2	02/21/12	< 1.0	< 1.0	< 1.0	< 1.5	83	< 10	1	98						
NMW-2/RNMW-2	08/22/12	54	< 1.0	< 1.0	< 1.5	290	9.6	1	357						
NMW-2/RNMW-2	03/26/13	99	1.2	1.7	2.2	220	7.4	1	332						
NMW-2/RNMW-2	10/01/13	< 1.0	< 1.0	< 1.0	< 1.5	61	< 10	1	76						
NMW-2/RNMW-2	05/02/14	12	< 1.0	< 1.0	< 1.5	72	< 10	1	98						
NMW-2/RNMW-2	11/17/14	< 1.0	< 1.0	< 1.0	< 1.5	62	< 10	1	77						
NMW-2/RNMW-2	05/19/15	12	< 1.0	< 1.0	< 1.5	50	2.3	1	68						
NMW-2/RNMW-2	01/17/17	< 1.0	< 1.0	< 1.0	< 1.5	23	< 10	1	38	< 1.0	< 1.0				
NMW-2/RNMW-2	12/20/17	< 1.0	< 1.0	< 1.0	< 1.5	18	< 10	1	33	< 1.0	< 1.0				
NMW-2/RNMW-2	10/10/19	120	1.9	3.4	2.8	110	80	1	318	< 1.0	< 1.0				
NMW-2/RNMW-2	06/17/21	13	< 2.0	< 2.0	< 3.0	44	< 20	1	84	< 2.0	< 2.0				
NMW-2/RNMW-2	04/06/22	44	< 2.0	< 2.0	< 3.0	51	13	1	115	< 1.0	< 1.0	< 0.50	68	720	
NMW-2/RNMW-2	03/08/23	< 1.0	< 1.0	< 1.0	< 1.5	46	< 10	1	61	< 1.0	< 1.0	< 0.50	100	93	
NMW-2/RNMW-2	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	9.5	< 10	1	24	< 1.0	< 1.0	< 0.50	93		

**TABLE 4. GROUNDWATER ANALYTICAL RESULTS**  
**ATEX 213, ALBUQUERQUE, NEW MEXICO**

Well	Date	5 Benzene	1,000 Toluene	700 Ethyl benzene	620 Total Xylenes	100 MTBE	30 Total Naphthalenes	5 BTExMN	0.05 EDC	0.05 EDB	Nitrate	Sulfate	TDS	Notes
NMW-2/RNMW-2	09/06/23	< 1.0	< 1.0	< 1.0	< 1.5	<b>22</b>	< 10	1	37	< 1.0	< 1.0			
NMW-3/RNMW-3	01/01/98								0					<i>NAPL</i>
NMW-3/RNMW-3	04/23/04								0					<i>NAPL</i>
NMW-3/RNMW-3	07/28/05	<b>150</b>	<b>23</b>	270	130	<b>1,200</b>	<b>32</b>		1,805					
NMW-3/RNMW-3	11/03/05	<b>130</b>	<b>7.7</b>	<b>89</b>	170	<b>1,400</b>	<b>32</b>		1,829					
NMW-3/RNMW-3	01/31/06	<b>11</b>	< 1.0	16	6.4	<b>550</b>	3.3	1	588					
NMW-3/RNMW-3	05/17/06	<b>16</b>	< 1.0	<b>7.9</b>	< 3.0	<b>370</b>	< 10	1	408					
NMW-3/RNMW-3	09/25/06	<b>220</b>	< 5.0	<b>64</b>	< 15	<b>1,400</b>	<b>110</b>		1,814					
NMW-3/RNMW-3	12/26/06	<b>6.4</b>	< 5.0	< 5.0	< 15	<b>580</b>	< 50	1	661					
NMW-3/RNMW-3	02/21/12	1.8	< 1.0	< 1.0	< 1.5	<b>120</b>	4.9	1	130					
NMW-3/RNMW-3	08/23/12	1.2	< 1.0	< 1.0	< 1.5	<b>170</b>	5.5	1	180					
NMW-3/RNMW-3	03/26/13	4.6	< 1.0	< 1.0	< 1.5	86	5.4	1	100					
NMW-3/RNMW-3	10/01/13	1.2	< 1.0	< 1.0	< 1.5	83	10	1	98					
NMW-3/RNMW-3	05/02/14	< 1.0	< 1.0	< 1.0	< 1.5	31	< 10	1	46					
NMW-3/RNMW-3	11/17/14	1.1	< 1.0	< 1.0	< 1.5	63	< 10	1	78					
NMW-3/RNMW-3	05/19/15	< 1.0	< 1.0	< 1.0	< 1.5	<b>46</b>	< 10	1	61					
NMW-3/RNMW-3	01/17/17	1.3	< 1.0	< 1.0	< 1.5	64	10	1	79	< 1.0	< 1.0			
NMW-3/RNMW-3	12/20/17	2.0	< 1.0	< 1.0	< 1.5	61	10	1	77	< 1.0	< 1.0			
NMW-3/RNMW-3	10/10/19	1.5	< 1.0	< 1.0	< 1.5	30	9.6	1	45	< 1.0	< 1.0			
NMW-3/RNMW-3	06/17/21	< 1.0	< 1.0	< 1.0	< 1.5	11	< 10	1	26	< 1.0	< 1.0			
NMW-3/RNMW-3	04/06/22	< 1.0	< 1.0	< 1.0	< 1.5	5.5	< 10	1	20	< 1.0	< 1.0	< 0.10	100	586
NMW-3/RNMW-3	03/08/23	< 1.0	< 1.0	< 1.0	< 1.5	13	< 10	1	28	< 1.0	< 1.0	< 0.50	75	633
NMW-3/RNMW-3	06/06/23	< 1.0	< 1.0	< 1.0	< 1.5	11	< 10	1	26	< 1.0	< 1.0			
NMW-3/RNMW-3	09/06/23	< 1.0	< 1.0	< 1.0	< 1.5	20	< 10	1	35	< 1.0	< 1.0			

NOTES:

**BOLD RED** indicates concentration above the New Mexico Administrative Code 20.6.2.3103 Human Health Standards for Groundwater

All concentrations reported in micrograms per liter ( $\mu\text{g/L}$ ).

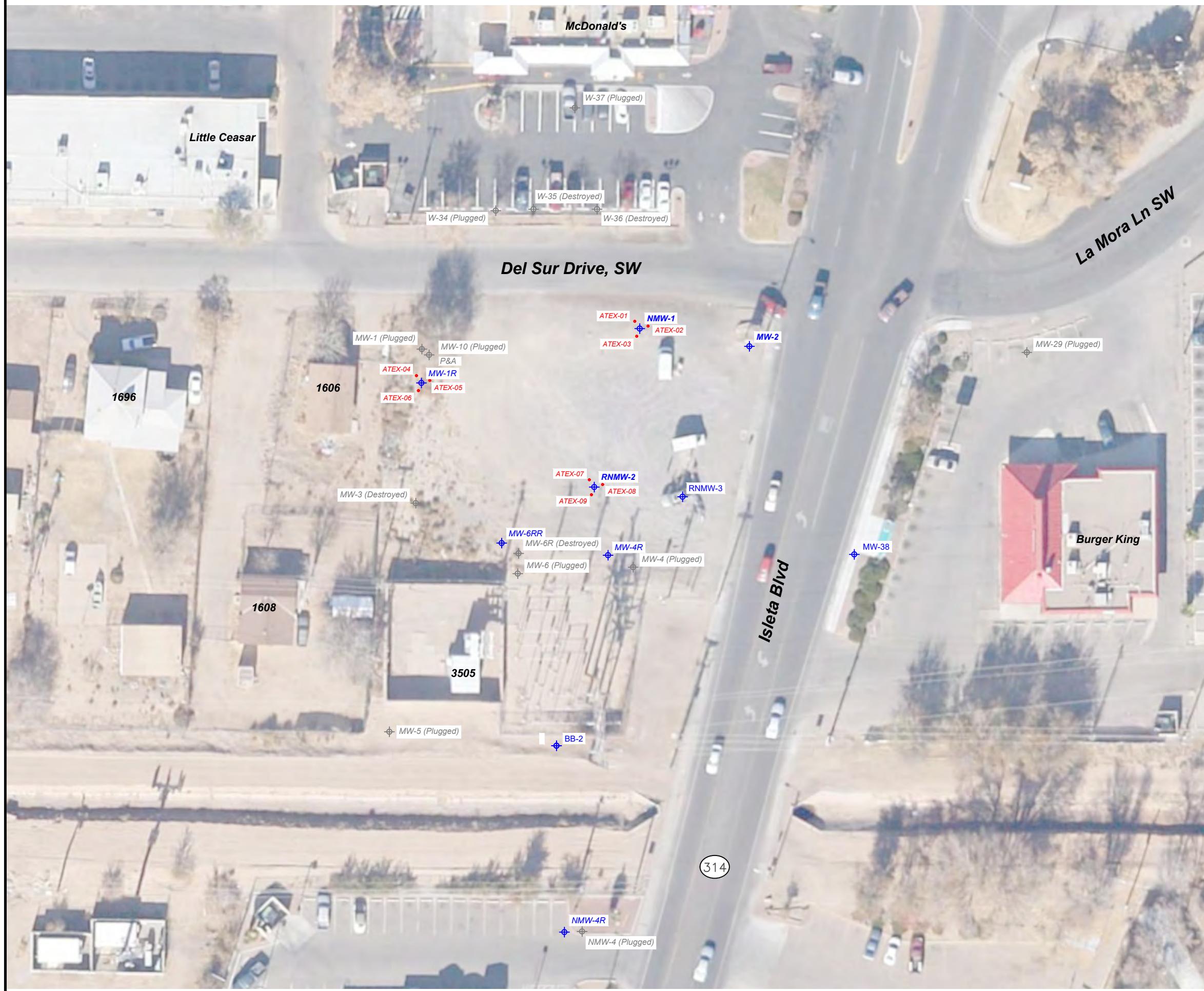
All data reported prior to 2012 from Groundwater Monitoring Report, Atex #213 UST Release Site, Albuquerque, New Mexico (Souder Miller Associates, 2007).

EDB = Ethylene Dibromide

EDC = Ethylene Dichloride

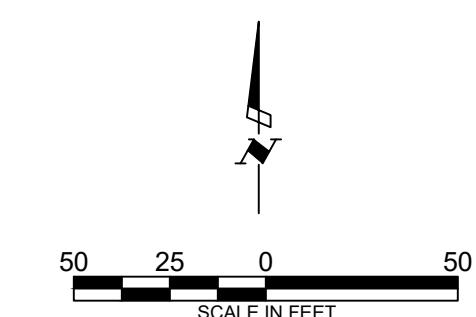
MTBE = Methyl tertiary-butyl ether

## Figures



## LEGEND:

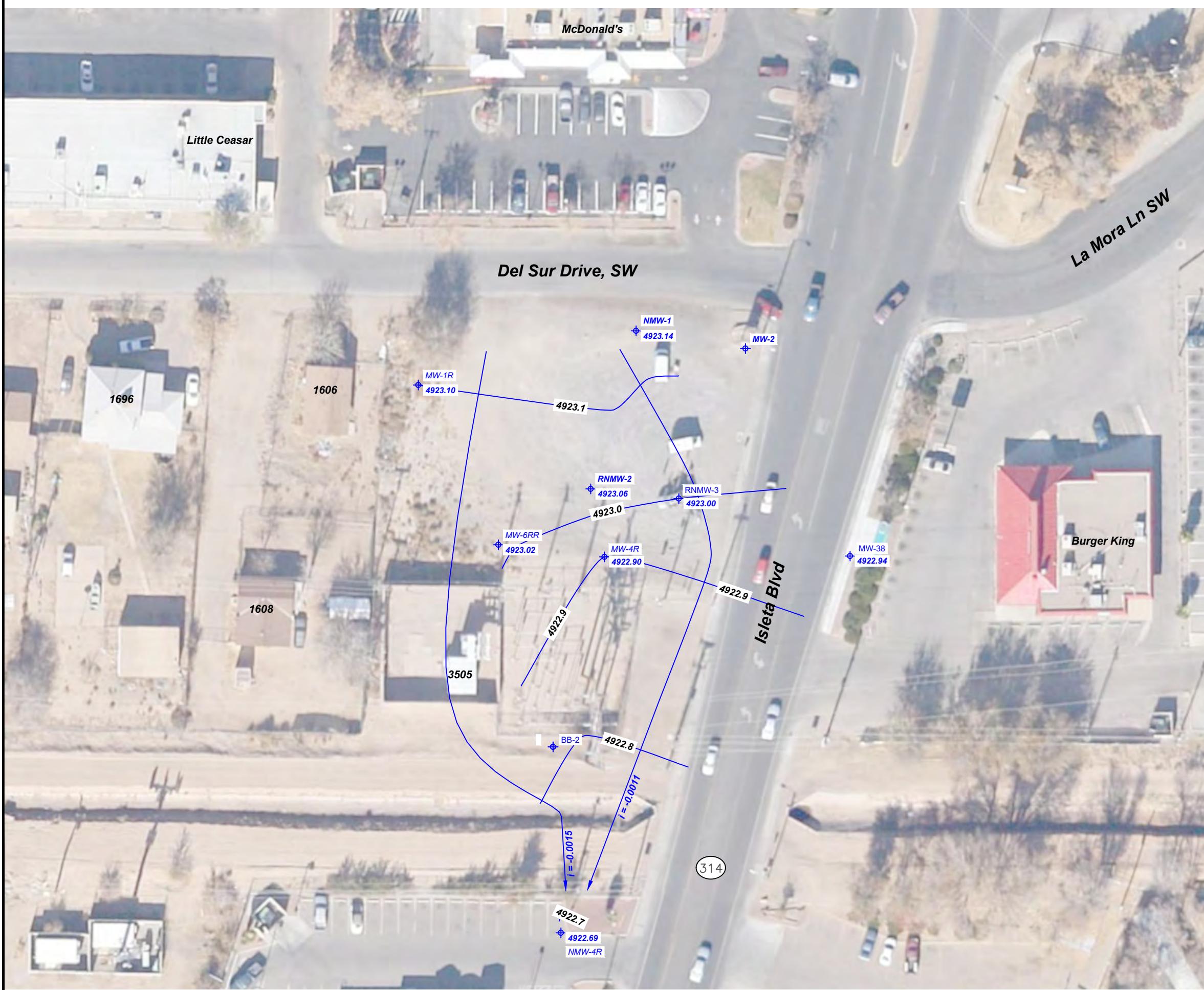
- MW-2 MONITORING WELL
- MW-6 P&A PLUGGED WELL
- PETROFIX INJECTION POINT



ATEX 213  
ALBUQUERQUE, NEW MEXICO

**FIGURE 1**  
**SITE LAYOUT**

PROJECT #: 633224 PROJECT PHASE: 01 PROJECT MANAGER: LA



## LEGEND:

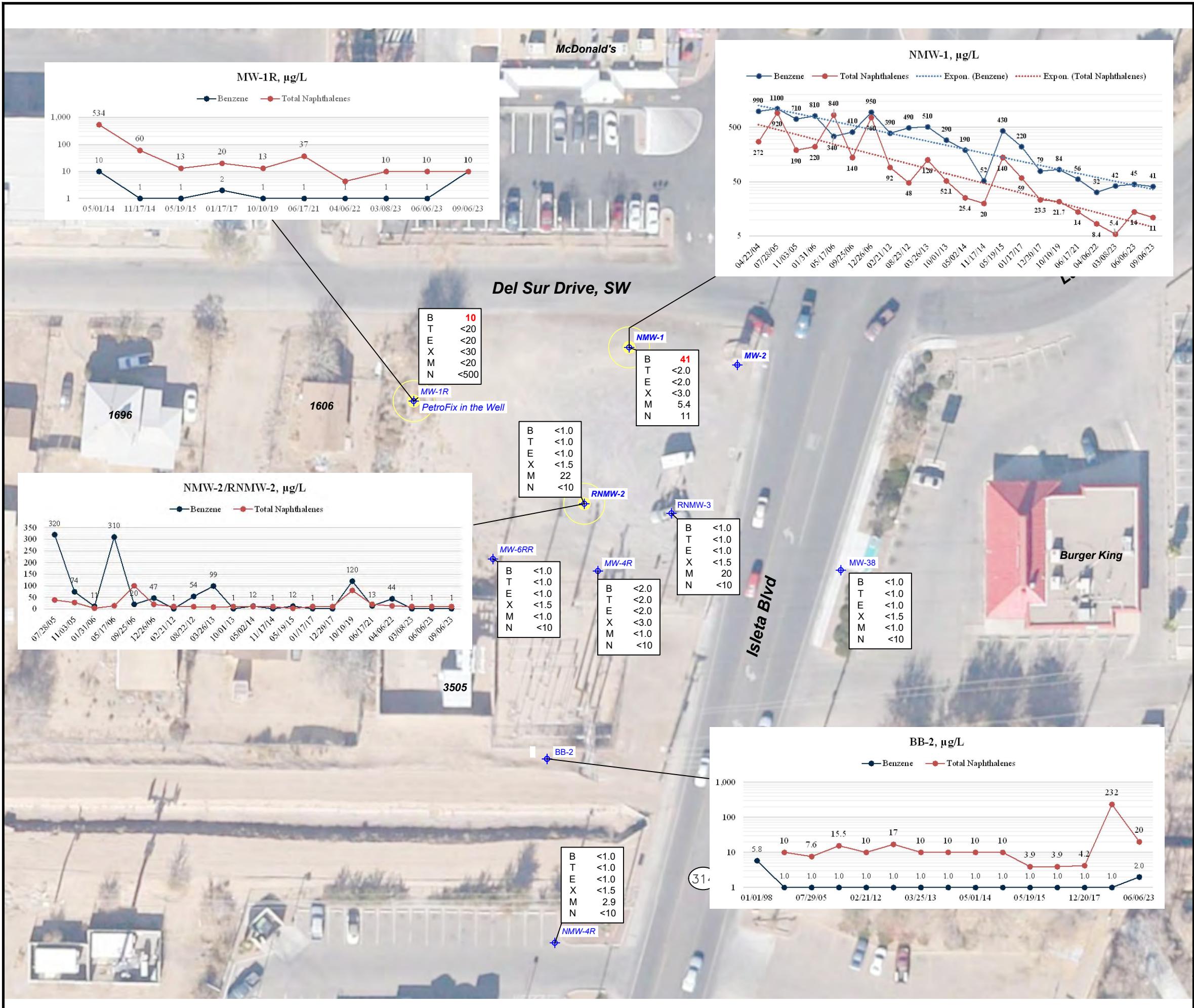
- MW-2 MONITORING WELL
- 4922.50 GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL
- GROUNDWATER FLOW DIRECTION AVERAGE GRADIENT 0.0015

ATEX 213  
ALBUQUERQUE, NEW MEXICO

**FIGURE 2**  
**GROUNDWATER CONTOUR MAP**  
**SEPTEMBER 6, 2023**

PROJECT #: 633224 PROJECT PHASE: 01 PROJECT MANAGER: LA

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. PBC  
320 Gold Avenue, SW Suite 1300  
Albuquerque, NM 87102



## **LEGEND:**



MONITORING WELL

PETROFIX WAS INJECTED IN THE AREA SURROUNDING THE WELL IN SEPTEMBER 2022.

B BENZENE  
T TOLUENE  
E ETHYLBENZENE  
X TOTAL XYLEMES  
M METHYL TERTIARY BUTYL ETHER  
N TOTAL NAPHTHALENE

## NOTES

1. ON GRAPHS, WHEN CONCENTRATIONS WERE BELOW DETECTION LIMITS, REPORTING LIMITS WERE USED FOR GRAPHING PURPOSES.
  2. MW-1R HAD PETROFIX®. THEREFORE, THE LABORATORY DILUTED THE SAMPLE TO ANALYZE IT. THIS RESULTED IN HIGH REPORTING LIMITS. THE VALUES SHOWN ON THE GRAPH WERE ADJUSTED TO THE STANDARD DILUTION.
  3. PLEASE SEE TABLE 4 FOR ADDITIONAL CONCENTRATION DATA.
  4. CONCENTRATIONS ARE IN MICROGRAMS PER LITER.



A horizontal scale bar with tick marks at 50, 25, 0, and 50. The distance between the 0 and 50 marks is shaded black, representing 50 feet.

ATEX 213  
ALBUQUERQUE, NEW MEXICO

**FIGURE 3**  
**VOLATILE ORGANIC COMPOUNDS**  
**SEPTEMBER 6, 2023**

PROJECT #: 6332224 PROJECT PHASE: 01 PROJECT MANAGER: [REDACTED]

## **Appendix A – Field Records**



**EA Engineering, Science, and Technology**  
320 Gold Avenue SW, Suite 1210  
Albuquerque, NM 87102  
Phone: (505) 224-9013

## MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID	<u>RNMW-3</u>	Date gauged
Site	<u>ATex 213</u>	Time gauged
Depth to PSH	Feet	Well diameter
Depth to water	10.22 Feet	Height of fluid column
Total depth	15.98 Feet	Volume in well
NAPL thickness	Feet	

9-6-2023  
0954  
After Bailing NAPL

## GROUNDWATER SAMPLING DATA

Time/date purged 0957 9.6.27 Purge Method

Actual purge volume 3 gal. Field measurements stabilized within  $\pm 10\%$ ? No

Time/date sampled 1004 9.6.23 Purged/sampled by D. O'Brien

## Disposable barrier

Requested analyses 8260

Comments/observations \_\_\_\_\_

## Well Casing Volumes

Well Sealing Requirements





**EA Engineering, Science, and Technology**  
320 Gold Avenue SW, Suite 1210  
Albuquerque, NM 87102  
Phone: (505) 224-9013

## MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID	<u>RNMW-2</u>	Date gauged
Site	<u>Alex 213</u>	Time gauged
Depth to PSH	— Feet	Well diameter <u>2</u> Inches
Depth to water	<u>10.39</u> Feet	Height of fluid column <u>5.13</u> Feet
Total depth	<u>15.52</u> Feet	Volume in well <u>0.87</u> Gallons
NAPL thickness	— Feet	(2 well volumes) <u>2.61</u>

9.6.2023  
10 27  
After Bailing NAPL

## GROUNDWATER SAMPLING DATA

Time/date purged 1030 9-16-2023 purge Method

handball

Actual purge volume 2.75 gal.

Field measurements stabilized within  $\pm 10\%$ ?

no

Time/date sampled 1040

Purged/sampled by

P.O'Brien

Disposable bag, L

Requested analyses \_\_\_\_\_ 8240

Comments/observations

[View Details](#) | [Edit](#) | [Delete](#)

## Well Casing Volumes

2" diameter = 0.17 gal/ft    4" diameter = 0.66 gal/ft    6" diameter = 1.50 gal/ft



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320 Gold Avenue SW, Suite 1210  
Albuquerque, NM 87102  
Phone: (505) 224-9013

## MONITOR WELL SAMPLING FIELD FORM

#### FLUID LEVEL DATA

Well ID	<u>Mw-6 RR</u>	Date gauged	<u>9.6.2023</u>
Site	<u>Alex 213</u>	Time gauged	<u>1046</u>
Depth to PSH	<u>—</u> Feet	Well diameter	<u>2</u> Inches
Depth to water	<u>10.88</u> Feet	Height of fluid column	<u>9.1</u> Feet
Total depth	<u>19.98</u> Feet	Volume in well	<u>1.54</u> Gallons
NAPL thickness	<u>—</u> Feet		<u>4.64</u>
(3 well volumes = _____ gallons)			
After Bailing NAPL			
Depth to PSH	Feet	Feet	Feet
Depth to water	Feet	Feet	Feet
NAPL thickness	Feet	Feet	Feet
NAPL Recovered	Gallons	Gallons	Gallons

## GROUNDWATER SAMPLING DATA

Time/date purged 10 48 Purge Method hand bag 1

Actual purge volume 4.75 gal. Field measurements stabilized within  $\pm 10\%$ ? no

Time/date sampled 1101 9.6.23 Purged/sampled by D. O'Brien

*Disposal to water*

Requested analyses 8242

**Comments/observations**

#### **Well Casing Volumes**



**EA Engineering, Science, and Technology**  
320 Gold Avenue SW, Suite 1210  
Albuquerque, NM 87102  
Phone: (505) 224-9013

## MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID MW-1R  
Site Alex 213

Date gauged

9.4.2023

Depth to PSH ) Feet

Well diameter  $\varnothing$  Inches

time gauged

1104

Depth to water 8.98 Feet

Height of fluid column 5.69 Feet

Total depth 14.6 Feet

Volume in well 0.96 Gallons

NAPL thickness \_\_\_\_\_ Feet

$$(3 \text{ well volumes} = \underline{2.90} \text{ gallons})$$

After Bailing NAPL

Depth to PSH \_\_\_\_\_ Feet

Depth to water \_\_\_\_\_ Feet

NAPL thickness \_\_\_\_\_ Feet

NAPL  
Recovered \_\_\_\_\_ Gallons

## GROUNDWATER SAMPLING DATA

Time/date purged 1/07 9.16.23 Purge Method

handball

Actual purge volume 3 gal.

Field measurements stabilized within  $\pm 10\%$ ?

Time/date sampled 1118 9.6.23 Purged/sampled by D. O'Brien

## Disposal of oiler

Requested analyses 4260

### **Comments/observations**

### Well Casing Volumes

Well Boring Volumes  
2" diameter = 0.17 gal/ft    4" diameter = 0.66 gal/ft    6" diameter = 1.50 gal/ft





**EA Engineering, Science, and Technology**  
320 Gold Avenue SW, Suite 1210  
Albuquerque, NM 87102  
Phone: (505) 224-9013

## MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID	<u>MW-39</u>	Date gauged
Site	<u>Alex 213</u>	Time gauged
Depth to PSH	<u>-</u> Feet	Well diameter <u>2</u> Inches
Depth to water	<u>8.93</u> Feet	Height of fluid column <u>3.22</u> Feet
Total depth	<u>12.15</u> Feet	Volume in well <u>0.54</u> Gallons
NAPL thickness	<u>-</u> Feet	(3 well volumes = <u>1.64</u> )

1.6.2023  
40 40 1198

After Bailing NAPL

Depth to PSH	Feet
Depth to water	Feet
NAPL thickness	Feet
NAPL Recovered	Gallons

## GROUNDWATER SAMPLING DATA

Time/date purged 11/4/9 9.6.23 Purge Method

hand ball

Actual purge volume 1.75 gal.

Field measurements stabilized within  $\pm 10\%$ ?

no

**Time/date sampled**

9-6-23

Purged/sampled by

R-OB<sub>n</sub>

### Sample method

### Requested analyses

#### **Comments/observations**

### Well Gasing Volumes

**Well Casing Volumes**

2" diameter = 0.17 gal/ft	4" diameter = 0.66 gal/ft	6" diameter = 1.50 gal/ft
---------------------------	---------------------------	---------------------------



**EA Engineering, Science, and Technology**  
320 Gold Avenue SW, Suite 1210  
Albuquerque, NM 87102  
Phone: (505) 224-9013

## MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID	<u>NMW-4R</u>	Date gauged
Site	<u>Alex 213</u>	Time gauged
Depth to PSH	<u>—</u> Feet	Well diameter <u>2</u> Inches
Depth to water	<u>9.84</u> Feet	Height of fluid column <u>9.94</u> Feet
Total depth	<u>19.78</u> Feet	Volume in well <u>1.68</u> Gallons
NAPL thickness	<u>—</u> Feet	(3 well volumes = <u>5.06</u> )

<u>9.6.2023</u>	
<u>1201</u>	
After Bailing NAPL	
Depth to PSH	Feet
Depth to water	Feet
NAPL thickness	Feet
NAPL Recovered	Gallons

## GROUNDWATER SAMPLING DATA

Time/date purged 1203 9.6.23 Purge Method

handball

Actual purge volume 5 gal.

Field measurements stabilized within  $\pm 10\%$ ? *No*

Time/date sampled 1212 9.11.23 Purged/sampled by D. Oberen

Sample method Dispersion Ratio

Requested analyses 8260

Comments/observations \_\_\_\_\_

## Well Casing Volumes

2" diameter = 0.17 gal/ft    4" diameter = 0.66 gal/ft    6" diameter = 1.50 gal/ft

## **Appendix B – Laboratory Report**



*Hall Environmental Analysis Laboratory*  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

September 20, 2023

Vener Mustafin  
EA Engineering  
320 Gold Ave SW Suite 1210  
Albuquerque, NM 87102  
TEL: (505) 224-9013  
FAX:

RE: Atex 213

OrderNo.: 2309231

Dear Vener Mustafin:

Hall Environmental Analysis Laboratory received 8 sample(s) on 9/6/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-001

**Client Sample ID:** RNMW-3

**Collection Date:** 9/6/2023 10:04:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Toluene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Ethylbenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Methyl tert-butyl ether (MTBE)	20	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Naphthalene	ND	2.0		µg/L	1	9/12/2023 4:11:10 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 4:11:10 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 4:11:10 PM	
Acetone	ND	10		µg/L	1	9/12/2023 4:11:10 PM	
Bromobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Bromoform	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Bromomethane	ND	3.0		µg/L	1	9/12/2023 4:11:10 PM	
2-Butanone	ND	10		µg/L	1	9/12/2023 4:11:10 PM	
Carbon disulfide	ND	10		µg/L	1	9/12/2023 4:11:10 PM	
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Chlorobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Chloroethane	ND	2.0		µg/L	1	9/12/2023 4:11:10 PM	
Chloroform	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Chloromethane	ND	3.0		µg/L	1	9/12/2023 4:11:10 PM	
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
cis-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2023 4:11:10 PM	
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Dibromomethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,1-Dichloroethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM	
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2023 4:11:10 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-001

**Client Sample ID:** RNMW-3

**Collection Date:** 9/6/2023 10:04:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
2-Hexanone	ND	10		µg/L	1	9/12/2023 4:11:10 PM
Isopropylbenzene	1.2	1.0		µg/L	1	9/12/2023 4:11:10 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2023 4:11:10 PM
Methylene Chloride	ND	3.0		µg/L	1	9/12/2023 4:11:10 PM
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2023 4:11:10 PM
n-Propylbenzene	1.6	1.0		µg/L	1	9/12/2023 4:11:10 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
Styrene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2023 4:11:10 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2023 4:11:10 PM
Vinyl chloride	ND	1.0		µg/L	1	9/12/2023 4:11:10 PM
Xylenes, Total	ND	1.5		µg/L	1	9/12/2023 4:11:10 PM
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec		1	9/12/2023 4:11:10 PM
Surr: 4-Bromofluorobenzene	107	70-130	%Rec		1	9/12/2023 4:11:10 PM
Surr: Dibromofluoromethane	97.9	70-130	%Rec		1	9/12/2023 4:11:10 PM
Surr: Toluene-d8	101	70-130	%Rec		1	9/12/2023 4:11:10 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-002

**Client Sample ID:** MW-4R

**Collection Date:** 9/6/2023 10:24:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Toluene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Ethylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Methyl tert-butyl ether (MTBE)	2.9	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,2,4-Trimethylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,3,5-Trimethylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,2-Dichloroethane (EDC)	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,2-Dibromoethane (EDB)	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Naphthalene	ND	4.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1-Methylnaphthalene	ND	8.0	D	µg/L	2	9/12/2023 4:39:25 PM	
2-Methylnaphthalene	ND	8.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Acetone	ND	20	D	µg/L	2	9/12/2023 4:39:25 PM	
Bromobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Bromodichloromethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Bromoform	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Bromomethane	ND	6.0	D	µg/L	2	9/12/2023 4:39:25 PM	
2-Butanone	ND	20	D	µg/L	2	9/12/2023 4:39:25 PM	
Carbon disulfide	ND	20	D	µg/L	2	9/12/2023 4:39:25 PM	
Carbon Tetrachloride	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Chlorobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Chloroethane	ND	4.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Chloroform	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Chloromethane	ND	6.0	D	µg/L	2	9/12/2023 4:39:25 PM	
2-Chlorotoluene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
4-Chlorotoluene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
cis-1,2-DCE	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
cis-1,3-Dichloropropene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,2-Dibromo-3-chloropropane	ND	4.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Dibromochloromethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Dibromomethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,2-Dichlorobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,3-Dichlorobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,4-Dichlorobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
Dichlorodifluoromethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,1-Dichloroethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,1-Dichloroethene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,2-Dichloropropane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
1,3-Dichloropropane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM	
2,2-Dichloropropane	ND	4.0	D	µg/L	2	9/12/2023 4:39:25 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
 D Sample Diluted Due to Matrix  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 PQL Practical Quantitative Limit  
 S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank  
 E Above Quantitation Range/Estimated Value  
 J Analyte detected below quantitation limits  
 P Sample pH Not In Range  
 RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-002

**Client Sample ID:** MW-4R

**Collection Date:** 9/6/2023 10:24:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
Hexachlorobutadiene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
2-Hexanone	ND	20	D	µg/L	2	9/12/2023 4:39:25 PM
Isopropylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
4-Isopropyltoluene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
4-Methyl-2-pentanone	ND	20	D	µg/L	2	9/12/2023 4:39:25 PM
Methylene Chloride	ND	6.0	D	µg/L	2	9/12/2023 4:39:25 PM
n-Butylbenzene	ND	6.0	D	µg/L	2	9/12/2023 4:39:25 PM
n-Propylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
sec-Butylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
Styrene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
tert-Butylbenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,1,1,2-Tetrachloroethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,1,2,2-Tetrachloroethane	ND	4.0	D	µg/L	2	9/12/2023 4:39:25 PM
Tetrachloroethene (PCE)	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
trans-1,2-DCE	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
trans-1,3-Dichloropropene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,2,3-Trichlorobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,2,4-Trichlorobenzene	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,1,1-Trichloroethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,1,2-Trichloroethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
Trichloroethene (TCE)	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
Trichlorofluoromethane	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
1,2,3-Trichloropropane	ND	4.0	D	µg/L	2	9/12/2023 4:39:25 PM
Vinyl chloride	ND	2.0	D	µg/L	2	9/12/2023 4:39:25 PM
Xylenes, Total	ND	3.0	D	µg/L	2	9/12/2023 4:39:25 PM
Surr: 1,2-Dichloroethane-d4	99.2	70-130	D	%Rec	2	9/12/2023 4:39:25 PM
Surr: 4-Bromofluorobenzene	106	70-130	D	%Rec	2	9/12/2023 4:39:25 PM
Surr: Dibromofluoromethane	97.7	70-130	D	%Rec	2	9/12/2023 4:39:25 PM
Surr: Toluene-d8	99.4	70-130	D	%Rec	2	9/12/2023 4:39:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
 D Sample Diluted Due to Matrix  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit  
 PQL Practical Quantitative Limit  
 S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank  
 E Above Quantitation Range/Estimated Value  
 J Analyte detected below quantitation limits  
 P Sample pH Not In Range  
 RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-003

**Client Sample ID:** RNMW-2

**Collection Date:** 9/6/2023 10:40:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Toluene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Ethylbenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Methyl tert-butyl ether (MTBE)	22	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Naphthalene	ND	2.0		µg/L	1	9/12/2023 5:07:40 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 5:07:40 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 5:07:40 PM	
Acetone	ND	10		µg/L	1	9/12/2023 5:07:40 PM	
Bromobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Bromoform	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Bromomethane	ND	3.0		µg/L	1	9/12/2023 5:07:40 PM	
2-Butanone	ND	10		µg/L	1	9/12/2023 5:07:40 PM	
Carbon disulfide	ND	10		µg/L	1	9/12/2023 5:07:40 PM	
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Chlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Chloroethane	ND	2.0		µg/L	1	9/12/2023 5:07:40 PM	
Chloroform	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Chloromethane	ND	3.0		µg/L	1	9/12/2023 5:07:40 PM	
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
cis-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2023 5:07:40 PM	
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Dibromomethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,1-Dichloroethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM	
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2023 5:07:40 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-003

**Client Sample ID:** RNMW-2

**Collection Date:** 9/6/2023 10:40:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
2-Hexanone	ND	10		µg/L	1	9/12/2023 5:07:40 PM
Isopropylbenzene	1.9	1.0		µg/L	1	9/12/2023 5:07:40 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2023 5:07:40 PM
Methylene Chloride	ND	3.0		µg/L	1	9/12/2023 5:07:40 PM
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2023 5:07:40 PM
n-Propylbenzene	2.3	1.0		µg/L	1	9/12/2023 5:07:40 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
Styrene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2023 5:07:40 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2023 5:07:40 PM
Vinyl chloride	ND	1.0		µg/L	1	9/12/2023 5:07:40 PM
Xylenes, Total	ND	1.5		µg/L	1	9/12/2023 5:07:40 PM
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec		1	9/12/2023 5:07:40 PM
Surr: 4-Bromofluorobenzene	106	70-130	%Rec		1	9/12/2023 5:07:40 PM
Surr: Dibromofluoromethane	96.0	70-130	%Rec		1	9/12/2023 5:07:40 PM
Surr: Toluene-d8	102	70-130	%Rec		1	9/12/2023 5:07:40 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-004

**Client Sample ID:** MW-6RR

**Collection Date:** 9/6/2023 11:01:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Toluene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Ethylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Naphthalene	ND	2.0		µg/L	1	9/12/2023 5:35:51 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 5:35:51 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 5:35:51 PM	
Acetone	ND	10		µg/L	1	9/12/2023 5:35:51 PM	
Bromobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Bromoform	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Bromomethane	ND	3.0		µg/L	1	9/12/2023 5:35:51 PM	
2-Butanone	ND	10		µg/L	1	9/12/2023 5:35:51 PM	
Carbon disulfide	ND	10		µg/L	1	9/12/2023 5:35:51 PM	
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Chlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Chloroethane	ND	2.0		µg/L	1	9/12/2023 5:35:51 PM	
Chloroform	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Chloromethane	ND	3.0		µg/L	1	9/12/2023 5:35:51 PM	
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
cis-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2023 5:35:51 PM	
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Dibromomethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,1-Dichloroethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM	
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2023 5:35:51 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-004

**Client Sample ID:** MW-6RR

**Collection Date:** 9/6/2023 11:01:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
2-Hexanone	ND	10		µg/L	1	9/12/2023 5:35:51 PM
Isopropylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2023 5:35:51 PM
Methylene Chloride	ND	3.0		µg/L	1	9/12/2023 5:35:51 PM
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2023 5:35:51 PM
n-Propylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
Styrene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2023 5:35:51 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2023 5:35:51 PM
Vinyl chloride	ND	1.0		µg/L	1	9/12/2023 5:35:51 PM
Xylenes, Total	ND	1.5		µg/L	1	9/12/2023 5:35:51 PM
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec		1	9/12/2023 5:35:51 PM
Surr: 4-Bromofluorobenzene	106	70-130	%Rec		1	9/12/2023 5:35:51 PM
Surr: Dibromofluoromethane	101	70-130	%Rec		1	9/12/2023 5:35:51 PM
Surr: Toluene-d8	104	70-130	%Rec		1	9/12/2023 5:35:51 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-005

**Client Sample ID:** MW-1R

**Collection Date:** 9/6/2023 11:18:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: RAA
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	10	10	D	µg/L	20	9/13/2023 10:33:43 AM	
Toluene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Ethylbenzene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Methyl tert-butyl ether (MTBE)	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,2,4-Trimethylbenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
1,3,5-Trimethylbenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
1,2-Dichloroethane (EDC)	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,2-Dibromoethane (EDB)	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Naphthalene	ND	100	D	µg/L	50	9/14/2023 3:20:01 PM	
1-Methylnaphthalene	ND	200	D	µg/L	50	9/14/2023 3:20:01 PM	
2-Methylnaphthalene	ND	200	D	µg/L	50	9/14/2023 3:20:01 PM	
Acetone	ND	200	D	µg/L	20	9/13/2023 10:33:43 AM	
Bromobenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
Bromodichloromethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Bromoform	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
Bromomethane	ND	60	D	µg/L	20	9/13/2023 10:33:43 AM	
2-Butanone	ND	200	D	µg/L	20	9/13/2023 10:33:43 AM	
Carbon disulfide	ND	200	D	µg/L	20	9/13/2023 10:33:43 AM	
Carbon Tetrachloride	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Chlorobenzene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Chloroethane	ND	40	D	µg/L	20	9/13/2023 10:33:43 AM	
Chloroform	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Chloromethane	ND	60	D	µg/L	20	9/13/2023 10:33:43 AM	
2-Chlorotoluene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
4-Chlorotoluene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
cis-1,2-DCE	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
cis-1,3-Dichloropropene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,2-Dibromo-3-chloropropane	ND	100	D	µg/L	50	9/14/2023 3:20:01 PM	
Dibromochloromethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
Dibromomethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,2-Dichlorobenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
1,3-Dichlorobenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
1,4-Dichlorobenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM	
Dichlorodifluoromethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,1-Dichloroethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,1-Dichloroethene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,2-Dichloropropane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
1,3-Dichloropropane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM	
2,2-Dichloropropane	ND	40	D	µg/L	20	9/13/2023 10:33:43 AM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-005

**Client Sample ID:** MW-1R

**Collection Date:** 9/6/2023 11:18:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
Hexachlorobutadiene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
2-Hexanone	ND	200	D	µg/L	20	9/13/2023 10:33:43 AM
Isopropylbenzene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
4-Isopropyltoluene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
4-Methyl-2-pentanone	ND	200	D	µg/L	20	9/13/2023 10:33:43 AM
Methylene Chloride	ND	60	D	µg/L	20	9/13/2023 10:33:43 AM
n-Butylbenzene	ND	150	D	µg/L	50	9/14/2023 3:20:01 PM
n-Propylbenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
sec-Butylbenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
Styrene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
tert-Butylbenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
1,1,1,2-Tetrachloroethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
1,1,2,2-Tetrachloroethane	ND	100	D	µg/L	50	9/14/2023 3:20:01 PM
Tetrachloroethene (PCE)	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
trans-1,2-DCE	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
trans-1,3-Dichloropropene	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
1,2,3-Trichlorobenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
1,2,4-Trichlorobenzene	ND	50	D	µg/L	50	9/14/2023 3:20:01 PM
1,1,1-Trichloroethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
1,1,2-Trichloroethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
Trichloroethene (TCE)	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
Trichlorofluoromethane	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
1,2,3-Trichloropropane	ND	100	D	µg/L	50	9/14/2023 3:20:01 PM
Vinyl chloride	ND	20	D	µg/L	20	9/13/2023 10:33:43 AM
Xylenes, Total	ND	30	D	µg/L	20	9/13/2023 10:33:43 AM
Surr: 1,2-Dichloroethane-d4	108	70-130	D	%Rec	20	9/13/2023 10:33:43 AM
Surr: 4-Bromofluorobenzene	113	70-130	D	%Rec	50	9/14/2023 3:20:01 PM
Surr: Dibromofluoromethane	110	70-130	D	%Rec	20	9/13/2023 10:33:43 AM
Surr: Toluene-d8	118	70-130	D	%Rec	20	9/13/2023 10:33:43 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-006

**Client Sample ID:** NMW-1

**Collection Date:** 9/6/2023 11:33:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	41	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Toluene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Ethylbenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Methyl tert-butyl ether (MTBE)	5.4	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,2,4-Trimethylbenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Naphthalene	11	4.0		µg/L	2	9/12/2023 6:32:13 PM	
1-Methylnaphthalene	ND	8.0		µg/L	2	9/12/2023 6:32:13 PM	
2-Methylnaphthalene	ND	8.0		µg/L	2	9/12/2023 6:32:13 PM	
Acetone	ND	20		µg/L	2	9/12/2023 6:32:13 PM	
Bromobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Bromodichloromethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Bromoform	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Bromomethane	ND	6.0		µg/L	2	9/12/2023 6:32:13 PM	
2-Butanone	ND	20		µg/L	2	9/12/2023 6:32:13 PM	
Carbon disulfide	ND	20		µg/L	2	9/12/2023 6:32:13 PM	
Carbon Tetrachloride	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Chlorobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Chloroethane	ND	4.0		µg/L	2	9/12/2023 6:32:13 PM	
Chloroform	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Chloromethane	ND	6.0		µg/L	2	9/12/2023 6:32:13 PM	
2-Chlorotoluene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
4-Chlorotoluene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
cis-1,2-DCE	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	9/12/2023 6:32:13 PM	
Dibromochloromethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Dibromomethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,2-Dichlorobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,3-Dichlorobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,4-Dichlorobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
Dichlorodifluoromethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,1-Dichloroethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,1-Dichloroethene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,2-Dichloropropane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
1,3-Dichloropropane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM	
2,2-Dichloropropane	ND	4.0		µg/L	2	9/12/2023 6:32:13 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-006

**Client Sample ID:** NMW-1

**Collection Date:** 9/6/2023 11:33:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
Hexachlorobutadiene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
2-Hexanone	ND	20		µg/L	2	9/12/2023 6:32:13 PM
Isopropylbenzene	5.9	2.0		µg/L	2	9/12/2023 6:32:13 PM
4-Isopropyltoluene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
4-Methyl-2-pentanone	ND	20		µg/L	2	9/12/2023 6:32:13 PM
Methylene Chloride	ND	6.0		µg/L	2	9/12/2023 6:32:13 PM
n-Butylbenzene	ND	6.0		µg/L	2	9/12/2023 6:32:13 PM
n-Propylbenzene	13	2.0		µg/L	2	9/12/2023 6:32:13 PM
sec-Butylbenzene	2.1	2.0		µg/L	2	9/12/2023 6:32:13 PM
Styrene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
tert-Butylbenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	9/12/2023 6:32:13 PM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
trans-1,2-DCE	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
Trichloroethene (TCE)	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
Trichlorofluoromethane	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	9/12/2023 6:32:13 PM
Vinyl chloride	ND	2.0		µg/L	2	9/12/2023 6:32:13 PM
Xylenes, Total	ND	3.0		µg/L	2	9/12/2023 6:32:13 PM
Surr: 1,2-Dichloroethane-d4	115	70-130	%Rec		2	9/12/2023 6:32:13 PM
Surr: 4-Bromofluorobenzene	113	70-130	%Rec		2	9/12/2023 6:32:13 PM
Surr: Dibromofluoromethane	97.0	70-130	%Rec		2	9/12/2023 6:32:13 PM
Surr: Toluene-d8	106	70-130	%Rec		2	9/12/2023 6:32:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-007

**Client Sample ID:** MW-38

**Collection Date:** 9/6/2023 11:51:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Toluene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Ethylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Naphthalene	ND	2.0		µg/L	1	9/12/2023 7:00:26 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 7:00:26 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 7:00:26 PM	
Acetone	ND	10		µg/L	1	9/12/2023 7:00:26 PM	
Bromobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Bromoform	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Bromomethane	ND	3.0		µg/L	1	9/12/2023 7:00:26 PM	
2-Butanone	ND	10		µg/L	1	9/12/2023 7:00:26 PM	
Carbon disulfide	ND	10		µg/L	1	9/12/2023 7:00:26 PM	
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Chlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Chloroethane	ND	2.0		µg/L	1	9/12/2023 7:00:26 PM	
Chloroform	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Chloromethane	ND	3.0		µg/L	1	9/12/2023 7:00:26 PM	
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
cis-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2023 7:00:26 PM	
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Dibromomethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,1-Dichloroethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM	
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2023 7:00:26 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-007

**Client Sample ID:** MW-38

**Collection Date:** 9/6/2023 11:51:00 AM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
2-Hexanone	ND	10		µg/L	1	9/12/2023 7:00:26 PM
Isopropylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2023 7:00:26 PM
Methylene Chloride	ND	3.0		µg/L	1	9/12/2023 7:00:26 PM
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2023 7:00:26 PM
n-Propylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
Styrene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2023 7:00:26 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2023 7:00:26 PM
Vinyl chloride	ND	1.0		µg/L	1	9/12/2023 7:00:26 PM
Xylenes, Total	ND	1.5		µg/L	1	9/12/2023 7:00:26 PM
Surr: 1,2-Dichloroethane-d4	91.7	70-130	%Rec	1		9/12/2023 7:00:26 PM
Surr: 4-Bromofluorobenzene	107	70-130	%Rec	1		9/12/2023 7:00:26 PM
Surr: Dibromofluoromethane	96.8	70-130	%Rec	1		9/12/2023 7:00:26 PM
Surr: Toluene-d8	101	70-130	%Rec	1		9/12/2023 7:00:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-008

**Client Sample ID:** NMW-4R

**Collection Date:** 9/6/2023 12:12:00 PM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Analyst: JR
<b>EPA METHOD 8260B: VOLATILES</b>							
Benzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Toluene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Ethylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Naphthalene	ND	2.0		µg/L	1	9/12/2023 7:28:34 PM	
1-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 7:28:34 PM	
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2023 7:28:34 PM	
Acetone	ND	10		µg/L	1	9/12/2023 7:28:34 PM	
Bromobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Bromoform	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Bromomethane	ND	3.0		µg/L	1	9/12/2023 7:28:34 PM	
2-Butanone	ND	10		µg/L	1	9/12/2023 7:28:34 PM	
Carbon disulfide	ND	10		µg/L	1	9/12/2023 7:28:34 PM	
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Chlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Chloroethane	ND	2.0		µg/L	1	9/12/2023 7:28:34 PM	
Chloroform	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Chloromethane	ND	3.0		µg/L	1	9/12/2023 7:28:34 PM	
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
cis-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2023 7:28:34 PM	
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Dibromomethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,1-Dichloroethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM	
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2023 7:28:34 PM	

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 2309231

Date Reported: 9/20/2023

**CLIENT:** EA Engineering

**Project:** Atex 213

**Lab ID:** 2309231-008

**Client Sample ID:** NMW-4R

**Collection Date:** 9/6/2023 12:12:00 PM

**Matrix:** GROUNDWA

**Received Date:** 9/6/2023 1:09:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8260B: VOLATILES</b>						
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
2-Hexanone	ND	10		µg/L	1	9/12/2023 7:28:34 PM
Isopropylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2023 7:28:34 PM
Methylene Chloride	ND	3.0		µg/L	1	9/12/2023 7:28:34 PM
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2023 7:28:34 PM
n-Propylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
sec-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
Styrene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2023 7:28:34 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2023 7:28:34 PM
Vinyl chloride	ND	1.0		µg/L	1	9/12/2023 7:28:34 PM
Xylenes, Total	ND	1.5		µg/L	1	9/12/2023 7:28:34 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec		1	9/12/2023 7:28:34 PM
Surr: 4-Bromofluorobenzene	105	70-130	%Rec		1	9/12/2023 7:28:34 PM
Surr: Dibromofluoromethane	104	70-130	%Rec		1	9/12/2023 7:28:34 PM
Surr: Toluene-d8	104	70-130	%Rec		1	9/12/2023 7:28:34 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2309231

20-Sep-23

Client: EA Engineering

Project: Atex 213

Sample ID:	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	R99638	RunNo: 99638						
Prep Date:		Analysis Date:	9/12/2023	SeqNo: 3639620 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	24	1.0	20.00	0	118	70	130			
Toluene	21	1.0	20.00	0	106	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	97.6	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	105	70	130			
Sur: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Sur: 4-Bromofluorobenzene	11		10.00		108	70	130			
Sur: Dibromofluoromethane	10		10.00		104	70	130			
Sur: Toluene-d8	10		10.00		101	70	130			

Sample ID:	mb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	R99638	RunNo: 99638						
Prep Date:		Analysis Date:	9/12/2023	SeqNo: 3639638 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2309231

20-Sep-23

**Client:** EA Engineering

**Project:** Atex 213

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R99638	RunNo: 99638								
Prep Date:	Analysis Date: 9/12/2023	SeqNo: 3639638 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2309231

20-Sep-23

Client: EA Engineering

Project: Atex 213

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R99638	RunNo: 99638								
Prep Date:	Analysis Date: 9/12/2023	SeqNo: 3639638 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9	10.00		98.6	70	130				
Surr: 4-Bromofluorobenzene	10	10.00		101	70	130				
Surr: Dibromofluoromethane	10	10.00		105	70	130				
Surr: Toluene-d8	10	10.00		102	70	130				

Sample ID: 100ng lcs	SampType: LCS	TestCode: EPA Method 8260B: VOLATILES								
Client ID: LCSW	Batch ID: R99684	RunNo: 99684								
Prep Date:	Analysis Date: 9/13/2023	SeqNo: 3642046 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	117	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	22	1.0	20.00	0	112	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	10	10.00		104	70	130				
Surr: 4-Bromofluorobenzene	10	10.00		104	70	130				
Surr: Dibromofluoromethane	10	10.00		103	70	130				
Surr: Toluene-d8	10	10.00		101	70	130				

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8260B: VOLATILES								
Client ID: PBW	Batch ID: R99684	RunNo: 99684								
Prep Date:	Analysis Date: 9/13/2023	SeqNo: 3642081 Units: µg/L								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Acetone	ND	10								
Bromodichloromethane	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								

Qualifiers:										
*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank							
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value							
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits							
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range							
PQL	Practical Quantitative Limit	RL	Reporting Limit							
S	% Recovery outside of standard limits. If undiluted results may be estimated.									

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2309231

20-Sep-23

Client: EA Engineering

Project: Atex 213

Sample ID:	mb	SampType:	MBLK	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	PBW	Batch ID:	R99684	RunNo: 99684						
Prep Date:		Analysis Date:	9/13/2023	SeqNo: 3642081 Units: µg/L						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
Styrene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10	10.00		99.8	70	130				
Surr: 4-Bromofluorobenzene	10	10.00		104	70	130				
Surr: Dibromofluoromethane	10	10.00		100	70	130				
Surr: Toluene-d8	10	10.00		101	70	130				

Sample ID:	100ng lcs	SampType:	LCS	TestCode: EPA Method 8260B: VOLATILES						
Client ID:	LCSW	Batch ID:	W99718	RunNo: 99718						
Prep Date:		Analysis Date:	9/14/2023	SeqNo: 3644178 Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2309231

20-Sep-23

Client: EA Engineering

Project: Atex 213

Sample ID: <b>100ng lcs</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8260B: VOLATILES</b>								
Client ID: <b>LCSW</b>	Batch ID: <b>W99718</b>	RunNo: <b>99718</b>								
Prep Date:	Analysis Date: <b>9/14/2023</b>	SeqNo: <b>3644178</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.4	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: <b>mb</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8260B: VOLATILES</b>								
Client ID: <b>PBW</b>	Batch ID: <b>W99718</b>	RunNo: <b>99718</b>								
Prep Date:	Analysis Date: <b>9/14/2023</b>	SeqNo: <b>3644180</b> Units: <b>µg/L</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND		1.0							
1,3,5-Trimethylbenzene	ND		1.0							
Naphthalene	ND		2.0							
1-Methylnaphthalene	ND		4.0							
2-Methylnaphthalene	ND		4.0							
Bromobenzene	ND		1.0							
Bromoform	ND		1.0							
2-Chlorotoluene	ND		1.0							
4-Chlorotoluene	ND		1.0							
1,2-Dibromo-3-chloropropane	ND		2.0							
1,2-Dichlorobenzene	ND		1.0							
1,3-Dichlorobenzene	ND		1.0							
1,4-Dichlorobenzene	ND		1.0							
Hexachlorobutadiene	ND		1.0							
4-Isopropyltoluene	ND		1.0							
n-Butylbenzene	ND		3.0							
n-Propylbenzene	ND		1.0							
sec-Butylbenzene	ND		1.0							
tert-Butylbenzene	ND		1.0							
1,1,2,2-Tetrachloroethane	ND		2.0							
1,2,3-Trichlorobenzene	ND		1.0							
1,2,4-Trichlorobenzene	ND		1.0							
1,2,3-Trichloropropane	ND		2.0							
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130			
Surr: Dibromofluoromethane	9.7		10.00		96.7	70	130			
Surr: Toluene-d8	10		10.00		99.7	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
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- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: EA Engineering

Work Order Number: 2309231

RcptNo. 1

Received By: Juan Rojas

9/6/2023 1:09:00 PM

*Juan Rojas*

Completed By: Desiree Dominguez

9/6/2023 2:24:32 PM

*DD*

Reviewed By: *m 9/8/23*

### Chain of Custody

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

### Log In

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA   
Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes  No  NA
10. Were any sample containers received broken? Yes  No   

# of preserved bottles checked for pH:  
(<2 or >12 unless noted)  
Adjusted?  
Checked by: *SCM 9/8/23*
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes  No
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes  No

### Special Handling (if applicable)

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

Person Notified:	Date:
By Whom:	Via: <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	
Client Instructions:	

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	26.4	Good	Not Present	Morty		

