



TETRA TECH

**REVIEWED**

*By Mike Buchanan at 10:10 am, Sep 19, 2023*

**2022 GROUNDWATER SAMPLING REPORT**

**E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
NMOCD ABATEMENT PLAN (AP-088)  
INCIDENT # NRM2103338654**

*Prepared for:*

**JR OIL, LTD. CO.**

*PO BOX 2975  
HOBBS, NEW MEXICO 88241*

*Prepared by:*

**Tetra Tech**

*901 West Wall Street, Suite 100  
Midland, Texas 79701  
(432) 682-4559  
Fax (432) 682-3946*

January 11, 2023

Review of the 2022 Groundwater Monitoring Report for the E.M. Elliot Tank Battery: **Content Satisfactory**

1. Continue to conduct monitoring and sampling for all groundwater wells.
2. A request may be submitted to suspend sampling for monitoring wells that have demonstrated eight (8) consecutive quarterly samples that meet abatement standards in Subsections A, B and C of 19.15.30.9 NMAC.
3. Continue to pump monitoring well MW-1R
4. Submit the Annual Sampling report for 2023 by April 1, 2024.

**complex world CLEAR SOLUTIONS-**

January 11, 2022

Dylan Rose-Coss  
New Mexico Energy, Minerals, & Natural Resources  
Oil Conservation Division, Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: 2022 Groundwater Sampling Report  
J.R Oil LTD  
E. M. Elliott Tank Battery,  
Section 22, Township 22 South, Range 37 East,  
Lea County, New Mexico.  
NMOCD Abatement Plan (AP-088)  
Incident # NRM2103338654**

Mr. Rose-Coss,

This report summarizes the results of the quarterly sampling and quarterly pumping events for monitor well MW-1R which occurred during the second half of 2022 for the E. M. Elliott Tank Battery (Site). The Site is located in Lea County, Section 22, Township 22 South, Range 37 East, approximately 4 miles south of Eunice, New Mexico. The GPS coordinates for the Site are 32.38266°N, 103.15517°W. The facility was acquired by JR Oil LTD (JR Oil) in March of 2021. Prior to JR Oil, the facility was previously operated by OXY USA, Inc. (OXY), Plains Exploration and Production (PXP), Pogo Producing Company (Pogo), and Latigo Petroleum, Inc. (Latigo). The Site location is shown on **Figures 1 and 2**.

### **FACILITY BACKGROUND**

As part of a due diligence assessment for Pogo, the Site was inspected, and soil sampling was performed to investigate areas where visual evidence of historic spills was observed.

Four impacted areas were investigated north and south of the facility and inside the containment dike. One auger hole and one borehole were installed in an area measuring 25' x 30'. One auger hole was placed in the second impacted area measuring 10' x 10'. Two auger holes were placed in a third impacted area measuring 6' x 15'. The auger holes could only be advanced to depths of 1.0'-1.5' below ground surface (bgs) due to the presence of a dense caliche layer. Elevated chloride concentrations were detected in three of the six auger hole samples analyzed. Total Petroleum Hydrocarbon (TPH) concentrations were above the New Mexico Oil Conservation Division (OCD) Recommended Remedial Action Level (RRAL) of 5,000 milligrams per kilogram all six of the auger holes. Auger holes AH-1, AH-4 and AH-6 had TPH concentrations above the RRAL on the 0-1.0' sample, which declined to below the RRAL in the 1.0'-1.5' samples. Access was restricted inside the dike; therefore, the borehole BH-1 was drilled just outside the dike, close

to AH-1, AH-2 and AH-5. In BH-1, the TPH concentrations declined to below the RRAL in the 30'-32' sample.

Based on the results, borehole BH-1 was converted to a temporary 2-inch monitor well. Groundwater was encountered at approximately 70 feet below the top of casing (TOC). On September 25, 2006 and May 15, 2007, the temporary well was purged and sampled for analyses of chlorides and benzene, toluene, ethylbenzene and xylenes (BTEX). Chloride concentrations exceeded New Mexico Water Quality Control Commission (NMWQCC) standard of 250 milligrams per liter (mg/L) while BTEX concentrations were below the NMWQCC standards.

In accordance with NM Rule 116 the OCD Environmental Bureau director was notified in writing on June 25, 2007 of groundwater impact at the Site. The OCD responded with a request for a Stage 1 Abatement Plan for the facility.

On July 9, 2008, a Stage 1 Abatement Plan addressing the soil and groundwater impacts at the Site was submitted to the OCD-Santa Fe, New Mexico office. The Stage 1 Abatement Plan concluded that chloride concentrations in groundwater had not been delineated and that no BTEX constituents exceeded NMWQCC standards. No receptors were found in the vicinity of the Site. Quarterly groundwater gauging and sampling was proposed to commence during the third quarter of 2008. Additional monitor wells were proposed to delineate the chloride impacts to groundwater.

On September 12, 2011, monitor wells MW-2 and MW-3 were installed down gradient and up gradient, respectively, from monitor well MW-1. Monitor wells MW-4 and MW-5 were installed on September 7, 2016 for cross gradient delineation. On September 8, 2016, monitor well MW-1R was drilled as a replacement for monitor well MW-1. Monitor well MW-1R was constructed as a 4-inch diameter well for potential use as a groundwater recovery well. Monitor well MW-1 was plugged on September 12, 2016.

## **2022 GAUGING AND MONITOR WELL SAMPLING**

During the transition of the Site from Oxy to JR Oil, certain quarterly sampling events were missed, but was reinitiated in July 2022. Tetra Tech notified the NMOCD of the continuation of the sampling on July 18, 2022, as shown in **Appendix A**. Four of the monitor wells MW-2 through MW-5 were sampled during the July 2022 sampling event, and all five monitor wells at the site MW-1R, MW-2, MW-3, MW-4, and MW-5 were bailed. The monitor well MW-1R was not sampled during July, however, approximately three well casing volumes was bailed from the well and stored onsite in a drum for proper disposal. During the December 2022 sampling event, all of the well's MW-1R, MW-2, MW-3, MW-4, and MW-5 were bailed and sampled. Approximately three well casing volumes were bailed from each well during each sampling event and stored onsite in a drum for proper disposal. The bailed water total for 2022 is approximately 84 gallons. During each groundwater sampling event, the monitor wells were gauged with an electronic water level meter. No Phase Separated Hydrocarbons (PSH) were observed in any of the monitor wells.

Based on the gauging data, the groundwater flow direction was generally to the southeast with an average hydraulic gradient of 0.0017 ft / ft. The gauging data is

summarized in **Table 1** and potentiometric surface maps for each of the quarterly sampling events in 2022 are included as **Figures 4** and **5**.

During each groundwater sampling event, the monitor wells were purged to remove approximately three well casing volumes of water using disposable rope or twine with a new polyethylene bailer for each monitor well. The sample bottles were filled directly from the bailers. The sample bottles were placed on ice and delivered to Eurofins Laboratory in Midland, Texas for the July sampling event and shipped under proper chain-of-custody control to PACE Laboratories of Houston, Texas for the December sampling event. All samples were analyzed for BTEX by EPA Method SW8260 and chlorides by EPA Method E300.

The analytical results indicate that BTEX concentrations were below NMWQCC standards during all of the sampling events. The analytical results indicated the chloride concentrations in monitor well MW-5 were below NMWQCC standards during both of the 2022 quarterly sampling events, with concentrations ranging from 52.1 mg/kg to 145 mg/kg. The analytical results from monitor well MW-4 exceeded the NMWQCC standards during both of the 2022 sampling events, with concentrations ranging from 834 mg/kg to 1,040 mg/kg, which are within the range of previously detected concentrations. The analytical results from monitor well MW-2 exceeded the NMWQCC standards during the July sampling event, with a concentration of 335 mg/kg, however, it decreased to 140 mg/kg during the December sampling event which is closer to the previous range. The analytical results from monitor wells MW-1R and MW-3 exceeded the NMWQCC standards during the December sampling event, with concentrations of 18,900 mg/kg and 252 mg/kg, respectively. The chloride concentration from December for monitor well (MW-1R) has shown a significant increase, however, due to only one sample being collected in 2022, more data is needed to determine if this increase is consistent. Monitor well MW-3 indicated increased chloride concentrations as well. The generally increasing concentrations may be due to the break in the pumping of monitor well MW-1R for over a year's period.

Graphs of chloride concentrations versus groundwater elevations for each of the monitor wells are included in **Appendix B**. The graph for monitor well MW-4, indicate a generally stable chloride concentration trend. However, monitor wells MW-1R, MW-2, MW-3, and MW-5 indicate a generally increasing chloride concentration trend.

Chloride concentration maps for the two quarterly monitoring events in 2022 are included as **Figures 6** and **7**. The groundwater analytical data is summarized in **Table 2**. Copies of the laboratory analytical reports are included in **Appendix C**.

## **CONCLUSIONS**

1. Analytical results indicate that BTEX concentrations were below NMWQCC standards for both sampling events in 2022.
2. PSH has never been measured in any monitor wells at this Site.

3. Chloride analytical results for monitor well MW-5 were below NMWQCC standards during both of the 2022 sampling events.
4. The graphs for monitor well MW-4 indicate a generally stable chloride concentration trend, however, monitor wells MW-1R, MW-2, MW-3, and MW-5 indicate a generally increasing chloride concentration trend.
5. The chloride analytical results for monitor well MW-4 exceeded the NMWQCC standards during both of the 2022 sampling events. Additionally, chloride analytical results for monitor well MW-2 exceeded the NMWQCC standards during the July sampling event and monitor wells MW-1R and MW-3 exceeded the NMWQCC standards during the December sampling event.

### **PROPOSED 2022 GROUNDWATER MONITORING PROGRAM**

Continued quarterly groundwater monitoring and quarterly pumping of monitor well MW-1R is proposed for 2023.

If you have any questions or comments concerning this report, please feel free to contact Brittany Long at (432) 682-4559.

Respectfully submitted,  
Tetra Tech, Inc.



Brittany Long,  
Project Manager

Reviewed by:



Clair Gonzales, P.G.  
Senior Project Manager



Russell Weigand, P.G.  
Client Account Manager

**Attachments:**

Figures:

- Figure 1 – Overview Map
- Figure 2 – Topographic Map
- Figure 3 – Site Map
- Figure 4 – July 2022 Potentiometric Surface Map
- Figure 5 – December 2022 Potentiometric Surface Map
- Figure 6 – July 2022 Chloride Plume Map
- Figure 7 – December 2022 Chloride Plume Map

Tables:

- Table 1 – Groundwater Elevation
- Table 2 – Summary of Analysis of Groundwater Samples

Appendix A – Graphs

Appendix B – Lab Reports

Appendix C – State Correspondence

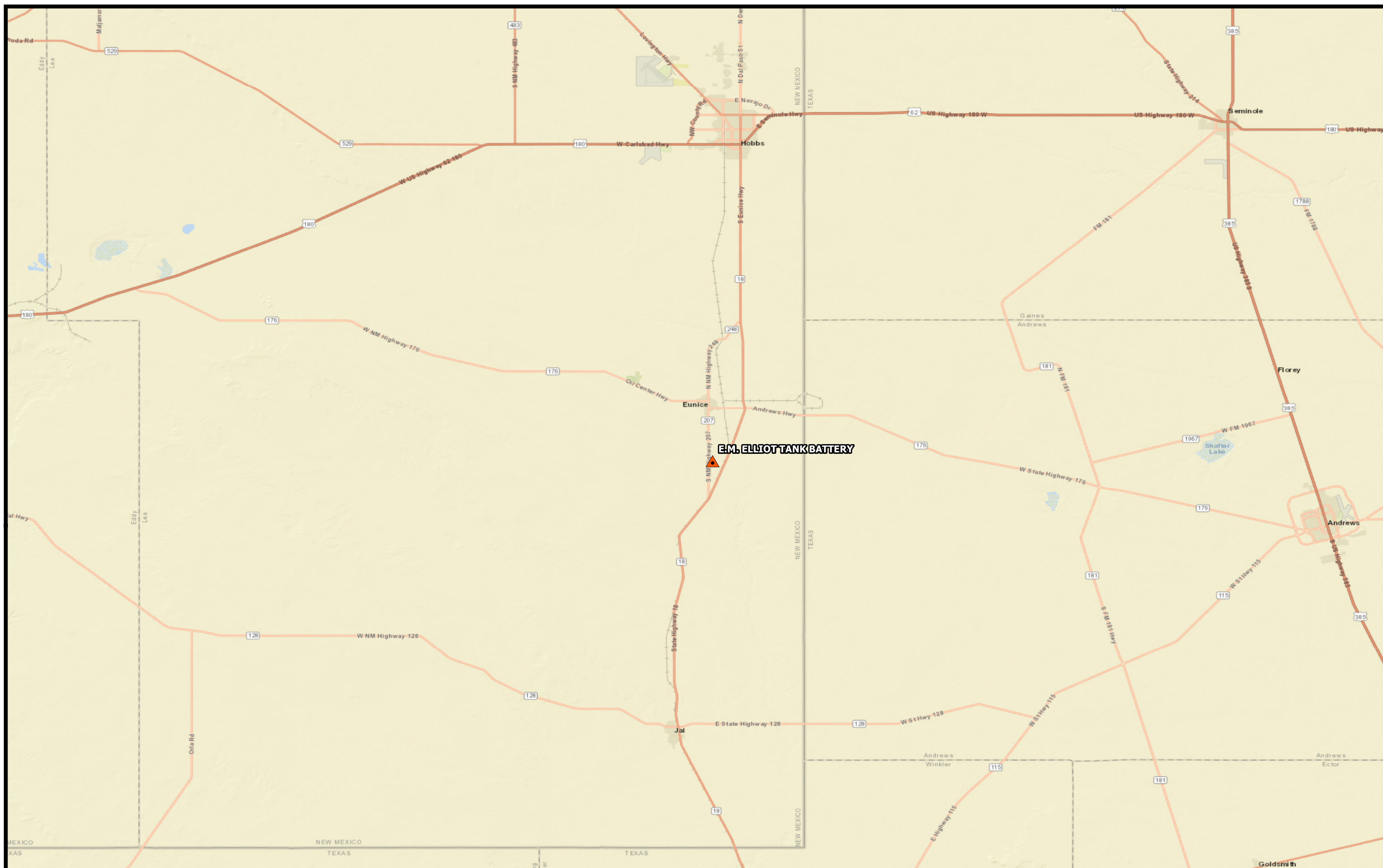
**cc:** Joe Tippy – JR Oil  
Rex Tippy – JR Oil



# Figures

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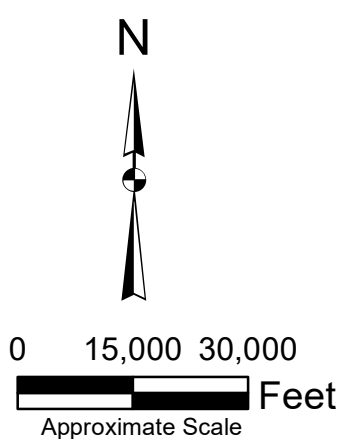


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**LEGEND**

- SITE LOCATION

**SITE LOCATOR MAP**



901 W. WALL STREET STE. 100  
MIDLAND, TEXAS  
(432) 682-4559



**FIGURE 1**

**OVERVIEW MAP**

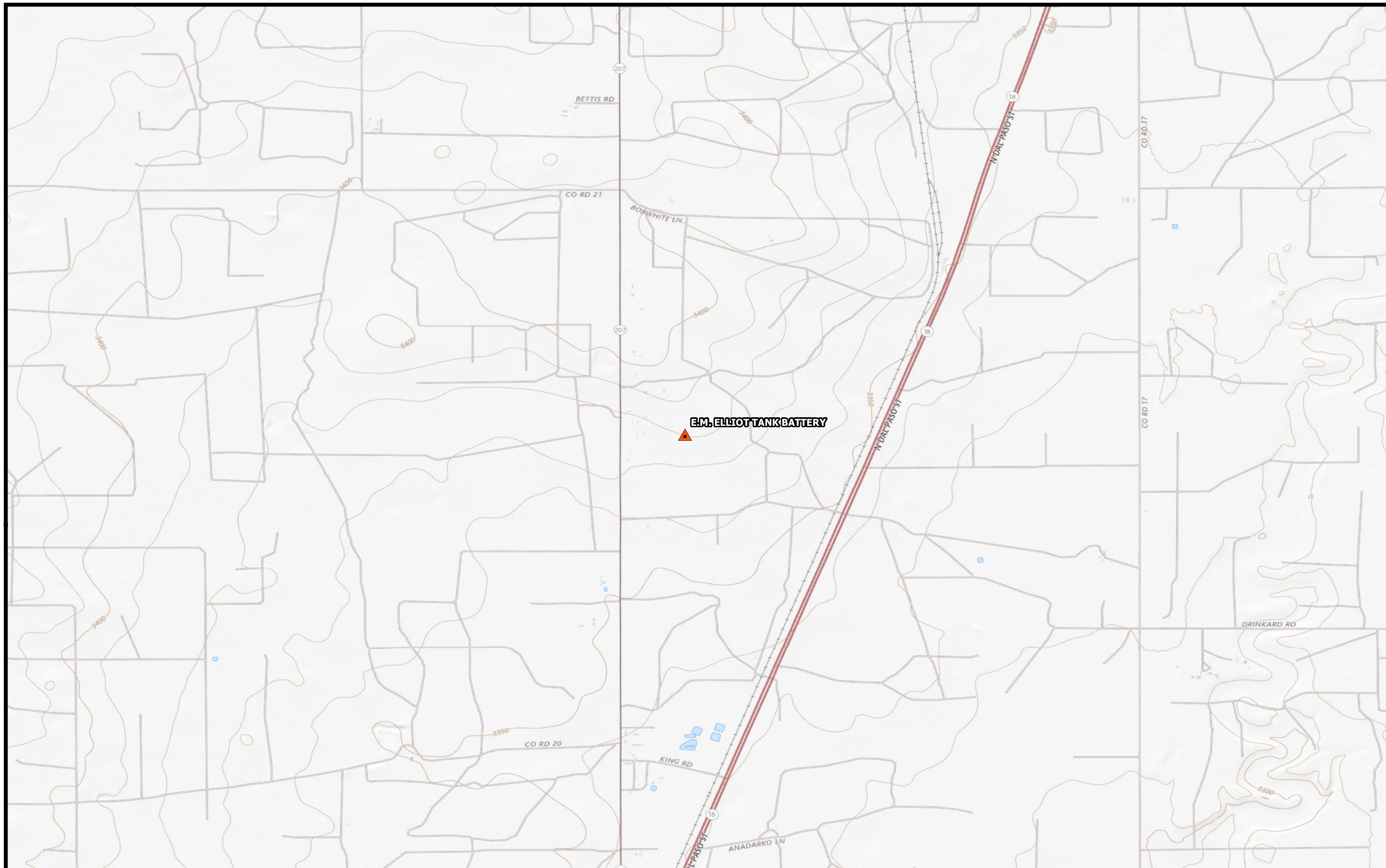
E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
32.38266°, -103.15517°

PROJECT: 212C-HN-02794

DATE: 1/5/2023

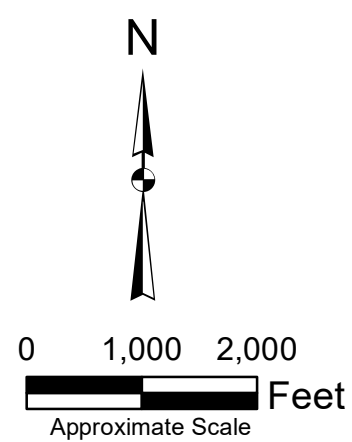
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**LEGEND**  
 SITE LOCATION



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 MIDLAND, TEXAS  
 (432) 682-4559



**FIGURE 2**

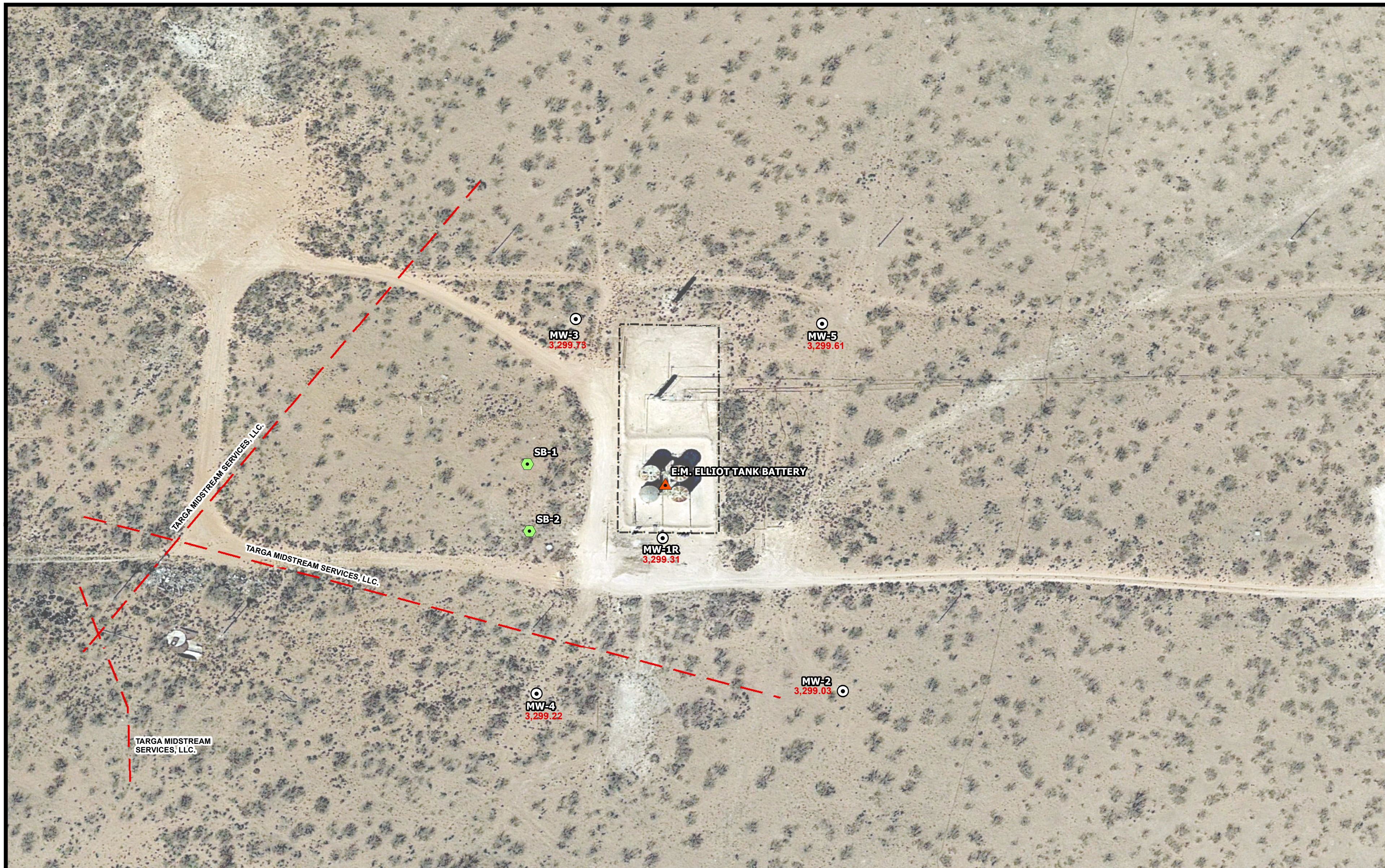
TOPOGRAPHIC MAP

E.M. ELLIOT TANK BATTERY  
 LEA COUNTY, NEW MEXICO  
 32.38266°, -103.15517°

PROJECT: 212C-HN-02794

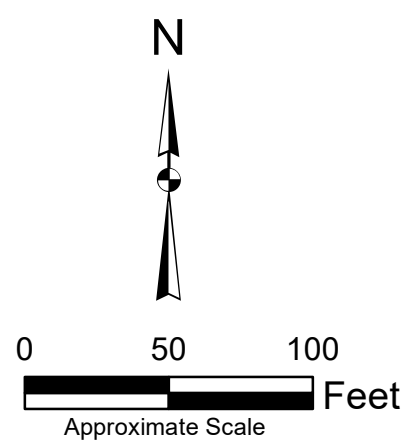
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- LEGEND**
- SOIL BORING LOCATIONS
  - MONITOR WELL LOCATIONS
  - SITE LOCATION
  - SUBSURFACE PIPELINES
  - FENCELINE



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**FIGURE 3**

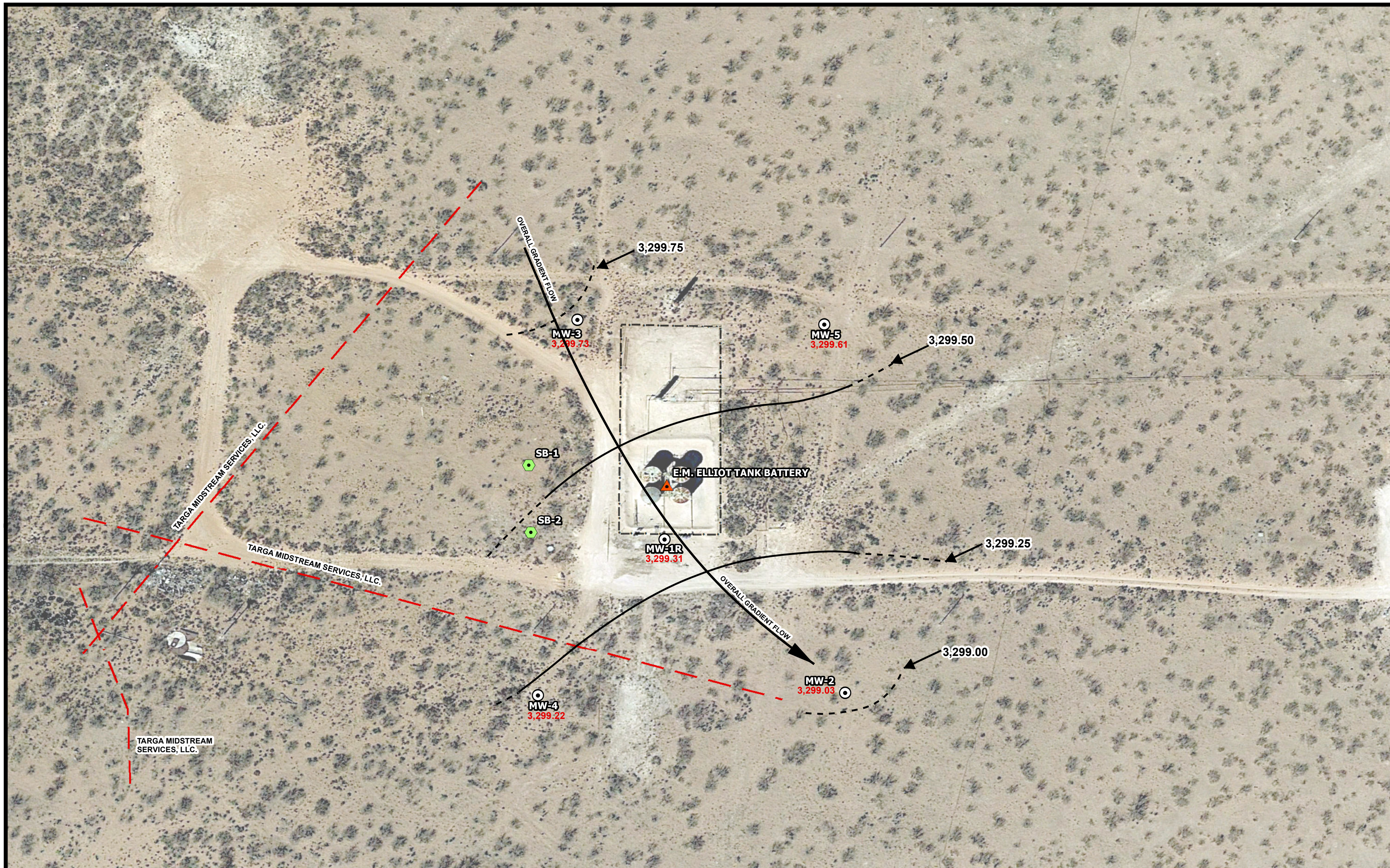
**SITE MAP**

E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
32.38266°, -103.15517°

PROJECT: 212C-HN-02794

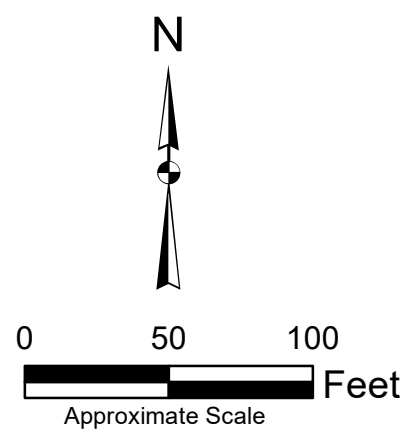
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- LEGEND**
- SOIL BORING LOCATIONS
  - MONITOR WELL LOCATIONS
  - APPROXIMATE SITE LOCATION
  - DERIVED CONTOUR LINES WITH ELEVATION IN FEET
  - SUBSURFACE PIPELINES
  - FENCELINE



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**FIGURE 4**

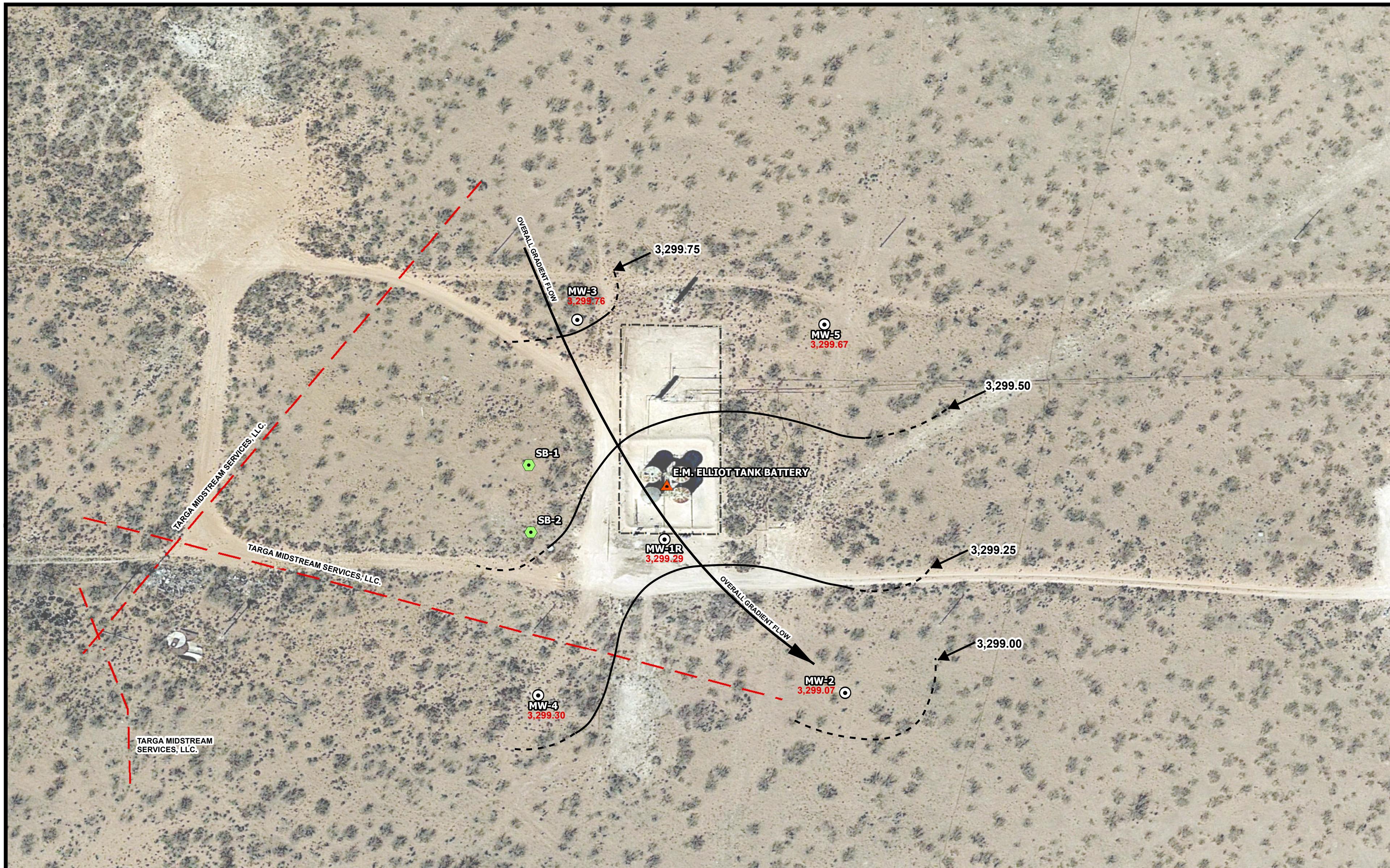
JULY 2022 POTENTIOMETRIC SURFACE MAP

E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
32.38266°, -103.15517°

PROJECT: 212C-HN-02794

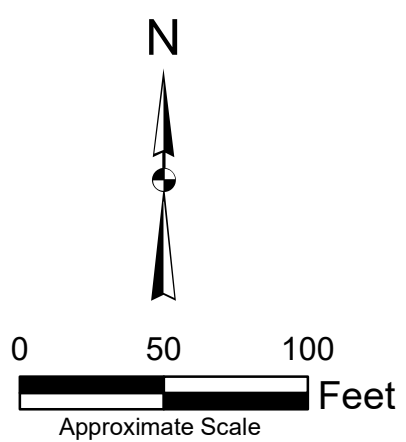
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- LEGEND**
- SOIL BORING LOCATIONS
  - MONITOR WELL LOCATIONS
  - APPROXIMATE SITE LOCATION
  - DERIVED POTENTIOMETRIC CONTOURS WITH ELEVATION IN FEET
  - SUBSURFACE PIPELINES
  - FENCELINE



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**FIGURE 5**

DECEMBER 2022 POTENTIOMETRIC SURFACE MAP

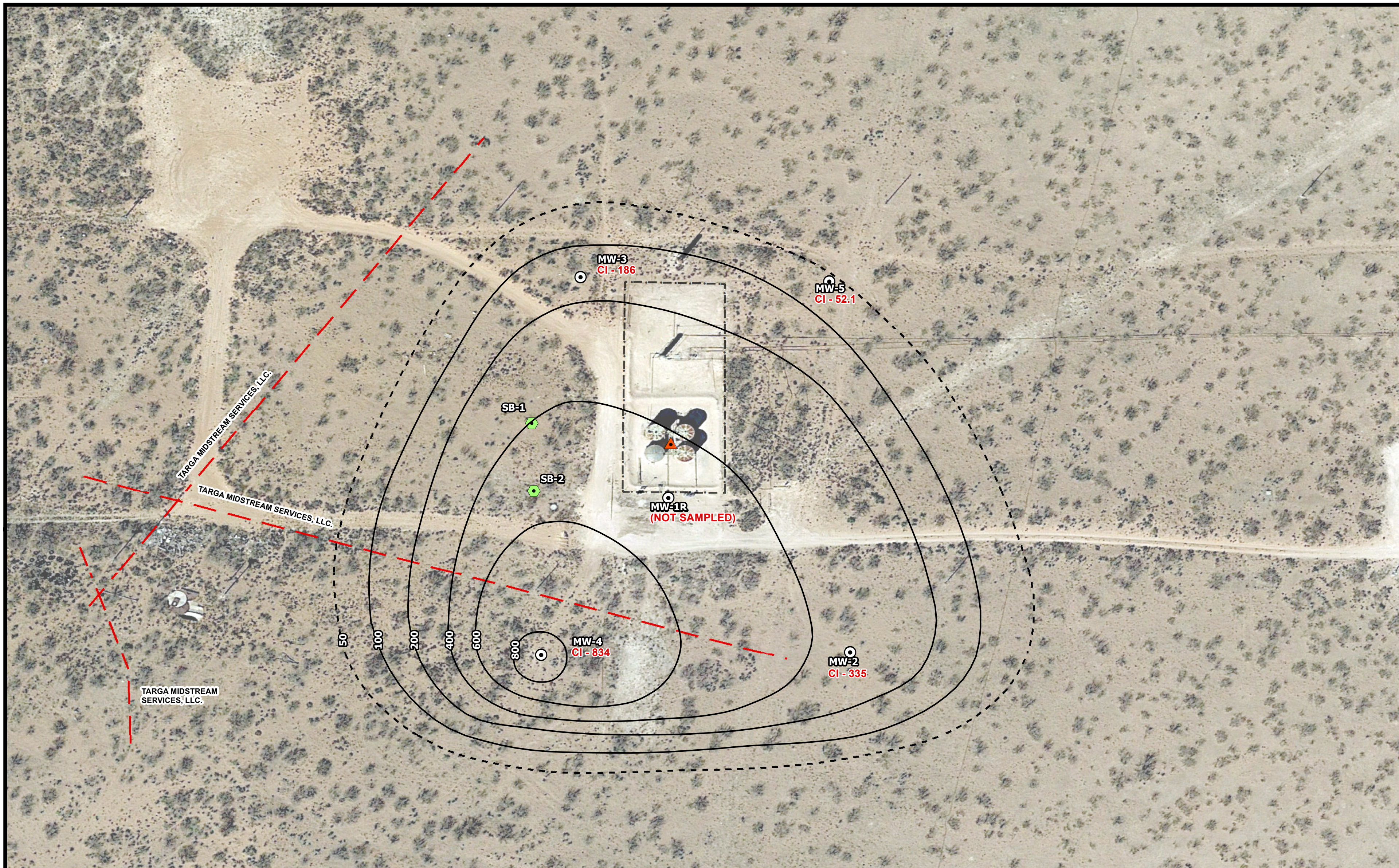
E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
32.38266°, -103.15517°

PROJECT: 212C-HN-02794

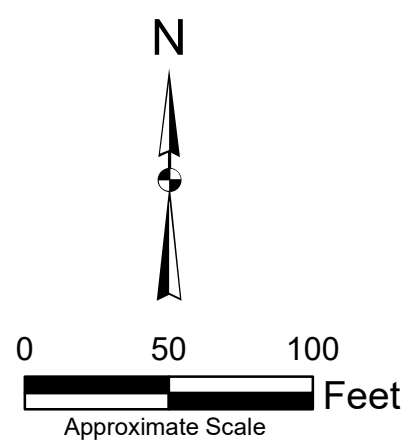
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NAME: Figure 5 - E.M. Elliot

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- LEGEND**
- SOIL BORING LOCATIONS
  - MONITOR WELL LOCATIONS
  - SITE LOCATION
  - CHLORIDE CONCENTRATION DERIVED CONTOURS (PPM)
  - SUBSURFACE PIPELINES
  - FENCELINE



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**FIGURE 6**

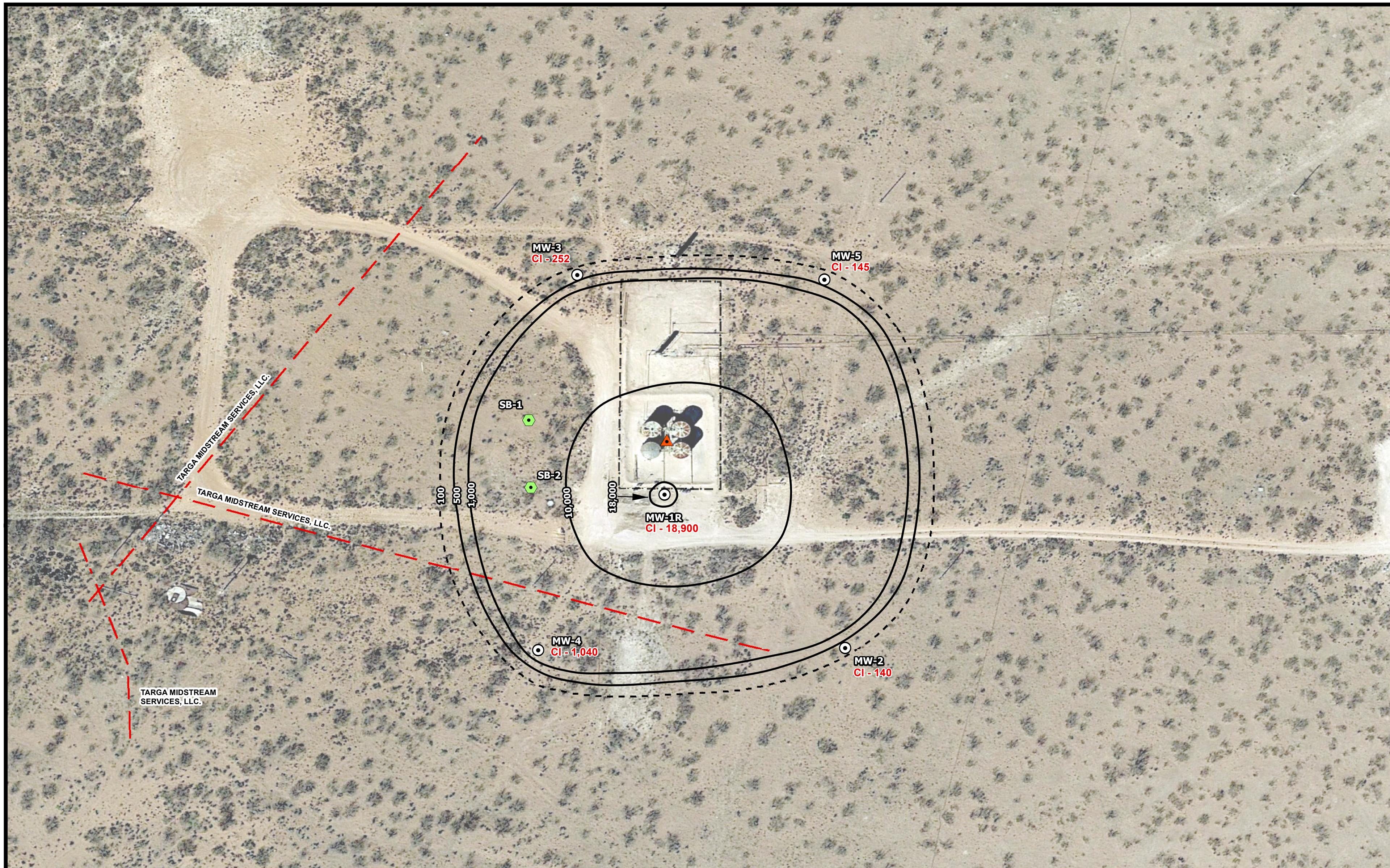
JULY 2022 CHLORIDE PLUME MAP

E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
32.38266°, -103.15517°

PROJECT: 212C-HN-02794

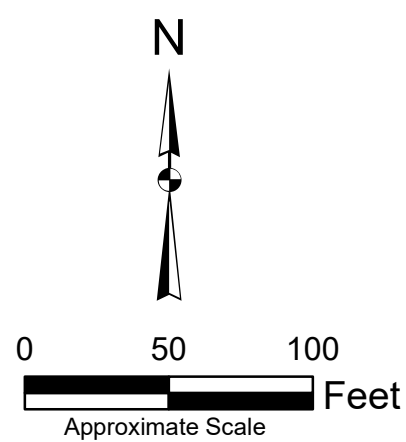
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- LEGEND**
- SOIL BORING LOCATIONS
  - MONITOR WELL LOCATIONS
  - SITE LOCATION
  - CHLORIDE CONCENTRATION DERIVED CONTOURS (PPM)
  - SUBSURFACE PIPELINES
  - FENCELINE



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**FIGURE 7**

DECEMBER 2022  
CHLORIDE PLUME MAP

E.M. ELLIOT TANK BATTERY  
LEA COUNTY, NEW MEXICO  
32.38266°, -103.15517°

PROJECT: 212C-HN-02794

DATE: 1/5/2023

NAME: Figure 7 - E.M. Elliot



# Tables

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**TABLE 1**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Groundwater Elevations and PSH Thickness**  
**Lea County, New Mexico**

Well/ Borehole ID	Date Measurement	Top of Casing Elevation, feet AMSL	Total Well Depth (in ft)	Product (ft) (TOC)	Water level (ft) (TOC)	PSH Thickness (ft)	Groundwater Elevation (ft)
MW-1	10/23/08	3,378.91	85.60	-	80.88	-	3,298.03
	12/10/08	-	85.60	-	80.85	-	3,298.06
	03/11/09	-	85.60	-	80.85	-	3,298.06
	06/22/09	-	85.60	-	80.84	-	3,298.07
	09/15/09	-	85.66	-	80.84	-	3,298.03
	12/09/09	-	85.60	-	80.88	-	3,298.03
	03/10/10	-	85.60	-	80.85	-	3,298.06
	06/07/10	-	85.60	-	80.77	-	3,298.14
	09/13/10	-	85.60	-	81.64	-	3,297.27
	12/13/10	-	85.60	-	81.78	-	3,297.13
	03/10/11	-	85.60	-	81.82	-	3,297.09
	06/13/11	-	85.60	-	80.77	-	3,298.14
	09/20/11	-	85.60	-	80.82	-	3,298.09
	12/12/11	-	85.60	-	80.95	-	3,297.96
	04/05/12	-	85.60	-	80.84	-	3,298.07
	06/19/12	-	85.60	-	80.83	-	3,298.08
	09/24/12	-	85.60	-	80.91	-	3,298.00
	12/14/12	-	85.60	-	80.82	-	3,298.09
	03/27/13	-	86.80	-	80.83	-	3,298.08
	06/07/13	-	-	-	80.82	-	3,298.09
	09/19/13	-	-	-	80.81	-	3,298.10
	12/26/13	-	86.83	-	80.86	-	3,298.05
	03/27/14	-	85.60	-	80.93	-	3,297.98
	06/17/14	-	85.60	-	80.83	-	3,298.08
	09/26/14	-	85.60	-	80.88	-	3,298.03
	12/15/14	-	85.59	-	80.99	-	3,297.92
	03/24/15	-	85.66	-	80.91	-	3,298.00
	06/18/15	-	85.66	-	80.96	-	3,297.95
	08/06/15	-	-	-	80.90	-	3,298.01
	08/12/15	-	-	-	80.87	-	3,298.04
	08/18/15	-	-	-	80.84	-	3,298.07
	09/08/15	-	85.66	-	80.82	-	3,298.09
12/18/15	-	85.72	-	80.86	-	3,298.05	
03/14/16	-	-	-	80.82	-	3,298.09	
06/28/16	-	85.66	-	80.83	-	3,298.08	
09/12/16	Well Plugged						
MW-1R	09/09/16	3,380.41	-	-	79.32	-	3,301.09
	09/15/16	-	-	-	82.04	-	3,298.37
	09/29/16	-	92.40	-	81.34	-	3,299.07
	10/12/16	-	-	-	81.30	-	3,299.11
	12/06/16	-	-	-	81.32	-	3,299.09
	03/01/17	-	92.40	-	81.39	-	3,299.02
	08/29/17	-	-	-	81.29	-	3,299.12
	11/20/17	-	-	-	81.66	-	3,298.75
	02/20/18	-	90.38	-	81.28	-	3,299.13



**TABLE 1**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Groundwater Elevations and PSH Thickness**  
**Lea County, New Mexico**

Well/ Borehole ID	Date Measurement	Top of Casing Elevation, feet AMSL	Total Well Depth (in ft)	Product (ft) (TOC)	Water level (ft) (TOC)	PSH Thickness (ft)	Groundwater Elevation (ft)
MW-1R Cont.	05/24/18	-	-	-	81.12	-	3,299.29
	08/24/18	-	-	-	81.70	-	3,298.71
	11/15/18	-	90.45	-	81.65	-	3,298.76
	02/08/19	-	90.42	-	81.15	-	3,299.26
	08/07/19	-	90.40	-	81.3	-	3,299.11
	02/18/20	-	90.30	-	81.41	-	3,299.00
	05/04/20	-	90.30	-	81.17	-	3,299.24
	08/11/20	-	90.30	-	81.10	-	3,299.31
	11/16/20	-	90.30	-	81.10	-	3,299.31
	07/26/22	-	90.10	-	81.10	-	3,299.31
	12/01/22	-	90.10	-	81.12	-	3,299.29
MW-2	09/20/11	3,378.00	102.00	-	82.97	-	3,295.03
	12/12/11	-	102.00	-	80.44	-	3,297.56
	04/05/12	-	102.00	-	80.27	-	3,297.73
	06/19/12	-	102.00	-	80.32	-	3,297.68
	09/24/12	-	102.00	-	80.31	-	3,297.69
	12/14/12	-	102.00	-	80.34	-	3,297.66
	03/27/13	-	98.35	-	80.33	-	3,297.67
	06/07/13	-	-	-	80.35	-	3,297.65
	09/19/13	-	-	-	80.34	-	3,297.66
	12/26/13	-	-	-	80.35	-	3,297.65
	03/27/14	-	97.16	-	80.39	-	3,297.61
	06/17/14	-	97.16	-	80.29	-	3,297.71
	09/30/14	-	97.16	-	80.37	-	3,297.63
	12/15/14	-	97.16	-	80.44	-	3,297.56
	03/24/15	-	97.05	-	80.37	-	3,297.63
	06/18/15	-	97.16	-	80.36	-	3,297.64
	08/06/15	-	-	-	80.37	-	3,297.63
	09/08/15	-	97.16	-	80.33	-	3,297.67
	12/18/15	-	97.12	-	80.35	-	3,297.65
	03/14/16	-	-	-	80.30	-	3,297.70
	06/28/16	-	97.16	-	80.32	-	3,297.68
	09/09/16	3,378.98	-	-	80.27	-	3,298.71
	09/29/16	-	97.16	-	80.34	-	3,298.64
	10/12/16	-	-	-	80.30	-	3,298.68
	12/06/16	-	-	-	80.34	-	3,298.64
	03/01/17	-	98.35	-	80.32	-	3,298.66
	08/29/17	-	98.35	-	80.29	-	3,298.69
	11/20/17	-	-	-	80.43	-	3,298.55
	02/20/18	-	97.10	-	80.29	-	3,298.69
	05/24/18	-	-	-	80.17	-	3,298.81
	08/24/18	-	-	-	80.42	-	3,298.56
	11/15/18	-	97.19	-	80.38	-	3,298.60
	02/08/19	-	96.83	-	80.20	-	3,298.78
08/07/19	-	97.25	-	80.35	-	3,298.63	
02/18/20	-	96.95	-	80.17	-	3,298.81	
05/04/20	-	96.95	-	80.10	-	3,298.88	
08/11/20	-	96.90	-	80.13	-	3,298.85	
11/16/20	-	96.90	-	80.14	-	3,298.84	
07/26/22	-	97.10	-	79.95	-	3,299.03	
12/01/22	-	97.10	-	79.91	-	3,299.07	

**TABLE 1**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Groundwater Elevations and PSH Thickness**  
**Lea County, New Mexico**

Well/ Borehole ID	Date Measurement	Top of Casing Elevation, feet AMSL	Total Well Depth (in ft)	Product (ft) (TOC)	Water level (ft) (TOC)	PSH Thickness (ft)	Groundwater Elevation (ft)
MW-3	09/20/11	3,381.40	99.00	-	80.33	-	3,301.07
	12/12/11	-	99.00	-	83.11	-	3,298.29
	04/05/12	-	99.00	-	82.98	-	3,298.42
	06/19/12	-	99.00	-	82.99	-	3,298.41
	09/24/12	-	99.00	-	82.99	-	3,298.41
	12/14/12	-	99.00	-	82.99	-	3,298.41
	03/27/13	-	99.00	-	83.04	-	3,298.36
	06/07/13	-	-	-	83.05	-	3,298.35
	09/19/13	-	-	-	83.02	-	3,298.38
	12/26/13	-	-	-	83.09	-	3,298.31
	03/27/14	-	100.95	-	83.12	-	3,298.28
	06/17/14	-	100.95	-	83.06	-	3,298.34
	09/30/14	-	100.95	-	83.09	-	3,298.31
	12/15/14	-	100.94	-	83.18	-	3,298.22
	03/24/15	-	100.94	-	83.08	-	3,298.32
	06/18/15	-	100.94	-	83.05	-	3,298.35
	08/06/15	-	-	-	83.04	-	3,298.36
	09/08/15	-	100.94	-	83.02	-	3,298.38
	12/18/15	-	104.94	-	83.04	-	3,298.36
	03/14/16	-	-	-	82.99	-	3,298.41
	06/28/16	-	100.97	-	82.98	-	3,298.42
	09/09/16	3,382.36	-	-	83.00	-	3,299.36
	09/29/16	-	100.97	-	83.01	-	3,299.35
	10/12/16	-	-	-	82.98	-	3,299.38
	12/06/16	-	-	-	82.99	-	3,299.37
	03/01/17	-	-	-	83.00	-	3,299.36
	08/29/17	-	-	-	82.98	-	3,299.38
	11/20/17	-	-	-	83.05	-	3,299.31
	02/20/18	-	100.96	-	82.93	-	3,299.43
	05/24/18	-	-	-	82.83	-	3,299.53
	08/24/18	-	-	-	83.02	-	3,299.34
	11/15/18	-	101.09	-	82.96	-	3,299.40
	02/08/19	-	100.94	-	82.88	-	3,299.48
08/07/19	-	101.15	-	82.97	-	3,299.39	
02/18/20	-	100.90	-	82.80	-	3,299.56	
05/04/20	-	100.90	-	82.72	-	3,299.64	
08/11/20	-	100.70	-	82.77	-	3,299.59	
11/16/20	-	101.71	-	82.79	-	3,299.57	
07/26/22	-	100.75	-	82.63	-	3,299.73	
12/01/22	-	100.75	-	82.60	-	3,299.76	
MW-4	09/08/16	3,377.80	-	-	78.90	-	3,298.90
	09/09/16	-	-	-	78.96	-	3,298.84
	09/15/16	-	-	-	78.95	-	3,298.85
	09/29/16	-	94.40	-	78.95	-	3,298.85
	10/12/16	-	-	-	78.92	-	3,298.88
	12/06/16	-	-	-	78.91	-	3,298.89
	03/01/17	-	93.35	-	78.89	-	3,298.91
	08/29/17	-	93.35	-	78.91	-	3,298.89

**TABLE 1**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Groundwater Elevations and PSH Thickness**  
**Lea County, New Mexico**

Well/ Borehole ID	Date Measurement	Top of Casing Elevation, feet AMSL	Total Well Depth (in ft)	Product (ft) (TOC)	Water level (ft) (TOC)	PSH Thickness (ft)	Groundwater Elevation (ft)
MW-4 Cont.	11/20/17	-	-	-	78.96	-	3,298.84
	02/20/18	-	93.72	-	78.82	-	3,298.98
	05/24/18	-	-	-	78.75	-	3,299.05
	08/24/18	-	-	-	78.98	-	3,298.82
	11/15/18	-	93.72	-	78.87	-	3,298.93
	02/08/19	-	93.55	-	78.72	-	3,299.08
	08/07/19	-	93.80	-	78.93	-	3,298.87
	02/18/20	-	94.60	-	78.70	-	3,299.10
	05/04/20	-	94.60	-	78.70	-	3,299.10
	08/11/20	-	93.40	-	78.70	-	3,299.10
	11/16/20	-	93.40	-	78.76	-	3,299.04
	07/26/22	-	93.40	-	78.58	-	3,299.22
	12/01/22	-	93.40	-	78.50	-	3,299.30
MW-5	09/08/16	3,384.53	-	-	85.15	-	3,299.38
	09/09/16	-	-	-	85.19	-	3,299.34
	09/15/16	-	-	-	85.15	-	3,299.38
	09/29/16	-	101.94	-	85.16	-	3,299.37
	10/12/16	-	-	-	85.14	-	3,299.39
	12/06/16	-	-	-	85.18	-	3,299.35
	03/01/17	-	101.49	-	85.20	-	3,299.33
	08/29/17	-	101.49	-	85.16	-	3,299.37
	11/20/17	-	-	-	85.24	-	3,299.29
	02/20/18	-	101.95	-	85.12	-	3,299.41
	05/24/18	-	-	-	85.03	-	3,299.50
	08/24/18	-	-	-	85.25	-	3,299.28
	11/15/18	-	-	-	85.19	-	3,299.34
	02/08/19	-	101.95	-	85.03	-	3,299.50
	08/07/19	-	101.20	-	85.25	-	3,299.28
	02/18/20	-	100.77	-	85.00	-	3,299.53
	05/04/20	-	100.77	-	84.91	-	3,299.62
08/11/20	-	100.74	-	84.96	-	3,299.57	
11/16/20	-	100.80	-	84.95	-	3,299.58	
07/26/22	-	100.80	-	84.92	-	3,299.61	
12/01/22	-	100.80	-	84.86	-	3,299.67	

( - ) No data (TOC) Top of casing

9/7/16 MW-4 and MW-5 drilled

9/8/16 MW-1R drilled

9/12/16 MW-1 plugged

10/12/16 John West Survey Company surveyed all five monitor wells on Site

**TABLE 2**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Analysis of Groundwater Samples**  
**Lea County, New Mexico**

Sample ID	Sample Date	PSH Thickness (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/l)	Xylene (mg/L)	Total BTEX (mg/l)	Chloride (mg/L)
<b>New Mexico Water Quality Control Commission Human Health Standard Maximum Allowable Concentration</b>			<b>0.010 mg/L</b>	<b>0.75 mg/L</b>	<b>0.75 mg/L</b>	<b>0.62 mg/L</b>		<b>250.0 mg/L*</b>
<b>MW-1</b>	09/25/06	-	<b>0.0013</b>	<0.001	<0.001	<b>0.0065</b>	<b>0.0078</b>	<b>8,260</b>
	05/15/07	-	<0.001	<0.001	<0.001	<b>0.0015</b>	<b>0.0015</b>	<b>2,020</b>
	10/23/08	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>8,040</b>
	12/11/08	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>9,590</b>
	03/11/09	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>9,670</b>
<b>Dup</b>	03/11/09	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>8,950</b>
	06/22/09	-	<b>0.00049</b>	<0.001	<0.001	<0.003	<0.003	<b>9,600</b>
	09/15/09	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>9,500</b>
	12/09/10	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>9,880</b>
	03/10/10	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>8,630</b>
	06/07/10	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>9,650</b>
	09/13/10	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>9,520</b>
	12/13/10	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>9,580</b>
	03/10/11	-	<0.001	<0.001	<0.001	<0.003	<0.003	<b>16,800</b>
	06/13/11	-	<b>0.00024 J</b>	<0.00030	<0.00020	<0.00023	<b>0.00024 J</b>	<b>11,000</b>
	09/20/11	-	<b>0.00027 J</b>	<0.00030	<0.00020	<0.00023	<b>0.00027 J</b>	<b>4,400</b>
	12/13/11	-	<b>0.00025 J</b>	<0.00030	<0.00020	<0.00023	<b>0.00025 J</b>	<b>9,600</b>
	04/06/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>10,300</b>
	06/19/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>8,030</b>
	09/24/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>11,100</b>
	11/27/12	-	-	-	-	-	-	<b>9,110</b>
	11/27/12	-	-	-	-	-	-	<b>8,310</b>
	12/14/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>7,230</b>
	03/27/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>8,820</b>
	06/07/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>9,320</b>
	09/19/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>9,620</b>
	12/27/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>8,380</b>
	03/27/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>7,630</b>
	06/19/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>11,100</b>
	09/30/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>13,400</b>
	12/15/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>10,700</b>
	03/24/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>11,000</b>
	06/18/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>11,000</b>
	09/08/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>11,500</b>

**TABLE 2**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Analysis of Groundwater Samples**  
**Lea County, New Mexico**

Sample ID	Sample Date	PSH Thickness (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/l)	Xylene (mg/L)	Total BTEX (mg/l)	Chloride (mg/L)
<b>New Mexico Water Quality Control Commission Human Health Standard Maximum Allowable Concentration</b>			<b>0.010 mg/L</b>	<b>0.75 mg/L</b>	<b>0.75 mg/L</b>	<b>0.62 mg/L</b>		<b>250.0 mg/L*</b>
<b>Dup</b>	12/18/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>11,500</b>
	03/15/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>10,000</b>
	03/15/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>9,590</b>
	06/30/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>9,270</b>
	06/30/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>10,700</b>
	09/12/16		<b>Plugged</b>					
<b>MW-1R</b>	09/29/16	-	<0.005	<b>0.00095 J</b>	<0.005	<0.015	<b>0.00095 J</b>	<b>7,210</b>
<b>Dup</b>	09/29/16	-	<0.005	<b>0.0010 J</b>	<0.005	<0.015	<b>0.0010 J</b>	<b>7,040</b>
<b>Dup</b>	12/07/16	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>8,810</b>
	12/07/16	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>9,380</b>
<b>Dup</b>	03/03/17	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>8,740</b>
<b>Dup</b>	03/03/17	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>9,250</b>
<b>Dup</b>	06/08/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>8,710</b>
	06/08/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>8,690</b>
<b>Dup</b>	08/30/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>8,600</b>
	08/30/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>8,860</b>
<b>Dup</b>	11/20/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>12,500</b>
	11/20/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>9,330</b>
<b>Dup</b>	02/21/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>9,380</b>
	02/21/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>9,340</b>
<b>Dup</b>	05/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>8,490</b>
	05/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>9,810</b>
<b>Dup</b>	08/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>9,160</b>
	08/24/18	-	<0.0050	<0.0050	<0.0050	<b>0.00081 J</b>	<b>0.00081 J</b>	<b>9,300</b>
	11/15/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>7,850</b>
	02/08/19	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>608</b>
	08/07/19	-	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<b>8,840</b>
	02/18/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>8,810</b>
	05/04/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>7,980</b>
	08/11/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>10,600</b>
	11/16/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>11,700</b>
	12/01/22	-	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300	<b>18,900</b>
<b>MW-2</b>	09/20/11	-	<0.00014	<0.00030	<0.00020	<0.00023	<0.00030	<b>51</b>
	12/13/11	-	<0.00014	<0.00030	<0.00020	<0.00023	<0.00030	<b>160</b>

**TABLE 2**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Analysis of Groundwater Samples**  
**Lea County, New Mexico**

Sample ID	Sample Date	PSH Thickness (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/l)	Xylene (mg/L)	Total BTEX (mg/l)	Chloride (mg/L)
<b>New Mexico Water Quality Control Commission Human Health Standard Maximum Allowable Concentration</b>			<b>0.010 mg/L</b>	<b>0.75 mg/L</b>	<b>0.75 mg/L</b>	<b>0.62 mg/L</b>		<b>250.0 mg/L*</b>
MW-2 Cont.	04/06/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>62.2</b>
	06/19/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>60.7</b>
	09/24/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>63.3</b>
	12/14/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>50.7</b>
	03/27/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>109</b>
	06/07/13	-	NA	-	-	-	-	NA
	09/19/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>59.9</b>
	12/27/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>53.5</b>
	03/27/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>63.1</b>
	06/19/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>63.1</b>
	09/30/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>58.0</b>
	12/15/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>54.4</b>
	03/24/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>55.0</b>
	06/18/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>55.0</b>
	09/08/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>54.2</b>
	12/18/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>53.6</b>
	03/15/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>57.6</b>
	06/30/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>53.4</b>
	09/29/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>51.2</b>
	12/07/16	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>54.3</b>
	03/03/17	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>53.2</b>
	06/08/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>49.4</b>
	08/30/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>50.4</b>
	11/20/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>57.5</b>
	02/21/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>56.0</b>
	05/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>58.6</b>
	08/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>54.7</b>
	11/15/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>55.3</b>
	02/08/19	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>53.4</b>
	08/07/19	-	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<b>56.6</b>
	02/18/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>54.9</b>
	05/04/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>53.7</b>
	08/11/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>56.9</b>
	11/16/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>56.7</b>

**TABLE 2**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Analysis of Groundwater Samples**  
**Lea County, New Mexico**

Sample ID	Sample Date	PSH Thickness (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/l)	Xylene (mg/L)	Total BTEX (mg/l)	Chloride (mg/L)
<b>New Mexico Water Quality Control Commission Human Health Standard Maximum Allowable Concentration</b>			<b>0.010 mg/L</b>	<b>0.75 mg/L</b>	<b>0.75 mg/L</b>	<b>0.62 mg/L</b>		<b>250.0 mg/L*</b>
<b>MW-2 Cont.</b>	07/26/22	-	<b>0.00430</b>	<0.00200	<0.00200	<0.00400	<b>0.00430</b>	<b>335</b>
	12/01/22	-	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300	<b>140</b>
<b>MW-3</b>	09/20/11	-	<0.00014	<0.00030	<0.00020	<0.00023	<0.00030	<b>270</b>
	12/13/11	-	<0.00014	<0.00030	<0.00020	<0.00023	<0.00030	<b>52</b>
	04/06/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>51.7</b>
	06/19/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>52.6</b>
	09/24/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>54.9</b>
	12/14/12	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>46.0</b>
	03/27/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>97.5</b>
	06/07/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>47.0</b>
	09/19/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>54.3</b>
	12/27/13	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>51.3</b>
	03/27/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>57.0</b>
	06/19/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>60.2</b>
	09/30/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>53.2</b>
	12/15/14	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>51.1</b>
	03/24/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>56.9</b>
	06/18/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>52.4</b>
	09/08/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>51.8</b>
	12/18/15	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>51.0</b>
	03/15/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>55.9</b>
	06/30/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>53.4</b>
	09/29/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>49.0</b>
	12/07/16	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>54.6</b>
	03/03/17	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>55.1</b>
06/08/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>48.4</b>	
08/30/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>49.3</b>	
11/20/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>55.5</b>	
02/21/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>52.7</b>	
05/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>55.9</b>	
08/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>56.7</b>	
11/15/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>56.4</b>	
02/08/19	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>52.8</b>	
08/07/19	-	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<b>55.9</b>	

**TABLE 2**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Analysis of Groundwater Samples**  
**Lea County, New Mexico**

Sample ID	Sample Date	PSH Thickness (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/l)	Xylene (mg/L)	Total BTEX (mg/l)	Chloride (mg/L)	
<b>New Mexico Water Quality Control Commission Human Health Standard Maximum Allowable Concentration</b>			<b>0.010 mg/L</b>	<b>0.75 mg/L</b>	<b>0.75 mg/L</b>	<b>0.62 mg/L</b>		<b>250.0 mg/L*</b>	
<b>MW-3 Cont.</b>	02/18/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>55.7</b>	
	05/04/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>56.1</b>	
	08/11/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>63.4</b>	
	11/16/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>58.1</b>	
	07/26/22	-	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<b>186</b>	
	12/01/22	-	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300	<b>252</b>	
<b>MW-4</b>	09/29/16	-	<0.005	<0.005	<0.005	<0.015	<0.015	<b>696</b>	
	12/07/16	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>1,010</b>	
	03/03/17	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>1,080</b>	
	06/08/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>923</b>	
	08/30/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>905</b>	
	11/20/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>1,270</b>	
	02/21/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>1,110</b>	
	05/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>985</b>	
	08/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>877</b>	
	11/15/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>1,090</b>	
	<b>Dup</b>	11/15/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>1,100</b>
		02/08/19	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>1,010</b>
	<b>Dup</b>	02/08/19	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>1,020</b>
		08/07/19	-	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<b>933</b>
	<b>Dup</b>	08/07/19	-	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<b>931</b>
		02/18/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>1,070</b>
	<b>Dup</b>	02/18/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>1,070</b>
		05/04/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>1,040</b>
	<b>Dup</b>	05/04/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>1,050</b>
		08/11/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>818</b>
<b>Dup</b>	08/11/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>828</b>	
	11/16/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>999</b>	
<b>Dup</b>	11/16/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>1,010</b>	
	07/26/22	-	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<b>834</b>	
<b>Dup</b>	07/26/22	-	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<b>760</b>	
	12/01/22	-	<0.00100	<0.00100	<0.00100	0.000283	<0.00300	<b>1,040</b>	
<b>Dup</b>	12/01/22	-	<0.00100	<0.00100	<0.00100	<0.00300	<0.00300	<b>995</b>	



**TABLE 2**  
**JR Oil, LTD. CO.**  
**E. M. Elliott Tank Battery**  
**Summary of Analysis of Groundwater Samples**  
**Lea County, New Mexico**

Sample ID	Sample Date	PSH Thickness (ft)	Benzene (mg/L)	Toluene (mg/L)	Ethyl-benzene (mg/l)	Xylene (mg/L)	Total BTEX (mg/l)	Chloride (mg/L)
<b>New Mexico Water Quality Control Commission Human Health Standard Maximum Allowable Concentration</b>			<b>0.010 mg/L</b>	<b>0.75 mg/L</b>	<b>0.75 mg/L</b>	<b>0.62 mg/L</b>		<b>250.0 mg/L*</b>
<b>MW-5</b>	09/29/16	-	<0.005	<b>0.0011 J</b>	<0.005	<0.015	<b>0.0011 J</b>	<b>61.8</b>
	12/07/16	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>51.6</b>
	03/03/17	-	<0.005	<0.005	<0.005	<0.005	<0.005	<b>51.2</b>
	06/08/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>45.8</b>
	08/30/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>47.2</b>
	11/20/17	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>52.7</b>
	02/21/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>51.3</b>
	05/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>54.1</b>
	08/24/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>51.0</b>
	11/15/18	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>52.2</b>
	02/08/19	-	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<b>48.9</b>
	08/07/19	-	<0.0060	<0.0050	<0.0050	<0.0050	<0.0050	<b>50.4</b>
02/18/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>51.3</b>	
<b>MW-5 Cont.</b>	05/04/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00050	<b>49.4</b>
	08/11/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>50.2</b>
	11/16/20	-	<0.00060	<0.00050	<0.00050	<0.00050	<0.00060	<b>48.3</b>
	07/26/22		<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<b>52.1</b>
	12/01/22		<0.00100	<0.00100	<0.00100	<0.00300	<0.00300	<b>145</b>

( - ) Not Analyzed  
 NA - Not Analyzed, sample vials were broken during delivery to the laboratory  
 \* - Other Standard for Domestic Water Supply  
 ( J ) Analyte detected below quantitation limit  
 MW-4 and MW-5 drilled on 9/7/16, MW-1R drilled on 09/08/16



# Appendix A

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## State Correspondence

## Long, Brittany

---

**From:** Gonzales, Clair  
**Sent:** Wednesday, December 7, 2022 1:10 PM  
**To:** Long, Brittany  
**Subject:** FW: [EXTERNAL] EM Elliott Tank Battery

### Clair Gonzales,

**Clair Gonzales, P.G. | Project Manager & Office Lead**  
Phone: 432.687.8123 | Mobile 432.260.8634 | Fax:432.682.3946  
[clair.gonzales@tetrattech.com](mailto:clair.gonzales@tetrattech.com)

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---

**From:** Gonzales, Clair  
**Sent:** Tuesday, July 19, 2022 12:30 PM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; Rose-Coss, Dylan H, EMNRD <DylanH.Rose-Coss@state.nm.us>  
**Cc:** Romero, RosaM, EMNRD <RosaM.Romero@state.nm.us>; Velez, Nelson, EMNRD <Nelson.Velez@state.nm.us>; Weigand, Russell <Russell.Weigand@tetrattech.com>  
**Subject:** RE: [EXTERNAL] EM Elliott Tank Battery

Cory,

Thank you. The report that was attached was a previous report for reference, not a new submission. We mainly wanted to notify you that JR Oil has taken over operations at the site and we are going to resume quarterly sampling this month. The annual 2022 report will be submitted through the portal.

Thank you,

### Clair Gonzales,

**Clair Gonzales, P.G. | Project Manager & Office Lead**  
Phone: 432.687.8123 | Mobile 432.260.8634 | Fax:432.682.3946  
[clair.gonzales@tetrattech.com](mailto:clair.gonzales@tetrattech.com)

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---

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Tuesday, July 19, 2022 12:26 PM  
**To:** Rose-Coss, Dylan H, EMNRD <[DylanH.Rose-Coss@state.nm.us](mailto:DylanH.Rose-Coss@state.nm.us)>; Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>  
**Cc:** Romero, RosaM, EMNRD <[RosaM.Romero@state.nm.us](mailto:RosaM.Romero@state.nm.us)>; Velez, Nelson, EMNRD <[Nelson.Velez@state.nm.us](mailto:Nelson.Velez@state.nm.us)>  
**Subject:** RE: [EXTERNAL] EM Elliott Tank Battery

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. **⚠**

Clair,

The attached AGWR will not be reviewed or considered submitted.. All ground water related reports must be submitted on the OCD Permitting website via the Ground Water Abatement Submission.

You will need an active incident# to submit the document.. the incident # associated to AP-88 is NRM2103338654

Thanks,

**Cory Smith** • Environmental Projects Supervisor  
Environmental Bureau  
EMNRD - Oil Conservation Division  
5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113  
505.419.2687 | [Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Rose-Coss, Dylan H, EMNRD <[DylanH.Rose-Coss@state.nm.us](mailto:DylanH.Rose-Coss@state.nm.us)>  
**Sent:** Tuesday, July 19, 2022 10:34 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>  
**Subject:** FW: [EXTERNAL] EM Elliott Tank Battery

Clair,

Thanks for submitting the GW report. However, I am no longer the reviewer and reports are no longer submitted through email.

I've Cc'd Cory Smith. He manages the group that will be reviewing the document. He can chime in and let you know where and how the report is to be submitted.

Regards,

**Dylan Rose-Coss**

*Petroleum Specialist*  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

C: (505) 372-8687



---

**From:** Gonzales, Clair <[Clair.Gonzales@tetrattech.com](mailto:Clair.Gonzales@tetrattech.com)>  
**Sent:** Monday, July 18, 2022 7:52 AM  
**To:** Rose-Coss, Dylan H, EMNRD <[DylanH.Rose-Coss@state.nm.us](mailto:DylanH.Rose-Coss@state.nm.us)>  
**Cc:** Rex Tippy <[rtippy@ravenop.com](mailto:rtippy@ravenop.com)>; jlatimer@coltenergynm.com; Joe Tippy <[jtippy@coltenergynm.com](mailto:jtippy@coltenergynm.com)>; Daniel Colvin <[danielk.colvin@yahoo.com](mailto:danielk.colvin@yahoo.com)>; Weigand, Russell <[Russell.Weigand@tetrattech.com](mailto:Russell.Weigand@tetrattech.com)>  
**Subject:** [EXTERNAL] EM Elliott Tank Battery

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Morning,

JR Oil has recently acquired the EM Elliot Tank Battery, NMOCD Abatement Plan No. AP-088 previously held by Occidental Petroleum (Oxy). Attached is the last groundwater sampling report that was submitted on behalf of Oxy. Tetra Tech will be initiate the quarterly sampling at the site starting this month, July 2022, and will prepare an annual report for 2022.

Please let me know if you have any questions or concerns.

Thank you,

**Clair Gonzales,**

**Clair Gonzales, P.G. | Project Manager & Office Lead**  
Phone: 432.687.8123 | Mobile 432.260.8634 | Fax:432.682.3946  
[clair.gonzales@tetrattech.com](mailto:clair.gonzales@tetrattech.com)

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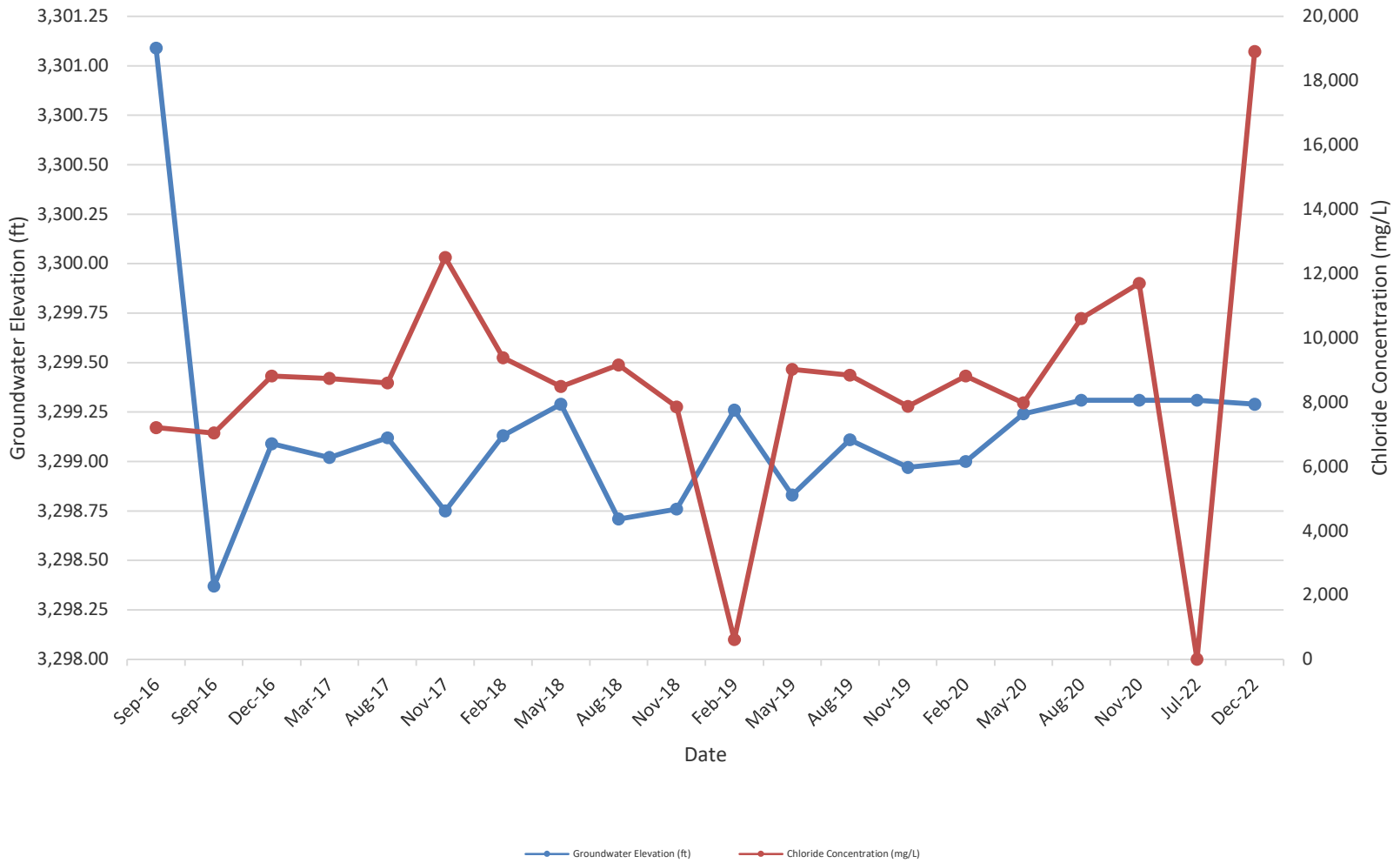
# Appendix B

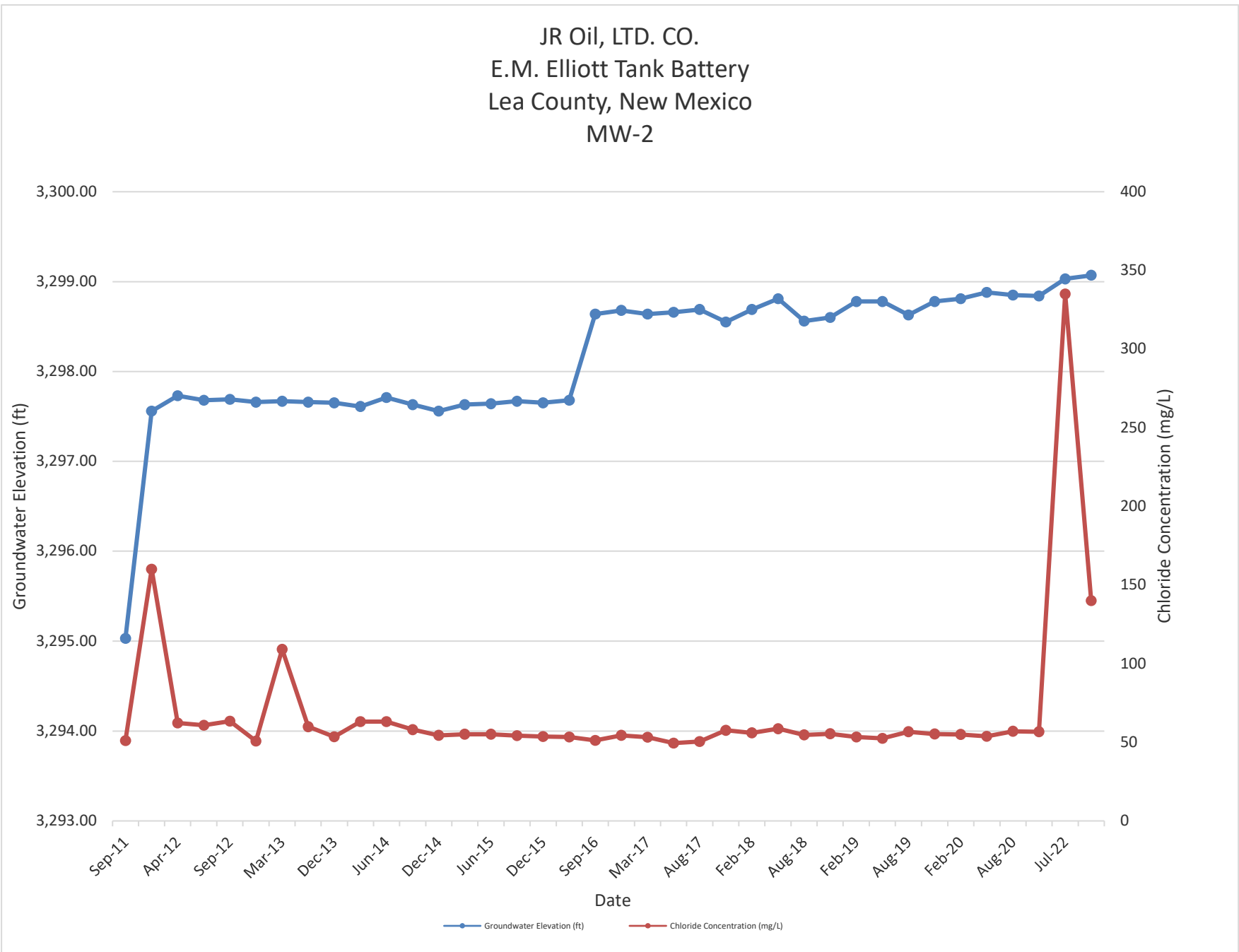
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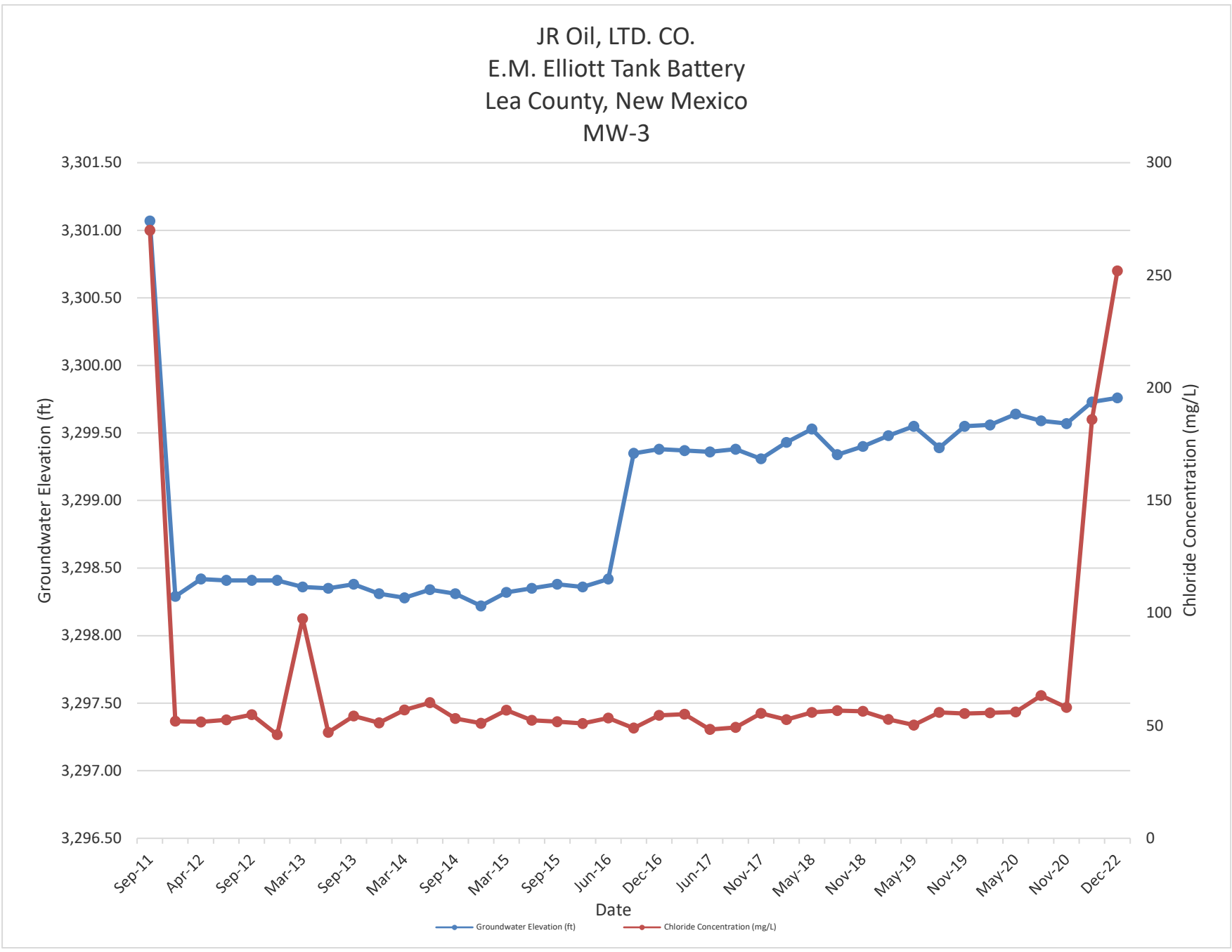
Graphs

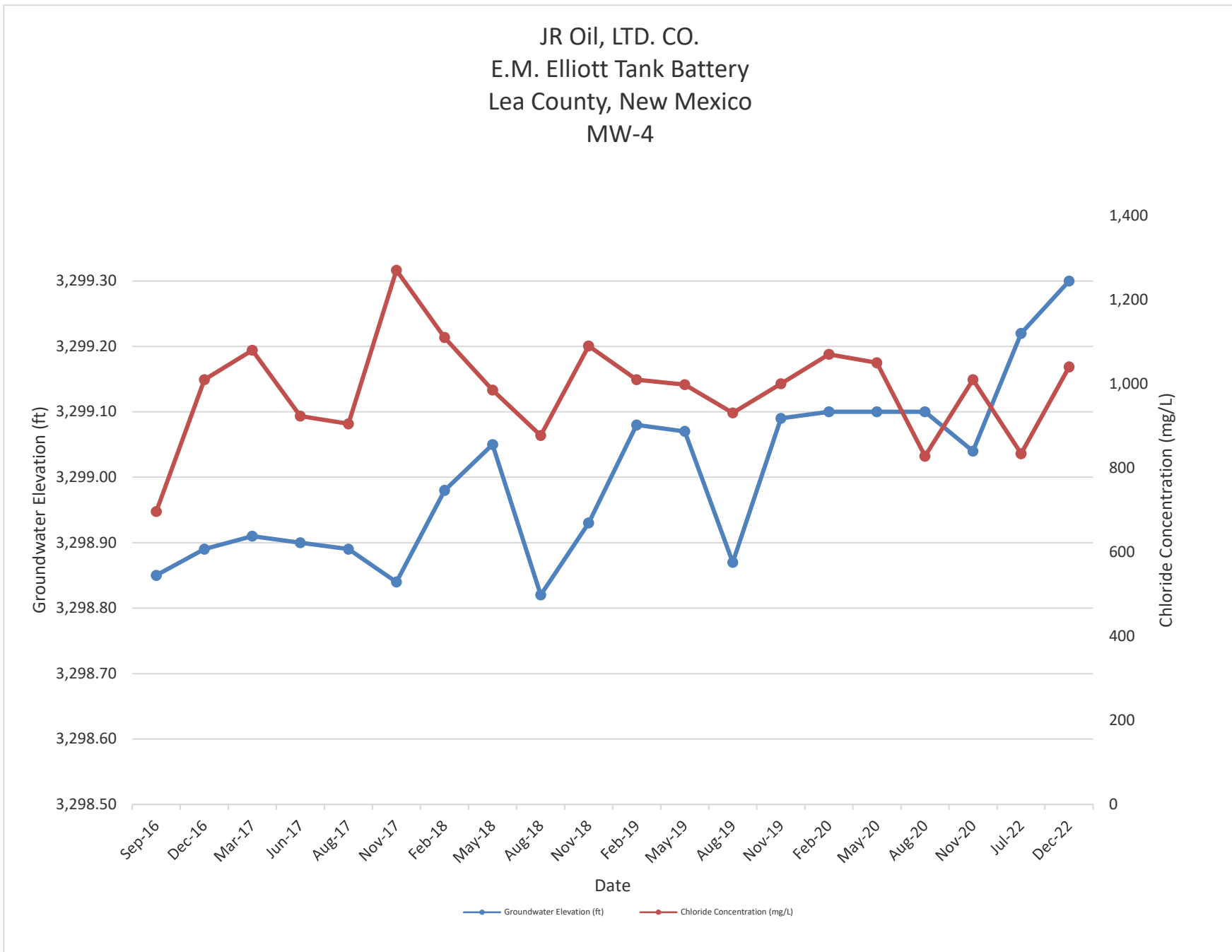
JR Oil, LTD. CO.  
E. M. Elliott Tank Battery  
Lea County, New Mexico  
MW-1R



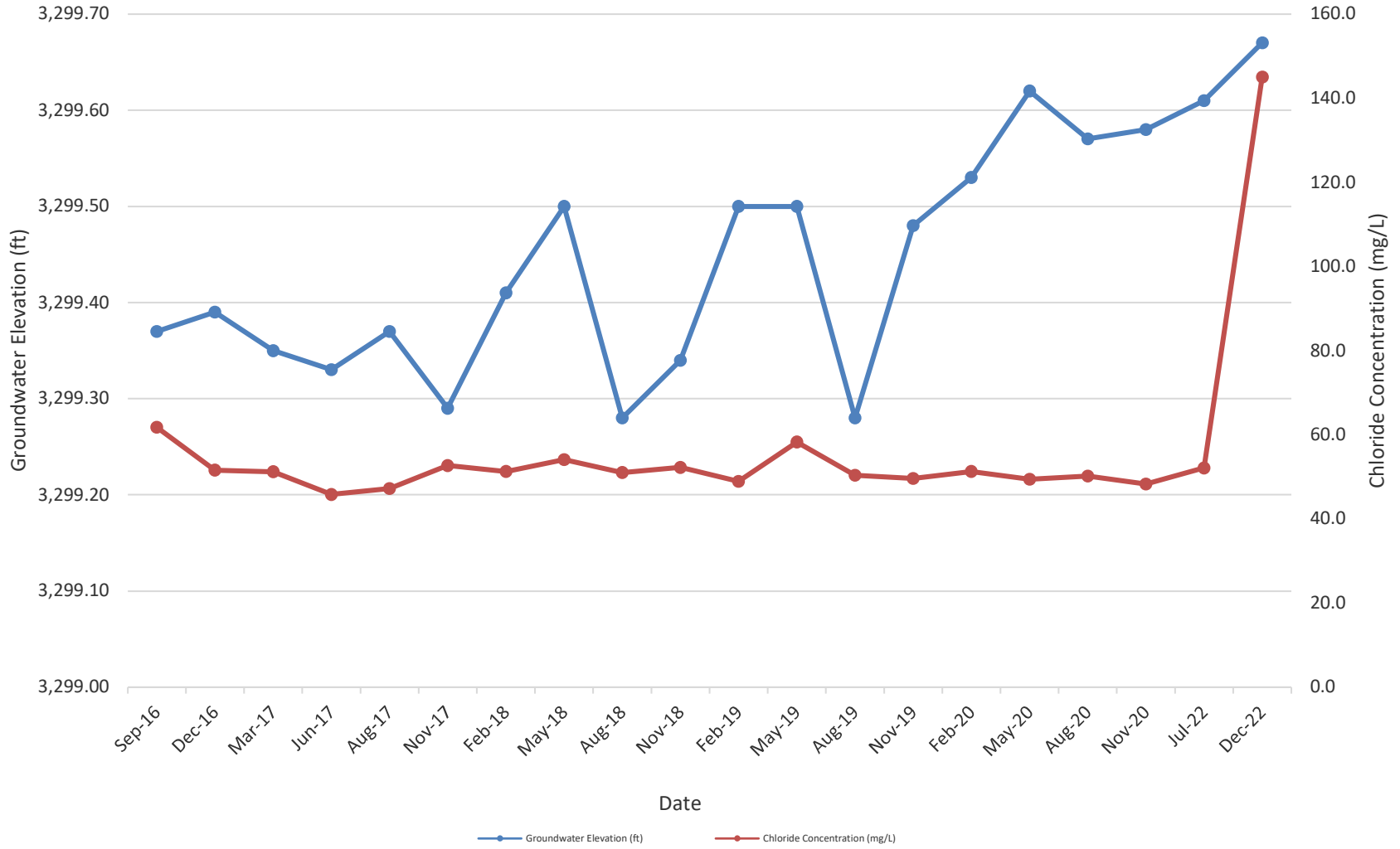








JR Oil, LTD. CO.  
E.M. Elliott Tank Battery  
Lea County, New Mexico  
MW-5





# Appendix C

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Laboratory Reports



Environment Testing  
America

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## ANALYTICAL REPORT

Eurofins Midland  
1211 W. Florida Ave  
Midland, TX 79701  
Tel: (432)704-5440

Laboratory Job ID: 880-17483-1  
Laboratory Sample Delivery Group: Lea County NM  
Client Project/Site: EM Elliot

For:  
Tetra Tech, Inc.  
901 W Wall  
Ste 100  
Midland, Texas 79701

Attn: Clair Gonzales

Authorized for release by:  
8/2/2022 7:58:03 PM

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Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Laboratory Job ID: 880-17483-1  
SDG: Lea County NM

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## Definitions/Glossary

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

### Case Narrative

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

**Job ID: 880-17483-1**

**Laboratory: Eurofins Midland**

**Narrative**

**Job Narrative**  
**880-17483-1**

**Receipt**

The samples were received on 7/28/2022 3:12 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

**GC VOA**

Method 8021B: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 880-31254 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Benzene and Toluene in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

**HPLC/IC**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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### Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

**Client Sample ID: MW-2**

**Lab Sample ID: 880-17483-1**

Date Collected: 07/26/22 15:45

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Benzene</b>	<b>0.00430</b>		0.00200		mg/L			08/02/22 16:20	1
Toluene	<0.00200	U	0.00200		mg/L			08/02/22 16:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			08/02/22 16:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			08/02/22 16:20	1
o-Xylene	<0.00200	U	0.00200		mg/L			08/02/22 16:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			08/02/22 16:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130		08/02/22 16:20	1
1,4-Difluorobenzene (Surr)	104		70 - 130		08/02/22 16:20	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00430</b>		0.00400		mg/L			08/02/22 20:42	1

**Method: 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>335</b>		5.00		mg/L			07/29/22 16:59	10

**Client Sample ID: MW-5**

**Lab Sample ID: 880-17483-2**

Date Collected: 07/26/22 16:30

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			08/02/22 16:41	1
Toluene	<0.00200	U	0.00200		mg/L			08/02/22 16:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			08/02/22 16:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			08/02/22 16:41	1
o-Xylene	<0.00200	U	0.00200		mg/L			08/02/22 16:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			08/02/22 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130		08/02/22 16:41	1
1,4-Difluorobenzene (Surr)	102		70 - 130		08/02/22 16:41	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			08/02/22 20:42	1

**Method: 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>52.1</b>		2.50		mg/L			07/29/22 17:07	5

**Client Sample ID: MW-3**

**Lab Sample ID: 880-17483-3**

Date Collected: 07/26/22 11:30

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			08/02/22 17:01	1
Toluene	<0.00200	U	0.00200		mg/L			08/02/22 17:01	1

Eurofins Midland

### Client Sample Results

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

**Client Sample ID: MW-3**

**Lab Sample ID: 880-17483-3**

Date Collected: 07/26/22 11:30

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/L			08/02/22 17:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			08/02/22 17:01	1
o-Xylene	<0.00200	U	0.00200		mg/L			08/02/22 17:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			08/02/22 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130					08/02/22 17:01	1
1,4-Difluorobenzene (Surr)	106		70 - 130					08/02/22 17:01	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			08/02/22 20:42	1

**Method: 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	186		5.00		mg/L			07/29/22 17:30	10

**Client Sample ID: MW-4**

**Lab Sample ID: 880-17483-4**

Date Collected: 07/26/22 14:25

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			08/02/22 17:22	1
Toluene	<0.00200	U	0.00200		mg/L			08/02/22 17:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			08/02/22 17:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			08/02/22 17:22	1
o-Xylene	<0.00200	U	0.00200		mg/L			08/02/22 17:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			08/02/22 17:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130					08/02/22 17:22	1
1,4-Difluorobenzene (Surr)	103		70 - 130					08/02/22 17:22	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			08/02/22 20:42	1

**Method: 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	834		10.0		mg/L			07/29/22 18:23	20

**Client Sample ID: DUP**

**Lab Sample ID: 880-17483-5**

Date Collected: 07/26/22 00:00

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			08/02/22 17:42	1
Toluene	<0.00200	U	0.00200		mg/L			08/02/22 17:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			08/02/22 17:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			08/02/22 17:42	1

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### Client Sample Results

Client: Tetra Tech, Inc.  
 Project/Site: EM Elliot

Job ID: 880-17483-1  
 SDG: Lea County NM

**Client Sample ID: DUP**

**Lab Sample ID: 880-17483-5**

Date Collected: 07/26/22 00:00

Matrix: Water

Date Received: 07/28/22 15:12

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/L			08/02/22 17:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			08/02/22 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130					08/02/22 17:42	1
1,4-Difluorobenzene (Surr)	103		70 - 130					08/02/22 17:42	1

**Method: Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/L			08/02/22 20:42	1

**Method: 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	760		10.0		mg/L			07/29/22 18:31	20

### Surrogate Summary

Client: Tetra Tech, Inc.  
 Project/Site: EM Elliot

Job ID: 880-17483-1  
 SDG: Lea County NM

**Method: 8021B - Volatile Organic Compounds (GC)**

**Matrix: Water**

**Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-17483-1	MW-2	102	104
880-17483-2	MW-5	99	102
880-17483-3	MW-3	101	106
880-17483-4	MW-4	98	103
880-17483-5	DUP	97	103
880-17570-A-2 MS	Matrix Spike	91	121
880-17570-A-2 MSD	Matrix Spike Duplicate	93	115
LCS 880-31254/3	Lab Control Sample	101	99
LCSD 880-31254/4	Lab Control Sample Dup	110	99
MB 880-31254/8	Method Blank	97	106

**Surrogate Legend**  
 BFB = 4-Bromofluorobenzene (Surr)  
 DFBZ = 1,4-Difluorobenzene (Surr)

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### QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

#### Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-31254/8  
Matrix: Water  
Analysis Batch: 31254

Client Sample ID: Method Blank  
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/L			08/02/22 15:30	1
Toluene	<0.00200	U	0.00200		mg/L			08/02/22 15:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/L			08/02/22 15:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/L			08/02/22 15:30	1
o-Xylene	<0.00200	U	0.00200		mg/L			08/02/22 15:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/L			08/02/22 15:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130		08/02/22 15:30	1
1,4-Difluorobenzene (Surr)	106		70 - 130		08/02/22 15:30	1

Lab Sample ID: LCS 880-31254/3  
Matrix: Water  
Analysis Batch: 31254

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08908		mg/L		89	70 - 130
Toluene	0.100	0.1051		mg/L		105	70 - 130
Ethylbenzene	0.100	0.09256		mg/L		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1887		mg/L		94	70 - 130
o-Xylene	0.100	0.1091		mg/L		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-31254/4  
Matrix: Water  
Analysis Batch: 31254

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09286		mg/L		93	70 - 130	4	20
Toluene	0.100	0.1085		mg/L		108	70 - 130	3	20
Ethylbenzene	0.100	0.09691		mg/L		97	70 - 130	5	20
m-Xylene & p-Xylene	0.200	0.1988		mg/L		99	70 - 130	5	20
o-Xylene	0.100	0.1161		mg/L		116	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-17570-A-2 MS  
Matrix: Water  
Analysis Batch: 31254

Client Sample ID: Matrix Spike  
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.63	E	0.100	1.666	E 4	mg/L		32	70 - 130
Toluene	0.748	E	0.100	0.8174	E 4	mg/L		70	70 - 130

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### QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

#### Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-17570-A-2 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 31254

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.0581		0.100	0.1384		mg/L		80	70 - 130
m-Xylene & p-Xylene	0.0476		0.200	0.2104		mg/L		81	70 - 130
o-Xylene	0.0281		0.100	0.1245		mg/L		96	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	121		70 - 130

Lab Sample ID: 880-17570-A-2 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 31254

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	1.63	E	0.100	1.641	E 4	mg/L		7	70 - 130	2	25
Toluene	0.748	E	0.100	0.7918	E 4	mg/L		44	70 - 130	3	25
Ethylbenzene	0.0581		0.100	0.1323		mg/L		74	70 - 130	4	25
m-Xylene & p-Xylene	0.0476		0.200	0.2006		mg/L		77	70 - 130	5	25
o-Xylene	0.0281		0.100	0.1194		mg/L		91	70 - 130	4	25

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-30940/3

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 30940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.500	U	0.500		mg/L			07/28/22 19:46	1

Lab Sample ID: LCS 880-30940/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 30940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	25.93		mg/L		104	90 - 110

Lab Sample ID: LCSD 880-30940/5

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 30940

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0	26.01		mg/L		104	90 - 110	0	20

### QC Sample Results

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: 880-17483-2 MS**  
**Matrix: Water**  
**Analysis Batch: 30940**

**Client Sample ID: MW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	52.1		125	178.4		mg/L		101	90 - 110

**Lab Sample ID: 880-17483-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 30940**

**Client Sample ID: MW-5**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	52.1		125	171.1		mg/L		95	90 - 110	4	20

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## QC Association Summary

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

## GC VOA

## Analysis Batch: 31254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17483-1	MW-2	Total/NA	Water	8021B	
880-17483-2	MW-5	Total/NA	Water	8021B	
880-17483-3	MW-3	Total/NA	Water	8021B	
880-17483-4	MW-4	Total/NA	Water	8021B	
880-17483-5	DUP	Total/NA	Water	8021B	
MB 880-31254/8	Method Blank	Total/NA	Water	8021B	
LCS 880-31254/3	Lab Control Sample	Total/NA	Water	8021B	
LCSD 880-31254/4	Lab Control Sample Dup	Total/NA	Water	8021B	
880-17570-A-2 MS	Matrix Spike	Total/NA	Water	8021B	
880-17570-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8021B	

## Analysis Batch: 31363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17483-1	MW-2	Total/NA	Water	Total BTEX	
880-17483-2	MW-5	Total/NA	Water	Total BTEX	
880-17483-3	MW-3	Total/NA	Water	Total BTEX	
880-17483-4	MW-4	Total/NA	Water	Total BTEX	
880-17483-5	DUP	Total/NA	Water	Total BTEX	

## HPLC/IC

## Analysis Batch: 30940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-17483-1	MW-2	Total/NA	Water	300.0	
880-17483-2	MW-5	Total/NA	Water	300.0	
880-17483-3	MW-3	Total/NA	Water	300.0	
880-17483-4	MW-4	Total/NA	Water	300.0	
880-17483-5	DUP	Total/NA	Water	300.0	
MB 880-30940/3	Method Blank	Total/NA	Water	300.0	
LCS 880-30940/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-30940/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-17483-2 MS	MW-5	Total/NA	Water	300.0	
880-17483-2 MSD	MW-5	Total/NA	Water	300.0	



### Lab Chronicle

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

**Client Sample ID: MW-2**

**Lab Sample ID: 880-17483-1**

Date Collected: 07/26/22 15:45

Matrix: Water

Date Received: 07/28/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	31254	08/02/22 16:20	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31363	08/02/22 20:42	AJ	XEN MID
Total/NA	Analysis	300.0		10			30940	07/29/22 16:59	CH	XEN MID

**Client Sample ID: MW-5**

**Lab Sample ID: 880-17483-2**

Date Collected: 07/26/22 16:30

Matrix: Water

Date Received: 07/28/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	31254	08/02/22 16:41	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31363	08/02/22 20:42	AJ	XEN MID
Total/NA	Analysis	300.0		5			30940	07/29/22 17:07	CH	XEN MID

**Client Sample ID: MW-3**

**Lab Sample ID: 880-17483-3**

Date Collected: 07/26/22 11:30

Matrix: Water

Date Received: 07/28/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	31254	08/02/22 17:01	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31363	08/02/22 20:42	AJ	XEN MID
Total/NA	Analysis	300.0		10			30940	07/29/22 17:30	CH	XEN MID

**Client Sample ID: MW-4**

**Lab Sample ID: 880-17483-4**

Date Collected: 07/26/22 14:25

Matrix: Water

Date Received: 07/28/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	31254	08/02/22 17:22	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31363	08/02/22 20:42	AJ	XEN MID
Total/NA	Analysis	300.0		20			30940	07/29/22 18:23	CH	XEN MID

**Client Sample ID: DUP**

**Lab Sample ID: 880-17483-5**

Date Collected: 07/26/22 00:00

Matrix: Water

Date Received: 07/28/22 15:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8021B		1	5 mL	5 mL	31254	08/02/22 17:42	AJ	XEN MID
Total/NA	Analysis	Total BTEX		1			31363	08/02/22 20:42	AJ	XEN MID
Total/NA	Analysis	300.0		20			30940	07/29/22 18:31	CH	XEN MID

**Laboratory References:**

XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

### Accreditation/Certification Summary

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

#### Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
Total BTEX		Water	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

### Method Summary

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XEN MID
Total BTEX	Total BTEX Calculation	TAL SOP	XEN MID
300.0	Anions, Ion Chromatography	MCAWW	XEN MID
5030B	Purge and Trap	SW846	XEN MID

**Protocol References:**

- MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

**Laboratory References:**

- XEN MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



### Sample Summary

Client: Tetra Tech, Inc.  
Project/Site: EM Elliot

Job ID: 880-17483-1  
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-17483-1	MW-2	Water	07/26/22 15:45	07/28/22 15:12
880-17483-2	MW-5	Water	07/26/22 16:30	07/28/22 15:12
880-17483-3	MW-3	Water	07/26/22 11:30	07/28/22 15:12
880-17483-4	MW-4	Water	07/26/22 14:25	07/28/22 15:12
880-17483-5	DUP	Water	07/26/22 00:00	07/28/22 15:12

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



### Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 880-17483-1  
SDG Number: Lea County NM

**Login Number: 17483**  
**List Number: 1**  
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

- 1
- 2
- 3
- 4
- 5
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- 10
- 11
- 12
- 13
- 14



# ANALYTICAL REPORT

December 13, 2022

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

## Tetra Tech EMI - Midland, TX

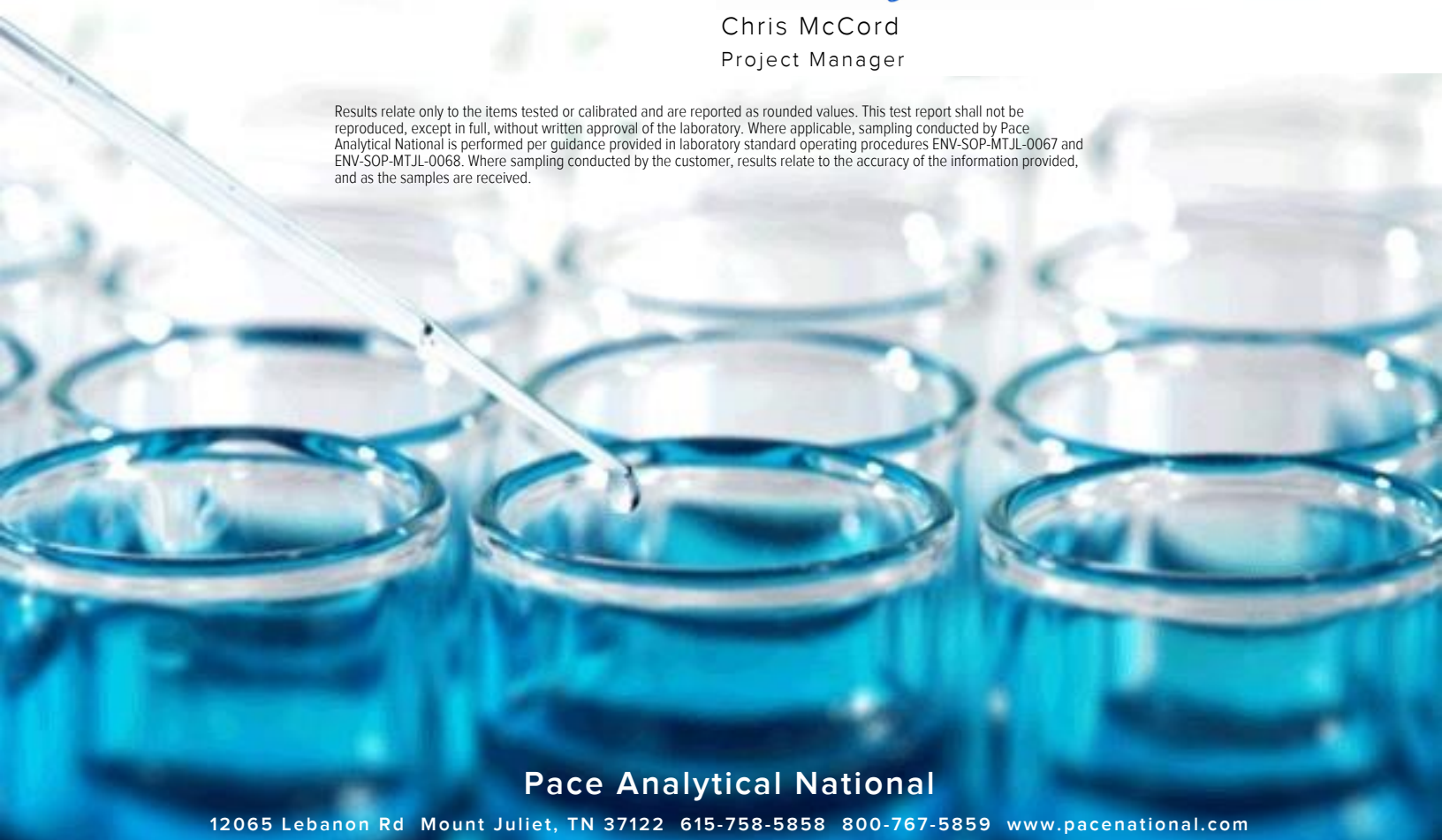
Sample Delivery Group: L1563680  
 Samples Received: 12/03/2022  
 Project Number:  
 Description: Em Elliot

Report To: Clair Gonzales  
 901 West Wall  
 Suite 100  
 Midland, TX 79701

Entire Report Reviewed By:










Chris McCord  
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

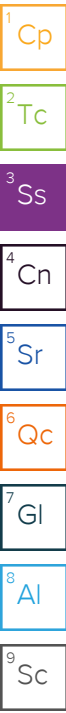
<b>Cp: Cover Page</b>	<b>1</b>	
<b>Tc: Table of Contents</b>	<b>2</b>	
<b>Ss: Sample Summary</b>	<b>3</b>	
<b>Cn: Case Narrative</b>	<b>4</b>	
<b>Sr: Sample Results</b>	<b>5</b>	
<b>MW-4 L1563680-01</b>	<b>5</b>	
<b>MW-3 L1563680-02</b>	<b>6</b>	
<b>MW-5 L1563680-03</b>	<b>7</b>	
<b>MW-2 L1563680-04</b>	<b>8</b>	
<b>MW-1R L1563680-05</b>	<b>9</b>	
<b>DUP L1563680-06</b>	<b>10</b>	
<b>Qc: Quality Control Summary</b>	<b>11</b>	
<b>Wet Chemistry by Method 9056A</b>	<b>11</b>	
<b>Volatile Organic Compounds (GC/MS) by Method 8260B</b>	<b>13</b>	
<b>Gl: Glossary of Terms</b>	<b>14</b>	
<b>Al: Accreditations &amp; Locations</b>	<b>15</b>	
<b>Sc: Sample Chain of Custody</b>	<b>16</b>	



MW-4 L1563680-01 GW

Collected by Matthew Castrejan  
 Collected date/time 12/01/22 13:00  
 Received date/time 12/03/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1969669	20	12/06/22 05:48	12/06/22 05:48	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1970329	1	12/07/22 02:47	12/07/22 02:47	ACG	Mt. Juliet, TN



MW-3 L1563680-02 GW

Collected by Matthew Castrejan  
 Collected date/time 12/01/22 14:35  
 Received date/time 12/03/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1969669	5	12/06/22 06:50	12/06/22 06:50	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1970329	1	12/07/22 03:06	12/07/22 03:06	ACG	Mt. Juliet, TN

MW-5 L1563680-03 GW

Collected by Matthew Castrejan  
 Collected date/time 12/01/22 15:50  
 Received date/time 12/03/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1969674	5	12/06/22 02:54	12/06/22 02:54	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1970329	1	12/07/22 03:25	12/07/22 03:25	ACG	Mt. Juliet, TN

MW-2 L1563680-04 GW

Collected by Matthew Castrejan  
 Collected date/time 12/02/22 09:00  
 Received date/time 12/03/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1969674	5	12/06/22 03:07	12/06/22 03:07	LBR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1970329	1	12/07/22 03:43	12/07/22 03:43	ACG	Mt. Juliet, TN

MW-1R L1563680-05 GW

Collected by Matthew Castrejan  
 Collected date/time 12/02/22 11:00  
 Received date/time 12/03/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1969669	500	12/06/22 07:02	12/06/22 07:02	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1970329	1	12/07/22 04:02	12/07/22 04:02	ACG	Mt. Juliet, TN

DUP L1563680-06 GW

Collected by Matthew Castrejan  
 Collected date/time 12/01/22 00:00  
 Received date/time 12/03/22 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1969669	20	12/06/22 07:15	12/06/22 07:15	GEB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1970329	1	12/07/22 04:21	12/07/22 04:21	ACG	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Chris McCord  
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Collected date/time: 12/01/22 13:00

L1563680

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	1040		7.58	20.0	20	12/06/2022 05:48	<a href="#">WG1969669</a>

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.0000941	0.00100	1	12/07/2022 02:47	<a href="#">WG1970329</a>
Toluene	U		0.000278	0.00100	1	12/07/2022 02:47	<a href="#">WG1970329</a>
Ethylbenzene	U		0.000137	0.00100	1	12/07/2022 02:47	<a href="#">WG1970329</a>
Total Xylenes	0.000283	J	0.000174	0.00300	1	12/07/2022 02:47	<a href="#">WG1970329</a>
(S) Toluene-d8	108			80.0-120		12/07/2022 02:47	<a href="#">WG1970329</a>
(S) 4-Bromofluorobenzene	103			77.0-126		12/07/2022 02:47	<a href="#">WG1970329</a>
(S) 1,2-Dichloroethane-d4	90.4			70.0-130		12/07/2022 02:47	<a href="#">WG1970329</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 12/01/22 14:35

L1563680

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	252	V	1.90	5.00	5	12/06/2022 06:50	<a href="#">WG1969669</a>

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.0000941	0.00100	1	12/07/2022 03:06	<a href="#">WG1970329</a>
Toluene	U		0.000278	0.00100	1	12/07/2022 03:06	<a href="#">WG1970329</a>
Ethylbenzene	U		0.000137	0.00100	1	12/07/2022 03:06	<a href="#">WG1970329</a>
Total Xylenes	U		0.000174	0.00300	1	12/07/2022 03:06	<a href="#">WG1970329</a>
(S) Toluene-d8	106			80.0-120		12/07/2022 03:06	<a href="#">WG1970329</a>
(S) 4-Bromofluorobenzene	103			77.0-126		12/07/2022 03:06	<a href="#">WG1970329</a>
(S) 1,2-Dichloroethane-d4	89.5			70.0-130		12/07/2022 03:06	<a href="#">WG1970329</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 12/01/22 15:50

L1563680

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	145		1.90	5.00	5	12/06/2022 02:54	<a href="#">WG1969674</a>

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.0000941	0.00100	1	12/07/2022 03:25	<a href="#">WG1970329</a>
Toluene	U		0.000278	0.00100	1	12/07/2022 03:25	<a href="#">WG1970329</a>
Ethylbenzene	U		0.000137	0.00100	1	12/07/2022 03:25	<a href="#">WG1970329</a>
Total Xylenes	U		0.000174	0.00300	1	12/07/2022 03:25	<a href="#">WG1970329</a>
(S) Toluene-d8	105			80.0-120		12/07/2022 03:25	<a href="#">WG1970329</a>
(S) 4-Bromofluorobenzene	105			77.0-126		12/07/2022 03:25	<a href="#">WG1970329</a>
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		12/07/2022 03:25	<a href="#">WG1970329</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 12/02/22 09:00

L1563680

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Chloride	140		1.90	5.00	5	12/06/2022 03:07	<a href="#">WG1969674</a>

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Benzene	U		0.0000941	0.00100	1	12/07/2022 03:43	<a href="#">WG1970329</a>
Toluene	U		0.000278	0.00100	1	12/07/2022 03:43	<a href="#">WG1970329</a>
Ethylbenzene	U		0.000137	0.00100	1	12/07/2022 03:43	<a href="#">WG1970329</a>
Total Xylenes	U		0.000174	0.00300	1	12/07/2022 03:43	<a href="#">WG1970329</a>
(S) Toluene-d8	105			80.0-120		12/07/2022 03:43	<a href="#">WG1970329</a>
(S) 4-Bromofluorobenzene	105			77.0-126		12/07/2022 03:43	<a href="#">WG1970329</a>
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		12/07/2022 03:43	<a href="#">WG1970329</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 12/02/22 11:00

L1563680

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Chloride	18900		190	500	500	12/06/2022 07:02	<a href="#">WG1969669</a>

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Benzene	U		0.0000941	0.00100	1	12/07/2022 04:02	<a href="#">WG1970329</a>
Toluene	U		0.000278	0.00100	1	12/07/2022 04:02	<a href="#">WG1970329</a>
Ethylbenzene	U		0.000137	0.00100	1	12/07/2022 04:02	<a href="#">WG1970329</a>
Total Xylenes	U		0.000174	0.00300	1	12/07/2022 04:02	<a href="#">WG1970329</a>
(S) Toluene-d8	104			80.0-120		12/07/2022 04:02	<a href="#">WG1970329</a>
(S) 4-Bromofluorobenzene	105			77.0-126		12/07/2022 04:02	<a href="#">WG1970329</a>
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		12/07/2022 04:02	<a href="#">WG1970329</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Collected date/time: 12/01/22 00:00

L1563680

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Chloride	995		7.58	20.0	20	12/06/2022 07:15	<a href="#">WG1969669</a>

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
Benzene	U		0.0000941	0.00100	1	12/07/2022 04:21	<a href="#">WG1970329</a>
Toluene	U		0.000278	0.00100	1	12/07/2022 04:21	<a href="#">WG1970329</a>
Ethylbenzene	U		0.000137	0.00100	1	12/07/2022 04:21	<a href="#">WG1970329</a>
Total Xylenes	U		0.000174	0.00300	1	12/07/2022 04:21	<a href="#">WG1970329</a>
(S) Toluene-d8	103			80.0-120		12/07/2022 04:21	<a href="#">WG1970329</a>
(S) 4-Bromofluorobenzene	102			77.0-126		12/07/2022 04:21	<a href="#">WG1970329</a>
(S) 1,2-Dichloroethane-d4	92.8			70.0-130		12/07/2022 04:21	<a href="#">WG1970329</a>

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 9056A

[L1563680-01,02,05,06](#)

Method Blank (MB)

(MB) R3868580-1 12/05/22 22:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		0.379	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1563171-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1563171-01 12/05/22 23:58 • (DUP) R3868580-3 12/06/22 00:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	101	101	1	0.0725		15

L1563680-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1563680-06 12/06/22 07:15 • (DUP) R3868580-7 12/06/22 07:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	995	1000	20	0.549		15

Laboratory Control Sample (LCS)

(LCS) R3868580-2 12/05/22 22:33

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40.0	40.8	102	80.0-120	

L1563171-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1563171-01 12/05/22 23:58 • (MS) R3868580-4 12/06/22 00:23 • (MSD) R3868580-5 12/06/22 00:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	50.0	101	147	148	93.8	94.5	1	80.0-120			0.250	15

L1563680-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1563680-02 12/06/22 06:25 • (MS) R3868580-6 12/06/22 06:37

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Chloride	50.0	251	289	77.2	1	80.0-120	<u>EV</u>

Wet Chemistry by Method 9056A

L1563680-03.04

Method Blank (MB)

(MB) R3869409-1 12/05/22 20:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Chloride	U		0.379	1.00

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

L1563640-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1563640-03 12/05/22 21:35 • (DUP) R3869409-3 12/05/22 21:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	64.9	63.1	1	2.92		15

L1563640-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1563640-17 12/06/22 01:50 • (DUP) R3869409-6 12/06/22 02:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Chloride	60.6	58.9	1	2.81		15

Laboratory Control Sample (LCS)

(LCS) R3869409-2 12/05/22 20:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Chloride	40.0	38.6	96.5	80.0-120	

L1563640-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1563640-03 12/05/22 21:35 • (MS) R3869409-4 12/05/22 22:01 • (MSD) R3869409-5 12/05/22 22:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Chloride	50.0	64.9	116	114	102	99.0	1	80.0-120			1.39	15

L1563640-17 Original Sample (OS) • Matrix Spike (MS)

(OS) L1563640-17 12/06/22 01:50 • (MS) R3869409-7 12/06/22 02:16

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Chloride	50.0	60.6	111	99.9	1	80.0-120	

Volatile Organic Compounds (GC/MS) by Method 8260B

[L1563680-01,02,03,04,05,06](#)

Method Blank (MB)

(MB) R3870792-3 12/07/22 00:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Benzene	U		0.0000941	0.00100
Toluene	U		0.000278	0.00100
Ethylbenzene	U		0.000137	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	105			80.0-120
(S) 4-Bromofluorobenzene	103			77.0-126
(S) 1,2-Dichloroethane-d4	84.5			70.0-130

<sup>1</sup>Cp

<sup>2</sup>Tc

<sup>3</sup>Ss

<sup>4</sup>Cn

<sup>5</sup>Sr

<sup>6</sup>Qc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3870792-1 12/06/22 22:41 • (LCSD) R3870792-2 12/06/22 23:00

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Benzene	0.00500	0.00470	0.00447	94.0	89.4	70.0-123			5.02	20
Toluene	0.00500	0.00468	0.00481	93.6	96.2	79.0-120			2.74	20
Ethylbenzene	0.00500	0.00451	0.00474	90.2	94.8	79.0-123			4.97	20
Xylenes, Total	0.0150	0.0140	0.0136	93.3	90.7	79.0-123			2.90	20
(S) Toluene-d8				107	108	80.0-120				
(S) 4-Bromofluorobenzene				106	101	77.0-126				
(S) 1,2-Dichloroethane-d4				91.8	85.9	70.0-130				

<sup>7</sup>Gl

<sup>8</sup>Al

<sup>9</sup>Sc

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1  
Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

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Sc

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico <sup>1</sup>	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina <sup>1</sup>	DW21704
Georgia	NELAP	North Carolina <sup>3</sup>	41
Georgia <sup>1</sup>	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky <sup>1,6</sup>	KY90010	South Carolina	84004002
Kentucky <sup>2</sup>	16	South Dakota	n/a
Louisiana	AI30792	Tennessee <sup>1,4</sup>	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas <sup>5</sup>	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 <sup>5</sup>	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

<sup>1</sup> Cp

<sup>2</sup> Tc

<sup>3</sup> Ss

<sup>4</sup> Cn

<sup>5</sup> Sr

<sup>6</sup> Qc

<sup>7</sup> Gl


<sup>8</sup> Al

<sup>9</sup> Sc

<sup>1</sup> Drinking Water <sup>2</sup> Underground Storage Tanks <sup>3</sup> Aquatic Toxicity <sup>4</sup> Chemical/Microbiological <sup>5</sup> Mold <sup>6</sup> Wastewater n/a Accreditation not applicable

\* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

\* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Billing Information: Accounts Payable 901 West Wall Suite 100 Midland, TX 79701		Analysis / Container / Preservative										Chain of Custody Page 1 of 1			
		Pres Chk CHLORIDE 125 mL HOPE - No Pres V8260 BTEX 40 mL Amb - HCl										 Pace Analytical® National Center for Testing & Innovation 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859			
Report to: Clair Gonzales		Email To: Clair.Gonzales@teratech.com		City/State Collected:		Lab Project #		P.O. #		Quote #		L# 1563680 <b>G239</b>			
Project Description: EM Elliot		Client Project #		Date Results Needed		No. of Cntrs		Acctnum: Template: Prelogin: TSR: PB: Shipped Via:		Remarks Sample # (lab only)					
Phone: Fax:		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Date Results Needed		No. of Cntrs		Acctnum: Template: Prelogin: TSR: PB: Shipped Via:		Remarks Sample # (lab only)					
Collected by (print): Matthew Castrorejan		Site/Facility ID #		P.O. # 212C-MO-02794		Quote #		Acctnum: Template: Prelogin: TSR: PB: Shipped Via:		Remarks Sample # (lab only)					
Collected by (signature): [Signature]		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Date Results Needed		No. of Cntrs		Acctnum: Template: Prelogin: TSR: PB: Shipped Via:		Remarks Sample # (lab only)					
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Date Results Needed		No. of Cntrs		Acctnum: Template: Prelogin: TSR: PB: Shipped Via:		Remarks Sample # (lab only)					
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs		pH		Temp		Flow		Other	
MW-4	G	GW		12/1/22	1300	4	X	X							
MW-3	G	GW		12/1/22	1435	4	X	X							
MW-5	G	GW		12/1/22	1550	4	X	X							
MW-2	G	GW		12/2/22	0900	4	X	X							
MW-1R	G	GW		12/2/22	1100	4	X	X							
DUP	G	GW		-	-	4	X	X							
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other		Remarks: Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking # 5WA		Received by (Signature): [Signature]		Trip Blank Received: Yes (No)		HCL / MeOH TBR		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N			
Relinquished by (Signature): [Signature]		Date: 12/2/22 Time: 1500		Received by (Signature): [Signature]		Trip Blank Received: Yes (No)		HCL / MeOH TBR		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
Relinquished by (Signature): [Signature]		Date: 12/2/22 Time: 1700		Received by (Signature): [Signature]		Trip Blank Received: Yes (No)		HCL / MeOH TBR		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					
Relinquished by (Signature): [Signature]		Date: 12/3/22 Time: 0800		Received for lab by (Signature): [Signature]		Trip Blank Received: Yes (No)		HCL / MeOH TBR		Sample Receipt Checklist COC Seal Present/Intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Correct/Checked: <input type="checkbox"/> N <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 176605

**CONDITIONS**

Operator: J R OIL, LTD. CO. P.O. Box 52647 Tulsa, OK 74152	OGRID: 256073
	Action Number: 176605
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

**CONDITIONS**

Created By	Condition	Condition Date
michael.buchanan	Review of the 2022 Groundwater Monitoring Report for the E.M. Elliot Tank Battery: Content Satisfactory 1. Continue to conduct monitoring and sampling for all groundwater wells. 2. A request may be submitted to suspend sampling for monitoring wells that have demonstrated eight (8) consecutive quarterly samples that meet abatement standards in Subsections A, B and C of 19.15.30.9 NMAC. 3. Continue to pump monitoring well MW-1R 4. Submit the Annual Sampling report for 2023 by April 1, 2024.	9/19/2023