2023 Post-Injection Quarterly Groundwater Monitoring and Sampling Workplan



Leonard's Conoco

FID #29084 RID #755
1633 Historic Route 66
Santa Rosa, New Mexico

April 27, 2023
Envirotech Project #22104-0003
Contract ID No. 22 667 3200 0015

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GROUNDWATER MONITORING REPORT

FOR:

LEONARD'S CONOCO
FID #29084 RID #755
1633 HISTORIC ROUTE 66
SANTA ROSA, NEW MEXICO 88435

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PROJECT NO. 22104-0003

APRIL 2023

2023 QUARTERLY GROUNDWATER MONITORING REPORT
LEONARD'S CONOCO
SANTA ROSA, NEW MEXICO

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INTRODUCTION

Envirotech, Inc. (Envirotech) presents this report to the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) to summarize groundwater monitoring activities and analytical results for the subject property Leonard's Conoco located at 1633 Historic Route 66 in Santa Rosa, New Mexico. This report is presented in accordance with the New Mexico Petroleum Storage Tank Regulations (PSTRs), Title 20, Chapter 5, Part 12 New Mexico Administrative Code (20.5.12.1223 NMAC) and the requirements of the Workplan approved on February 23rd, 2023. This is the 2023 1st quarterly groundwater monitoring event under the current approved Workplan. The Site is currently the location of the Santa Rosa Magistrate Court. ***Figure 1, Vicinity Map*** illustrates the topography in the surrounding area of the Site.

BACKGROUND

The following site history has been summarized from the DBS&A *Final Remediation Plan* dated May 25, 2022:

- The site has been active since 1991 when the initial UST release was confirmed.
- Four groundwater monitor wells were previously completed (MW-1, MW-2, MW-3, and MW-4).
- In 2001, MW-1 and MW-2 were replaced by wells MW-1A and MW-2A.
- MW-4 located at the far northwest corner of the property has since been destroyed.
- Groundwater monitoring and reporting has been ongoing since the 1990's with only three (3) current monitoring wells on-site (MW-1A, MW-2A and MW-3).
- The last groundwater monitoring sampling event occurred in March 2022. All groundwater monitoring analytical results reported below New Mexico Water Quality Control Commission (NMWQCC) regulation limits except for MW-1A which resulted a benzene concentration of 94 Micrograms per liter (µg/L).
- On August 30, 2022, DBS&A and Vista injected a material referred to as PetroFix; which is a micron-scale activated carbon emulsion that removes dissolved-phase hydrocarbon contaminants by absorption to the carbon media, combined with inorganic electron acceptors (nitrate and sulfate) to facilitate anaerobic biodegradation (DBS&A).
- The amendment injection event used a total of 6 borings for application of PetroFix. 1,496 gallons of amendment slurry (PetroFix, electron acceptor, and water mixture) was used per bore.

- All injection points were plugged with bentonite chips and the surface was restored with concrete to match the surrounding surface material.

METHODOLOGY

The groundwater monitoring wells were provided sufficient time for the static water level to stabilize/equilibrate once each well is exposed to atmospheric conditions, prior to collecting a measurement. Depth-to-water was recorded from the top-of-casing (TOC) and utilized to calculate groundwater elevations and the volume of water in the well. The oil-water interface probe and groundwater-exposed measurement tape were decontaminated with an Alconox/tap water solution followed by a tap water rinse between each water level measurement to prevent cross-contamination.

All groundwater samples were analyzed for volatile organic compounds (VOCs) including BTEX, MTBE, and total naphthalene's per EPA Method 8260B. Dissolved phase iron and manganese per EPA Method 200.7. Sulfate and nitrate per EPA Method 300.0. Total dissolved solids (TDS) per SM2540C. Chemical oxygen demand (COD) per EPA Method 410.4 in MW-1A only. Biological oxygen demand (BOD) per EPA Method SM5210B in MW-1A only as well.

Samples were collected using a new polyvinyl chloride (PVC) disposable bailer. Temperature, specific conductance (SpC), dissolved oxygen (DO), oxidation-reduction potential (ORP) and pH were measured and recorded following stabilization using a YSI ProDDS. Groundwater samples were collected into laboratory supplied 40-milliliter (mL) hydrochloric acid preserved (HCl) glass volatile organic analysis (VOA) vials and capped headspace free with Teflon™ seals and 250-mL nitric acid (HNO_3) preserved polyethylene containers. The groundwater samples were equipped with labels identifying sample location, date/time of sample collection, requested analysis, preservative, and sampler name then placed on ice for hand delivery to a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory for the analysis listed above.

RESULTS

Groundwater Potentiometric Data

During the 2023 annual Groundwater Monitor Event, the groundwater gradient was calculated to be 0.00518 feet/feet with an approximate northwest flow direction, which is consistent with previous groundwater monitoring events. Groundwater elevation decreased an average of 0.145 feet relative to the previous monitoring event conducted in 2022. Groundwater elevations are summarized in ***Table 1, Groundwater Elevation*** and depicted on ***Figure 3, Potentiometric Map.***

Groundwater Parameters

Temperature readings ranged from 16.8° degrees Celsius (°C) in MW-1A to 17.8°C in MW-1. SpC readings ranged from 3035 milli siemens (µS) in MW-1A to 2882 (µS) in MW-2A. DO readings ranged from 0.71 milligrams per liter (mg/L) in MW-1A to 2.90 mg/L in MW-3. PH readings ranged from 6.55 standard units in MW-1A to 6.96 standard units in MW-2A. ORP readings ranged from -182.6 millivolts (mV) in MW-1A to 8.4 mV in MW-3. Full field notes can be found in ***Appendix A, Field Notes.***

Groundwater Analytical Results

The laboratory analytical report is included as ***Appendix B, Laboratory Analytical Report***, and summarized in ***Table 2, Groundwater Analytical Results.***

- Benzene levels were well above NMWQCC regulations of 5 µg/L in MW-1A at 73 µg/L. All other wells were below standard regulations for benzene.

- Manganese levels were above NMWQCC regulations of 200 µg/L in MW-1A at 800 µg/L and MW-2A at 310 µg/L. ***Table 2, Groundwater Analytical Results***

DISCUSSION

Dissolved-phase contaminants-of-concern (COC) appear to include Benzene in MW-1A specifically. The other two wells resulted in levels below NMWQCC regulatory standards for benzene. All other VOCs were below NMWQCC regulatory standards. Groundwater samples were analyzed for dissolved iron and manganese during the 2023 1st Quarterly Groundwater Monitoring Event; all monitoring wells have levels of manganese above the 0.2mg/L standard. All monitoring wells have dissolved iron levels below regulatory limits. Total dissolved solids were above regulatory limits in all three wells. Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) were analyzed for MW-1A only during the 1st quarterly groundwater monitoring event, all levels resulted below regulatory limits for both BOD and COD. Nitrate and Sulfate were also analyzed for all three wells during the 1st quarterly event. Nitrate levels were below regulatory limits in all three wells; however, sulfate levels were above regulatory limits in all three wells.

Based on historical and current groundwater gradient, it does not appear that the plume is contained. Benzene concentrations do seem to be trending in the right direction. To determine if the PetroFix injection was successful, continued sampling and monitoring is recommended. For injection to be deemed successful, a decreasing trend of benzene will need to be observed in subsequent sampling events. Envirotech recommends the installation of an additional monitor well downgradient of MW-1A to the Northwest.

CONCLUSION

On March 27th, 2023, three (3) groundwater monitor wells (MW-1A, MW-2A, MW-3) were monitored, and groundwater samples were collected for laboratory analysis. Water levels, temperature, SpC, DO, ORP, and pH were measured prior to sample collection. Groundwater samples were analyzed by Envirotech Analytical Laboratory of Farmington, New Mexico, for VOCs by EPA Method 8260B and dissolved iron and manganese by EPA Method 200.7. Groundwater samples collected from all wells except for MW-1 exhibited concentrations below the 20.6.2.3103 NMAC standard for Benzene. Dissolved metals analysis resulted in all monitor wells having manganese concentrations above NMWQCC standards. Iron concentrations were below NMWQCC standards in all monitoring wells.

Envirotech recommends the continued groundwater monitoring of all monitoring wells to gather additional information and determine natural attenuation. Groundwater sample collection is recommended until laboratory analytical results indicate concentrations are in-compliance with 20.6.2.3103 NMQCC standards for eight (8) consecutive quarterly monitoring events.

Envirotech appreciates the opportunity to provide environmental consulting services on behalf of NMED. Please contact our office at (505) 632-0615 should you have any questions or require additional information.

Respectfully Submitted,
ENVIROTECH, INC.

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Figures

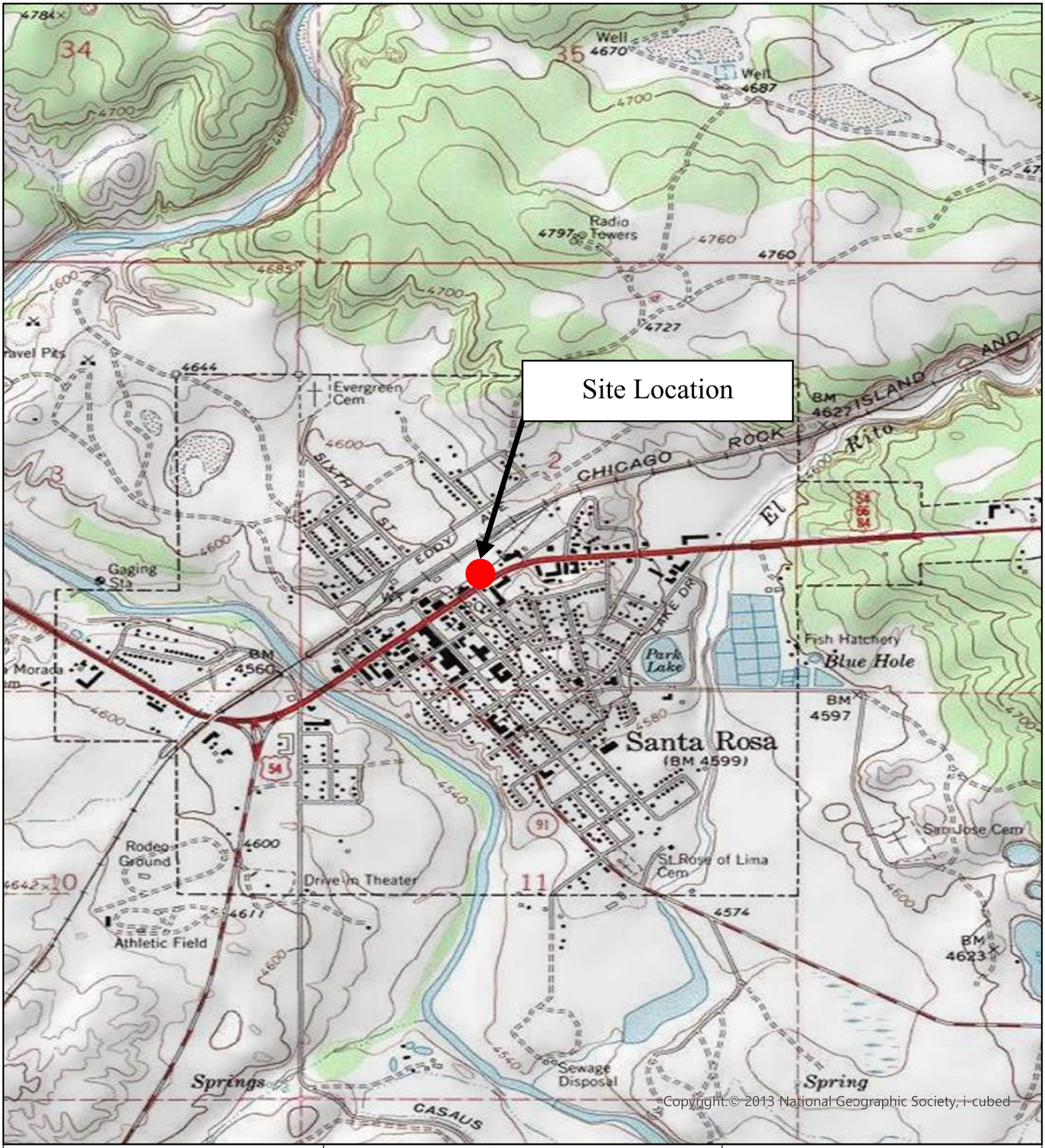

Figure 1, Vicinity Map

NMED PSTB
Leonard's Conoco
Section 2, Township 8N Range 21 E
1633 U.S. Route 66
Santa Rosa, New Mexico
Facility #: 29084, Release ID#: 755
Project#: 22104-0003

Legend

N
W E
S

1:20,000

0 1,000 2,000 4,000 Feet

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Environmental Scientists and Engineers
5796 U.S Highway 64
Farmington, New Mexico 87401
505.632.0615

Date Drawn: 04/11/2023
Drawn by: P. Mesa

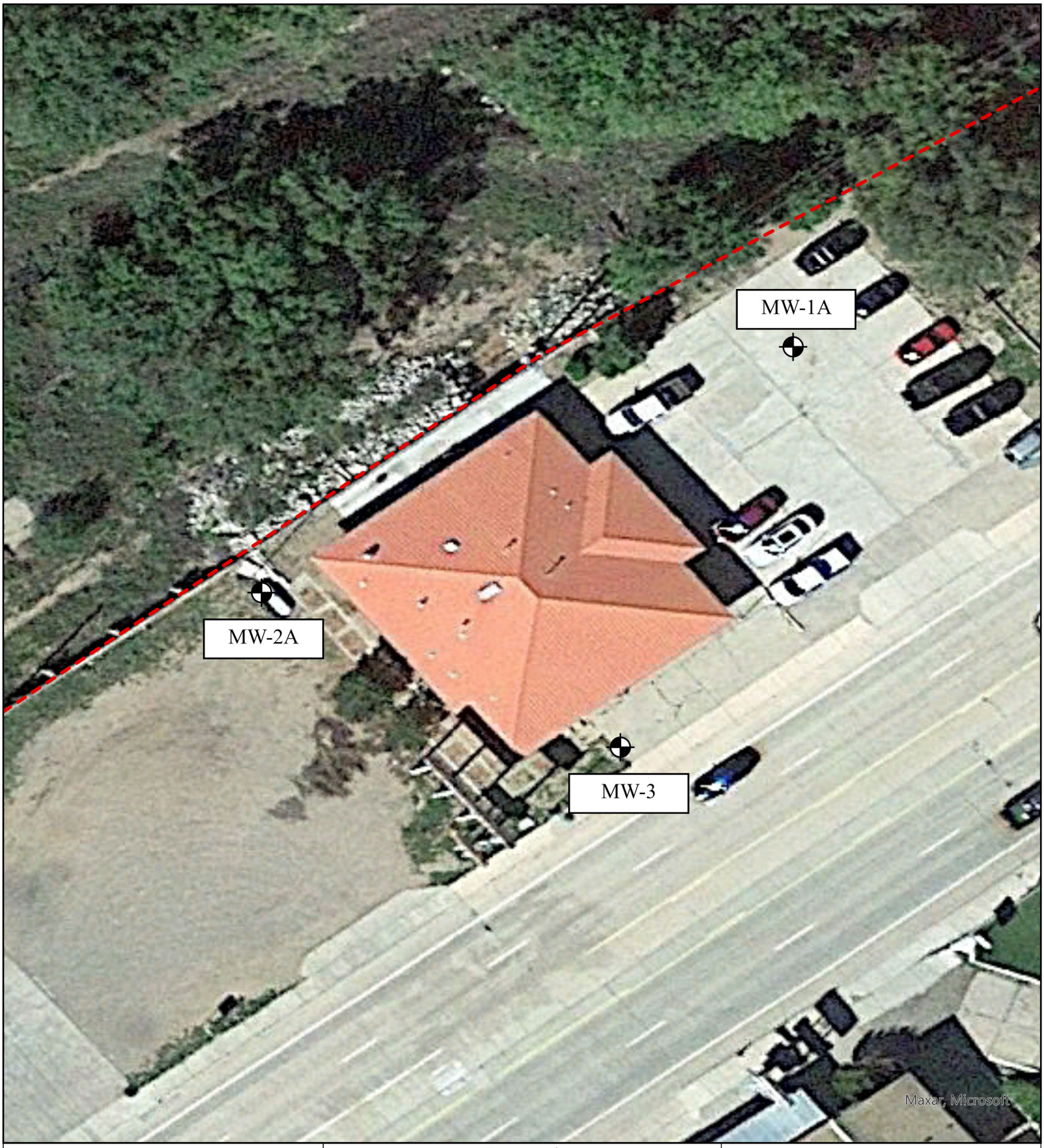

Figure 2, Site Map

NMED PSTB
Leonard's Conoco
Section 2, Township 8N Range 21 E
1633 U.S. Route 66
Santa Rosa, New Mexico
Facility #: 29084, Release ID#: 755
Project#: 22104-0003

Legend

Monitoring Well Location

Electric Overhead Line

N
W E
S

1:400

0 20.5 41 82 Feet

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5796 U.S Highway 64
Farmington, New Mexico 87401
505.632.0615
Date Drawn: 01/05/2023
Drawn by: P. Mesa

Figure 3, Potentiometric Groundwater Map

NMED PSTB
Leonard's Conoco
Section 2, Township 8N Range 21 E
1633 U.S. Route 66
Santa Rosa, New Mexico
Facility #: 29084, Release ID#: 755
Project#: 22104-0003

Legend

- Monitoring Well Location
- Potentiometric Contours
- Electric Overhead Line
- Ground Water Gradient

N
W E
S

1:400

0 20 40 80 Feet

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Farmington, New Mexico 87401
505.632.0615
Date Drawn: 04/11/2023
Drawn by: P. Mesa

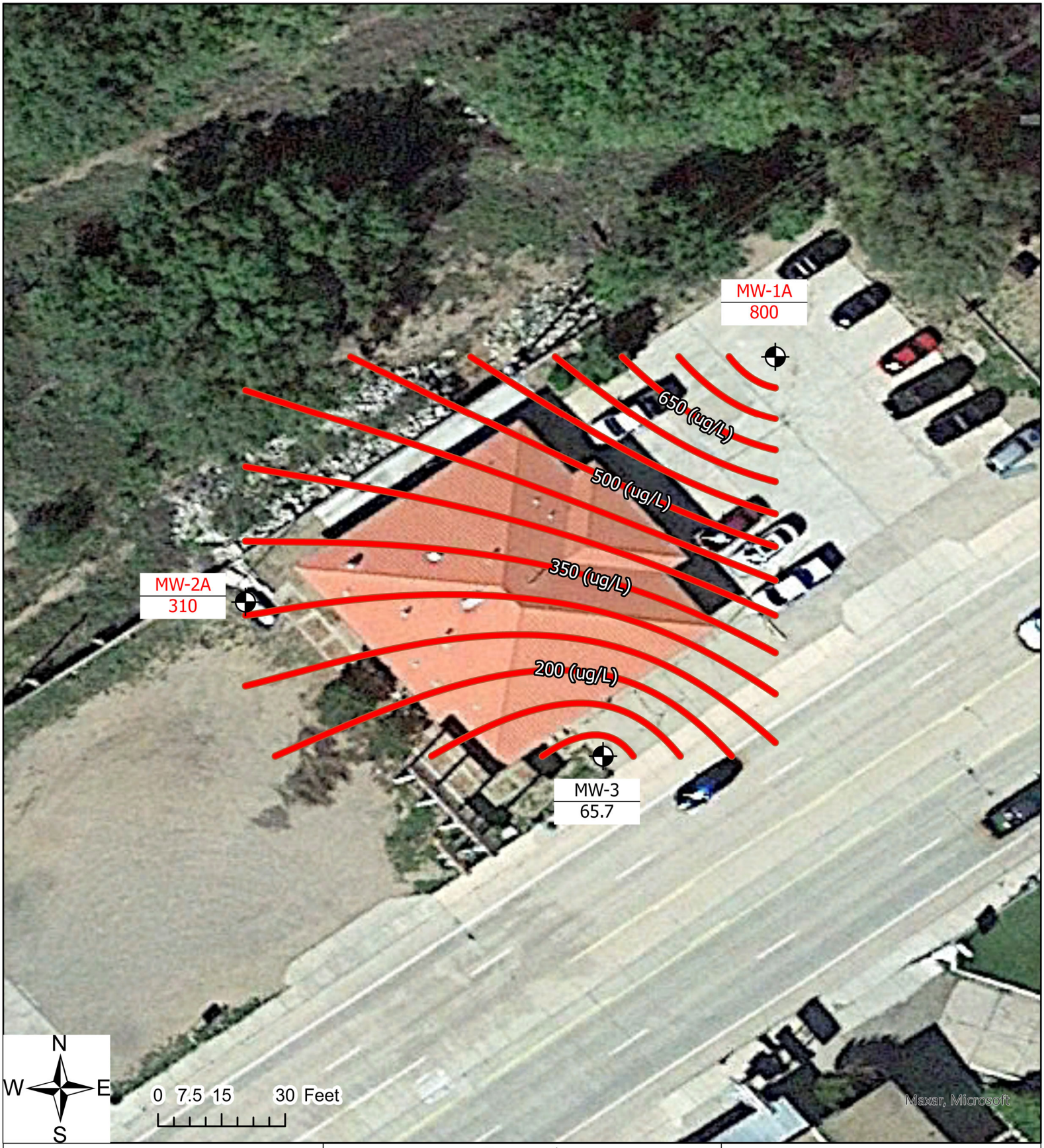

Figure #4, Manganese Concentration map

NMED PSTB
Leonard's Conoco
1633 U.S. Route 66
Santa Rosa, New Mexico
Facility #: 29084, Release ID#: 755
Project#: 22104-0003

Legend

- Manganese Contours
- Monitoring Wells

*Regulatory limits for Manganese are <200 µg/

*NS = Not Sampled

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Drawn by: D. Aragon

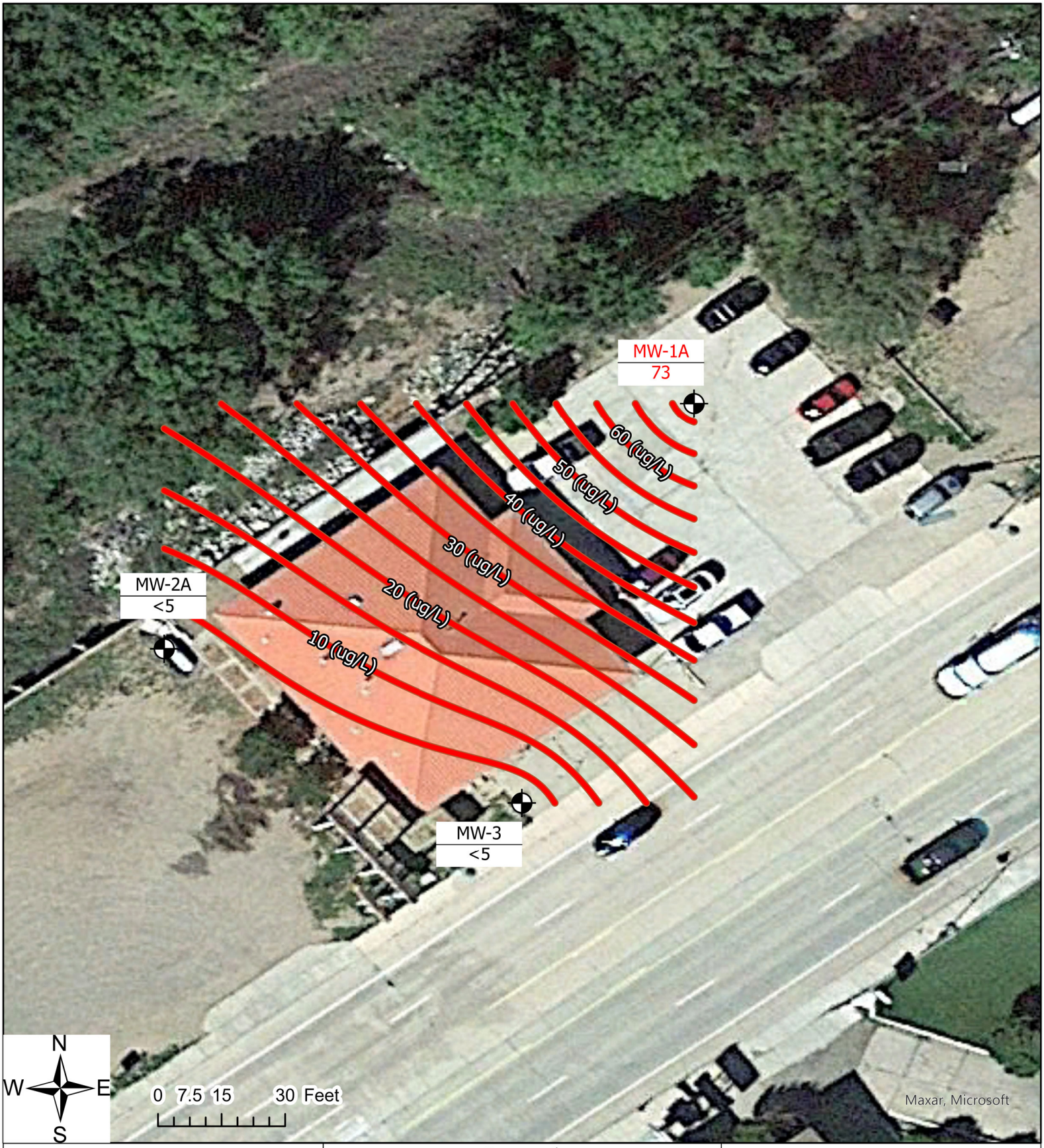

Figure #5, Benzene Concentration Map

NMED PSTB
Leonard's Conoco
1633 U.S. Route 66
Santa Rosa, New Mexico
Facility #: 29084, Release ID#: 755
Project#: 22104-0003

Legend

- Monitoring Well Location
- Benzne Contours

*Regulatory limits for Benzene are <5 µg/L

*NS = Not Sampled

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Drawn by: D. Aragon

Tables

Table 1, Groundwater Elevation
Table 2, Groundwater Analytical Results

Site Name:	Leonard's Conoco
Date:	4/5/2023
Project #:	22104-0003

Table 1

Water Level Measurements

Well No.	Date of Measurement	Top of Casing Elevation (ft)	Depth to Water (ft)	Water Elevation (ft)	Change from Previous Event (ft)
MW-1A	01/26/17	4,615.84	14.76	4,601.08	----
	12/12/17	4,615.84	14.54	4,601.30	-0.22
	04/26/19	4,615.84	14.80	4,601.04	0.26
	05/05/21	4,615.84	15.07	4,600.77	0.27
	03/15/22	4,615.84	15.00	4,600.84	0.07
	03/27/23	4,615.84	16.40	4,599.44	-1.4
MW-2A	01/26/17	4,613.53	13.12	4,600.41	----
	12/12/17	4,613.53	13.05	4,600.48	-0.07
	04/26/19	4,613.53	13.54	4,599.99	0.49
	05/05/21	4,613.53	13.16	4,600.37	-0.38
	03/15/22	4,613.53	13.47	4,600.06	-0.31
	03/27/23	4,613.53	14.70	4,598.83	-1.23
MW-3	01/26/17	4,615.00	14.03	4,600.97	----
	12/12/17	4,615.00	13.27	4,601.73	-0.76
	04/26/19	4,615.00	13.59	4,601.41	0.32
	05/05/21	4,615.00	13.68	4,601.32	0.09
	3/15/2022	4,615.00	13.88	4,601.12	-0.2
	03/27/23	4,615.00	14.80	4,600.20	-0.92

Table 2

Groundwater Analytical Results
Leonard's Conoco
Santa Rosa, New Mexico
Project # 22104-0003

20.6.2.3103 NMAC Standards		5 (µg/L)	1000 (µg/L)	700 (µg/L)	620 (µg/L)	100 (µg/L)	0.005 (µg/L)	30 (µg/L)	800 (µg/L)	200 (µg/L	50,000 (µg/L)	2000(µg/L)	10,000 (µg/L)	2,500 (µg/L)	20,000 (µg/L
Groundwater Monitoring Well	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	Napthalenes	Iron	Manganese	TDS	BOD	COD	NITRATE	SULFATE
		EPA Method 8260B							EPA Method 200.7		EPA Method SM2540C	EPA Method SM5210B	EPA Method 410.4	EPA Method 300.0	
MW-1A	1/26/2017	93	<1.00	58	<1.5	15	<1.0	<30	~	~	~	~	~	~	~
	12/12/2017	430	<1.00	310	<1.5	45	<1.0	207	~	~	~	~	~	~	~
	4/26/2019	250	<1.0	140	<1.5	46	<1.0	72	~	~	~	~	~	~	~
	5/5/2021	120	<1.0	110	<1.5	32	0.0092	30	~	~	~	~	~	~	~
	3/15/2022	94	<1.00	88	<1.5	45	<0.005	<30	<0.800	600	3140000	~	~	<2.5	1600000
	3/27/2023	73	<5.00	58.9	<5.00	21.7	<10.00	<25	<0.800	800	2940000	<2.0	17700	<2.5	1740000
MW-2A	1/26/2017	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<30	~	~	~	~	~	~	~
	12/12/2017	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<30	~	~	~	~	~	~	~
	4/26/2019	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<30	~	~	~	~	~	~	~
	5/5/2021	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<30	~	~	~	~	~	~	~
	3/15/2022	<1.0	<1.0	<1.0	<1.5	<1.5	<1.0	<30	130	170	3970000	~	~	<2.5	1600000
	3/27/2023	<5.00	<5.00	<5.00	<5.00	<5.00	<10.00	<25	<0.800	310	3020000	~	~	<2.5	1710000
MW-3	1/26/2017	<2.0	<2.0	<1.0	<1.5	<1.00	<1.00	<30	~	~	~	~	~	~	~
	12/12/2017	<2.0	<2.0	<1.0	<1.5	<1.00	<1.00	<30	~	~	~	~	~	~	~
	4/26/2019	<2.0	<2.0	<1.0	<1.5	<1.00	<1.00	<30	~	~	~	~	~	~	~
	5/5/2021	<2.0	<2.0	<1.0	<1.5	<1.00	0.0094	<30	~	~	~	~	~	~	~
	3/15/2022	<1.00	<1.00	<1.00	<1.5	<5.00	<1.00	<30	<0.800	<0.200	3890000	~	~	<2.5	1700000
	3/27/2023	<5.00	<5.00	<5.00	<5.00	<5.00	<10.0	<25	<0.800	65.7	4350000	~	~	<2.5	1920000

Bold - indicates the concentration exceeded the applicable Title 20, Chapter 6, Part 2 New Mexico Administrative Code standard
20.6.2.3103 NMAC - Title 20, Chapter 6, Part 2 New Mexico Administrative Code
< - below the laboratory reporting limit
µg/L - micrograms per liter
EDC - 1,2-Dichloroethane
EPA - United States Environmental Protection Agency
NS - not sampled
MTBE - methyl tert-butyl ether
Total Naphthalenes - the summation of the results for naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene
Recordings on dates 10/25/13 and 3/24/14 were determined by a different company.
Recordings on dates 04/26/19 and 05/05/21 were determined by a different company.

Appendix A

Field Notes

MONITORING WELL DATA FORM

WELL ID: MW-1A

Location: 1633 U.S. Route 66 **Project No.:** 22104-0003

Project: Leonard's Chevron **Date:** 3/27/2023

Sampling Technician: D. Aragon **Start/End Time:**

Air Temp:

Purge Device: Bailer **Well Diameter (in):** 2 in

Total Well Depth (ft): 18.26 **Water Column (ft):** 3.66

Initial D.T.W. (ft): 14.6 **Time:** 11:37 *(taken at initial gauging of all wells)*

Final D.T.W. (ft): 16.4 **Time:** 12:32 *(taken after sample collection)*

If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Water Quality Parameters - Recorded During Well Purging

Time	Static Water Level	Temp (deg C)	Conductivity (µS/cm)	DO (mg/L)	pH s.u.	ORP (mV)	Purged Volume (see reverse for calc.)	Observations (sheen, odor, organic etc.)
Stabilization Parameters		*2°C*	*3%*	*10%*	*1 s.u.*	*10 mV*		
See reverse for notes on purging and stabilization procedures								
11:45		17.2	3094	0.91	6.54	-141.1	Initial	Clear, mild odor
12:05		16.8	3079	1.05	6.55	-152.6	1gal	Clear, no odor
12:15		16.9	3035	0.71	6.60	-150	2gal	Clear, no odor
12:25							* Sample	

Disposal of Purged Water: Evaporation ☑ Containerized ☐

Collected Samples Stored on Ice in Cooler: Yes ☑ No ☐

Chain of Custody Record Complete: Yes ☑ No ☐

Analytical Laboratory: Envirotech, Hall (BOD

Equipment Used During Sampling:

34.94368, -104.68508

Notes/Comments *(use this area to document well condition and/or other site maitenance issues):*

Water quality parameters are consider stable when two (2) consecutive measurements meet the following: temperature is within 2°C; pH is within one (1) standard unit; specific conductance/conductivity is within 3%; dissolved oxygen (DO) is within 10%; and oxidation reduction potential (ORP) is within 10 mV.

The parameters should be recorded approximately every well volume when using a bailer and every 2 minutes when using a pump.

If it is necessary to calculate the volume of the monitoring well to determine what volume of groundwater will need to be purged from the well prior to collecting the samples, use the following equation:

Well Volume = (h)(cf)

where:

h = height of water column (feet)
cf = gallons/foot based on well diameter shown below

The gallons/foot for common size monitoring wells are as follows:

Well Diameter (inches)	2"	3"	4"	6"
Volume (gallons/foot)	0.1632	0.3672	0.6528	1.4688

The well volume is typically tripled to determine the volume to be purged.

Show purge volume calculation below:

h = Total Well Depth - Depth To Water = 18.26 - 14.6 = 3.66

Well Volume = (h)(cf) = (3.66)(0.1632) = 0.6

Total Purge Volume = 3(Well Volume) = 1.79

MONITORING WELL DATA FORM

WELL ID: MW-2A

Location: 1633 US Route 66

Project: Leonards Chevron

Project No.: 22104-0003

Sampling Technician: D. Aragon

Date: 3/27/2023

Start/End Time:

Air Temp:

Purge Device: Bailer

Well Diameter (in): 2 in

Total Well Depth (ft): 18.25

Water Column (ft): 3.55

Initial D.T.W. (ft): 14.70 **Time:** 12:40 *(taken at initial gauging of all wells)*

Final D.T.W. (ft): 15.56 **Time:** 13:38 *(taken after sample collection)*

If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Water Quality Parameters - Recorded During Well Purging

Time	Static Water Level	Temp (deg C)	Conductivity (µS/cm)	DO (mg/L)	pH s.u.	ORP (mV)	Purged Volume (see reverse for calc.)	Observations (sheen, odor, organic etc.)
Stabilzation Parameters		*2°C*	*3%*	*10%*	*1 s.u.*	*10 mV*		
See reverse for notes on purging and stabilization procedures								
12:46		16.9	2886	1.20	6.96	46.6	Initial	light brown
12:55		16.1	2882	1.39	6.91	43.6	1gal	"
13:05		16.1	2883	1.25	6.91	18.3	2gal	"
13:15		16.1	2886	1.30	6.92	-5.6	3gal	"
13:26							* Sample	"

Disposal of Purged Water: Evaporation ☑ Containerized ☐

Collected Samples Stored on Ice in Cooler: Yes ☑ No ☐

Chain of Custody Record Complete: Yes ☑ No ☐

Analytical Laboratory: Envirotech, Hall (BOD)

Equipment Used During Sampling:

34.94349, -104.68544

Notes/Comments *(use this area to document well condition and/or other site maintenance issues)*:

Water quality parameters are consider stable when two (2) consecutive measurements meet the following: temperature is within 2°C; pH is within one (1) standard unit; specific conductance/conductivity is within 3%; dissolved oxygen (DO) is within 10%; and oxidation reduction potential (ORP) is within 10 mV.

The parameters should be recorded approximately every well volume when using a bailer and every 2 minutes when using a pump.

If it is necessary to calculate the volume of the monitoring well to determine what volume of groundwater will need to be purged from the well prior to collecting the samples, use the following equation:

Well Volume = (h)(cf)

where:

h = height of water column (feet)
cf = gallons/foot based on well diameter shown below

The gallons/foot for common size monitoring wells are as follows:

Well Diameter (inches)	2"	3"	4"	6"
Volume (gallons/foot)	0.1632	0.3672	0.6528	1.4688

The well volume is typically tripled to determine the volume to be purged.

Show purge volume calculation below:

h = Total Well Depth - Depth To Water = 18.25 - 14.7 = 3.55

Well Volume = (h)(cf) = (3.55)(0.1632) = 0.6

Total Purge Volume = 3(Well Volume) = 1.8

MONITORING WELL DATA FORM

WELL ID: MW-3

Location: 1633 US Route 66
Project: Leonards Chevron
Sampling Technician: D. Aragon

Project No.: 22104-0003
Date: 3/27/2023
Start/End Time:
Air Temp:

Purge Device: Bailer
Total Well Depth (ft): 18.5
Well Diameter (in): 2in
Water Column (ft): 3.7

Initial D.T.W. (ft): 14.8 **Time:** 13:52 *(taken at initial gauging of all wells)*
Final D.T.W. (ft): 15.9 **Time:** 15:00 *(taken after sample collection)*
If NAPL Present: D.T.P.: D.T.W.: Thickness: Time:

Water Quality Parameters - Recorded During Well Purging

Time	Static Water Level	Temp (deg C)	Conductivity (µS/cm)	DO (mg/L)	pH s.u.	ORP (mV)	Purged Volume (see reverse for calc.)	Observations (sheen, odor, organic etc.)
Stabilization Parameters		*2°C*	*3%*	*10%*	*1 s.u.*	*10 mV*		
See reverse for notes on purging and stabilization procedures								
14:01		17.8	3287	2.90	6.8	7.4	Initial	Orange
14:14		17.6	3513	1.23	6.68	4.0	1gal	"
14:25		17.8	3505	1.31	6.67	8.4	2gal	"
14:32		17.81	3518	1.42	6.67	7.6	3gal	"
14:49							# sample	

Disposal of Purged Water: Evaporation ☑ Containerized ☐
Collected Samples Stored on Ice in Cooler: Yes ☑ No ☐
Chain of Custody Record Complete: Yes ☑ No ☐
Analytical Laboratory: Envirotech, Hall (BOD
Equipment Used During Sampling:
34.94338, -104.68519

Notes/Comments *(use this area to document well condition and/or other site maintenance issues):*

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Water quality parameters are consider stable when two (2) consecutive measurements meet the following: temperature is within 2°C; pH is within one (1) standard unit; specific conductance/conductivity is within 3%; dissolved oxygen (DO) is within 10%; and oxidation reduction potential (ORP) is within 10 mV.

The parameters should be recorded approximately every well volume when using a bailer and every 2 minutes when using a pump.

If it is necessary to calculate the volume of the monitoring well to determine what volume of groundwater will need to be purged from the well prior to collecting the samples, use the following equation:

Well Volume = (h)(cf)

where:

h = height of water column (feet)
cf = gallons/foot based on well diameter shown below

The gallons/foot for common size monitoring wells are as follows:

Well Diameter (inches)	2"	3"	4"	6"
Volume (gallons/foot)	0.1632	0.3672	0.6528	1.4688

The well volume is typically tripled to determine the volume to be purged.

Show purge volume calculation below:

h = Total Well Depth - Depth To Water = 18.5 - 14.8 = 3.7

Well Volume = (h)(cf) = ( )(0.1632) = 0.60

Total Purge Volume = 3(Well Volume) = 1.8

Appendix B

Laboratory Analytical Report

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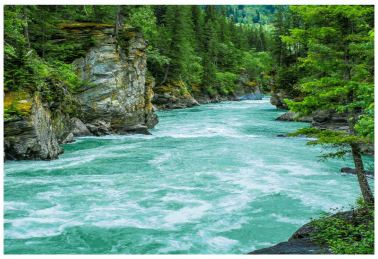
Practical Solutions for a Better Tomorrow

Report to:

Greg Crabtree



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

NMED

Project Name:	Leonard's Chevron
Work Order:	E303107
Job Number:	22104-0003
Received:	3/28/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/5/23

Date Reported: 4/5/23

Greg Crabtree
3400 2nd Street NW
Albuquerque, NM -

Project Name: Leonard's Chevron
Workorder: E303107
Date Received: 3/28/2023 9:04:00AM

Greg Crabtree,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/28/2023 9:04:00AM, under the Project Name: Leonard's Chevron.

The analytical test results summarized in this report with the Project Name: Leonard's Chevron apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
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Cell: 775-287-1762
whinchman@envirotech-inc.com

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Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	04/05/23 16:15

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
MW-1A	E303107-01A	Aqueous	03/27/23	03/28/23	Poly 250mL
	E303107-01B	Aqueous	03/27/23	03/28/23	Poly 500mL
	E303107-01C	Aqueous	03/27/23	03/28/23	Poly 500mL; H2SO4
	E303107-01D	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
	E303107-01E	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
	E303107-01F	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
MW-2A	E303107-02A	Aqueous	03/27/23	03/28/23	Poly 250mL
	E303107-02B	Aqueous	03/27/23	03/28/23	Poly 500mL
	E303107-02C	Aqueous	03/27/23	03/28/23	Poly 500mL; H2SO4
	E303107-02D	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
	E303107-02E	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
	E303107-02F	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
MW-3	E303107-03A	Aqueous	03/27/23	03/28/23	Poly 250mL
	E303107-03B	Aqueous	03/27/23	03/28/23	Poly 500mL
	E303107-03C	Aqueous	03/27/23	03/28/23	Poly 500mL; H2SO4
	E303107-03D	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
	E303107-03E	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
	E303107-03F	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl
TRIP BLANK	E303107-04A	Aqueous	03/27/23	03/28/23	VOA Vial, 40mL; HCl

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-1A

E303107-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
Acetone	ND	200	5	04/03/23	04/03/23	
Benzene	**73.0**	5.00	5	04/03/23	04/03/23	
Bromobenzene	ND	5.00	5	04/03/23	04/03/23	
Bromochloromethane	ND	5.00	5	04/03/23	04/03/23	
Bromodichloromethane	ND	5.00	5	04/03/23	04/03/23	
Bromoform	ND	5.00	5	04/03/23	04/03/23	
Bromomethane	ND	10.0	5	04/03/23	04/03/23	
n-Butyl Benzene	ND	5.00	5	04/03/23	04/03/23	
sec-Butylbenzene	ND	5.00	5	04/03/23	04/03/23	
tert-Butylbenzene	ND	5.00	5	04/03/23	04/03/23	
Carbon Tetrachloride	ND	5.00	5	04/03/23	04/03/23	
Chlorobenzene	ND	5.00	5	04/03/23	04/03/23	
Chloroethane	ND	10.0	5	04/03/23	04/03/23	
Chloroform	ND	25.0	5	04/03/23	04/03/23	
Chloromethane	ND	10.0	5	04/03/23	04/03/23	
2-Chlorotoluene	ND	5.00	5	04/03/23	04/03/23	
4-Chlorotoluene	ND	5.00	5	04/03/23	04/03/23	
Dibromochloromethane	ND	5.00	5	04/03/23	04/03/23	
1,2-Dibromo-3-chloropropane (DBCP)	ND	25.0	5	04/03/23	04/03/23	
1,2-Dibromoethane (EDB)	ND	10.0	5	04/03/23	04/03/23	
Dibromomethane	ND	5.00	5	04/03/23	04/03/23	
1,2-Dichlorobenzene	ND	5.00	5	04/03/23	04/03/23	
1,3-Dichlorobenzene	ND	5.00	5	04/03/23	04/03/23	
1,4-Dichlorobenzene	ND	5.00	5	04/03/23	04/03/23	
Dichlorodifluoromethane (Freon-12)	ND	10.0	5	04/03/23	04/03/23	
1,1-Dichloroethane	ND	5.00	5	04/03/23	04/03/23	
1,2-Dichloroethane	ND	5.00	5	04/03/23	04/03/23	
1,1-Dichloroethene	ND	5.00	5	04/03/23	04/03/23	
cis-1,2-Dichloroethene	ND	5.00	5	04/03/23	04/03/23	
trans-1,2-Dichloroethene	ND	5.00	5	04/03/23	04/03/23	
1,2-Dichloropropane	ND	5.00	5	04/03/23	04/03/23	
1,3-Dichloropropane	ND	5.00	5	04/03/23	04/03/23	
2,2-Dichloropropane	ND	5.00	5	04/03/23	04/03/23	
1,1-Dichloropropene	ND	5.00	5	04/03/23	04/03/23	
cis-1,3-Dichloropropene	ND	5.00	5	04/03/23	04/03/23	
trans-1,3-Dichloropropene	ND	5.00	5	04/03/23	04/03/23	
Diisopropyl Ether (DIPE)	ND	5.00	5	04/03/23	04/03/23	
Ethylbenzene	**58.9**	5.00	5	04/03/23	04/03/23	
Ethyl tert-Butyl Ether (ETBE)	ND	5.00	5	04/03/23	04/03/23	
Hexachlorobutadiene	ND	25.0	5	04/03/23	04/03/23	
2-Hexanone	ND	100	5	04/03/23	04/03/23	
Isopropylbenzene	**12.6**	5.00	5	04/03/23	04/03/23	
4-Isopropyltoluene	ND	5.00	5	04/03/23	04/03/23	
2-Butanone (MEK)	ND	100	5	04/03/23	04/03/23	
Methylene Chloride	ND	10.0	5	04/03/23	04/03/23	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-1A

E303107-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
1-Methylnaphthalene	ND	50.0	5	04/03/23	04/03/23	
2-Methylnaphthalene	ND	50.0	5	04/03/23	04/03/23	
4-Methyl-2-pentanone (MIBK)	ND	100	5	04/03/23	04/03/23	
Methyl tert-Butyl Ether (MTBE)	**21.7**	5.00	5	04/03/23	04/03/23	
Naphthalene	ND	25.0	5	04/03/23	04/03/23	
n-Propyl Benzene	**16.9**	5.00	5	04/03/23	04/03/23	
Styrene	ND	5.00	5	04/03/23	04/03/23	
tert-Amyl Methyl ether (TAME)	ND	5.00	5	04/03/23	04/03/23	
1,1,1,2-Tetrachloroethane	ND	5.00	5	04/03/23	04/03/23	
1,1,2,2-Tetrachloroethane	ND	5.00	5	04/03/23	04/03/23	
Tetrachloroethene	ND	5.00	5	04/03/23	04/03/23	
1,2,3-Trichlorobenzene	ND	25.0	5	04/03/23	04/03/23	
1,2,4-Trichlorobenzene	ND	25.0	5	04/03/23	04/03/23	
1,1,1-Trichloroethane	ND	5.00	5	04/03/23	04/03/23	
1,1,2-Trichloroethane	ND	5.00	5	04/03/23	04/03/23	
Trichloroethene	ND	5.00	5	04/03/23	04/03/23	
Trichlorofluoromethane (Freon-11)	ND	10.0	5	04/03/23	04/03/23	
1,2,3-Trichloropropane	ND	10.0	5	04/03/23	04/03/23	
1,2,4-Trimethylbenzene	ND	25.0	5	04/03/23	04/03/23	
1,3,5-Trimethylbenzene	ND	5.00	5	04/03/23	04/03/23	
Toluene	ND	5.00	5	04/03/23	04/03/23	
Vinyl chloride	ND	10.0	5	04/03/23	04/03/23	
o-Xylene	ND	5.00	5	04/03/23	04/03/23	
p,m-Xylene	ND	10.0	5	04/03/23	04/03/23	
Total Xylenes	ND	5.00	5	04/03/23	04/03/23	
Surrogate: Bromofluorobenzene		*90.3 %*	*70-130*	*04/03/23*	*04/03/23*	
Surrogate: 1,2-Dichloroethane-d4		*94.8 %*	*70-130*	*04/03/23*	*04/03/23*	
Surrogate: Toluene-d8		*99.4 %*	*70-130*	*04/03/23*	*04/03/23*	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-1A

E303107-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L	Analyst: KF			Batch: 2313044
Total Dissolved Solids	**2940**	10.0	1	03/30/23	04/03/23	
Wet Chemistry by 410.4	mg/L	mg/L	Analyst: RAS			Batch: 2314021
Chemical Oxygen Demand (COD)	**17.7**	10.0	1	04/04/23	04/05/23	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analyst: BA			Batch: 2313043
Nitrate-N	ND	5.00	20	03/29/23 11:46	03/29/23 12:12	
Sulfate	**1740**	40.0	20	03/29/23	03/29/23	
Dissolved Metals by EPA 200.7	mg/L	mg/L	Analyst: JL			Batch: 2313028
Iron	ND	0.800	0.4	03/29/23	04/03/23	
Manganese	**0.800**	0.200	20	03/29/23	04/04/23	C6

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-2A

E303107-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
Acetone	ND	200	5	04/04/23	04/04/23	
Benzene	ND	5.00	5	04/04/23	04/04/23	
Bromobenzene	ND	5.00	5	04/04/23	04/04/23	
Bromochloromethane	ND	5.00	5	04/04/23	04/04/23	
Bromodichloromethane	ND	5.00	5	04/04/23	04/04/23	
Bromoform	ND	5.00	5	04/04/23	04/04/23	
Bromomethane	ND	10.0	5	04/04/23	04/04/23	
n-Butyl Benzene	ND	5.00	5	04/04/23	04/04/23	
sec-Butylbenzene	ND	5.00	5	04/04/23	04/04/23	
tert-Butylbenzene	ND	5.00	5	04/04/23	04/04/23	
Carbon Tetrachloride	ND	5.00	5	04/04/23	04/04/23	
Chlorobenzene	ND	5.00	5	04/04/23	04/04/23	
Chloroethane	ND	10.0	5	04/04/23	04/04/23	
Chloroform	ND	25.0	5	04/04/23	04/04/23	
Chloromethane	ND	10.0	5	04/04/23	04/04/23	
2-Chlorotoluene	ND	5.00	5	04/04/23	04/04/23	
4-Chlorotoluene	ND	5.00	5	04/04/23	04/04/23	
Dibromochloromethane	ND	5.00	5	04/04/23	04/04/23	
1,2-Dibromo-3-chloropropane (DBCP)	ND	25.0	5	04/04/23	04/04/23	
1,2-Dibromoethane (EDB)	ND	10.0	5	04/04/23	04/04/23	
Dibromomethane	ND	5.00	5	04/04/23	04/04/23	
1,2-Dichlorobenzene	ND	5.00	5	04/04/23	04/04/23	
1,3-Dichlorobenzene	ND	5.00	5	04/04/23	04/04/23	
1,4-Dichlorobenzene	ND	5.00	5	04/04/23	04/04/23	
Dichlorodifluoromethane (Freon-12)	ND	10.0	5	04/04/23	04/04/23	
1,1-Dichloroethane	ND	5.00	5	04/04/23	04/04/23	
1,2-Dichloroethane	ND	5.00	5	04/04/23	04/04/23	
1,1-Dichloroethene	ND	5.00	5	04/04/23	04/04/23	
cis-1,2-Dichloroethene	ND	5.00	5	04/04/23	04/04/23	
trans-1,2-Dichloroethene	ND	5.00	5	04/04/23	04/04/23	
1,2-Dichloropropane	ND	5.00	5	04/04/23	04/04/23	
1,3-Dichloropropane	ND	5.00	5	04/04/23	04/04/23	
2,2-Dichloropropane	ND	5.00	5	04/04/23	04/04/23	
1,1-Dichloropropene	ND	5.00	5	04/04/23	04/04/23	
cis-1,3-Dichloropropene	ND	5.00	5	04/04/23	04/04/23	
trans-1,3-Dichloropropene	ND	5.00	5	04/04/23	04/04/23	
Diisopropyl Ether (DIPE)	ND	5.00	5	04/04/23	04/04/23	
Ethylbenzene	ND	5.00	5	04/04/23	04/04/23	
Ethyl tert-Butyl Ether (ETBE)	ND	5.00	5	04/04/23	04/04/23	
Hexachlorobutadiene	ND	25.0	5	04/04/23	04/04/23	
2-Hexanone	ND	100	5	04/04/23	04/04/23	
Isopropylbenzene	ND	5.00	5	04/04/23	04/04/23	
4-Isopropyltoluene	ND	5.00	5	04/04/23	04/04/23	
2-Butanone (MEK)	ND	100	5	04/04/23	04/04/23	
Methylene Chloride	ND	10.0	5	04/04/23	04/04/23	
1-Methylnaphthalene	ND	50.0	5	04/04/23	04/04/23	
2-Methylnaphthalene	ND	50.0	5	04/04/23	04/04/23	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-2A

E303107-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
4-Methyl-2-pentanone (MIBK)	ND	100	5	04/04/23	04/04/23	
Methyl tert-Butyl Ether (MTBE)	ND	5.00	5	04/04/23	04/04/23	
Naphthalene	ND	25.0	5	04/04/23	04/04/23	
n-Propyl Benzene	ND	5.00	5	04/04/23	04/04/23	
Styrene	ND	5.00	5	04/04/23	04/04/23	
tert-Amyl Methyl ether (TAME)	ND	5.00	5	04/04/23	04/04/23	
1,1,1,2-Tetrachloroethane	ND	5.00	5	04/04/23	04/04/23	
1,1,2,2-Tetrachloroethane	ND	5.00	5	04/04/23	04/04/23	
Tetrachloroethene	ND	5.00	5	04/04/23	04/04/23	
1,2,3-Trichlorobenzene	ND	25.0	5	04/04/23	04/04/23	
1,2,4-Trichlorobenzene	ND	25.0	5	04/04/23	04/04/23	
1,1,1-Trichloroethane	ND	5.00	5	04/04/23	04/04/23	
1,1,2-Trichloroethane	ND	5.00	5	04/04/23	04/04/23	
Trichloroethene	ND	5.00	5	04/04/23	04/04/23	
Trichlorofluoromethane (Freon-11)	ND	10.0	5	04/04/23	04/04/23	
1,2,3-Trichloropropane	ND	10.0	5	04/04/23	04/04/23	
1,2,4-Trimethylbenzene	ND	25.0	5	04/04/23	04/04/23	
1,3,5-Trimethylbenzene	ND	5.00	5	04/04/23	04/04/23	
Toluene	ND	5.00	5	04/04/23	04/04/23	
Vinyl chloride	ND	10.0	5	04/04/23	04/04/23	
o-Xylene	ND	5.00	5	04/04/23	04/04/23	
p,m-Xylene	ND	10.0	5	04/04/23	04/04/23	
Total Xylenes	ND	5.00	5	04/04/23	04/04/23	
Surrogate: Bromofluorobenzene		*86.5 %*	*70-130*	*04/04/23*	*04/04/23*	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*	*70-130*	*04/04/23*	*04/04/23*	
Surrogate: Toluene-d8		*97.6 %*	*70-130*	*04/04/23*	*04/04/23*	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-2A

E303107-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L	Analyst: KF			Batch: 2313044
Total Dissolved Solids	**3020**	50.0	1	03/30/23	04/03/23	
Wet Chemistry by 410.4	mg/L	mg/L	Analyst: RAS			Batch: 2314021
Chemical Oxygen Demand (COD)	ND	10.0	1	04/04/23	04/05/23	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analyst: BA			Batch: 2313043
Nitrate-N	ND	2.50	10	03/29/23 11:46	03/29/23 12:32	
Sulfate	**1710**	20.0	10	03/29/23	03/29/23	
Dissolved Metals by EPA 200.7	mg/L	mg/L	Analyst: JL			Batch: 2313028
Iron	ND	0.800	0.4	03/29/23	04/03/23	
Manganese	**0.310**	0.200	20	03/29/23	04/04/23	C6

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-3

E303107-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
Acetone	ND	200	5	04/04/23	04/04/23	
Benzene	ND	5.00	5	04/04/23	04/04/23	
Bromobenzene	ND	5.00	5	04/04/23	04/04/23	
Bromochloromethane	ND	5.00	5	04/04/23	04/04/23	
Bromodichloromethane	ND	5.00	5	04/04/23	04/04/23	
Bromoform	ND	5.00	5	04/04/23	04/04/23	
Bromomethane	ND	10.0	5	04/04/23	04/04/23	
n-Butyl Benzene	ND	5.00	5	04/04/23	04/04/23	
sec-Butylbenzene	ND	5.00	5	04/04/23	04/04/23	
tert-Butylbenzene	ND	5.00	5	04/04/23	04/04/23	
Carbon Tetrachloride	ND	5.00	5	04/04/23	04/04/23	
Chlorobenzene	ND	5.00	5	04/04/23	04/04/23	
Chloroethane	ND	10.0	5	04/04/23	04/04/23	
Chloroform	ND	25.0	5	04/04/23	04/04/23	
Chloromethane	ND	10.0	5	04/04/23	04/04/23	
2-Chlorotoluene	ND	5.00	5	04/04/23	04/04/23	
4-Chlorotoluene	ND	5.00	5	04/04/23	04/04/23	
Dibromochloromethane	ND	5.00	5	04/04/23	04/04/23	
1,2-Dibromo-3-chloropropane (DBCP)	ND	25.0	5	04/04/23	04/04/23	
1,2-Dibromoethane (EDB)	ND	10.0	5	04/04/23	04/04/23	
Dibromomethane	ND	5.00	5	04/04/23	04/04/23	
1,2-Dichlorobenzene	ND	5.00	5	04/04/23	04/04/23	
1,3-Dichlorobenzene	ND	5.00	5	04/04/23	04/04/23	
1,4-Dichlorobenzene	ND	5.00	5	04/04/23	04/04/23	
Dichlorodifluoromethane (Freon-12)	ND	10.0	5	04/04/23	04/04/23	
1,1-Dichloroethane	ND	5.00	5	04/04/23	04/04/23	
1,2-Dichloroethane	ND	5.00	5	04/04/23	04/04/23	
1,1-Dichloroethene	ND	5.00	5	04/04/23	04/04/23	
cis-1,2-Dichloroethene	ND	5.00	5	04/04/23	04/04/23	
trans-1,2-Dichloroethene	ND	5.00	5	04/04/23	04/04/23	
1,2-Dichloropropane	ND	5.00	5	04/04/23	04/04/23	
1,3-Dichloropropane	ND	5.00	5	04/04/23	04/04/23	
2,2-Dichloropropane	ND	5.00	5	04/04/23	04/04/23	
1,1-Dichloropropene	ND	5.00	5	04/04/23	04/04/23	
cis-1,3-Dichloropropene	ND	5.00	5	04/04/23	04/04/23	
trans-1,3-Dichloropropene	ND	5.00	5	04/04/23	04/04/23	
Diisopropyl Ether (DIPE)	ND	5.00	5	04/04/23	04/04/23	
Ethylbenzene	ND	5.00	5	04/04/23	04/04/23	
Ethyl tert-Butyl Ether (ETBE)	ND	5.00	5	04/04/23	04/04/23	
Hexachlorobutadiene	ND	25.0	5	04/04/23	04/04/23	
2-Hexanone	ND	100	5	04/04/23	04/04/23	
Isopropylbenzene	ND	5.00	5	04/04/23	04/04/23	
4-Isopropyltoluene	ND	5.00	5	04/04/23	04/04/23	
2-Butanone (MEK)	ND	100	5	04/04/23	04/04/23	
Methylene Chloride	ND	10.0	5	04/04/23	04/04/23	
1-Methylnaphthalene	ND	50.0	5	04/04/23	04/04/23	
2-Methylnaphthalene	ND	50.0	5	04/04/23	04/04/23	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-3

E303107-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
4-Methyl-2-pentanone (MIBK)	ND	100	5	04/04/23	04/04/23	
Methyl tert-Butyl Ether (MTBE)	ND	5.00	5	04/04/23	04/04/23	
Naphthalene	ND	25.0	5	04/04/23	04/04/23	
n-Propyl Benzene	ND	5.00	5	04/04/23	04/04/23	
Styrene	ND	5.00	5	04/04/23	04/04/23	
tert-Amyl Methyl ether (TAME)	ND	5.00	5	04/04/23	04/04/23	
1,1,1,2-Tetrachloroethane	ND	5.00	5	04/04/23	04/04/23	
1,1,2,2-Tetrachloroethane	ND	5.00	5	04/04/23	04/04/23	
Tetrachloroethene	ND	5.00	5	04/04/23	04/04/23	
1,2,3-Trichlorobenzene	ND	25.0	5	04/04/23	04/04/23	
1,2,4-Trichlorobenzene	ND	25.0	5	04/04/23	04/04/23	
1,1,1-Trichloroethane	ND	5.00	5	04/04/23	04/04/23	
1,1,2-Trichloroethane	ND	5.00	5	04/04/23	04/04/23	
Trichloroethene	ND	5.00	5	04/04/23	04/04/23	
Trichlorofluoromethane (Freon-11)	ND	10.0	5	04/04/23	04/04/23	
1,2,3-Trichloropropane	ND	10.0	5	04/04/23	04/04/23	
1,2,4-Trimethylbenzene	ND	25.0	5	04/04/23	04/04/23	
1,3,5-Trimethylbenzene	ND	5.00	5	04/04/23	04/04/23	
Toluene	ND	5.00	5	04/04/23	04/04/23	
Vinyl chloride	ND	10.0	5	04/04/23	04/04/23	
o-Xylene	ND	5.00	5	04/04/23	04/04/23	
p,m-Xylene	ND	10.0	5	04/04/23	04/04/23	
Total Xylenes	ND	5.00	5	04/04/23	04/04/23	
Surrogate: Bromofluorobenzene		*86.2 %*	*70-130*	*04/04/23*	*04/04/23*	
Surrogate: 1,2-Dichloroethane-d4		*97.1 %*	*70-130*	*04/04/23*	*04/04/23*	
Surrogate: Toluene-d8		*99.4 %*	*70-130*	*04/04/23*	*04/04/23*	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

MW-3

E303107-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Wet Chem/Gravimetric by SM2540C	mg/L	mg/L	Analyst: KF			Batch: 2313044
Total Dissolved Solids	**4350**	10.0	1	03/30/23	04/03/23	
Wet Chemistry by 410.4	mg/L	mg/L	Analyst: RAS			Batch: 2314021
Chemical Oxygen Demand (COD)	ND	10.0	1	04/04/23	04/05/23	
Anions by EPA 300.0/9056A	mg/L	mg/L	Analyst: BA			Batch: 2313043
Nitrate-N	ND	5.00	20	03/29/23 11:46	03/29/23 12:51	
Sulfate	**1920**	40.0	20	03/29/23	03/29/23	
Dissolved Metals by EPA 200.7	mg/L	mg/L	Analyst: JL			Batch: 2313028
Iron	ND	0.800	0.4	03/29/23	04/03/23	
Manganese	**0.0657**	0.00400	0.4	03/29/23	04/03/23	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

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E303107-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
Acetone	ND	40.0	1	04/03/23	04/03/23	
Benzene	ND	1.00	1	04/03/23	04/03/23	
Bromobenzene	ND	1.00	1	04/03/23	04/03/23	
Bromochloromethane	ND	1.00	1	04/03/23	04/03/23	
Bromodichloromethane	ND	1.00	1	04/03/23	04/03/23	
Bromoform	ND	1.00	1	04/03/23	04/03/23	
Bromomethane	ND	2.00	1	04/03/23	04/03/23	
n-Butyl Benzene	ND	1.00	1	04/03/23	04/03/23	
sec-Butylbenzene	ND	1.00	1	04/03/23	04/03/23	
tert-Butylbenzene	ND	1.00	1	04/03/23	04/03/23	
Carbon Tetrachloride	ND	1.00	1	04/03/23	04/03/23	
Chlorobenzene	ND	1.00	1	04/03/23	04/03/23	
Chloroethane	ND	2.00	1	04/03/23	04/03/23	
Chloroform	ND	5.00	1	04/03/23	04/03/23	
Chloromethane	ND	2.00	1	04/03/23	04/03/23	
2-Chlorotoluene	ND	1.00	1	04/03/23	04/03/23	
4-Chlorotoluene	ND	1.00	1	04/03/23	04/03/23	
Dibromochloromethane	ND	1.00	1	04/03/23	04/03/23	
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.00	1	04/03/23	04/03/23	
1,2-Dibromoethane (EDB)	ND	2.00	1	04/03/23	04/03/23	
Dibromomethane	ND	1.00	1	04/03/23	04/03/23	
1,2-Dichlorobenzene	ND	1.00	1	04/03/23	04/03/23	
1,3-Dichlorobenzene	ND	1.00	1	04/03/23	04/03/23	
1,4-Dichlorobenzene	ND	1.00	1	04/03/23	04/03/23	
Dichlorodifluoromethane (Freon-12)	ND	2.00	1	04/03/23	04/03/23	
1,1-Dichloroethane	ND	1.00	1	04/03/23	04/03/23	
1,2-Dichloroethane	ND	1.00	1	04/03/23	04/03/23	
1,1-Dichloroethene	ND	1.00	1	04/03/23	04/03/23	
cis-1,2-Dichloroethene	ND	1.00	1	04/03/23	04/03/23	
trans-1,2-Dichloroethene	ND	1.00	1	04/03/23	04/03/23	
1,2-Dichloropropane	ND	1.00	1	04/03/23	04/03/23	
1,3-Dichloropropane	ND	1.00	1	04/03/23	04/03/23	
2,2-Dichloropropane	ND	1.00	1	04/03/23	04/03/23	
1,1-Dichloropropene	ND	1.00	1	04/03/23	04/03/23	
cis-1,3-Dichloropropene	ND	1.00	1	04/03/23	04/03/23	
trans-1,3-Dichloropropene	ND	1.00	1	04/03/23	04/03/23	
Diisopropyl Ether (DIPE)	ND	1.00	1	04/03/23	04/03/23	
Ethylbenzene	ND	1.00	1	04/03/23	04/03/23	
Ethyl tert-Butyl Ether (ETBE)	ND	1.00	1	04/03/23	04/03/23	
Hexachlorobutadiene	ND	5.00	1	04/03/23	04/03/23	
2-Hexanone	ND	20.0	1	04/03/23	04/03/23	
Isopropylbenzene	ND	1.00	1	04/03/23	04/03/23	
4-Isopropyltoluene	ND	1.00	1	04/03/23	04/03/23	
2-Butanone (MEK)	ND	20.0	1	04/03/23	04/03/23	
Methylene Chloride	ND	2.00	1	04/03/23	04/03/23	
1-Methylnaphthalene	ND	10.0	1	04/03/23	04/03/23	
2-Methylnaphthalene	ND	10.0	1	04/03/23	04/03/23	

Sample Data

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

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E303107-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	ug/L	ug/L	Analyst: IY			Batch: 2314011
4-Methyl-2-pentanone (MIBK)	ND	20.0	1	04/03/23	04/03/23	
Methyl tert-Butyl Ether (MTBE)	ND	1.00	1	04/03/23	04/03/23	
Naphthalene	ND	5.00	1	04/03/23	04/03/23	
n-Propyl Benzene	ND	1.00	1	04/03/23	04/03/23	
Styrene	ND	1.00	1	04/03/23	04/03/23	
tert-Amyl Methyl ether (TAME)	ND	1.00	1	04/03/23	04/03/23	
1,1,1,2-Tetrachloroethane	ND	1.00	1	04/03/23	04/03/23	
1,1,2,2-Tetrachloroethane	ND	1.00	1	04/03/23	04/03/23	
Tetrachloroethene	ND	1.00	1	04/03/23	04/03/23	
1,2,3-Trichlorobenzene	ND	5.00	1	04/03/23	04/03/23	
1,2,4-Trichlorobenzene	ND	5.00	1	04/03/23	04/03/23	
1,1,1-Trichloroethane	ND	1.00	1	04/03/23	04/03/23	
1,1,2-Trichloroethane	ND	1.00	1	04/03/23	04/03/23	
Trichloroethene	ND	1.00	1	04/03/23	04/03/23	
Trichlorofluoromethane (Freon-11)	ND	2.00	1	04/03/23	04/03/23	
1,2,3-Trichloropropane	ND	2.00	1	04/03/23	04/03/23	
1,2,4-Trimethylbenzene	ND	5.00	1	04/03/23	04/03/23	
1,3,5-Trimethylbenzene	ND	1.00	1	04/03/23	04/03/23	
Toluene	ND	1.00	1	04/03/23	04/03/23	
Vinyl chloride	ND	2.00	1	04/03/23	04/03/23	
o-Xylene	ND	1.00	1	04/03/23	04/03/23	
p,m-Xylene	ND	2.00	1	04/03/23	04/03/23	
Total Xylenes	ND	1.00	1	04/03/23	04/03/23	
Surrogate: Bromofluorobenzene		*82.1 %*	*70-130*	*04/03/23*	*04/03/23*	
Surrogate: 1,2-Dichloroethane-d4		*98.4 %*	*70-130*	*04/03/23*	*04/03/23*	
Surrogate: Toluene-d8		*91.5 %*	*70-130*	*04/03/23*	*04/03/23*	

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	
Blank (2314011-BLK1)									Prepared: 04/03/23 Analyzed: 04/03/23
Acetone	ND	40.0							
Benzene	ND	1.00							
Bromobenzene	ND	1.00							
Bromochloromethane	ND	1.00							
Bromodichloromethane	ND	1.00							
Bromoform	ND	1.00							
Bromomethane	ND	2.00							
n-Butyl Benzene	ND	1.00							
sec-Butylbenzene	ND	1.00							
tert-Butylbenzene	ND	1.00							
Carbon Tetrachloride	ND	1.00							
Chlorobenzene	ND	1.00							
Chloroethane	ND	2.00							
Chloroform	ND	5.00							
Chloromethane	ND	2.00							
2-Chlorotoluene	ND	1.00							
4-Chlorotoluene	ND	1.00							
Dibromochloromethane	ND	1.00							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.00							
1,2-Dibromoethane (EDB)	ND	2.00							
Dibromomethane	ND	1.00							
1,2-Dichlorobenzene	ND	1.00							
1,3-Dichlorobenzene	ND	1.00							
1,4-Dichlorobenzene	ND	1.00							
Dichlorodifluoromethane (Freon-12)	ND	2.00							
1,1-Dichloroethane	ND	1.00							
1,2-Dichloroethane	ND	1.00							
1,1-Dichloroethene	ND	1.00							
cis-1,2-Dichloroethene	ND	1.00							
trans-1,2-Dichloroethene	ND	1.00							
1,2-Dichloropropane	ND	1.00							
1,3-Dichloropropane	ND	1.00							
2,2-Dichloropropane	ND	1.00							
1,1-Dichloropropene	ND	1.00							
cis-1,3-Dichloropropene	ND	1.00							
trans-1,3-Dichloropropene	ND	1.00							
Diisopropyl Ether (DIPE)	ND	1.00							
Ethylbenzene	ND	1.00							
Ethyl tert-Butyl Ether (ETBE)	ND	1.00							
Hexachlorobutadiene	ND	5.00							
2-Hexanone	ND	20.0							
Isopropylbenzene	ND	1.00							
4-Isopropyltoluene	ND	1.00							
2-Butanone (MEK)	ND	20.0							
Methylene Chloride	ND	2.00							
1-Methylnaphthalene	ND	10.0							
2-Methylnaphthalene	ND	10.0							
4-Methyl-2-pentanone (MIBK)	ND	20.0							
Methyl tert-Butyl Ether (MTBE)	ND	1.00							
Naphthalene	ND	5.00							
n-Propyl Benzene	ND	1.00							
Styrene	ND	1.00							
tert-Amyl Methyl ether (TAME)	ND	1.00							
1,1,1,2-Tetrachloroethane	ND	1.00							
1,1,2,2-Tetrachloroethane	ND	1.00							
Tetrachloroethene	ND	1.00							
1,2,3-Trichlorobenzene	ND	5.00							
1,2,4-Trichlorobenzene	ND	5.00							
1,1,1-Trichloroethane	ND	1.00							
1,1,2-Trichloroethane	ND	1.00							
Trichloroethene	ND	1.00							
Trichlorofluoromethane (Freon-11)	ND	2.00							
1,2,3-Trichloropropane	ND	2.00							
1,2,4-Trimethylbenzene	ND	5.00							

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	
Blank (2314011-BLK1)									Prepared: 04/03/23 Analyzed: 04/03/23
1,3,5-Trimethylbenzene	ND	1.00							
Toluene	ND	1.00							
Vinyl chloride	ND	2.00							
o-Xylene	ND	1.00							
p,m-Xylene	ND	2.00							
Total Xylenes	ND	1.00							
Surrogate: Bromofluorobenzene	*8.86*		*10.0*		*88.6*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*9.90*		*10.0*		*99.0*	*70-130*			
Surrogate: Toluene-d8	*9.85*		*10.0*		*98.5*	*70-130*			
LCS (2314011-BS1)									Prepared: 04/03/23 Analyzed: 04/03/23
Benzene	51.3	1.00	50.0		103	70-130			
Bromodichloromethane	42.1	1.00	50.0		84.1	70-130			
Chlorobenzene	54.7	1.00	50.0		109	70-130			
Chloroethane	57.9	2.00	50.0		116	41-153			
Chloroform	46.8	5.00	50.0		93.7	80-120			
4-Chlorotoluene	54.7	1.00	50.0		109	70-130			
1,1-Dichloroethene	51.2	1.00	50.0		102	80-120			
trans-1,2-Dichloroethene	53.0	1.00	50.0		106	70-130			
1,3-Dichloropropane	48.3	1.00	50.0		96.5	70-130			
1,1-Dichloropropene	51.7	1.00	50.0		103	70-130			
Ethylbenzene	48.6	1.00	50.0		97.2	80-120			
Ethyl tert-Butyl Ether (ETBE)	45.0	1.00	50.0		90.0	70-130			
2-Hexanone	72.3	20.0	100		72.3	48-171			
4-Isopropyltoluene	54.0	1.00	50.0		108	70-130			
2-Butanone (MEK)	95.7	20.0	100		95.6	26-183			
Methyl tert-Butyl Ether (MTBE)	92.7	1.00	100		92.7	70-130			
1,1,1,2-Tetrachloroethane	48.9	1.00	50.0		97.8	70-130			
1,2,4-Trichlorobenzene	49.8	5.00	50.0		99.6	70-140			
Trichloroethene	47.7	1.00	50.0		95.5	70-130			
1,2,3-Trichloropropane	45.0	2.00	50.0		89.9	70-130			
1,2,4-Trimethylbenzene	53.3	5.00	50.0		107	70-130			
Toluene	52.3	1.00	50.0		105	80-120			
o-Xylene	53.0	1.00	50.0		106	70-130			
p,m-Xylene	102	2.00	100		102	70-130			
Total Xylenes	155	1.00	150		103	70-130			
Surrogate: Bromofluorobenzene	*9.13*		*10.0*		*91.3*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*9.72*		*10.0*		*97.2*	*70-130*			
Surrogate: Toluene-d8	*9.95*		*10.0*		*99.5*	*70-130*			
Matrix Spike (2314011-MS1)				**Source: E303107-01**					Prepared: 04/03/23 Analyzed: 04/03/23
Benzene	336	5.00	250	73.0	105	59-133			
Bromodichloromethane	205	5.00	250	ND	81.9	69-130			
Chlorobenzene	272	5.00	250	ND	109	70-130			
Chloroethane	311	10.0	250	ND	124	33-155			
Chloroform	237	25.0	250	ND	95.0	66-133			
4-Chlorotoluene	274	5.00	250	ND	110	67-134			
1,1-Dichloroethene	262	5.00	250	ND	105	49-144			
trans-1,2-Dichloroethene	269	5.00	250	ND	108	61-132			
1,3-Dichloropropane	231	5.00	250	ND	92.4	70-130			
1,1-Dichloropropene	263	5.00	250	ND	105	61-136			
Ethylbenzene	309	5.00	250	58.9	99.9	62-136			
Ethyl tert-Butyl Ether (ETBE)	221	5.00	250	ND	88.3	65-135			
2-Hexanone	318	100	500	ND	63.7	25-183			
4-Isopropyltoluene	270	5.00	250	ND	108	63-143			
2-Butanone (MEK)	422	100	500	ND	84.4	22-198			
Methyl tert-Butyl Ether (MTBE)	464	5.00	500	21.7	88.5	61-136			
1,1,1,2-Tetrachloroethane	239	5.00	250	ND	95.8	70-132			
1,2,4-Trichlorobenzene	236	25.0	250	ND	94.3	60-160			
Trichloroethene	223	5.00	250	ND	89.3	49-148			
1,2,3-Trichloropropane	225	10.0	250	ND	89.8	70-134			

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	ug/L	ug/L	ug/L	ug/L	%	%	%	%	
Matrix Spike (2314011-MS1)				**Source: E303107-01**			Prepared: 04/03/23 Analyzed: 04/03/23		
1,2,4-Trimethylbenzene	259	25.0	250	ND	103	60-137			
Toluene	250	5.00	250	ND	100	67-130			
o-Xylene	283	5.00	250	ND	113	70-130			
p,m-Xylene	496	10.0	500	ND	99.3	65-135			
Total Xylenes	779	5.00	750	ND	104	65-135			
Surrogate: Bromofluorobenzene	*50.5*		*50.0*		*101*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*48.3*		*50.0*		*96.6*	*70-130*			
Surrogate: Toluene-d8	*49.0*		*50.0*		*98.0*	*70-130*			
Matrix Spike Dup (2314011-MSD1)				**Source: E303107-01**			Prepared: 04/03/23 Analyzed: 04/03/23		
Benzene	340	5.00	250	73.0	107	59-133	1.23	20	
Bromodichloromethane	215	5.00	250	ND	85.8	69-130	4.75	20	
Chlorobenzene	285	5.00	250	ND	114	70-130	4.47	20	
Chloroethane	316	10.0	250	ND	126	33-155	1.52	20	
Chloroform	246	25.0	250	ND	98.4	66-133	3.60	20	
4-Chlorotoluene	262	5.00	250	ND	105	67-134	4.34	20	
1,1-Dichloroethene	270	5.00	250	ND	108	49-144	3.16	20	
trans-1,2-Dichloroethene	279	5.00	250	ND	111	61-132	3.47	20	
1,3-Dichloropropane	239	5.00	250	ND	95.5	70-130	3.38	20	
1,1-Dichloropropene	272	5.00	250	ND	109	61-136	3.48	20	
Ethylbenzene	316	5.00	250	58.9	103	62-136	2.31	20	
Ethyl tert-Butyl Ether (ETBE)	226	5.00	250	ND	90.6	65-135	2.57	20	
2-Hexanone	327	100	500	ND	65.4	25-183	2.71	20	
4-Isopropyltoluene	264	5.00	250	ND	106	63-143	2.06	20	
2-Butanone (MEK)	432	100	500	ND	86.3	22-198	2.23	30	
Methyl tert-Butyl Ether (MTBE)	473	5.00	500	21.7	90.3	61-136	1.99	20	
1,1,1,2-Tetrachloroethane	252	5.00	250	ND	101	70-132	4.93	20	
1,2,4-Trichlorobenzene	291	25.0	250	ND	117	60-160	21.1	20	R3
Trichloroethene	236	5.00	250	ND	94.3	49-148	5.51	20	
1,2,3-Trichloropropane	215	10.0	250	ND	85.9	70-134	4.48	20	
1,2,4-Trimethylbenzene	251	25.0	250	ND	100	60-137	2.88	20	
Toluene	264	5.00	250	ND	105	67-130	5.14	20	
o-Xylene	270	5.00	250	ND	108	70-130	4.47	20	
p,m-Xylene	519	10.0	500	ND	104	65-135	4.46	20	
Total Xylenes	789	5.00	750	ND	105	65-135	1.31	20	
Surrogate: Bromofluorobenzene	*45.5*		*50.0*		*90.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*47.5*		*50.0*		*94.9*	*70-130*			
Surrogate: Toluene-d8	*48.9*		*50.0*		*97.8*	*70-130*			

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Wet Chem/Gravimetric by SM2540C

Analyst: KF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	
Blank (2313044-BLK1)									Prepared: 03/30/23 Analyzed: 04/03/23
Total Dissolved Solids	ND	10.0							
LCS (2313044-BS1)									Prepared: 03/30/23 Analyzed: 04/03/23
Total Dissolved Solids	97.0	10.0	100		97.0	55-134			
Duplicate (2313044-DUP1)				**Source: E303107-01**					Prepared: 03/30/23 Analyzed: 04/03/23
Total Dissolved Solids	2930	10.0		2940			0.341	5	

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Wet Chemistry by 410.4

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	
Blank (2314021-BLK1)									Prepared: 04/04/23 Analyzed: 04/05/23
Chemical Oxygen Demand (COD)	ND	10.0							
LCS (2314021-BS1)									Prepared: 04/04/23 Analyzed: 04/05/23
Chemical Oxygen Demand (COD)	51.3	10.0	50.0		103	90-110			
LCS Dup (2314021-BSD1)									Prepared: 04/04/23 Analyzed: 04/05/23
Chemical Oxygen Demand (COD)	50.9	10.0	50.0		102	90-110	0.666	20	

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	
Blank (2313043-BLK1)							Prepared: 03/29/23 Analyzed: 03/29/23		
Nitrate-N	ND	0.250							
Sulfate	ND	2.00							
LCS (2313043-BS1)							Prepared: 03/29/23 Analyzed: 03/29/23		
Nitrate-N	2.61	0.250	2.50		105	90-110			
Sulfate	25.6	2.00	25.0		102	90-110			
LCS Dup (2313043-BSD1)							Prepared: 03/29/23 Analyzed: 03/29/23		
Nitrate-N	2.61	0.250	2.50		104	90-110	0.134	20	
Sulfate	25.6	2.00	25.0		102	90-110	0.0742	20	

QC Summary Data

NMED	Project Name:	Leonard's Chevron	**Reported:**
3400 2nd Street NW	Project Number:	22104-0003	
Albuquerque NM, -	Project Manager:	Greg Crabtree	4/5/2023 4:15:05PM

Dissolved Metals by EPA 200.7

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/L	mg/L	mg/L	mg/L	%	%	%	%	
Blank (2313028-BLK1)									Prepared: 03/28/23 Analyzed: 03/29/23
Iron	ND	0.400							
Manganese	ND	0.00200							
LCS (2313028-BS1)									Prepared: 03/28/23 Analyzed: 03/29/23
Iron	20.4	0.400	20.0		102	85-115			
Manganese	0.0514	0.00200	0.0500		103	85-115			
LCS Dup (2313028-BSD1)									Prepared: 03/28/23 Analyzed: 03/29/23
Iron	20.5	0.400	20.0		103	85-115	0.391	20	
Manganese	0.0502	0.00200	0.0500		100	85-115	2.40	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Definitions and Notes

NMED	Project Name:	Leonard's Chevron	
3400 2nd Street NW	Project Number:	22104-0003	**Reported:**
Albuquerque NM, -	Project Manager:	Greg Crabtree	04/05/23 16:15

C6	The CV recovery was outside acceptance limits. The sample was analyzed multiple times all with similar bracketing CV results.
R3	The RPD exceeded the acceptance limit. LCS spike recovery met acceptance criteria.
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
DNI	Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Laborato[illegible]f

Non-field Preserved Samples

Dissolved Metals

Batch: 2313028

Analyst: JJ

Sample ID	Initial pH	Initial Date	Filtered Y/N	Date 3.22.23	Final pH	Final Date 3.22.23
E303080-01	6	3.21.23 11:26	Y	09:19	1	09:36
E303080-02	6	12:50	Y	09:22	1	09:37
E303080-03	6	15:26	Y	09:24	1	09:38
E303080-04	6	16:37	Y	09:27	1	09:39
E30308-05	6	17:23	Y	09:29	1	09:40
E303107-01	6	3.27.23 12:25	Y	3.28.23 13:55	1	3.28.23 13:58
E303107-02	5.5	13:26	Y	14:01	1	14:02
E303107-03	5.5	14:49	Y	14:05	1	14:06

Acid Standard ID: EB30803

Lot ID: 20021123 65 ml

Directions: To avoid the hazards of acid in the field, Method 200.7 will allow the laboratory to acidify samples in the laboratory. However, acid must be added at least 24 hours before analysis to dissolve any metals that adsorb to the container walls. If the sample must be analyzed within 24 hours of collection, add the acid immediately. Sample pH and date of preservation must be documented for non-field preserved samples.

Note: The 24 hour time period is specified for this method by the EPA and documented in 40 CFR Part 136 as updated under the Method Update Rule (MUR).

Client: NMED
Project: Leonards Chevron
Project Manager: Greg Crabtree
Address:
City, State, Zip
Phone:
Email:All Enviro
Report due by:

Bill To
Attention:
Address:
City, State, Zip
Phone:
Email:

Lab Use Only: Lab WO# E303107 | Job Number 22104-0003

TAT: 1D | 2D | 3D | Standard (X)

EPA Program: CWA | SDWA | RCRA (X)

State: NM (X) | CO | UT | AZ | TX

Analysis and Method: Iron and Manganese; VOC by 8260; Sulfate and Nitrate; Total Dissolved Solids; COD

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Iron and Manganese	VOC by 8260	Sulfate and Nitrate	Total Dissolved Solids	COD	Remarks
12:25	3/27/2023	A	6	MW-1A	1	X	X	X	X	X	
13:26	3/27/2023	A	6	MW-2A	2	X	X	X	X	X	
14:49	3/27/2023	A	6	MW-3	3	X	X	X	X	X	
	3/27/23	A	1	Trip Blank	4		X				

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: D. Aragon

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	3/27/23	20:00		3/28/23	9:04
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on ice: (Y) / N
T1 T2 T3
AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Envirotech Analytical Laboratory

Printed: 3/28/2023 10:36:02AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.
If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	NMED	Date Received:	03/28/23 09:04	Work Order ID:	E303107
Phone:	(505) 372-8334	Date Logged In:	03/28/23 10:29	Logged In By:	Caitlin Christian
Email:	gcrabtree@envirotech-inc.com	Due Date:	04/04/23 17:00 (5 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC?	Yes	
2. Does the number of samples per sampling site location match the COC	Yes	
3. Were samples dropped off by client or carrier?	Yes	Carrier: Diego Aragon
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT?	Yes

Sample Cooler

7. Was a sample cooler received?	Yes
8. If yes, was cooler received in good condition?	Yes
9. Was the sample(s) received intact, i.e., not broken?	Yes
10. Were custody/security seals present?	No
11. If yes, were custody/security seals intact?	NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling	Yes
13. If no visible ice, record the temperature. Actual sample temperature: 4°C	

Sample Container

14. Are aqueous VOC samples present?	Yes
15. Are VOC samples collected in VOA Vials?	Yes
16. Is the head space less than 6-8 mm (pea sized or less)?	Yes
17. Was a trip blank (TB) included for VOC analyses?	Yes
18. Are non-VOC samples collected in the correct containers?	Yes
19. Is the appropriate volume/weight or number of sample containers collected?	Yes

Field Label

20. Were field sample labels filled out with the minimum information:	
Sample ID?	Yes
Date/Time Collected?	Yes
Collectors name?	Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved?	Yes
22. Are sample(s) correctly preserved?	Yes
24. Is lab filteration required and/or requested for dissolved metals?	Yes

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase?	No
27. If yes, does the COC specify which phase(s) is to be analyzed?	NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory?	No	
29. Was a subcontract laboratory specified by the client and if so who?	NA	Subcontract Lab: na

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

envirotech Inc.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

April 19, 2023

Greg Crabtree

Envirotech
5796 US Highway 64
Farmington, NM 87401
TEL: (505) 632-0615
FAX: (505) 632-1865

RE: Leonards Chevron OrderNo.: 2303D25

Dear Greg Crabtree:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/27/2023 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 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,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order: **2303D25**
Date Reported: **4/19/2023**

CLIENT: Envirotech
Project: Leonards Chevron
Lab Order: 2303D25

Lab ID: 2303D25-001
Collection Date: 3/27/2023 12:25:00 PM
Client Sample ID: MW-1A
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD						Analyst: **SMS**	
Biochemical Oxygen Demand	<2.46	2.00	E	mg/L	1	4/3/2023 3:21:00 PM	73996

NOTES:
E-Estimated value due to all bottles having a DO Depletion <2.0 mg/L.

Lab ID: 2303D25-002
Collection Date: 3/27/2023 1:26:00 PM
Client Sample ID: MW-2A
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD						Analyst: **SMS**	
Biochemical Oxygen Demand	DO Depletion<2.0	2.00		mg/L	1	4/3/2023 3:21:00 PM	73996

Lab ID: 2303D25-003
Collection Date: 3/27/2023 2:49:00 PM
Client Sample ID: MW-3
Matrix: AQUEOUS

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
SM5210B: BOD						Analyst: **SMS**	
Biochemical Oxygen Demand	DO Depletion<2.0	2.00		mg/L	1	4/3/2023 3:21:00 PM	73996

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 Quanitative 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#: **2303D25**

19-Apr-23

Client: Envirotech

Project: Leonards Chevron

Sample ID: **MB-73996**	SampType: **MBLK**	TestCode: **SM5210B: BOD**							
Client ID: **PBW**	Batch ID: **73996**	RunNo: **95968**							
Prep Date: **3/29/2023**	Analysis Date: **4/3/2023**	SeqNo: **3475015**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	ND	2.00								

Sample ID: **LCS-73996**	SampType: **LCS**	TestCode: **SM5210B: BOD**							
Client ID: **LCSW**	Batch ID: **73996**	RunNo: **95968**							
Prep Date: **3/29/2023**	Analysis Date: **4/3/2023**	SeqNo: **3475016**	Units: **mg/L**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Biochemical Oxygen Demand	189	2.00	198.0	0	95.5	84.6	115.4			

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 Quanitative 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

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: Envirotech Work Order Number: 2303D25 RcptNo: 1

Received By: Joseph Alderette 3/27/2023 4:20:00 PM

Completed By: Sean Livingston 3/27/2023 4:27:52 PM

Reviewed By: CMC 3/27/23 @ 1633

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 ☑
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 ☐

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)

Adjusted? _____

Checked by: SGL 3/27/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ 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	16.6	Good	Not Present	Morty		

Project Information | Chain of Custody | Page 1 of 1

Client: NMED	**Bill To**	**Lab Use Only**
Project: Leonard's Chevron	Attention:	Lab WO# E — Job Number 22104-0003
Project Manager: Greg Crabtree	Address:	
Address: 1633 US Route 66	City, State, Zip	
City, State, Zip Santa Rosa, NM	Phone:	
Phone:	Email:	
Email: daragon@envirotech-inc.com		
Report due by:		

TAT				EPA Program	
1D	2D	3D	Standard	CWA	SDWA
			X		
					RCRA
					X

State: NM X | CO | UT | AZ | TX

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	NM- BGDOC	BOD	Remarks
12:25	3-27-23	A	1	MW-1A									X	23053525-001
13:26	3-27-23	A	1	MW-2A									X	-002
14:49	3-27-23	A	1	MW-3									X	-003

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Diego Aragon

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	3/27/23	16:20	[signature]	3.27.23	16:20
[signature]	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on ice: Y / N
T1 _____ T2 _____ T3 _____
AVG Temp °C_____

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

Container Type: **g** - glass, **p** - poly/plastic, **ag** - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

16.8 - 0.2 = 16.6°C mrty

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