



2024 ANNUAL GROUNDWATER MONITORING REPORT

**LANGLIE MATTIX PENROSE SAND UNIT TRASH PIT
NTO1427254875 (1RP-3360)
UNIT O, SECTION 27, TOWNSHIP 22S, RANGE 37E
EDDY COUNTY, NEW MEXICO
32.357998, -103.147318**

PREPARED FOR:

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MARCH 31, 2025

A blue ink signature of Patrick K. Finn, consisting of a stylized 'P' followed by a horizontal line.

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**William Kierdorf, REM
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**ANNUAL GROUNDWATER MONITORING REPORT
LANGLIE MATTIX PENROSE SAND UNIT TRASH PIT
NTO1427254875 (1RP-3360)
UNIT O, SECTION 27, TOWNSHIP 22S, RANGE 37E
LEA COUNTY, NEW MEXICO
32.357998, -103.147318**

1.0 SITE LOCATION AND BACKGROUND

The Langlie Mattix Penrose Sand Unit Trash Pit ("subject site") is a historic oil and gas location situated approximately 5.5 miles south-southeast of Eunice, in Lea County, New Mexico. The Site is situated in Unit O, Section 27, Township 22 South, Range 27 East, at approximate GPS coordinates 32.357998, -103.147318.

In May 2011, the New Mexico Oil Conservation Division (NMOCD) issued a letter to the current and past operators of the subject site that referenced a complaint from a nearby landowner that burial of miscellaneous refuse and debris had occurred at the Site. In response to the notification, the operator at the time (Legacy) initiated investigation activities at the site. From 2011 to 2014 site assessment and soil excavation activities were completed at the subject site and on August 1, 2014, the OCD District 1 office approved of the closure of the site excavations.

Groundwater assessment activities were conducted at the site during 2013–2014 and a total of four monitoring wells were installed (MW's 1-4). Between 2014 and 2023, a total of 35 groundwater monitoring events were conducted at the Site which documented chloride, TDS, and sulfate in the site groundwater in excess of the 20.6.2.3103 NMAC standards. The 2014-2023 data were indicative of stable to potentially declining groundwater conditions.

In the 2023 1st Semi-Annual (January-June) Groundwater Monitoring Report, dated July 24, 2023, Larson proposed to reduce the site groundwater monitoring frequency from quarterly to semi-annual. In a September 14, 2023 email, the NMOCD approved of the proposed reduction in monitoring frequency from quarterly to semiannual and a reduction in sample constituent analysis since the groundwater plume had been documented to be stable.

In November 2023, Ranger Environmental Services, LLC (Ranger) was retained by Team Operating, LLC in to assist with the semi-annual groundwater monitoring activities at the subject site. Ranger personnel completed the second 2023 sampling event in December 2023 and subsequently prepared the April 26, 2024 *Annual Groundwater Monitoring Report* which documented the results of the 2023 groundwater monitoring activities. The report also contained a proposal to modify sampling techniques to passive sampling techniques. On June 12, 2024, the NMOCD approved of the annual report with conditions of approval that included the continuation of semi-annual groundwater monitoring and the changing of the sampling techniques. The NMOCD also requested a proposal for the remediation of the elevated groundwater total dissolved solids and chloride concentrations.

Semi-annual groundwater monitoring activities were continued at the Site in 2024 with monitoring events conducted by Ranger on June 25, 2024 and December 9, 2024. This 2024 *Annual*

Groundwater Monitoring Report has been prepared to document the completion and results of the 2024 site groundwater monitoring activities.

Attached are a *Topographic Map* and aerial *Area Map* which illustrate the location of the subject site and surrounding areas. Also attached is a *Site Map* which illustrates pertinent site features and the locations of the monitoring wells installed at the subject site.

2.0 GROUNDWATER MONITORING

2.1 Historical Results Summary

As summarized above, between 2014 and 2023, a total of 35 groundwater monitoring events were conducted at the Site. The 2014-2023 data were indicative of stable groundwater conditions. Monitor well MW-1 was documented to be the most affected site monitoring well with reported concentrations of chloride and total dissolved solids (TDS) exceeding the 20.6.2.3103 NMAC standards during every sampling event. Sulfate concentrations in this well were also found to frequently exceed the 20.6.2.3103 NMAC standards. The chloride concentrations in MW-1 were primarily documented to range from 1,550 to 3,230 mg/L, while the TDS concentrations were primarily documented to range from 3,830 to 9,820 mg/L.

The 2014-2023 data for upgradient monitor well MW-2 was not found to be in exceedance of the 20.6.2.3103 NMAC standards. The chloride concentrations in MW-2 were documented to range from 57.8 to 194 mg/L, while the TDS concentrations were documented to range from 560 to 923 mg/L. The June 27, 2022 Larson "2022 Semi-Annual (January-June) Groundwater Monitoring Report" noted that the groundwater analytical data for upgradient monitor well MW-2 appeared to be representative of background groundwater conditions.

Upgradient monitor well MW-3 was documented to contain chloride and TDS concentrations exceeding the 20.6.2.3103 NMAC standards during every 2014-2023 sampling event except one. However, the chloride and TDS concentrations were found to be significantly lower than in monitor well MW-1, primarily ranging from 327 to 483 mg/L chloride and 1,050 to 1,530 mg/L TDS which were not significantly in excess of the applicable 20.6.2.3103 NMAC standards. The June 27, 2022 Larson "2022 Semi-Annual (January-June) Groundwater Monitoring Report" speculated that the chloride and TDS concentrations in MW-3 appeared to be associated with an up-gradient source or variable background groundwater quality.

Lastly, downgradient monitor well MW-4 was documented to contain exceedances of the 20.6.2.3103 NMAC standards for either chloride, TDS, and/or sulfate during 13 of the 2014-2023 monitoring events. The chloride and TDS results in this well were generally similar to the results documented in monitor well MW-3 with chloride concentrations ranging from 140 to 320 mg/L and TDS concentrations ranging from 780 to 1,510 mg/L.

Lastly, Ranger notes that the previously reported January 4, 2021 groundwater TDS and chloride concentrations all appear anomalous, and Ranger does not consider them valid. It appears to Ranger that there may have been a sample jar labeling issue or something similar. The reported MW-1 TDS and chloride concentrations were consistent with the historical results from MW-3. The reported MW-2 TDS and chloride concentrations were consistent with the historical results from MW-4. The reported MW-3 TDS and chloride concentrations were consistent with the historical results from MW-2. And, finally, the reported MW-4 TDS and chloride concentrations were consistent with the historical results from MW-1.

2.2 2024 Groundwater Monitoring

Groundwater monitoring events were conducted at the subject site on June 25, 2024 and December 9, 2024. As detailed above, the 2023 annual report included a proposal for altering the sampling techniques to a passive sampling methodology, which was approved by the NMOCD. However, upon review of the available options and concerns regarding data consistency, Team Operating opted to continue sampling utilizing low-flow techniques for the 2024 sampling events.

Cumulative summary tables of the site well gauging and groundwater analytical data are attached. Also attached are groundwater gradient and chloride, sulfate and TDS isoconcentration maps for both 2024 sampling events, as well as copies of the laboratory analytical reports for the 2024 sampling events.

2.2.1 2024 Groundwater Sampling Methodologies

Upon arrival at the Site, the monitor wells were opened and allowed to equilibrate for approximately 30 minutes prior to the performance of any well gauging or sampling activities. Prior to sampling the groundwater in each monitor well, the wells were first gauged with a decontaminated interface probe to determine the depth to groundwater in each monitor well, and light nonaqueous phase liquid (LNAPL) thicknesses, if any. This data was utilized to determine the site groundwater flow direction and gradient.

Groundwater samples were subsequently collected using low-flow sampling techniques. The wells were purged and sampled using a low flow rate (0.026 to 0.264 gpm) that minimized drawdown. The pump-intake was located in the middle or slightly above the middle of the saturated screened interval. The monitoring wells were purged until the field water quality parameters (i.e., pH, temperature, and conductivity) stabilized. Parameters were considered to have stabilized if, over three consecutive readings, the following criteria were met:

- pH ± 0.1 unit
- Temperature within 3%
- Conductivity within 3%

All sample containers were filled with minimal turbulence. Due to sample turbidity, the samples collected for dissolved metals analysis were first field-filtered through a 10-micron pore size filter. Ranger personnel wore new nitrile gloves while handling each sample in order to prevent cross-contamination of samples.

For QA/QC purposes, duplicate samples were collected during the June and December 2024 monitoring events from monitor well MW-2.

All samples were containerized using properly selected and cleaned containers, which were preserved by the laboratory as needed for the particular analysis to be performed. All VOC sample vials were filled completely to minimize head space. The samples were subsequently sealed in one or more ziplock bags and stored in a sample shuttle containing ice until arrival at the laboratory for chemical analysis. All sample containers were labeled with the project name, sample identification, date of sample collection, samplers' initials, and time sampled collected. Chain-of-custody forms were completed to document sample transport to the analytical laboratory.



The groundwater samples were subsequently submitted to Hall Environmental Analysis Laboratory, Inc. in Albuquerque, New Mexico for chemical analysis. The samples were analyzed for BTEX using EPA Method 8021B, dissolved metals (calcium, magnesium, potassium, and sodium) using EPA Method 6010B, anions (chloride and sulfate) using EPA Method 300, alkalinity utilizing Method SM-2320B, and total dissolved solids (TDS) utilizing Method SM-2540C.

All purge water generated during the sampling event was placed in a sealed and labeled container and was temporarily stored on-site pending off-site disposal.

2.2.2 2024 Well Gauging Results

No LNAPL was documented to be present in the site monitoring wells during the June and December 2024 sampling events. During 2024, the depth to groundwater in the site monitoring wells was documented to range from approximately 39.71' below ground surface (bgs) in MW-4 to 42.44' bgs in MW-3. As illustrated on the attached groundwater gradient maps, the 2024 site groundwater gradient and flow direction was documented to be approximately 0.001 ft/ft to the southeast, consistent with historical observations.

2.2.3 2024 Groundwater Analytical Results

- Primary Site COCs (Chloride, Sulfate, TDS)

The 2024 chloride, sulfate and TDS concentrations were generally similar to the historical groundwater analytical results and are indicative of stable groundwater conditions. During 2024, concentrations of chloride, sulfate and/or TDS in exceedance of the 20.6.2.3103 NMAC standards were documented in monitor wells MW-1 and MW-3. Consistent with historical results, monitor well MW-1 was the most highly affected site monitoring well with chloride concentrations ranging from 1,700 to 1,900 mg/L and TDS concentrations ranging from 4,200 to 4,600 mg/L. The chloride and TDS concentrations in monitor well MW-3 were found to be significantly lower than in monitor well MW-1, ranging from 470 to 480 mg/L chloride and 1,400 mg/L TDS which were not significantly in excess of the applicable 20.6.2.3103 NMAC standards.

- Other Analytes

Consistent with historical results, there were no exceedances of the 20.6.2.3103 NMAC standards for the other target site analytes including calcium, magnesium, potassium, sodium, BTEX, and alkalinity.

As summarized above, duplicate samples were collected during the June and December 2024 monitoring events from monitor well MW-2. The results from the duplicate samples were generally consistent with the MW-2 results and indicate that the data are usable and valid.

In summary, the 2024 groundwater analytical results again documented chloride, sulfate and TDS to be the primary site COCs. The analytical data are indicative of stable groundwater conditions. There does not appear to be a need for continued sampling of the other target analytes (calcium, magnesium, potassium, sodium, BTEX, and alkalinity) since none of these have been found to exceed the 20.6.2.3103 NMAC standards since monitoring activities were initiated in 2014 (over 35 events).



3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 Conclusions

- Groundwater monitoring events were conducted at the subject site on June 25, 2024 and December 9, 2024. No LNAPL was detected in the site monitoring wells. The 2024 groundwater gradient and flow direction was documented to be approximately 0.001 ft/ft to the southeast, consistent with historical observations.
- The 2024 chloride, sulfate and TDS concentrations were generally similar to the historical groundwater analytical results and are indicative of stable groundwater conditions. Concentrations of chloride, sulfate and/or TDS in exceedance of the 20.6.2.3103 NMAC standards were documented in monitor wells MW-1 and MW-3. Consistent with historical results, monitor well MW-1 was the most highly affected site monitoring well. The chloride and TDS concentrations in monitor well MW-3 were found to be significantly lower than in monitor well MW-1 and were not significantly in excess of the applicable 20.6.2.3103 NMAC standards.
- Consistent with historical results, there were no exceedances of the 20.6.2.3103 NMAC standards for the other target groundwater analytes including calcium, magnesium, potassium, sodium, BTEX, and alkalinity.
- The 2024 chloride and TDS concentrations in upgradient monitor well MW-3 were again found to be significantly lower than in monitor well MW-1 and were not significantly in excess of the applicable 20.6.2.3103 NMAC standards. The MW-3 chloride and TDS concentrations continue to appear to be associated with either an up-gradient source or variable background groundwater quality. The site is located in the northeastern portion of the Pecos Valley Aquifer, which has been documented to contain highly variable water quality including high levels of naturally occurring chlorides, TDS, and sulfates.

3.2 Recommendations

- Ranger recommends the continuation of the approved semi-annual groundwater monitoring and annual reporting program. The annual groundwater monitoring report documenting the results of the 2025 groundwater sampling activities will be prepared and submitted to the NMOCD no later than April 1, 2026.
- With regard to the June 12, 2024 NMOCD request for a remediation proposal to address the elevated groundwater TDS and chloride concentrations, Ranger respectfully recommends that the area background groundwater quality conditions be investigated first in order to gather data regarding whether or not there is variability in the area background groundwater quality as speculated by Larson and indicated in literature. In addition to review of published data, Ranger will determine if there are any nearby water wells completed in the Pecos Valley Aquifer that might be available for sampling. The collection of area background groundwater quality data could potentially impact any proposed target cleanup levels or areas requiring remediation. Ranger recommends that this information



be included in the 2025 annual report along with appropriate recommendations for continued site actions.

- Since the 2024 groundwater analytical results continued to document chloride, sulfate and TDS to be the primary site COCs, and since the analytical data continued to document stable groundwater conditions, there does not appear to be a need for continued sampling of the other target analytes (calcium, magnesium, potassium, sodium, BTEX, and alkalinity) since none of these have been found to exceed the 20.6.2.3103 NMAC standards since monitoring activities were initiated in 2014 (over 35 events). Ranger therefore recommends that groundwater analyses in the future be limited to chloride, sulfate and TDS.

FIGURES

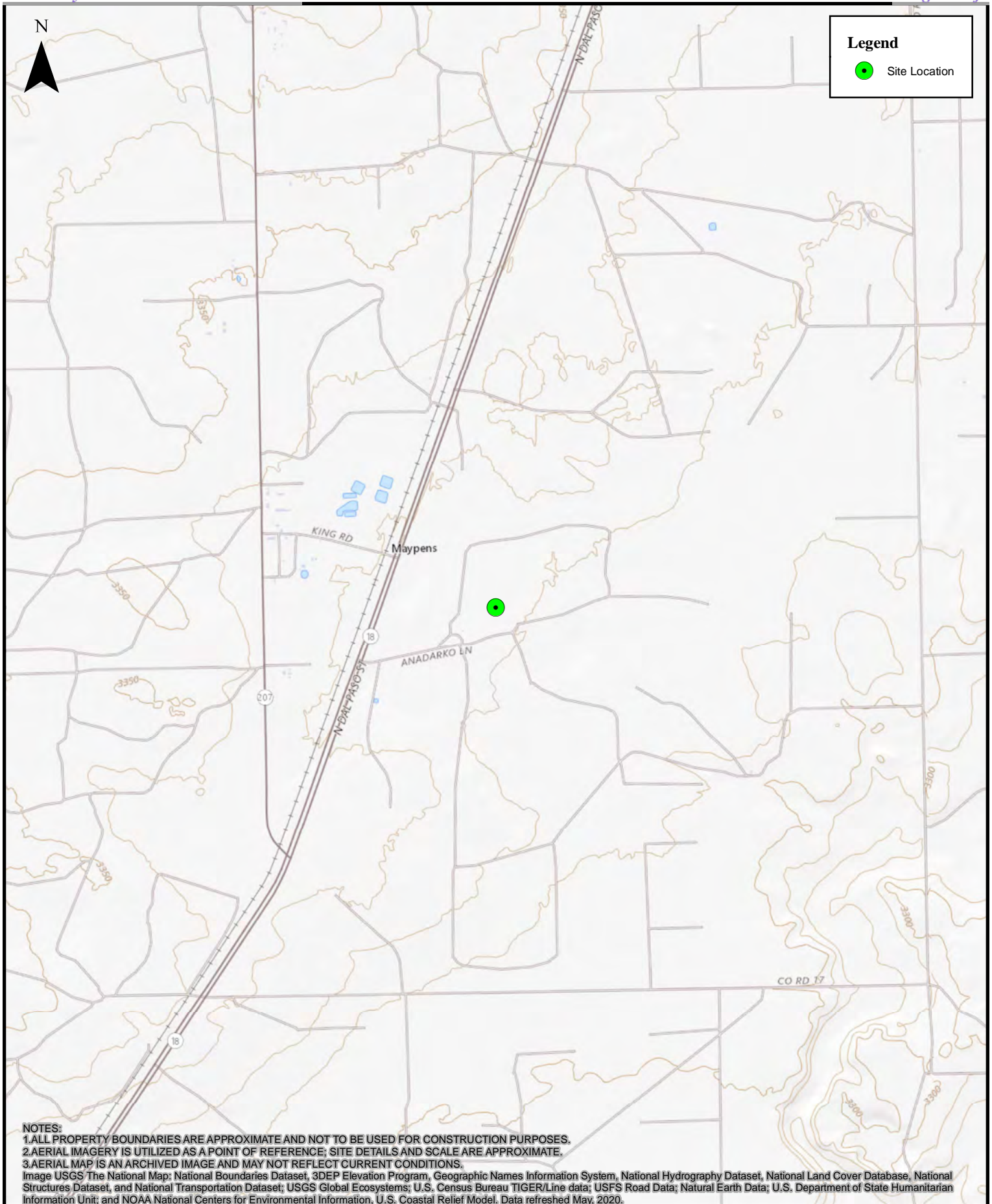
Topographic Map

Area Map

Site Map

Groundwater Gradient Maps

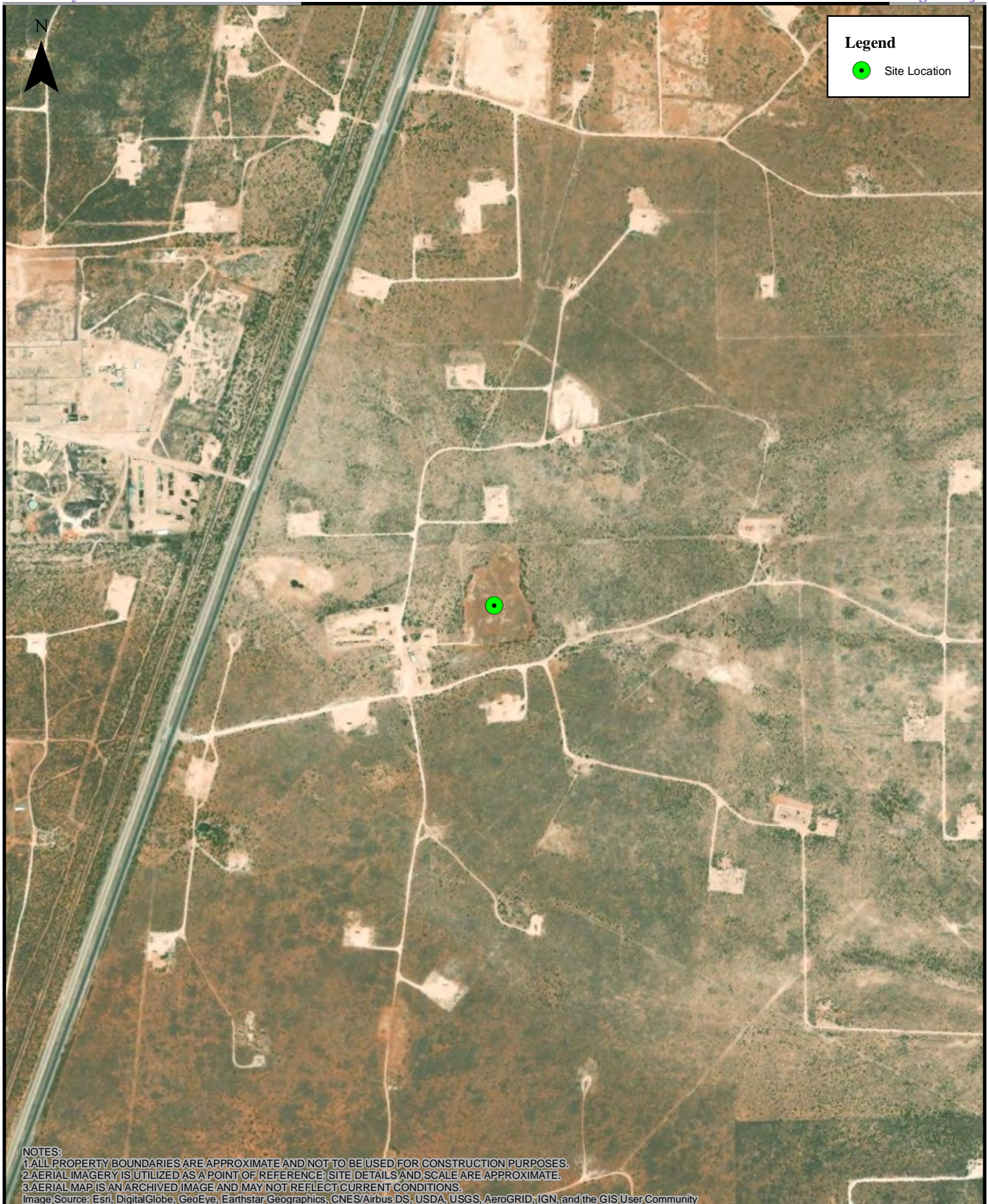
Groundwater Chloride, TDS and sulfate Isoconcentration Maps




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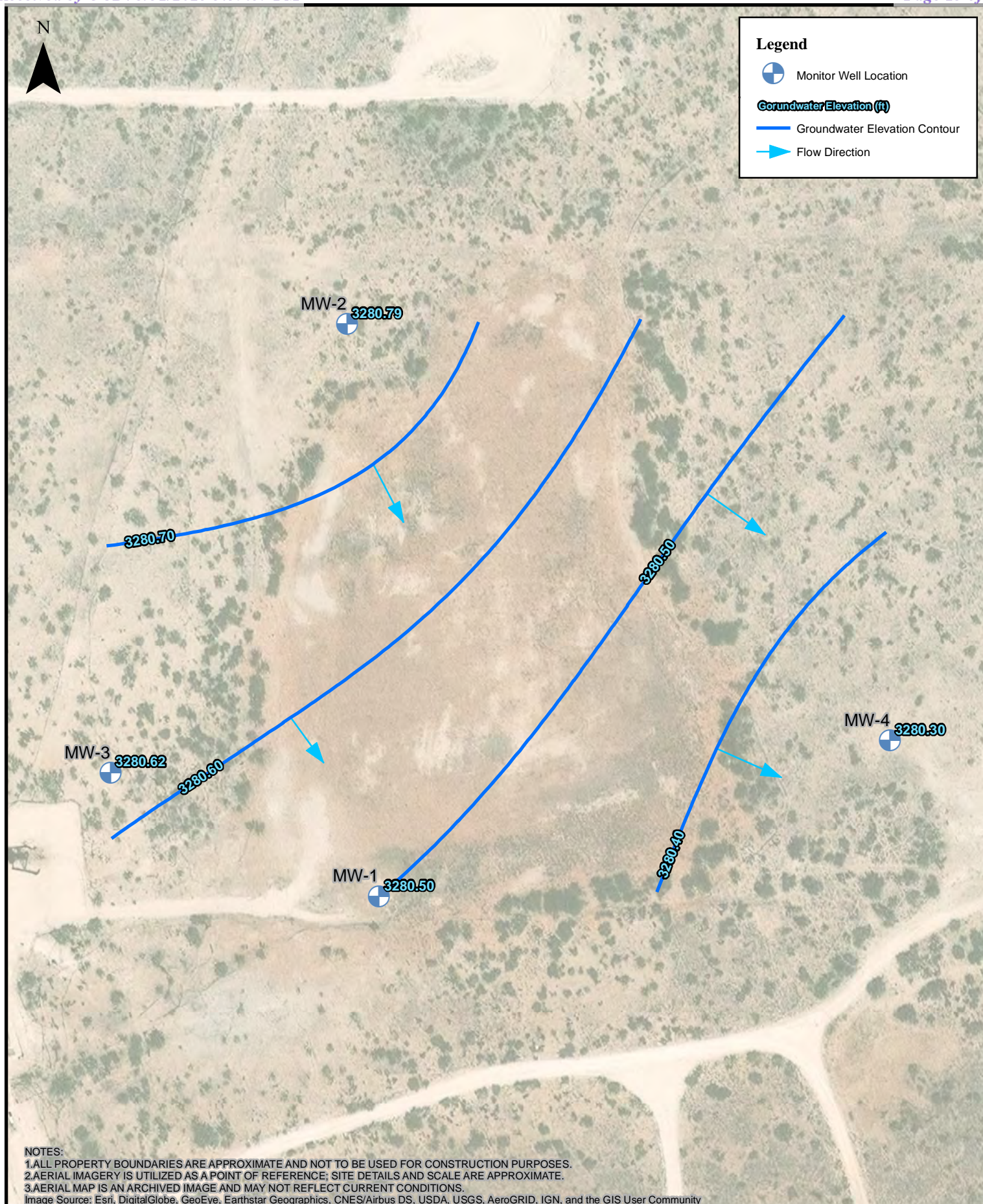
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Topographic Map
LMPSU Trash Pit
Lea County, NM



 <p>0 250 500 1,000 1,500 2,000 Feet</p> <p>1:10,000</p>	<p>Area Map</p> <p>LMPSU Trash Pit</p> <p>Lea County, NM</p>
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0 35 70 140 210 280
 Feet

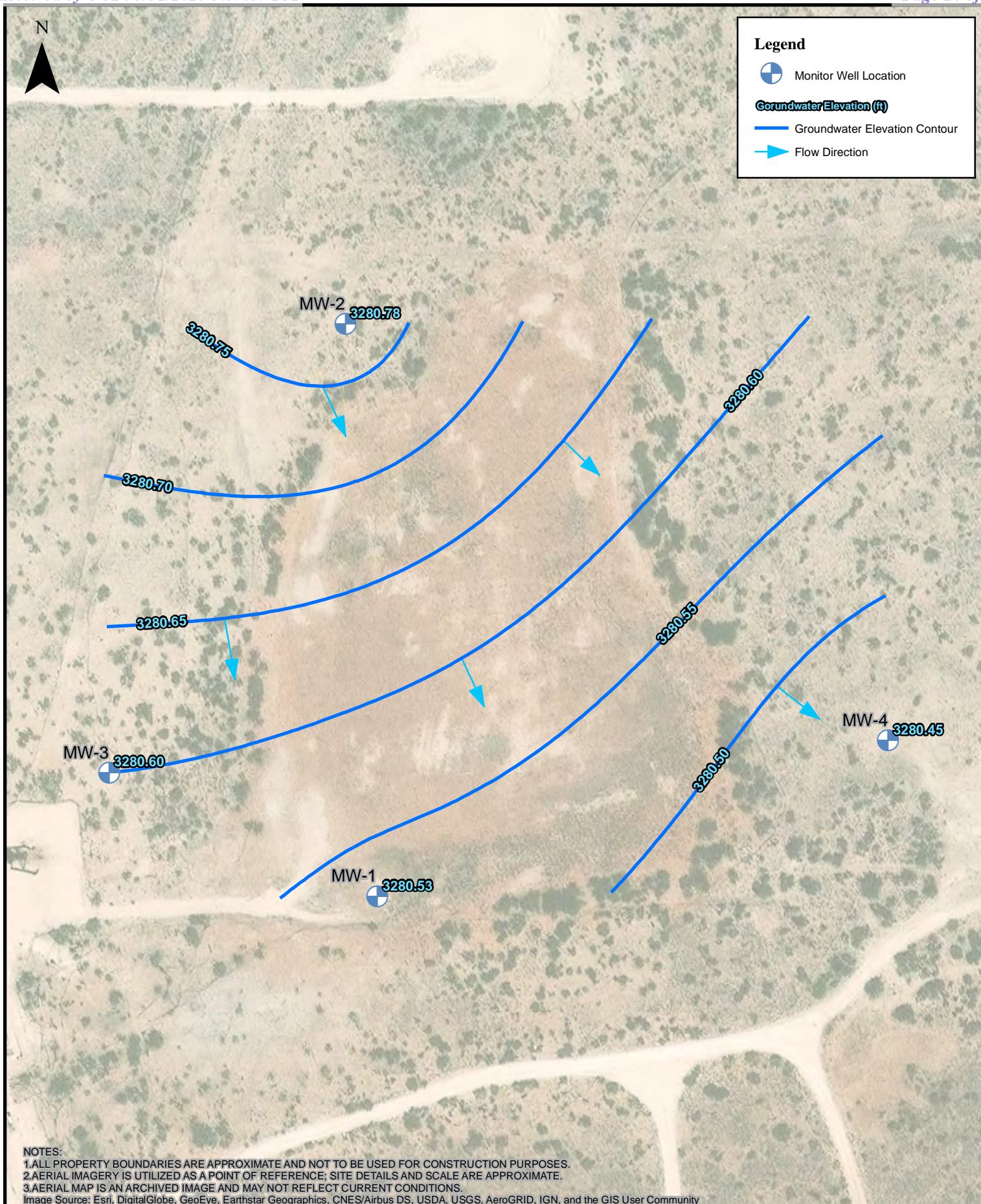
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Groundwater Elevation Contour Map

(06/25/2024)

LMPSU Trash Pit

Lea County, NM



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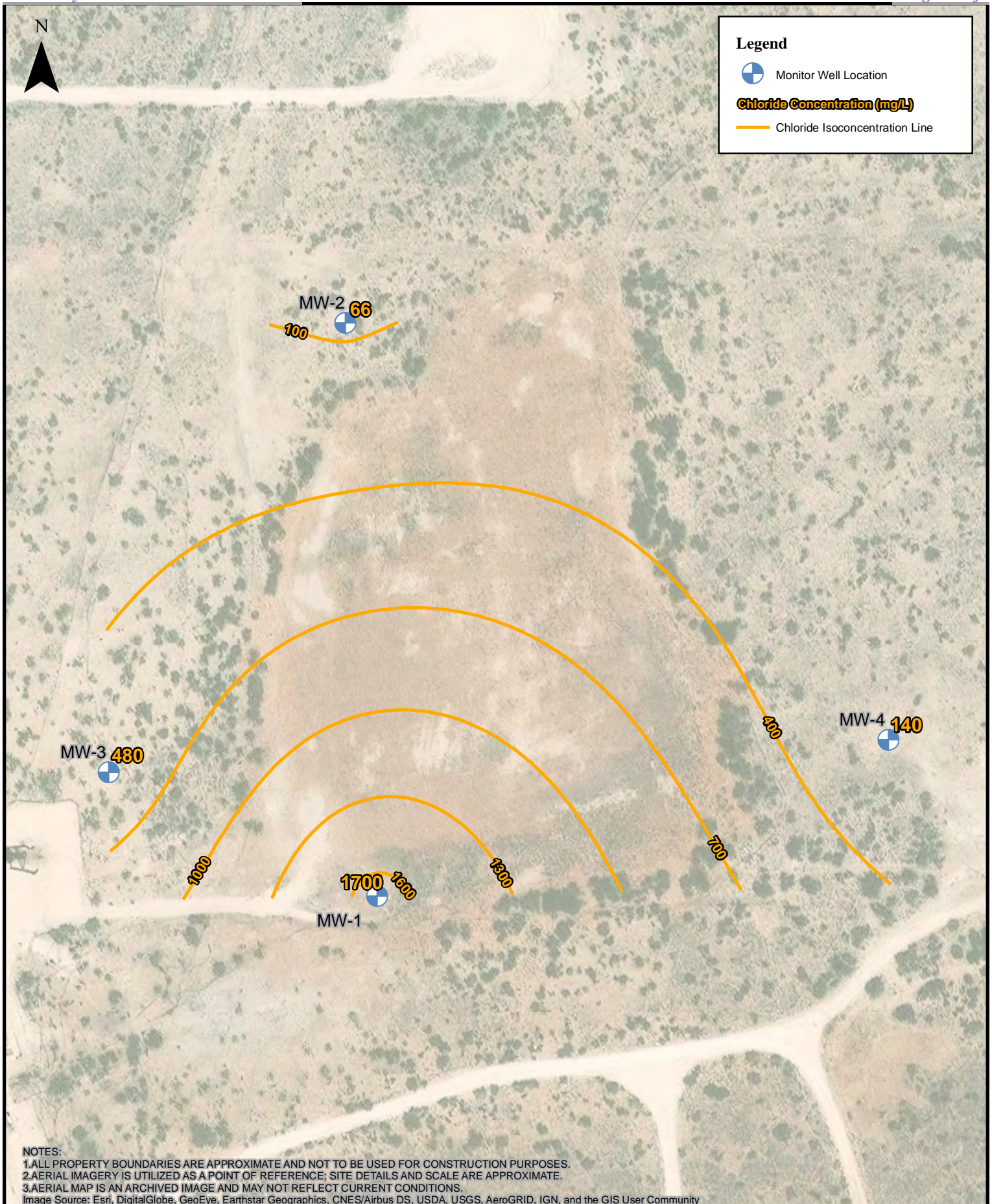
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Groundwater Elevation Contour Map

(12/09/2024)

LMPSU Trash Pit

Lea County, NM



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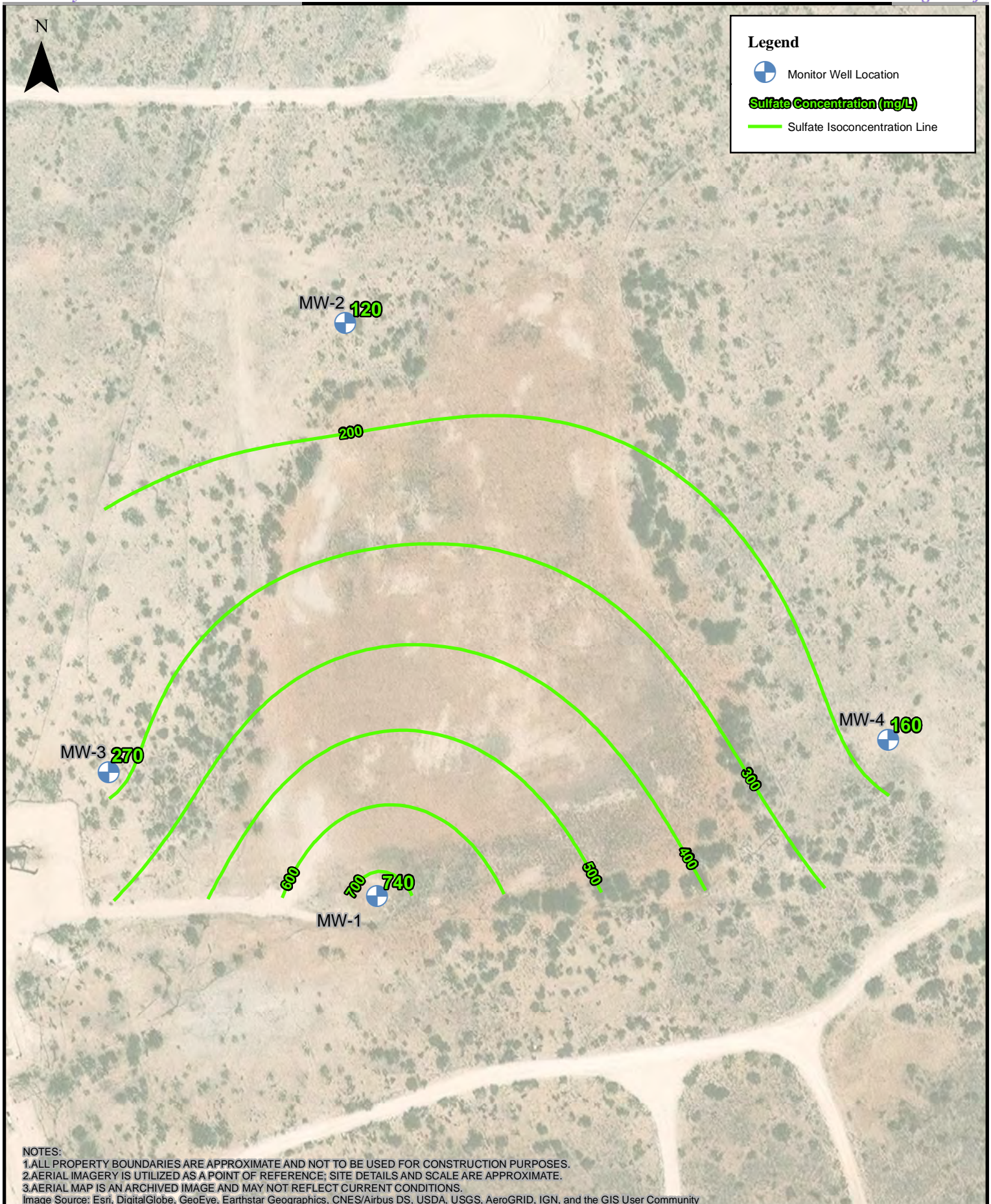
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Chloride Isoconcentration Map

(06/25/2024)

LMPSU Trash Pit

Lea County, NM



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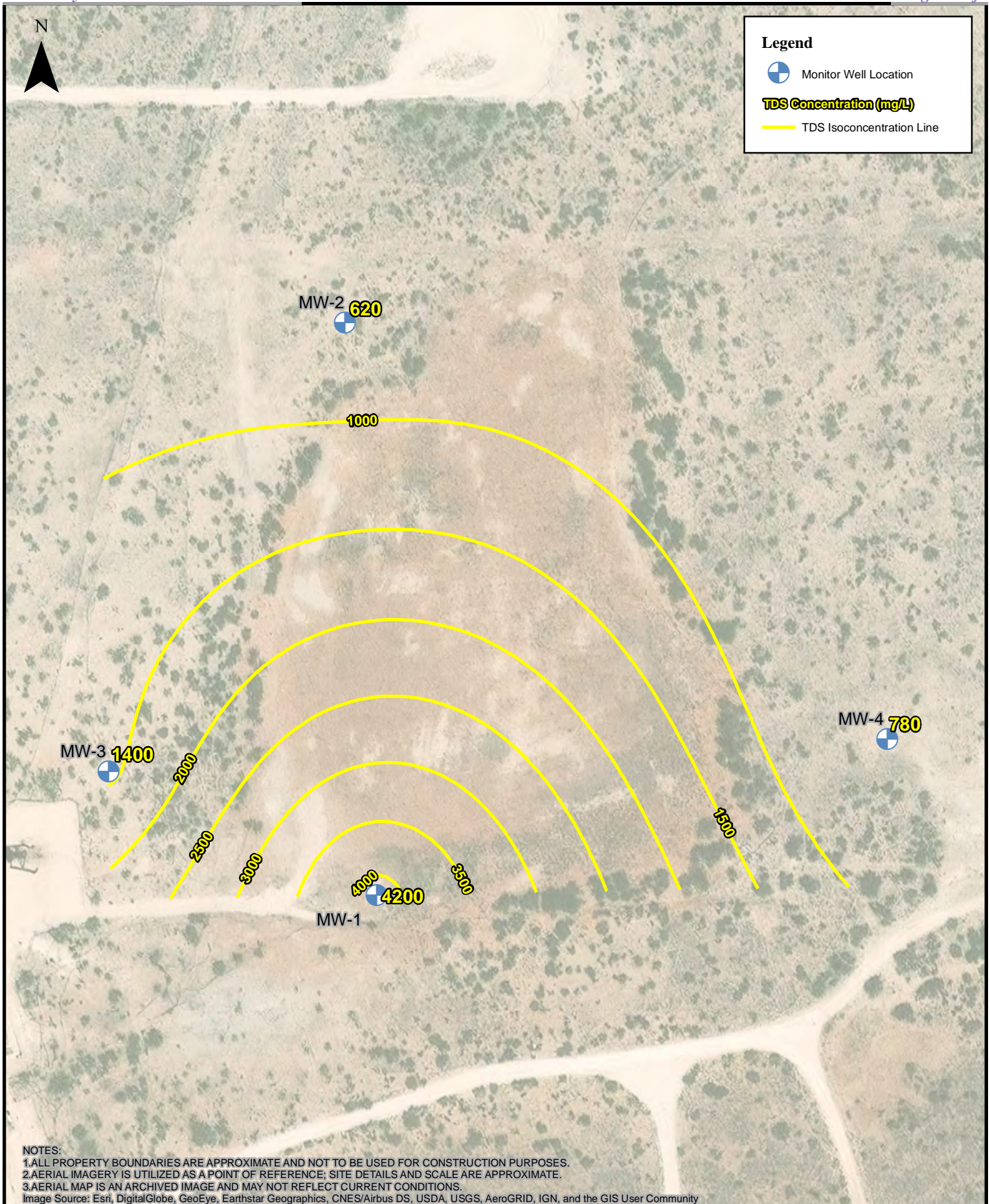
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Sulfate Isoconcentration Map

(06/25/2024)

LMPSU Trash Pit

Lea County, NM



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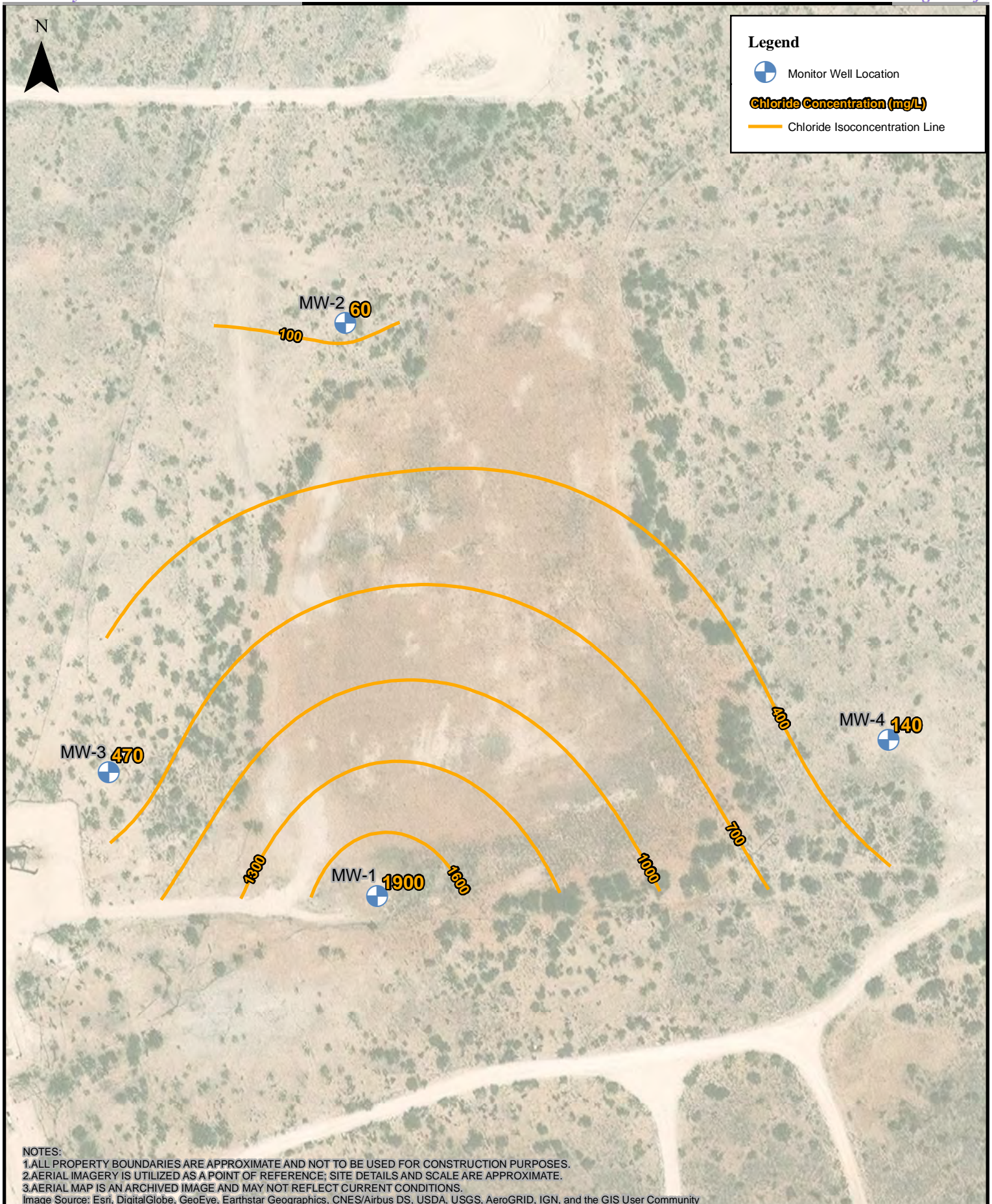
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TDS Isoconcentration Map

(06/25/2024)

LMPSU Trash Pit

Lea County, NM



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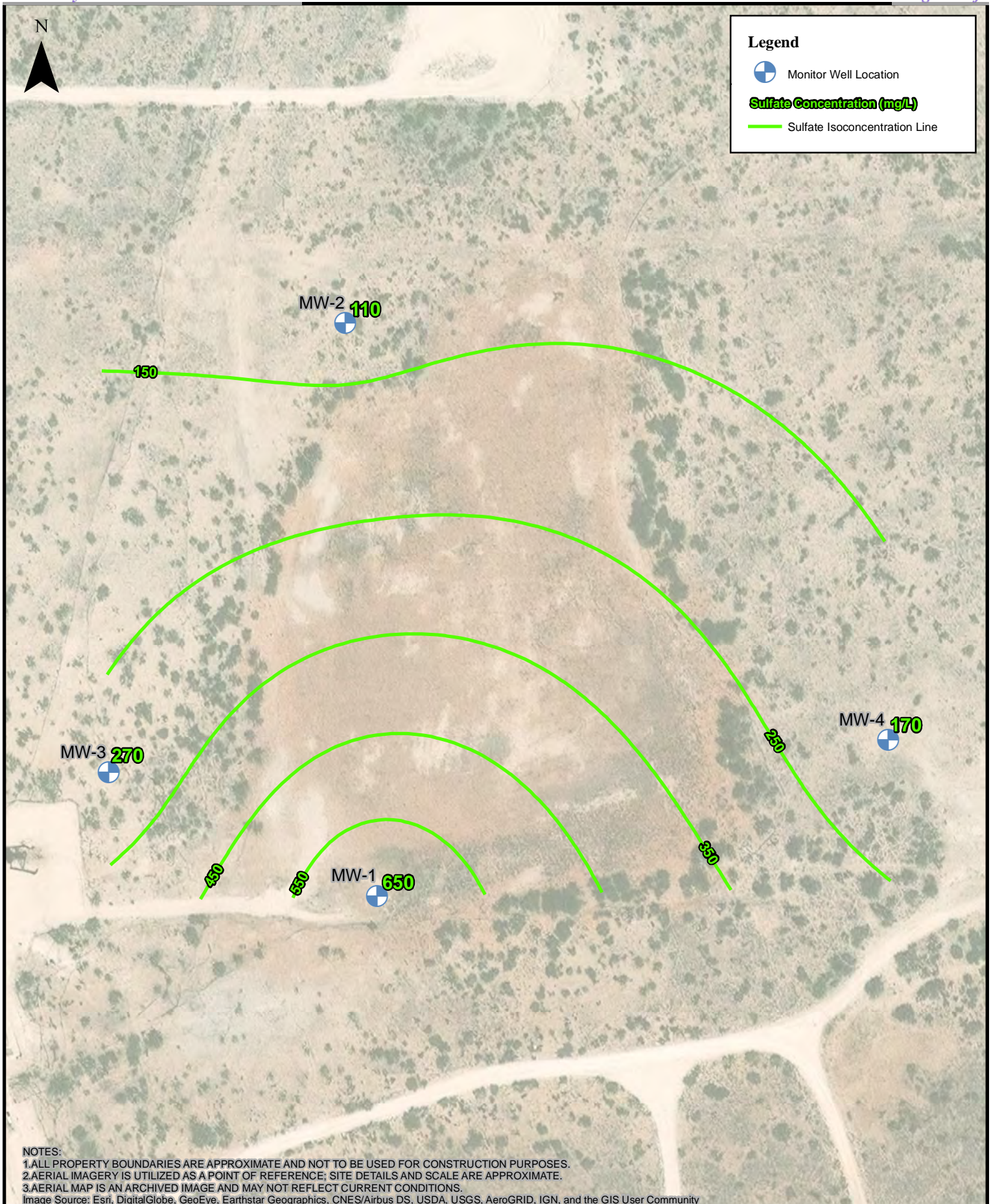
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Chloride Isoconcentration Map

(12/09/2024)

LMPSU Trash Pit

Lea County, NM



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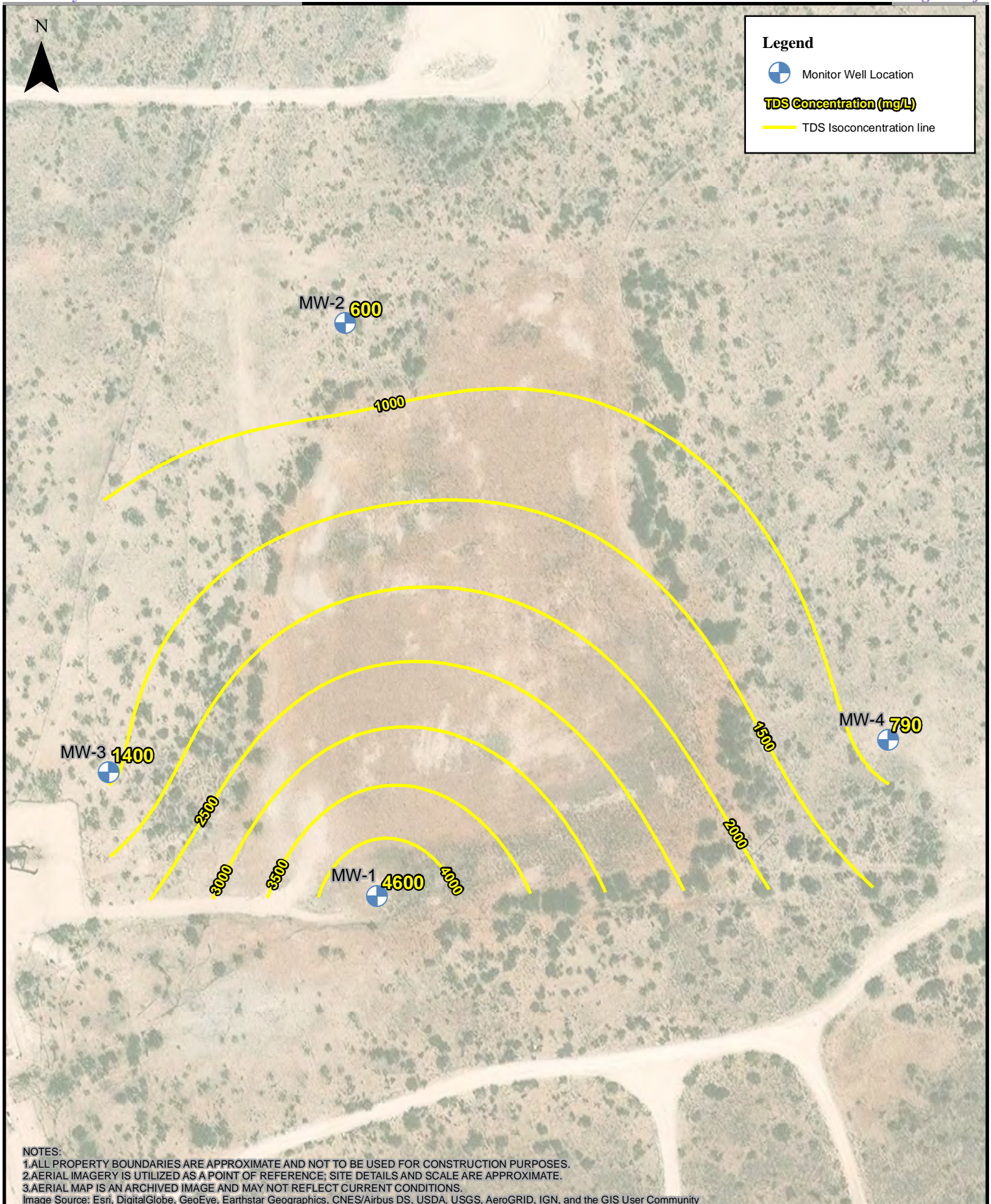
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Sulfate Isoconcentration Map

(12/09/2024)

LMPSU Trash Pit

Lea County, NM



0 35 70 140 210 280 Feet

1:1,500

TDS Isoconcentration Map

(12/09/2024)

LMPSU Trash Pit

Lea County, NM

TABLES

Cumulative Well Gauging Data
Cumulative Groundwater Analytical Summary Table

CUMULATIVE WELL GAUGING DATA
LMPSU TRASH PIT
LEA COUNTY, NEW MEXICO
1RP-3360

WELL NUMBER	DATE	CASING ELEV. (FT)	DEPTH TO WATER (FT-BTOC)	LNAPL THICKNESS (FT)	GW ELEVATION (FT)	SCREENED INTERVAL (FT-BGS)
MW-1	1/28/2015	3324.09	43.79	0.00	3280.30	---
MW-1	6/1/2015	3324.09	43.69	0.00	3280.40	---
MW-1	8/18/2015	3324.09	46.60	0.00	3277.49	---
MW-1	9/11/2015	3324.09	43.60	0.00	3280.49	---
MW-1	12/3/2015	3324.09	42.55	0.00	3281.54	---
MW-1	3/17/2016	3324.09	43.45	0.00	3280.64	---
MW-1	7/19/2016	3324.09	43.46	0.00	3280.63	---
MW-1	8/26/2016	3324.09	43.46	0.00	3280.63	---
MW-1	10/18/2016	3324.09	43.33	0.00	3280.76	---
MW-1	1/18/2017	3324.09	43.35	0.00	3280.74	---
MW-1	4/25/2017	3324.09	43.47	0.00	3280.62	---
MW-1	9/13/2017	3324.09	43.28	0.00	3280.81	---
MW-1	12/19/2017	3324.09	43.28	0.00	3280.81	---
MW-1	2/26/2018	3324.09	43.28	0.00	3280.81	---
MW-1	5/7/2018	3324.09	43.28	0.00	3280.81	---
MW-1	8/2/2018	3324.09	43.33	0.00	3280.76	---
MW-1	12/10/2018	3324.09	44.39	0.00	3279.70	---
MW-1	2/18/2019	3324.09	43.55	0.00	3280.54	---
MW-1	5/7/2019	3324.09	43.35	0.00	3280.74	---
MW-1	8/1/2019	3324.09	43.40	0.00	3280.69	---
MW-1	12/5/2019	3324.09	43.37	0.00	3280.72	---
MW-1	2/17/2020	3324.09	43.90	0.00	3280.19	---
MW-1	5/4/2020	3324.09	43.30	0.00	3280.79	---
MW-1	8/12/2020	3324.09	43.40	0.00	3280.69	---
MW-1	10/5/2020	3324.09	43.45	0.00	3280.64	---
MW-1	1/4/2021	3324.09	45.19	0.00	3278.90	---
MW-1	2/1/2021	3324.09	43.50	0.00	3280.59	---
MW-1	4/30/2021	3324.09	43.46	0.00	3280.63	---
MW-1	8/9/2021	3324.09	43.41	0.00	3280.68	---
MW-1	11/19/2021	3324.09	43.40	0.00	3280.69	---
MW-1	2/25/2022	3324.09	43.43	0.00	3280.66	---
MW-1	5/18/2022	3324.09	43.41	0.00	3280.68	---

CUMULATIVE WELL GAUGING DATA
LMPSU TRASH PIT
LEA COUNTY, NEW MEXICO
1RP-3360

WELL NUMBER	DATE	CASING ELEV. (FT)	DEPTH TO WATER (FT-BTOC)	LNAPL THICKNESS (FT)	GW ELEVATION (FT)	SCREENED INTERVAL (FT-BGS)
MW-1	8/19/2022	3324.09	43.50	0.00	3280.59	---
MW-1	12/19/2022	3324.09	43.49	0.00	3280.60	---
MW-1	3/17/2023	3324.09	43.49	0.00	3280.60	---
MW-1	6/8/2023	3324.09	43.49	0.00	3280.60	---
MW-1	12/20/2023	3324.09	43.54	0.00	3280.55	---
MW-1	6/25/2024	3324.09	43.59	0.00	3280.50	---
MW-1	12/9/2024	3324.09	43.56	0.00	3280.53	---
MW-2	1/28/2015	3325.18	43.79	0.00	3281.39	38.17 - 57.77
MW-2	6/1/2015	3325.18	49.88	0.00	3275.30	38.17 - 57.78
MW-2	8/18/2015	3325.18	44.75	0.00	3280.43	38.17 - 57.79
MW-2	9/11/2015	3325.18	44.50	0.00	3280.68	38.17 - 57.80
MW-2	12/3/2015	3325.18	44.65	0.00	3280.53	38.17 - 57.81
MW-2	3/17/2016	3325.18	44.66	0.00	3280.52	38.17 - 57.82
MW-2	7/19/2016	3325.18	44.35	0.00	3280.83	38.17 - 57.83
MW-2	8/26/2016	3325.18	44.35	0.00	3280.83	38.17 - 57.77
MW-2	10/18/2016	3325.18	44.25	0.00	3280.93	38.17 - 57.78
MW-2	1/18/2017	3325.18	44.31	0.00	3280.87	38.17 - 57.79
MW-2	4/25/2017	3325.18	43.15	0.00	3282.03	38.17 - 57.80
MW-2	9/13/2017	3325.18	44.17	0.00	3281.01	38.17 - 57.81
MW-2	12/19/2017	3325.18	44.18	0.00	3281.00	38.17 - 57.82
MW-2	2/26/2018	3325.18	44.16	0.00	3281.02	38.17 - 57.83
MW-2	5/7/2018	3325.18	44.16	0.00	3281.02	38.17 - 57.84
MW-2	8/2/2018	3325.18	44.18	0.00	3281.00	38.17 - 57.85
MW-2	12/10/2018	3325.18	44.25	0.00	3280.93	38.17 - 57.86
MW-2	2/18/2019	3325.18	44.22	0.00	3280.96	38.17 - 57.87
MW-2	5/7/2019	3325.18	44.20	0.00	3280.98	38.17 - 57.88
MW-2	8/1/2019	3325.18	44.21	0.00	3280.97	38.17 - 57.89
MW-2	12/5/2019	3325.18	44.21	0.00	3280.97	38.17 - 57.90
MW-2	2/17/2020	3325.18	44.30	0.00	3280.88	38.17 - 57.77
MW-2	5/4/2020	3325.18	44.18	0.00	3281.00	38.17 - 57.78
MW-2	8/12/2020	3325.18	44.30	0.00	3280.88	38.17 - 57.79
MW-2	10/5/2020	3325.18	44.30	0.00	3280.88	38.17 - 57.80
MW-2	1/4/2021	3325.18	41.59	0.00	3283.59	38.17 - 57.81
MW-2	2/1/2021	3325.18	44.35	0.00	3280.83	38.17 - 57.82
MW-2	4/30/2021	3325.18	44.34	0.00	3280.84	38.17 - 57.83
MW-2	8/9/2021	3325.18	44.30	0.00	3280.88	38.17 - 57.84

CUMULATIVE WELL GAUGING DATA
LMPSU TRASH PIT
LEA COUNTY, NEW MEXICO
1RP-3360

WELL NUMBER	DATE	CASING ELEV. (FT)	DEPTH TO WATER (FT-BTOC)	LNAPL THICKNESS (FT)	GW ELEVATION (FT)	SCREENED INTERVAL (FT-BGS)
MW-2	11/19/2021	3325.18	44.26	0.00	3280.92	38.17 - 57.85
MW-2	2/25/2022	3325.18	44.31	0.00	3280.87	38.17 - 57.86
MW-2	5/18/2022	3325.18	44.29	0.00	3280.89	38.17 - 57.87
MW-2	8/19/2022	3325.18	44.36	0.00	3280.82	38.17 - 57.88
MW-2	12/19/2022	3325.18	44.36	0.00	3280.82	38.17 - 57.89
MW-2	3/17/2023	3325.18	44.36	0.00	3280.82	38.17 - 57.90
MW-2	6/8/2023	3325.18	44.32	0.00	3280.86	38.17 - 57.77
MW-2	12/20/2023	3325.18	44.38	0.00	3280.80	38.17 - 57.77
MW-2	6/25/2024	3325.18	44.39	0.00	3280.79	38.17 - 57.77
MW-2	12/9/2024	3325.18	44.40	0.00	3280.78	38.17 - 57.77
MW-3	4/15/2015	3325.87	46.00	0.00	3279.87	34.69 - 54.75
MW-3	6/1/2015	3325.87	45.53	0.00	3280.34	34.69 - 54.76
MW-3	8/18/2015	3325.87	45.42	0.00	3280.45	34.69 - 54.77
MW-3	9/11/2015	3325.87	45.40	0.00	3280.47	34.69 - 54.78
MW-3	12/3/2015	3325.87	45.21	0.00	3280.66	34.69 - 54.79
MW-3	3/17/2016	3325.87	45.35	0.00	3280.52	34.69 - 54.80
MW-3	7/19/2016	3325.87	45.12	0.00	3280.75	34.69 - 54.81
MW-3	8/26/2016	3325.87	45.13	0.00	3280.74	34.69 - 54.75
MW-3	10/18/2016	3325.87	45.01	0.00	3280.86	34.69 - 54.76
MW-3	1/18/2017	3325.87	45.07	0.00	3280.80	34.69 - 54.77
MW-3	4/25/2017	3325.87	44.93	0.00	3280.94	34.69 - 54.78
MW-3	9/13/2017	3325.87	44.90	0.00	3280.97	34.69 - 54.79
MW-3	12/19/2017	3325.87	44.94	0.00	3280.93	34.69 - 54.80
MW-3	2/26/2018	3325.87	44.94	0.00	3280.93	34.69 - 54.81
MW-3	5/7/2018	3325.87	44.94	0.00	3280.93	34.69 - 54.82
MW-3	8/2/2018	3325.87	45.02	0.00	3280.85	34.69 - 54.83
MW-3	12/10/2018	3325.87	45.09	0.00	3280.78	34.69 - 54.84
MW-3	2/18/2019	3325.87	45.10	0.00	3280.77	34.69 - 54.85
MW-3	5/7/2019	3325.87	45.02	0.00	3280.85	34.69 - 54.86
MW-3	8/1/2019	3325.87	45.09	0.00	3280.78	34.69 - 54.87
MW-3	12/5/2019	3325.87	45.07	0.00	3280.80	34.69 - 54.88
MW-3	2/17/2020	3325.87	45.00	0.00	3280.87	34.69 - 54.75
MW-3	5/4/2020	3325.87	45.05	0.00	3280.82	34.69 - 54.76
MW-3	8/12/2020	3325.87	45.10	0.00	3280.77	34.69 - 54.77
MW-3	10/5/2020	3325.87	45.15	0.00	3280.72	34.69 - 54.78
MW-3	1/4/2021	3325.87	44.34	0.00	3281.53	34.69 - 54.79

CUMULATIVE WELL GAUGING DATA
LMPSU TRASH PIT
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WELL NUMBER	DATE	CASING ELEV. (FT)	DEPTH TO WATER (FT-BTOC)	LNAPL THICKNESS (FT)	GW ELEVATION (FT)	SCREENED INTERVAL (FT-BGS)
MW-3	2/1/2021	3325.87	45.20	0.00	3280.67	34.69 - 54.80
MW-3	4/30/2021	3325.87	45.20	0.00	3280.67	34.69 - 54.81
MW-3	8/9/2021	3325.87	45.11	0.00	3280.76	34.69 - 54.82
MW-3	11/19/2021	3325.87	45.11	0.00	3280.76	34.69 - 54.83
MW-3	2/25/2022	3325.87	45.15	0.00	3280.72	34.69 - 54.84
MW-3	5/18/2022	3325.87	45.14	0.00	3280.73	34.69 - 54.85
MW-3	8/19/2022	3325.87	45.19	0.00	3280.68	34.69 - 54.86
MW-3	12/19/2022	3325.87	45.21	0.00	3280.66	34.69 - 54.87
MW-3	3/17/2023	3325.87	45.24	0.00	3280.63	34.69 - 54.88
MW-3	6/8/2023	3325.87	45.21	0.00	3280.66	34.69 - 54.75
MW-3	12/20/2023	3325.87	45.27	0.00	3280.60	34.69 - 54.75
MW-3	6/25/2024	3325.87	45.25	0.00	3280.62	34.69 - 54.75
MW-3	12/9/2024	3325.87	45.27	0.00	3280.60	34.69 - 54.75
MW-4	4/15/2015	3322.16	42.08	0.00	3280.08	38.31 - 57.77
MW-4	6/1/2015	3322.16	42.35	0.00	3279.81	38.31 - 57.78
MW-4	8/18/2015	3322.16	42.20	0.00	3279.96	38.31 - 57.79
MW-4	9/11/2015	3322.16	42.00	0.00	3280.16	38.31 - 57.80
MW-4	12/3/2015	3322.16	41.77	0.00	3280.39	38.31 - 57.81
MW-4	3/17/2016	3322.16	42.02	0.00	3280.14	38.31 - 57.82
MW-4	7/19/2016	3322.16	41.65	0.00	3280.51	38.31 - 57.83
MW-4	8/26/2016	3322.16	41.64	0.00	3280.52	38.31 - 57.77
MW-4	10/18/2016	3322.16	41.51	0.00	3280.65	38.31 - 57.78
MW-4	1/18/2017	3322.16	41.54	0.00	3280.62	38.31 - 57.79
MW-4	4/25/2017	3322.16	41.47	0.00	3280.69	38.31 - 57.80
MW-4	9/13/2017	3322.16	41.39	0.00	3280.77	38.31 - 57.81
MW-4	12/19/2017	3322.16	41.43	0.00	3280.73	38.31 - 57.82
MW-4	2/26/2018	3322.16	41.44	0.00	3280.72	38.31 - 57.83
MW-4	5/7/2018	3322.16	41.41	0.00	3280.75	38.31 - 57.84
MW-4	8/2/2018	3322.16	41.48	0.00	3280.68	38.31 - 57.85
MW-4	12/10/2018	3322.16	41.49	0.00	3280.67	38.31 - 57.86
MW-4	2/18/2019	3322.16	41.49	0.00	3280.67	38.31 - 57.87
MW-4	5/7/2019	3322.16	41.45	0.00	3280.71	38.31 - 57.88
MW-4	8/1/2019	3322.16	41.50	0.00	3280.66	38.31 - 57.89
MW-4	12/5/2019	3322.16	41.49	0.00	3280.67	38.31 - 57.90
MW-4	2/17/2020	3322.16	42.50	0.00	3279.66	38.31 - 57.77
MW-4	5/4/2020	3322.16	41.45	0.00	3280.71	38.31 - 57.78

CUMULATIVE WELL GAUGING DATA
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WELL NUMBER	DATE	CASING ELEV. (FT)	DEPTH TO WATER (FT-BTOC)	LNAPL THICKNESS (FT)	GW ELEVATION (FT)	SCREENED INTERVAL (FT-BGS)
MW-4	8/12/2020	3322.16	41.50	0.00	3280.66	38.31 - 57.79
MW-4	10/5/2020	3322.16	41.49	0.00	3280.67	38.31 - 57.80
MW-4	1/4/2021	3322.16	43.47	0.00	3278.69	38.31 - 57.81
MW-4	2/1/2021	3322.16	41.60	0.00	3280.56	38.31 - 57.82
MW-4	4/30/2021	3322.16	41.60	0.00	3280.56	38.31 - 57.83
MW-4	8/9/2021	3322.16	41.44	0.00	3280.72	38.31 - 57.84
MW-4	11/19/2021	3322.16	41.49	0.00	3280.67	38.31 - 57.85
MW-4	2/25/2022	3322.16	41.54	0.00	3280.62	38.31 - 57.86
MW-4	5/18/2022	3322.16	41.56	0.00	3280.60	38.31 - 57.87
MW-4	8/19/2022	3322.16	41.61	0.00	3280.55	38.31 - 57.88
MW-4	12/19/2022	3322.16	41.61	0.00	3280.55	38.31 - 57.89
MW-4	3/17/2023	3322.16	41.59	0.00	3280.57	38.31 - 57.90
MW-4	6/8/2023	3322.16	41.57	0.00	3280.59	38.31 - 57.77
MW-4	12/20/2023	3322.16	41.66	0.00	3280.50	38.31 - 57.77
MW-4	6/5/2024	3322.16	41.86	0.00	3280.30	38.31 - 57.77
MW-4	12/9/2024	3322.16	41.71	0.00	3280.45	38.31 - 57.77

Notes:

1. Elevations referenced to a temporary on-site benchmark.
2. BTOC = below top of casing
3. All depth-to-water information prior to the 12/2023 data was collected by a previous consultant.
4. All well survey data was collected by other parties and not verified by Ranger. The presented groundwater elevation data is based on information provided to Ranger.

CUMULATIVE GROUNDWATER ANALYTICAL SUMMARY TABLE
LMPSU TRASH PIT
LEA COUNTY, NEW MEXICO
1RP-3360

All Values Presented in Parts Per Million (mg/L) unless otherwise noted

SAMPLE ID	DATE	Benzene	Toluene	Ethylbenzene	Xylenes	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	Nitrate	TDS
MW-1	12/11/2014	--	--	--	--	186	242	22.3	913	1,600	543	888	<0.100	5,330
MW-1	1/28/2015	--	--	--	--	610	437	32.5	1,430	3,230	947	417	<0.100	6,260
MW-1	6/1/2015	<0.001	<0.001	<0.001	<0.001	201	270	27.6	950	1,560	446	653	<0.2	3,920
MW-1	8/18/2015	<0.0008	<0.002	<0.002	<0.003	152	224	21.5	820	1,600	433	723	<0.10	3,830
MW-1	12/3/2015	<0.0008	<0.002	<0.002	<0.003	310	258	22.6	930	1,820	431	727	<0.1	4,230
MW-1	3/17/2016	<0.002	<0.006	<0.006	<0.009	184	283	22.7	982	1,920	432	---	<0.500	4,130
MW-1	7/19/2016	<0.002	<0.006	<0.006	<0.009	185	292	21.6	1,020	2,040	478	714	<0.500	4,690
MW-1	8/29/2016	<0.002	<0.006	<0.006	<0.009	166	278	19.9	986	1,840	450	721	<0.500	5,130
MW-1	10/18/2016	<0.002	<0.006	<0.006	<0.009	2,030	318	25	1,040	2,030	406	739	<0.500	5,040
MW-1	1/18/2017	<0.002	<0.006	<0.006	<0.006	212	333	22.9	1,130	2,080	454	766	<0.500	5,500
MW-1	4/25/2017	<0.002	<0.006	<0.006	<0.006	313	366	26.6	1,290	2,840	852	439	<0.500	9,820
MW-1	9/13/2017	<0.002	<0.006	<0.006	<0.006	217	329	21.8	1,070	1,920	361	811	<1.00	4,950
MW-1	12/19/2017	<0.002	<0.006	<0.006	<0.006	214	325	21.9	1,070	2,170	521	734	<0.0800	4,910
MW-1	2/26/2018	<0.002	<0.006	<0.006	<0.006	217	336	21.3	1,160	2,190	559	751	<0.0500	4,930
MW-1	5/7/2018	<0.002	<0.006	<0.006	<0.006	218	338	20.5	1,150	2,170	643	725	<0.0500	5,000
MW-1	8/2/2018	<0.00200	<0.00600	<0.00600	<0.00600	227	329	22.4	1,080	2,040	693	726	<0.0500	5,060
MW-1	12/10/2018	<0.00200	<0.00600	<0.00600	<0.00600	219	341	20.4	1,100	1,980	696	714	<0.0500	5,340
MW-1	2/18/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	2,610	--	--	--	--
MW-1	5/7/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	2,570	--	--	--	--
MW-1	8/1/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	2,010	--	--	--	--
MW-1	12/5/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	2,110	--	--	--	--
MW-1	2/17/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	1,950	--	--	--	--
MW-1	5/4/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	2,240	--	--	--	--
MW-1	1/4/2021	<0.00200	<0.00600	<0.00600	<0.00600	63.5	71.4	9.76	288	449	261	204	--	1,420
MW-1	2/1/2021	<0.00200	<0.00600	<0.00600	<0.00600	196	325	19.7	1,130	2,130	652	694	--	5,060
MW-1	4/30/2021	<0.000800	<0.00200	<0.00200	<0.00200	207	314	19.1	1,100	2,120	750	657	--	4,940
MW-1	8/9/2021	<0.000800	<0.00200	<0.00200	<0.00200	192	297	18.5	1,090	1,930	737	646	--	4,800
MW-1	11/19/2021	<0.000800	<0.00200	<0.00200	<0.00200	191	288	18	1,000	1,950	724	613	--	4,770
MW-1	2/25/2022	<0.000800	<0.00200	<0.00200	<0.00200	170	278	18.2	1,100	1,930	690	638	--	4,570
MW-1	5/18/2022	<0.000800	<0.00200	<0.00200	<0.00200	183	269	17.8	1,000	1,980	703	566	--	4,550
MW-1	8/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	155	258	18.7	1,080	1,890	675	670	--	4,670
MW-1	12/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	166	254	18.8	1,040	1,890	713	620	--	4,400
MW-1	3/17/2023	<0.000800	<0.00200	<0.00200	<0.00200	153	254	18.7	1,080	2,130	741	706	--	5,020
MW-1	6/9/2023	<0.000800	<0.00200	<0.00200	<0.00200	175	246	18.6	987	1,630	631	620	--	4,380
MW-1	12/20/2023	<0.001	<0.001	<0.001	<0.002	160	240	24	1,200	1,500	540	611.1	--	3,830
MW-1	6/25/2024	0.0012	0.005	0.0012	0.0048	230	270	21	1,100	1,700	740	590	--	4,200
MW-1	12/9/2024	<0.001	<0.001	<0.001	<0.002	190	240	20	980	1,900	650	620	--	4,600

CUMULATIVE GROUNDWATER ANALYTICAL SUMMARY TABLE
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All Values Presented in Parts Per Million (mg/L) unless otherwise noted

SAMPLE ID	DATE	Benzene	Toluene	Ethylbenzene	Xylenes	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	Nitrate	TDS
MW-2	12/11/2014	--	--	--	--	64.5	34.9	8.29	116	71.8	119	361	1.42	619
MW-2	1/28/2015	--	--	--	--	91.1	36.6	7.3	126	71.3	112	288	1.36	573
MW-2	6/1/2015	<0.001	<0.001	<0.001	<0.001	54.9	34.6	<10	117	57.8	112	281	1.63	578
MW-2	8/18/2015	<0.0008	<0.002	<0.002	<0.003	118	32.6	6.01	104	73.9	114	274	1.35	583
MW-2	12/3/2015	<0.0008	<0.002	<0.002	<0.003	214	31.8	6.22	106	67	112	247	1.23	582
MW-2	3/17/2016	<0.002	<0.006	<0.006	<0.009	45	27.2	6.02	99	63.8	114	---	1.57	560
MW-2	7/19/2016	<0.002	<0.006	<0.006	<0.009	42.6	28	5.69	109	65.6	113	221	1.44	605
MW-2	8/29/2016	<0.002	<0.006	<0.006	<0.009	45.8	28.1	5.99	107	61.5	109	262	1.53	923
MW-2	10/18/2016	<0.002	<0.006	<0.006	<0.009	45.6	28.6	6.4	103	59.8	105	241	1.52	571
MW-2	1/18/2017	<0.002	<0.006	<0.006	<0.006	45.7	28.3	5.79	107	60	109	246	1.53	591
MW-2	4/25/2017	<0.002	<0.006	<0.006	<0.006	44.4	28.7	5.55	108	59.9	112	248	1.43	649
MW-2	9/13/2017	<0.002	<0.006	<0.006	<0.006	49.3	28.4	6.15	102	61.2	111	256	1.58	577
MW-2	12/19/2017	<0.002	<0.006	<0.006	<0.006	46.3	28.3	5.55	104	63	106	298	1.39	571
MW-2	2/26/2018	<0.002	<0.006	<0.006	<0.006	46.3	28.3	5.75	107	64.6	111	301	1.34	593
MW-2	5/7/2018	<0.002	<0.006	<0.006	<0.006	49.2	29.1	5.64	109	63.2	125	257	1.45	580
MW-2	8/2/2018	<0.00200	<0.00600	<0.00600	<0.00600	51.7	28.4	5.72	106	68.8	120	274	1.21	616
MW-2	12/10/2018	<0.00200	<0.00600	<0.00600	<0.00600	46.4	28.4	5.54	109	65.4	112	260	1.33	601
MW-2	2/18/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	67	--	--	--	--
MW-2	5/7/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	67.1	--	--	--	--
MW-2	8/1/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	72.2	--	--	--	--
MW-2	12/5/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	58.2	--	--	--	--
MW-2	2/17/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	67.6	--	--	--	--
MW-2	5/4/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	68.4	--	--	--	--
MW-2	1/4/2021	<0.00200	<0.00600	<0.00600	<0.00600	69.8	45.3	8.07	169	194	207	244	--	917
MW-2	2/1/2021	<0.00200	<0.00600	<0.00600	<0.00600	56.2	45.1	6.4	135	73	258	274	--	827
MW-2	4/30/2021	<0.000800	<0.00200	<0.00200	<0.00200	52.7	28	5.36	107	61.4	126	258	--	607
MW-2	8/9/2021	<0.000800	<0.00200	<0.00200	<0.00200	50.0	29.4	5.39	114	65.4	121	269	--	605
MW-2	11/19/2021	<0.000800	<0.00200	<0.00200	<0.00200	50.5	27.6	5.4	101	65.5	118	257	--	597
MW-2	2/25/2022	<0.000800	<0.00200	<0.00200	<0.00200	50.4	29.8	5.74	118	73.7	124	264	--	638
MW-2	5/18/2022	<0.000800	<0.00200	<0.00200	<0.00200	53.1	28.1	5.31	109	78.5	131	270	--	650
MW-2	8/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	54.5	31.7	5.44	126	73.5	121	284	--	649
MW-2	12/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	50.6	28.1	6.03	112	68.6	116	247	--	585
MW-2	3/17/2023	<0.000800	<0.00200	<0.00200	<0.00200	48.4	28.8	5.91	110	63.6	114	256	--	608
MW-2	6/9/2023	<0.000800	<0.00200	<0.00200	<0.00200	52.6	27.9	5.33	102	63.6	111	262	--	588
MW-2	12/20/2023	<0.001	<0.001	<0.001	<0.002	51.0	28	5.9	99	62	110	254.8	--	594
MW-2	6/25/2024	<0.001	0.0015	<0.001	<0.002	53	30	5.5	110	66	120	270	--	620
MW-2	12/9/2024	<0.001	<0.001	<0.001	<0.002	49	29	5.7	110	60	110	260	--	600

CUMULATIVE GROUNDWATER ANALYTICAL SUMMARY TABLE
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LEA COUNTY, NEW MEXICO
1RP-3360

All Values Presented in Parts Per Million (mg/L) unless otherwise noted

SAMPLE ID	DATE	Benzene	Toluene	Ethylbenzene	Xylenes	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	Nitrate	TDS
MW-3	6/1/2015	<0.001	<0.001	<0.001	<0.001	57.6	60.5	10.7	324	399	234	290	2.19	1,180
MW-3	8/18/2015	<0.0008	<0.002	<0.002	<0.003	147	51.5	8.22	284	405	239	230	1.5	1,380
MW-3	12/3/2015	<0.0008	<0.002	<0.002	<0.003	221	51.9	8.48	284	350	222	232	1.19	1,260
MW-3	3/17/2016	<0.002	<0.006	<0.006	<0.009	49.2	47.9	8.58	284	334	232	---	1.85	1,050
MW-3	7/19/2016	<0.002	<0.006	<0.006	<0.009	41.5	47.7	7.93	301	349	233	244	1.75	1,260
MW-3	8/29/2016	<0.002	<0.006	<0.006	<0.009	51.9	47.4	7.78	277	327	252	230	1.83	1,240
MW-3	10/18/2016	<0.002	<0.006	<0.006	<0.009	49.6	56.4	9.32	324	340	223	219	1.78	1,280
MW-3	1/18/2017	<0.002	<0.006	<0.006	<0.006	45.7	51.8	8.54	312	342	240	215	1.75	1,340
MW-3	4/25/2017	<0.002	<0.006	<0.006	<0.006	50.0	62.5	9.6	392	342	223	220	1.6	1,510
MW-3	9/13/2017	<0.002	<0.006	<0.006	<0.006	49.6	54.2	9.22	314	380	227	218	1.91	1,410
MW-3	12/19/2017	<0.002	<0.006	<0.006	<0.006	52.9	56.2	9.21	304	379	243	207	1.81	1,280
MW-3	2/26/2018	<0.002	<0.006	<0.006	<0.006	49.7	53.7	8.66	296	378	216	218	2.13	1,280
MW-3	5/7/2018	<0.002	<0.006	<0.006	<0.006	53.7	56.6	8.85	311	414	249	204	2.21	1,300
MW-3	8/2/2018	<0.00200	<0.00600	<0.00600	<0.00600	55.8	54.2	9.09	283	388	256	210	2.13	1,330
MW-3	12/10/2018	<0.00200	<0.00600	<0.00600	<0.00600	53.6	59.2	8.66	298	391	251	207	1.81	1,330
MW-3	2/18/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	421	--	--	--	--
MW-3	5/7/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	432	--	--	--	--
MW-3	8/1/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	421	--	--	--	--
MW-3	12/5/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	429	--	--	--	--
MW-3	2/17/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	424	--	--	--	--
MW-3	5/4/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	451	--	--	--	--
MW-3	1/4/2021	<0.00200	<0.00600	<0.00600	<0.00600	48.7	27.7	5.67	106	65.9	108	259	--	596
MW-3	2/1/2021	<0.00200	<0.00600	<0.00600	<0.00600	64.4	74.2	9.8	295	452	262	197	--	1,410
MW-3	4/30/2021	<0.000800	<0.00200	<0.00200	<0.00200	65.3	70.1	10	300	483	269	195	--	1,480
MW-3	8/9/2021	<0.000800	<0.00200	<0.00200	<0.00200	65.3	72.1	9.81	294	447	278	194	--	1,380
MW-3	11/19/2021	<0.000800	<0.00200	<0.00200	<0.00200	70.4	70.2	9.34	266	457	484	193	--	1,410
MW-3	2/25/2022	<0.000800	<0.00200	<0.00200	<0.00200	65.4	72.3	9.75	296	453	266	195	--	1,400
MW-3	5/18/2022	<0.000800	<0.00200	<0.00200	<0.00200	75.7	73.2	9.85	278	470	277	194	--	1,370
MW-3	8/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	69.2	76.4	10.1	304	461	274	190	--	1,460
MW-3	12/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	71.2	74.4	10.1	290	475	289	191	--	1,410
MW-3	3/17/2023	<0.000800	<0.00200	<0.00200	<0.00200	70.6	77.2	9.94	294	448	285	189	--	1,530
MW-3	6/9/2023	<0.000800	<0.00200	<0.00200	<0.00200	76.2	76.6	9.9	274	432	258	198	--	1,470
MW-3	12/20/2023	<0.001	<0.001	<0.001	<0.002	82.0	74	9.8	260	440	280	204.5	--	1,380
MW-3	6/25/2024	<0.001	<0.001	<0.001	<0.002	75	80	10	270	480	270	200	--	1,400
MW-3	12/9/2024	<0.001	<0.001	<0.001	<0.002	75	83	10	290	470	270	200	--	1,400

CUMULATIVE GROUNDWATER ANALYTICAL SUMMARY TABLE
LMPSU TRASH PIT
LEA COUNTY, NEW MEXICO
1RP-3360

All Values Presented in Parts Per Million (mg/L) unless otherwise noted

SAMPLE ID	DATE	Benzene	Toluene	Ethylbenzene	Xylenes	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	Nitrate	TDS
MW-4	6/1/2015	<0.001	<0.001	<0.001	0.0015	83	58.6	10.1	186	190	251	236	2.34	918
MW-4	8/18/2015	<0.0008	<0.002	<0.002	<0.003	70.6	52.8	8.28	160	213	251	256	1.54	974
MW-4	12/3/2015	<0.0008	<0.002	<0.002	<0.003	93.5	54.7	8.91	190	218	239	266	1.19	1,050
MW-4	3/17/2016	<0.002	<0.006	<0.006	<0.009	83.9	57.2	10.7	171	214	252	---	1.76	945
MW-4	7/19/2016	<0.002	<0.006	<0.006	<0.009	80.6	58.7	8.75	213	259	273	252	1.61	1,100
MW-4	8/29/2016	<0.002	<0.006	<0.006	<0.009	81.8	57.2	9.25	202	247	276	266	1.72	1,500
MW-4	10/18/2016	<0.002	<0.006	<0.006	<0.009	81.8	55.8	8.85	205	255	264	248	1.7	1,270
MW-4	1/18/2017	<0.002	<0.006	<0.006	<0.006	86.2	58.9	8.93	203	262	279	245	1.66	1,210
MW-4	4/25/2017	<0.002	<0.006	<0.006	<0.006	86.8	61.9	9.24	213	285	279	239	1.51	1,510
MW-4	9/13/2017	<0.002	<0.006	<0.006	<0.006	99.3	65	11.1	213	288	278	236	1.78	1,280
MW-4	12/19/2017	<0.002	<0.006	<0.006	<0.006	95.6	64.2	9.33	209	298	296	226	1.73	1,240
MW-4	2/26/2018	<0.002	<0.006	<0.006	<0.006	91.8	62.5	9.32	211	320	306	239	1.93	1,250
MW-4	5/7/2018	<0.002	<0.006	<0.006	<0.006	96.2	64.2	9.6	214	296	299	234	1.9	1,220
MW-4	8/2/2018	<0.00200	<0.00600	<0.00600	<0.00600	90.1	54.6	9.23	189	254	277	245	1.95	1,140
MW-4	12/10/2018	<0.00200	<0.00600	<0.00600	<0.00600	77.9	53.6	8.49	195	223	243	249	1.79	1,110
MW-4	2/18/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	231	--	--	--	--
MW-4	5/7/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	215	--	--	--	--
MW-4	8/1/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	213	--	--	--	--
MW-4	12/5/2019	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	211	--	--	--	--
MW-4	2/17/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	195	--	--	--	--
MW-4	5/4/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	211	--	--	--	--
MW-4	1/4/2021	<0.00200	<0.00600	<0.00600	<0.00600	210	323	18.9	1100	2,160	686	665	--	4,950
MW-4	2/1/2021	<0.00200	<0.00600	<0.00600	<0.00600	68.7	46.4	8.1	168	192	221	246	--	948
MW-4	4/30/2021	<0.000800	<0.00200	<0.00200	<0.00200	75.3	44.5	8.41	158	179	209	244	--	910
MW-4	8/9/2021	<0.000800	<0.00200	<0.00200	<0.00200	65.0	43.5	7.98	165	181	211	243	--	877
MW-4	11/19/2021	<0.000800	<0.00200	<0.00200	<0.00200	70.4	70.2	9.34	266	169	208	243	--	883
MW-4	2/22/2022	<0.000800	<0.00200	<0.00200	<0.00200	62	42.7	7.83	165	176	200	256	--	861
MW-4	5/18/2022	<0.000800	<0.00200	<0.00200	<0.00200	67	40.8	7.85	156	175	194	247	--	880
MW-4	8/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	65	42.6	8.13	162	163	189	247	--	857
MW-4	12/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	63	41.2	8.02	157	166	195	246	--	850
MW-4	3/17/2023	<0.000800	<0.00200	<0.00200	<0.00200	62	43	7.79	160	245	189	245	--	951
MW-4	6/9/2023	<0.000800	<0.00200	<0.00200	<0.00200	65	41.6	7.73	148	145	170	246	--	827
MW-4	12/20/2023	<0.001	<0.001	<0.001	<0.002	68	43	8.2	140	160	180	244.8	--	816
MW-4	6/25/2024	<0.001	0.0021	<0.001	<0.002	59	40	7.7	150	140	160	260	--	780
MW-4	12/9/2024	<0.001	<0.001	<0.001	<0.002	59	42	7.7	140	140	170	250	--	790

CUMULATIVE GROUNDWATER ANALYTICAL SUMMARY TABLE LMPSU TRASH PIT LEA COUNTY, NEW MEXICO 1RP-3360																
All Values Presented in Parts Per Million (mg/L) unless otherwise noted																
SAMPLE ID	DATE	Benzene	Toluene	Ethylbenzene	Xylenes	Calcium	Magnesium	Potassium	Sodium	Chloride	Sulfate	Alkalinity	Nitrate	TDS		
Dup-1 (MW-1)	2/17/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	--	--	--	--	2,200		
Dup-1 (MW-3)	5/4/2020	<0.00200	<0.00600	<0.00600	<0.00600	--	--	--	--	--	--	--	--	449		
Dup-1 (MW-2)	1/4/2021	<0.00200	<0.00600	<0.00600	<0.00600	69	45	8.00	166	191	204	247	--	927		
Dup-1 (MW-2)	2/1/2021	<0.00200	<0.00600	<0.00600	<0.00600	56	49	6.50	145	74	285	269	--	860		
Dup-1 (MW-2)	4/30/2021	<0.000800	<0.00200	<0.00200	<0.00200	53	28	5.30	106	60	125	262	--	612		
Dup-1 (MW-2)	8/9/2021	<0.000800	<0.00200	<0.00200	<0.00200	65	44	7.98	165	181	211	243	--	877		
Dup-1 (MW-2)	11/19/2021	<0.000800	<0.00200	<0.00200	<0.00200	47	27	5.38	98	65	118	244	--	594		
Dup-1 (MW-2)	2/25/2022	<0.000800	<0.00200	<0.00200	<0.00200	48	28	5.61	113	71	118	254	--	598		
Dup-1 (MW-2)	5/18/2022	<0.000800	<0.00200	<0.00200	<0.00200	54	29	5.09	111	78	129	265	--	650		
Dup-1 (MW-2)	8/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	51	29	5.27	117	73	120	278	--	651		
DUP-1 (MW-2)	12/19/2022	<0.000800	<0.00200	<0.00200	<0.00200	49	28	5.97	112	68	115	248	--	586		
DUP-1 (MW-2)	3/17/2023	<0.000800	<0.00200	<0.00200	<0.00200	50	29	5.92	112	63	112	257	--	602		
DUP-1 (MW-2)	6/9/2023	<0.000800	<0.00200	<0.00200	<0.00200	53	28	5.52	104	62	109	257	--	604		
Duplicate (MW-2)	12/20/2024	<0.001	<0.001	<0.001	<0.002	54	28	6.00	100	61	110	253.8	--	603		
MW-A Duplicate (MW-2)	6/25/2024	<0.001	0.0015	<0.001	<0.002	52	30	5.5	110	62	110	270	--	610		
FIELD DUP. (MW-2)	12/9/2024	<0.001	<0.001	<0.001	<0.002	47	29	5.8	100	62	110	260	--	590		
20.6.2.3103 NMAC GW STANDARDS (<10,000 mg/L)						---	---	---	---	---						
A. Human Health Standards		0.005	1	0.7	0.62										10 ¹	1,000
B. Other Standards for Domestic Water Supply																
C. Standards for Irrigation Use																
Notes: 1. This standard is for nitrate. The nitrite standard is 1.0 mg/L. 2. Exceedances of the listed closure criteria highlighted in bold, red type																

ATTACHMENT 1 – SITE PHOTOGRAPHS



PHOTOGRAPH NO. 1 – A general view of the low-flow sampling methodology at monitor well MW-4 on June 25, 2024.



PHOTOGRAPH NO. 2 – A current view of the former Langlie Mattix Penrose Sand Unit Trash Pit. The view is towards the north
(Approximate GPS Coordinates: 32.357423, -103.147517)

ATTACHMENT 2 – LABORATORY ANALYTICAL REPORTS



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Max Cook
Ranger Environmental Services, Inc
7215 McNeil Drive
PO BOX 201179
Austin, Texas 78729

Generated 7/27/2024 10:18:38 AM

JOB DESCRIPTION

LMPSU Trash Pit

JOB NUMBER

885-7029-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109



Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Generated
7/27/2024 10:18:38 AM

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Laboratory Job ID: 885-7029-1

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Definitions/Glossary

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
⬮	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: Ranger Environmental Services, Inc
Project: LMPSU Trash Pit

Job ID: 885-7029-1

Job ID: 885-7029-1

Eurofins Albuquerque

Job Narrative 885-7029-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 6/27/2024 10:58 AM. 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 0.3°C.

GC VOA

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.

Metals

Method 200.7 - Dissolved: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for analytical batch 885-8038. The associated laboratory control sample (LCS) met acceptance criteria.

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

General Chemistry

Method 2540C_Calcd: The analysis volume selected for the following sample produced a base result greater than 200mg before calculation of the final result: MW-1 (885-7029-1). Reanalysis could not be performed due to holding time exceedance. Visual inspection shows no signs of trapped moisture, report as is. The reference method specifies that no more than 200mg of weight be recovered for a chosen sample analysis volume in order to produce the best data precision. As such, these data have been qualified.

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

Eurofins Albuquerque

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-1
Date Collected: 06/25/24 12:54
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-1
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	1.2		1.0	ug/L			07/08/24 11:10	1	
Ethylbenzene	1.2		1.0	ug/L			07/08/24 11:10	1	
Toluene	5.0		1.0	ug/L			07/08/24 11:10	1	
Xylenes, Total	4.8		2.0	ug/L			07/08/24 11:10	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	86		43 - 158				07/08/24 11:10	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	1700		100	mg/L			07/23/24 19:34	200	
Sulfate	740		10	mg/L			07/20/24 02:12	20	
Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Calcium	230		5.0	mg/L			07/08/24 13:21	5	
Magnesium	270		5.0	mg/L			07/08/24 13:21	5	
Potassium	21		1.0	mg/L			07/08/24 13:19	1	
Sodium	1100		20	mg/L			07/09/24 14:22	20	
General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Total Alkalinity as CaCO3 (SM 2320B)	590		20	mg/L			07/08/24 15:21	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	590		20	mg/L			07/08/24 15:21	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			07/08/24 15:21	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			07/08/24 15:21	1	
Total Dissolved Solids (SM 2540C)	4200	E	50	mg/L			07/01/24 17:49	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-2
Date Collected: 06/25/24 15:20
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-2
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	ND		1.0	ug/L			07/08/24 11:33	1	
Ethylbenzene	ND		1.0	ug/L			07/08/24 11:33	1	
Toluene	1.5		1.0	ug/L			07/08/24 11:33	1	
Xylenes, Total	ND		2.0	ug/L			07/08/24 11:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	84		43 - 158				07/08/24 11:33	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	66		10	mg/L			07/20/24 02:37	20	
Sulfate	120		10	mg/L			07/20/24 02:37	20	
Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Calcium	53		1.0	mg/L			07/08/24 13:30	1	
Magnesium	30		1.0	mg/L			07/08/24 13:30	1	
Potassium	5.5		1.0	mg/L			07/08/24 13:30	1	
Sodium	110		5.0	mg/L			07/08/24 13:32	5	
General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Total Alkalinity as CaCO3 (SM 2320B)	270		20	mg/L			07/09/24 15:33	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	270		20	mg/L			07/09/24 15:33	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			07/09/24 15:33	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			07/09/24 15:33	1	
Total Dissolved Solids (SM 2540C)	620		50	mg/L			07/01/24 17:49	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-3
Date Collected: 06/25/24 14:51
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-3
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	ND		1.0	ug/L			07/08/24 11:56	1	
Ethylbenzene	ND		1.0	ug/L			07/08/24 11:56	1	
Toluene	ND		1.0	ug/L			07/08/24 11:56	1	
Xylenes, Total	ND		2.0	ug/L			07/08/24 11:56	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	86		43 - 158				07/08/24 11:56	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	480		25	mg/L			07/23/24 19:49	50	
Sulfate	270		10	mg/L			07/20/24 03:51	20	
Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Calcium	75		1.0	mg/L			07/09/24 13:56	1	
Magnesium	80		1.0	mg/L			07/09/24 13:56	1	
Potassium	10		1.0	mg/L			07/09/24 13:56	1	
Sodium	270		5.0	mg/L			07/09/24 13:58	5	
General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Total Alkalinity as CaCO3 (SM 2320B)	200		20	mg/L			07/09/24 15:46	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	200		20	mg/L			07/09/24 15:46	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			07/09/24 15:46	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			07/09/24 15:46	1	
Total Dissolved Solids (SM 2540C)	1400		50	mg/L			07/01/24 17:49	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-4
Date Collected: 06/25/24 10:10
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-4
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	ND		1.0	ug/L			07/08/24 12:20	1	
Ethylbenzene	ND		1.0	ug/L			07/08/24 12:20	1	
Toluene	2.1		1.0	ug/L			07/08/24 12:20	1	
Xylenes, Total	ND		2.0	ug/L			07/08/24 12:20	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	86		43 - 158				07/08/24 12:20	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	140		10	mg/L			07/20/24 04:15	20	
Sulfate	160		10	mg/L			07/20/24 04:15	20	
Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Calcium	59		1.0	mg/L			07/09/24 14:00	1	
Magnesium	40		1.0	mg/L			07/09/24 14:00	1	
Potassium	7.7		1.0	mg/L			07/09/24 14:00	1	
Sodium	150		5.0	mg/L			07/09/24 14:02	5	
General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Total Alkalinity as CaCO3 (SM 2320B)	260		20	mg/L			07/09/24 15:56	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	260		20	mg/L			07/09/24 15:56	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			07/09/24 15:56	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			07/09/24 15:56	1	
Total Dissolved Solids (SM 2540C)	780		50	mg/L			07/01/24 17:49	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-A Duplicate
Date Collected: 06/25/24 15:30
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-5
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			07/08/24 12:43	1	
Ethylbenzene	ND		1.0	ug/L			07/08/24 12:43	1	
Toluene	1.5		1.0	ug/L			07/08/24 12:43	1	
Xylenes, Total	ND		2.0	ug/L			07/08/24 12:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	90		43 - 158				07/08/24 12:43	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	62		10	mg/L			07/20/24 04:40	20	
Sulfate	110		10	mg/L			07/20/24 04:40	20	

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	52		1.0	mg/L			07/08/24 14:11	1	
Magnesium	30		1.0	mg/L			07/08/24 14:11	1	
Potassium	5.5		1.0	mg/L			07/08/24 14:11	1	
Sodium	110		5.0	mg/L			07/08/24 14:13	5	

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Alkalinity as CaCO3 (SM 2320B)	270		20	mg/L			07/09/24 16:09	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	270		20	mg/L			07/09/24 16:09	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			07/09/24 16:09	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			07/09/24 16:09	1	
Total Dissolved Solids (SM 2540C)	610		50	mg/L			07/01/24 17:49	1	

QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-8062/20

Matrix: Water

Analysis Batch: 8062

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	ND		1.0	ug/L			07/08/24 10:46	1
Ethylbenzene	ND		1.0	ug/L			07/08/24 10:46	1
Toluene	ND		1.0	ug/L			07/08/24 10:46	1
Xylenes, Total	ND		2.0	ug/L			07/08/24 10:46	1
Surrogate	MB MB		Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	89		43 - 158				07/08/24 10:46	1

Lab Sample ID: LCS 885-8062/19

Matrix: Water

Analysis Batch: 8062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	%Rec Limits	
		Result	Qualifier					
Benzene	20.0	18.3		ug/L		91	70 - 130	
Ethylbenzene	20.0	17.1		ug/L		86	70 - 130	
m&p-Xylene	40.0	34.5		ug/L		86	70 - 130	
o-Xylene	20.0	17.1		ug/L		85	70 - 130	
Toluene	20.0	17.1		ug/L		85	70 - 130	
Xylenes, Total	60.0	51.5		ug/L		86	70 - 130	
Surrogate	LCS LCS		Limits			%Recovery	Qualifier	
	%Recovery	Qualifier						
4-Bromofluorobenzene (Surr)	90		43 - 158					

Lab Sample ID: 885-7029-2 MS

Matrix: Water

Analysis Batch: 8062

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec Limits	
	Result	Qualifier		Result	Qualifier					
Benzene	ND		20.0	18.1		ug/L		88	70 - 130	
Ethylbenzene	ND		20.0	17.2		ug/L		83	70 - 130	
m&p-Xylene	1.1		40.0	35.2		ug/L		85	70 - 130	
o-Xylene	ND		20.0	17.1		ug/L		83	70 - 130	
Toluene	1.5		20.0	18.5		ug/L		85	70 - 130	
Xylenes, Total	ND		60.0	52.3		ug/L		84	70 - 130	
Surrogate	MS MS		Limits			%Recovery	Qualifier			
	%Recovery	Qualifier								
4-Bromofluorobenzene (Surr)	92		43 - 158							

Lab Sample ID: 885-7029-2 MSD

Matrix: Water

Analysis Batch: 8062

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec Limits		RPD Limit	
	Result	Qualifier		Result	Qualifier						RPD	Limit
Benzene	ND		20.0	17.3		ug/L		84	70 - 130		5	20
Ethylbenzene	ND		20.0	16.7		ug/L		81	70 - 130		3	20
m&p-Xylene	1.1		40.0	34.4		ug/L		83	70 - 130		2	20
o-Xylene	ND		20.0	16.9		ug/L		82	70 - 130		1	20
Toluene	1.5		20.0	17.6		ug/L		81	70 - 130		5	20

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

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

Lab Sample ID: 885-7029-2 MSD

Matrix: Water

Analysis Batch: 8062

Client Sample ID: MW-2

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Xylenes, Total	ND		60.0	51.3		ug/L		83	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	90		43 - 158								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-8831/4

Matrix: Water

Analysis Batch: 8831

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			07/19/24 12:31	1
Sulfate	ND		0.50	mg/L			07/19/24 12:31	1

Lab Sample ID: MB 885-8831/67

Matrix: Water

Analysis Batch: 8831

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			07/20/24 01:10	1
Sulfate	ND		0.50	mg/L			07/20/24 01:10	1

Lab Sample ID: LCS 885-8831/68

Matrix: Water

Analysis Batch: 8831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.96		mg/L		99	90 - 110
Sulfate	10.0	10.1		mg/L		101	90 - 110

Lab Sample ID: MRL 885-8831/3

Matrix: Water

Analysis Batch: 8831

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.513		mg/L		103	50 - 150
Sulfate	0.500	0.487	J	mg/L		97	50 - 150

Lab Sample ID: MB 885-9027/30

Matrix: Water

Analysis Batch: 9027

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			07/23/24 18:34	1
Sulfate	ND		0.50	mg/L			07/23/24 18:34	1

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-9027/4

Matrix: Water

Analysis Batch: 9027

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/L			07/23/24 12:00	1
Sulfate	ND		0.50	mg/L			07/23/24 12:00	1

Lab Sample ID: LCS 885-9027/31

Matrix: Water

Analysis Batch: 9027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.00	4.71		mg/L		94	90 - 110
Sulfate	10.0	9.55		mg/L		95	90 - 110

Lab Sample ID: MRL 885-9027/3

Matrix: Water

Analysis Batch: 9027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.523		mg/L		105	50 - 150
Sulfate	0.500	0.537		mg/L		107	50 - 150

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 885-8038/62

Matrix: Water

Analysis Batch: 8038

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.0	mg/L			07/08/24 12:18	1
Magnesium	ND		1.0	mg/L			07/08/24 12:18	1
Potassium	ND		1.0	mg/L			07/08/24 12:18	1
Sodium	ND		1.0	mg/L			07/08/24 12:18	1

Lab Sample ID: LCS 885-8038/64

Matrix: Water

Analysis Batch: 8038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50.0	54.4		mg/L		109	85 - 115
Magnesium	50.0	51.6		mg/L		103	85 - 115
Potassium	50.0	50.8		mg/L		102	85 - 115
Sodium	50.0	53.5		mg/L		107	85 - 115

Lab Sample ID: LLCS 885-8038/63

Matrix: Water

Analysis Batch: 8038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.544	J	mg/L		109	50 - 150
Magnesium	0.500	0.511	J	mg/L		102	50 - 150
Potassium	0.500	0.454	J	mg/L		91	50 - 150
Sodium	0.500	0.626	J	mg/L		125	50 - 150

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MRL 885-8038/13

Matrix: Water

Analysis Batch: 8038

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.538	J	mg/L		108	50 - 150
Magnesium	0.500	0.526	J	mg/L		105	50 - 150
Potassium	0.500	0.518	J	mg/L		104	50 - 150
Sodium	0.500	0.527	J	mg/L		105	50 - 150

Lab Sample ID: MB 885-8111/17

Matrix: Water

Analysis Batch: 8111

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.0	mg/L			07/09/24 13:51	1
Magnesium	ND		1.0	mg/L			07/09/24 13:51	1
Potassium	ND		1.0	mg/L			07/09/24 13:51	1
Sodium	ND		1.0	mg/L			07/09/24 13:51	1

Lab Sample ID: LCS 885-8111/19

Matrix: Water

Analysis Batch: 8111

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50.0	52.4		mg/L		105	85 - 115
Magnesium	50.0	52.2		mg/L		104	85 - 115
Potassium	50.0	51.4		mg/L		103	85 - 115
Sodium	50.0	52.4		mg/L		105	85 - 115

Lab Sample ID: LLCS 885-8111/18

Matrix: Water

Analysis Batch: 8111

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.492	J	mg/L		98	50 - 150
Magnesium	0.500	0.491	J	mg/L		98	50 - 150
Potassium	0.500	0.427	J	mg/L		85	50 - 150
Sodium	0.500	0.453	J	mg/L		91	50 - 150

Lab Sample ID: MRL 885-8111/14

Matrix: Water

Analysis Batch: 8111

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.529	J	mg/L		106	50 - 150
Magnesium	0.500	0.526	J	mg/L		105	50 - 150
Potassium	0.500	0.456	J	mg/L		91	50 - 150
Sodium	0.500	0.567	J	mg/L		113	50 - 150

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 885-8149/2

Matrix: Water

Analysis Batch: 8149

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		20	mg/L			07/08/24 13:19	1
Bicarbonate Alkalinity as CaCO3	ND		20	mg/L			07/08/24 13:19	1
Carbonate Alkalinity as CaCO3	ND		2.0	mg/L			07/08/24 13:19	1
Hydroxide Alkalinity as CaCO3	ND		12	mg/L			07/08/24 13:19	1

Lab Sample ID: LCS 885-8149/3

Matrix: Water

Analysis Batch: 8149

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	84.8	77.8		mg/L		92	90 - 110

Lab Sample ID: MRL 885-8149/1

Matrix: Water

Analysis Batch: 8149

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	21.2	24.7		mg/L		117	50 - 150

Lab Sample ID: 885-7029-1 DU

Matrix: Water

Analysis Batch: 8149

Client Sample ID: MW-1

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3	590		589		mg/L		0.2	20
Bicarbonate Alkalinity as CaCO3	590		589		mg/L		0.2	
Carbonate Alkalinity as CaCO3	ND		ND		mg/L		NC	
Hydroxide Alkalinity as CaCO3	ND		ND		mg/L		NC	

Lab Sample ID: MB 885-8150/2

Matrix: Water

Analysis Batch: 8150

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		20	mg/L			07/09/24 12:46	1
Bicarbonate Alkalinity as CaCO3	ND		20	mg/L			07/09/24 12:46	1
Carbonate Alkalinity as CaCO3	ND		2.0	mg/L			07/09/24 12:46	1
Hydroxide Alkalinity as CaCO3	ND		12	mg/L			07/09/24 12:46	1

Lab Sample ID: MB 885-8150/25

Matrix: Water

Analysis Batch: 8150

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3	ND		20	mg/L			07/09/24 17:48	1
Bicarbonate Alkalinity as CaCO3	ND		20	mg/L			07/09/24 17:48	1
Carbonate Alkalinity as CaCO3	ND		2.0	mg/L			07/09/24 17:48	1
Hydroxide Alkalinity as CaCO3	ND		12	mg/L			07/09/24 17:48	1

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 885-8150/26				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 8150							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	84.8	80.4		mg/L		95	90 - 110

Lab Sample ID: LCS 885-8150/3				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 8150							
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	84.8	79.6		mg/L		94	90 - 110

Lab Sample ID: MRL 885-8150/1				Client Sample ID: Lab Control Sample			
Matrix: Water				Prep Type: Total/NA			
Analysis Batch: 8150							
Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3	21.2	23.0		mg/L		108	50 - 150

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 885-7731/1

Matrix: Water

Analysis Batch: 7731

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	mg/L			07/01/24 17:49	1

Lab Sample ID: LCS 885-7731/2

Matrix: Water

Analysis Batch: 7731

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1030		mg/L		102	80 - 120

Lab Sample ID: MRL 885-7731/3

Matrix: Water

Analysis Batch: 7731

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	50.0	56.0		mg/L		112	50 - 150

QC Association Summary

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

GC VOA

Analysis Batch: 8062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Total/NA	Water	8021B	
885-7029-2	MW-2	Total/NA	Water	8021B	
885-7029-3	MW-3	Total/NA	Water	8021B	
885-7029-4	MW-4	Total/NA	Water	8021B	
885-7029-5	MW-A Duplicate	Total/NA	Water	8021B	
MB 885-8062/20	Method Blank	Total/NA	Water	8021B	
LCS 885-8062/19	Lab Control Sample	Total/NA	Water	8021B	
885-7029-2 MS	MW-2	Total/NA	Water	8021B	
885-7029-2 MSD	MW-2	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 8831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Total/NA	Water	300.0	
885-7029-2	MW-2	Total/NA	Water	300.0	
885-7029-3	MW-3	Total/NA	Water	300.0	
885-7029-4	MW-4	Total/NA	Water	300.0	
885-7029-5	MW-A Duplicate	Total/NA	Water	300.0	
MB 885-8831/4	Method Blank	Total/NA	Water	300.0	
MB 885-8831/67	Method Blank	Total/NA	Water	300.0	
LCS 885-8831/68	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-8831/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 9027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Total/NA	Water	300.0	
885-7029-3	MW-3	Total/NA	Water	300.0	
MB 885-9027/30	Method Blank	Total/NA	Water	300.0	
MB 885-9027/4	Method Blank	Total/NA	Water	300.0	
LCS 885-9027/31	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-9027/3	Lab Control Sample	Total/NA	Water	300.0	

Metals

Analysis Batch: 8038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Dissolved	Water	200.7 Rev 4.4	
885-7029-1	MW-1	Dissolved	Water	200.7 Rev 4.4	
885-7029-2	MW-2	Dissolved	Water	200.7 Rev 4.4	
885-7029-2	MW-2	Dissolved	Water	200.7 Rev 4.4	
885-7029-5	MW-A Duplicate	Dissolved	Water	200.7 Rev 4.4	
885-7029-5	MW-A Duplicate	Dissolved	Water	200.7 Rev 4.4	
MB 885-8038/62	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 885-8038/64	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LLCS 885-8038/63	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
MRL 885-8038/13	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

Analysis Batch: 8111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Dissolved	Water	200.7 Rev 4.4	
885-7029-3	MW-3	Dissolved	Water	200.7 Rev 4.4	

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QC Association Summary

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Metals (Continued)

Analysis Batch: 8111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-3	MW-3	Dissolved	Water	200.7 Rev 4.4	
885-7029-4	MW-4	Dissolved	Water	200.7 Rev 4.4	
885-7029-4	MW-4	Dissolved	Water	200.7 Rev 4.4	
MB 885-8111/17	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 885-8111/19	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LLCS 885-8111/18	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
MRL 885-8111/14	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	

General Chemistry

Analysis Batch: 7731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Total/NA	Water	SM 2540C	
885-7029-2	MW-2	Total/NA	Water	SM 2540C	
885-7029-3	MW-3	Total/NA	Water	SM 2540C	
885-7029-4	MW-4	Total/NA	Water	SM 2540C	
885-7029-5	MW-A Duplicate	Total/NA	Water	SM 2540C	
MB 885-7731/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 885-7731/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MRL 885-7731/3	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 8149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-1	MW-1	Total/NA	Water	SM 2320B	
MB 885-8149/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 885-8149/3	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 885-8149/1	Lab Control Sample	Total/NA	Water	SM 2320B	
885-7029-1 DU	MW-1	Total/NA	Water	SM 2320B	

Analysis Batch: 8150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-7029-2	MW-2	Total/NA	Water	SM 2320B	
885-7029-3	MW-3	Total/NA	Water	SM 2320B	
885-7029-4	MW-4	Total/NA	Water	SM 2320B	
885-7029-5	MW-A Duplicate	Total/NA	Water	SM 2320B	
MB 885-8150/2	Method Blank	Total/NA	Water	SM 2320B	
MB 885-8150/25	Method Blank	Total/NA	Water	SM 2320B	
LCS 885-8150/26	Lab Control Sample	Total/NA	Water	SM 2320B	
LCS 885-8150/3	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 885-8150/1	Lab Control Sample	Total/NA	Water	SM 2320B	

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Lab Chronicle

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-1
Date Collected: 06/25/24 12:54
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	8062	JP	EET ALB	07/08/24 11:10
Total/NA	Analysis	300.0		200	9027	JT	EET ALB	07/23/24 19:34
Total/NA	Analysis	300.0		20	8831	RC	EET ALB	07/20/24 02:12
Dissolved	Analysis	200.7 Rev 4.4		1	8038	VP	EET ALB	07/08/24 13:19
Dissolved	Analysis	200.7 Rev 4.4		5	8038	VP	EET ALB	07/08/24 13:21
Dissolved	Analysis	200.7 Rev 4.4		20	8111	VP	EET ALB	07/09/24 14:22
Total/NA	Analysis	SM 2320B		1	8149	DL	EET ALB	07/08/24 15:21
Total/NA	Analysis	SM 2540C		1	7731	KS	EET ALB	07/01/24 17:49

Client Sample ID: MW-2
Date Collected: 06/25/24 15:20
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	8062	JP	EET ALB	07/08/24 11:33
Total/NA	Analysis	300.0		20	8831	RC	EET ALB	07/20/24 02:37
Dissolved	Analysis	200.7 Rev 4.4		1	8038	VP	EET ALB	07/08/24 13:30
Dissolved	Analysis	200.7 Rev 4.4		5	8038	VP	EET ALB	07/08/24 13:32
Total/NA	Analysis	SM 2320B		1	8150	DL	EET ALB	07/09/24 15:33
Total/NA	Analysis	SM 2540C		1	7731	KS	EET ALB	07/01/24 17:49

Client Sample ID: MW-3
Date Collected: 06/25/24 14:51
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	8062	JP	EET ALB	07/08/24 11:56
Total/NA	Analysis	300.0		50	9027	JT	EET ALB	07/23/24 19:49
Total/NA	Analysis	300.0		20	8831	RC	EET ALB	07/20/24 03:51
Dissolved	Analysis	200.7 Rev 4.4		1	8111	VP	EET ALB	07/09/24 13:56
Dissolved	Analysis	200.7 Rev 4.4		5	8111	VP	EET ALB	07/09/24 13:58
Total/NA	Analysis	SM 2320B		1	8150	DL	EET ALB	07/09/24 15:46
Total/NA	Analysis	SM 2540C		1	7731	KS	EET ALB	07/01/24 17:49

Client Sample ID: MW-4
Date Collected: 06/25/24 10:10
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	8062	JP	EET ALB	07/08/24 12:20
Total/NA	Analysis	300.0		20	8831	RC	EET ALB	07/20/24 04:15
Dissolved	Analysis	200.7 Rev 4.4		1	8111	VP	EET ALB	07/09/24 14:00
Dissolved	Analysis	200.7 Rev 4.4		5	8111	VP	EET ALB	07/09/24 14:02

Eurofins Albuquerque

Lab Chronicle

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Client Sample ID: MW-4
Date Collected: 06/25/24 10:10
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2320B		1	8150	DL	EET ALB	07/09/24 15:56
Total/NA	Analysis	SM 2540C		1	7731	KS	EET ALB	07/01/24 17:49

Client Sample ID: MW-A Duplicate
Date Collected: 06/25/24 15:30
Date Received: 06/27/24 10:58

Lab Sample ID: 885-7029-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	8062	JP	EET ALB	07/08/24 12:43
Total/NA	Analysis	300.0		20	8831	RC	EET ALB	07/20/24 04:40
Dissolved	Analysis	200.7 Rev 4.4		1	8038	VP	EET ALB	07/08/24 14:11
Dissolved	Analysis	200.7 Rev 4.4		5	8038	VP	EET ALB	07/08/24 14:13
Total/NA	Analysis	SM 2320B		1	8150	DL	EET ALB	07/09/24 16:09
Total/NA	Analysis	SM 2540C		1	7731	KS	EET ALB	07/01/24 17:49

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Ranger Environmental Services, Inc
Project/Site: LMPSU Trash Pit

Job ID: 885-7029-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25
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
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Please have all samples analyzed for the following constituents

Test	Method
BTEX	8021B
Anions :: including Chloride & Sulfate	300
Dissolved Metals :: including Calcium, Magnesium, Potassium, Sodium	6020B
Alkalinity :: including Bicarbonate, Carbonate, Hydroxide, Total Alkalinity	M2320B
TDS	M2540C

Ranger- LmPSU Trash Pit

Login Sample Receipt Checklist

Client: Ranger Environmental Services, Inc

Job Number: 885-7029-1

Login Number: 7029

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Will Kierdorf
Ranger Environmental Services, Inc
7215 McNeil Drive
PO BOX 201179
Austin, Texas 78729

Generated 12/19/2024 5:19:00 PM

JOB DESCRIPTION

Lmpsu Trash Pit

JOB NUMBER

885-16882-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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12/19/2024 5:19:00 PM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Laboratory Job ID: 885-16882-1

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Definitions/Glossary

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Qualifiers

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Ranger Environmental Services, Inc
Project: Lmpsu Trash Pit

Job ID: 885-16882-1

Job ID: 885-16882-1

Eurofins Albuquerque

Job Narrative 885-16882-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 12/12/2024 7:45 AM. 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 0.7°C.

GC VOA

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

HPLC/IC

Method 300_OF_28D_PREC: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 885-17579 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Metals

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

General Chemistry

Method 2540C_SingleDry: The analysis volume selected for the following sample produced a base result greater than 200mg before calculation of the final result: MW-1 (885-16882-1). Reanalysis could not be performed due to holding time exceedance. Visual inspection by analyst shows no signs of trapped moisture, report as is. The reference method specifies that no more than 200mg of weight be recovered for a chosen sample analysis volume in order to produce the best data precision. As such, these data have been qualified.

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

Eurofins Albuquerque

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: MW-1

Lab Sample ID: 885-16882-1

Date Collected: 12/09/24 15:17

Matrix: Water

Date Received: 12/12/24 07:45

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			12/18/24 06:42	1
Ethylbenzene	ND		1.0	ug/L			12/18/24 06:42	1
Toluene	ND		1.0	ug/L			12/18/24 06:42	1
Xylenes, Total	ND		2.0	ug/L			12/18/24 06:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		43 - 158		12/18/24 06:42	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1900		100	mg/L			12/13/24 19:29	200
Sulfate	650		50	mg/L			12/12/24 17:24	100

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	190		10	mg/L			12/19/24 07:46	10
Magnesium	240		10	mg/L			12/19/24 07:46	10
Potassium	20		1.0	mg/L			12/19/24 07:44	1
Sodium	980		10	mg/L			12/19/24 07:46	10

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	4600	E	100	mg/L			12/16/24 12:09	1
Total Alkalinity as CaCO3 (SM 2320B)	620		20	mg/L			12/13/24 18:14	1
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	620		20	mg/L			12/13/24 18:14	1
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			12/13/24 18:14	1
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			12/13/24 18:14	1

Eurofins Albuquerque

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: MW-2
Date Collected: 12/09/24 13:01
Date Received: 12/12/24 07:45

Lab Sample ID: 885-16882-2
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			12/18/24 07:04	1	
Ethylbenzene	ND		1.0	ug/L			12/18/24 07:04	1	
Toluene	ND		1.0	ug/L			12/18/24 07:04	1	
Xylenes, Total	ND		2.0	ug/L			12/18/24 07:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		43 - 158				12/18/24 07:04	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	60		10	mg/L			12/12/24 17:46	20	
Sulfate	110		10	mg/L			12/12/24 17:46	20	

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	49		1.0	mg/L			12/19/24 07:48	1	
Magnesium	29		1.0	mg/L			12/19/24 07:48	1	
Potassium	5.7		1.0	mg/L			12/19/24 07:48	1	
Sodium	110		10	mg/L			12/19/24 07:49	10	

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	600		50	mg/L			12/16/24 12:09	1	
Total Alkalinity as CaCO3 (SM 2320B)	260		20	mg/L			12/13/24 18:42	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	260		20	mg/L			12/13/24 18:42	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			12/13/24 18:42	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			12/13/24 18:42	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: MW-3
Date Collected: 12/09/24 14:33
Date Received: 12/12/24 07:45

Lab Sample ID: 885-16882-3
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			12/18/24 07:25	1	
Ethylbenzene	ND		1.0	ug/L			12/18/24 07:25	1	
Toluene	ND		1.0	ug/L			12/18/24 07:25	1	
Xylenes, Total	ND		2.0	ug/L			12/18/24 07:25	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		43 - 158				12/18/24 07:25	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	470		25	mg/L			12/13/24 19:39	50	
Sulfate	270		10	mg/L			12/12/24 18:30	20	

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	75		1.0	mg/L			12/19/24 07:51	1	
Magnesium	83		1.0	mg/L			12/19/24 07:51	1	
Potassium	10		1.0	mg/L			12/19/24 07:51	1	
Sodium	290		10	mg/L			12/19/24 07:53	10	

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	1400		50	mg/L			12/16/24 12:09	1	
Total Alkalinity as CaCO3 (SM 2320B)	200		20	mg/L			12/13/24 18:55	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	200		20	mg/L			12/13/24 18:55	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			12/13/24 18:55	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			12/13/24 18:55	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: MW-4
Date Collected: 12/09/24 13:50
Date Received: 12/12/24 07:45

Lab Sample ID: 885-16882-4
Matrix: Water

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	ND		1.0	ug/L			12/18/24 08:29	1	
Ethylbenzene	ND		1.0	ug/L			12/18/24 08:29	1	
Toluene	ND		1.0	ug/L			12/18/24 08:29	1	
Xylenes, Total	ND		2.0	ug/L			12/18/24 08:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	101		43 - 158				12/18/24 08:29	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	140		10	mg/L			12/12/24 18:53	20	
Sulfate	170		10	mg/L			12/12/24 18:53	20	
Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Calcium	59		10	mg/L			12/19/24 08:00	10	
Magnesium	42		1.0	mg/L			12/19/24 08:02	1	
Potassium	7.7		1.0	mg/L			12/19/24 08:02	1	
Sodium	140		10	mg/L			12/19/24 08:00	10	
General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Total Dissolved Solids (SM 2540C)	790		50	mg/L			12/16/24 12:09	1	
Total Alkalinity as CaCO3 (SM 2320B)	250		20	mg/L			12/13/24 19:06	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	250		20	mg/L			12/13/24 19:06	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			12/13/24 19:06	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			12/13/24 19:06	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: FIELD DUP. Lab Sample ID: 885-16882-5
Date Collected: 12/09/24 13:02 Matrix: Water
Date Received: 12/12/24 07:45

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			12/18/24 08:51	1	
Ethylbenzene	ND		1.0	ug/L			12/18/24 08:51	1	
Toluene	ND		1.0	ug/L			12/18/24 08:51	1	
Xylenes, Total	ND		2.0	ug/L			12/18/24 08:51	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		43 - 158				12/18/24 08:51	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	62		10	mg/L			12/12/24 19:37	20	
Sulfate	110		10	mg/L			12/12/24 19:37	20	

Method: EPA 200.7 Rev 4.4 - Metals (ICP) - Dissolved									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Calcium	47		10	mg/L			12/19/24 08:13	10	
Magnesium	29		1.0	mg/L			12/19/24 08:07	1	
Potassium	5.8		1.0	mg/L			12/19/24 08:07	1	
Sodium	100		10	mg/L			12/19/24 08:13	10	

General Chemistry									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Dissolved Solids (SM 2540C)	590		50	mg/L			12/16/24 12:09	1	
Total Alkalinity as CaCO3 (SM 2320B)	260		20	mg/L			12/13/24 19:18	1	
Bicarbonate Alkalinity as CaCO3 (SM 2320B)	260		20	mg/L			12/13/24 19:18	1	
Carbonate Alkalinity as CaCO3 (SM 2320B)	ND		2.0	mg/L			12/13/24 19:18	1	
Hydroxide Alkalinity as CaCO3 (SM 2320B)	ND		12	mg/L			12/13/24 19:18	1	

Client Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 885-16882-6

Date Collected: 12/09/24 00:00

Matrix: Water

Date Received: 12/12/24 07:45

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		1.0	ug/L			12/18/24 09:12	1	
Ethylbenzene	ND		1.0	ug/L			12/18/24 09:12	1	
Toluene	ND		1.0	ug/L			12/18/24 09:12	1	
Xylenes, Total	ND		2.0	ug/L			12/18/24 09:12	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		43 - 158				12/18/24 09:12	1	

QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-17965/56

Matrix: Water

Analysis Batch: 17965

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	ug/L			12/18/24 06:21	1
Ethylbenzene	ND		1.0	ug/L			12/18/24 06:21	1
Toluene	ND		1.0	ug/L			12/18/24 06:21	1
Xylenes, Total	ND		2.0	ug/L			12/18/24 06:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		43 - 158				12/18/24 06:21	1

Lab Sample ID: LCS 885-17965/55

Matrix: Water

Analysis Batch: 17965

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	20.0	18.9		ug/L		94	70 - 130
Ethylbenzene	20.0	19.3		ug/L		97	70 - 130
m&p-Xylene	40.0	37.6		ug/L		94	70 - 130
o-Xylene	20.0	19.2		ug/L		96	70 - 130
Toluene	20.0	19.1		ug/L		96	70 - 130
Xylenes, Total	60.0	56.8		ug/L		95	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	101		43 - 158				

Lab Sample ID: 885-16882-3 MS

Matrix: Water

Analysis Batch: 17965

Client Sample ID: MW-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		20.0	18.1		ug/L		91	70 - 130
Ethylbenzene	ND		20.0	18.7		ug/L		93	70 - 130
m&p-Xylene	ND		40.0	36.9		ug/L		92	70 - 130
o-Xylene	ND		20.0	18.7		ug/L		94	70 - 130
Toluene	ND		20.0	18.6		ug/L		93	70 - 130
Xylenes, Total	ND		60.0	55.6		ug/L		93	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	99		43 - 158						

Lab Sample ID: 885-16882-3 MSD

Matrix: Water

Analysis Batch: 17965

Client Sample ID: MW-3

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		20.0	17.8		ug/L		89	70 - 130	2	20
Ethylbenzene	ND		20.0	18.5		ug/L		92	70 - 130	1	20
m&p-Xylene	ND		40.0	36.5		ug/L		91	70 - 130	1	20
o-Xylene	ND		20.0	18.5		ug/L		93	70 - 130	1	20
Toluene	ND		20.0	18.3		ug/L		92	70 - 130	2	20

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MRL 885-17697/3

Matrix: Water

Analysis Batch: 17697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.528		mg/L		106	50 - 150
Sulfate	0.500	0.518		mg/L		104	50 - 150

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 885-18081/30

Matrix: Water

Analysis Batch: 18081

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		1.0	mg/L			12/19/24 07:12	1
Magnesium	ND		1.0	mg/L			12/19/24 07:12	1
Potassium	ND		1.0	mg/L			12/19/24 07:12	1
Sodium	ND		1.0	mg/L			12/19/24 07:12	1

Lab Sample ID: LCS 885-18081/32

Matrix: Water

Analysis Batch: 18081

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	50.0	52.2		mg/L		104	85 - 115
Magnesium	50.0	52.8		mg/L		106	85 - 115
Potassium	50.0	52.7		mg/L		105	85 - 115
Sodium	50.0	54.3		mg/L		109	85 - 115

Lab Sample ID: LLCS 885-18081/35

Matrix: Water

Analysis Batch: 18081

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.505	J	mg/L		101	50 - 150
Magnesium	0.500	0.526	J	mg/L		105	50 - 150
Potassium	0.500	0.403	J	mg/L		81	50 - 150
Sodium	0.500	0.673	J	mg/L		135	50 - 150

Lab Sample ID: MRL 885-18081/27

Matrix: Water

Analysis Batch: 18081

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	0.500	0.511	J	mg/L		102	50 - 150
Magnesium	0.500	0.504	J	mg/L		101	50 - 150
Potassium	0.500	0.406	J	mg/L		81	50 - 150
Sodium	0.500	0.357	J	mg/L		71	50 - 150

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 885-16882-4 MS

Matrix: Water

Analysis Batch: 18081

Client Sample ID: MW-4

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Magnesium	42		50.0	92.8		mg/L		101	70 - 130		
Potassium	7.7		50.0	56.8		mg/L		98	70 - 130		

Lab Sample ID: 885-16882-4 MSD

Matrix: Water

Analysis Batch: 18081

Client Sample ID: MW-4

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	42		50.0	90.2		mg/L		96	70 - 130	3	20
Potassium	7.7		50.0	56.6		mg/L		98	70 - 130	0	20

Lab Sample ID: 885-16882-5 MS

Matrix: Water

Analysis Batch: 18081

Client Sample ID: FIELD DUP.

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Magnesium	29		50.0	79.1		mg/L		100	70 - 130		
Potassium	5.8		50.0	54.2		mg/L		97	70 - 130		

Lab Sample ID: 885-16882-5 MSD

Matrix: Water

Analysis Batch: 18081

Client Sample ID: FIELD DUP.

Prep Type: Dissolved

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Magnesium	29		50.0	79.3		mg/L		101	70 - 130	0	20
Potassium	5.8		50.0	55.1		mg/L		99	70 - 130	2	20

Method: 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 885-17842/1

Matrix: Water

Analysis Batch: 17842

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		50	mg/L			12/16/24 12:09	1

Lab Sample ID: LCS 885-17842/2

Matrix: Water

Analysis Batch: 17842

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Dissolved Solids	1000	1040		mg/L		104	80 - 120		

Lab Sample ID: 885-16882-5 DU

Matrix: Water

Analysis Batch: 17842

Client Sample ID: FIELD DUP.

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	590		583		mg/L		1	10

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QC Sample Results

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 885-17794/2					Client Sample ID: Method Blank				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 17794									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Alkalinity as CaCO3	ND		20	mg/L			12/13/24 15:56	1	
Bicarbonate Alkalinity as CaCO3	ND		20	mg/L			12/13/24 15:56	1	
Carbonate Alkalinity as CaCO3	ND		2.0	mg/L			12/13/24 15:56	1	
Hydroxide Alkalinity as CaCO3	ND		12	mg/L			12/13/24 15:56	1	

Lab Sample ID: LCS 885-17794/3					Client Sample ID: Lab Control Sample				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 17794									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity as CaCO3	84.8	78.4		mg/L		92	90 - 110		

Lab Sample ID: MRL 885-17794/1					Client Sample ID: Lab Control Sample				
Matrix: Water					Prep Type: Total/NA				
Analysis Batch: 17794									
Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits		
Total Alkalinity as CaCO3	21.2	22.7		mg/L		107	50 - 150		

QC Association Summary

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

GC VOA

Analysis Batch: 17965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-1	MW-1	Total/NA	Water	8021B	
885-16882-2	MW-2	Total/NA	Water	8021B	
885-16882-3	MW-3	Total/NA	Water	8021B	
885-16882-4	MW-4	Total/NA	Water	8021B	
885-16882-5	FIELD DUP.	Total/NA	Water	8021B	
885-16882-6	TRIP BLANK	Total/NA	Water	8021B	
MB 885-17965/56	Method Blank	Total/NA	Water	8021B	
LCS 885-17965/55	Lab Control Sample	Total/NA	Water	8021B	
885-16882-3 MS	MW-3	Total/NA	Water	8021B	
885-16882-3 MSD	MW-3	Total/NA	Water	8021B	

HPLC/IC

Analysis Batch: 17579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-1	MW-1	Total/NA	Water	300.0	
885-16882-2	MW-2	Total/NA	Water	300.0	
885-16882-3	MW-3	Total/NA	Water	300.0	
885-16882-4	MW-4	Total/NA	Water	300.0	
885-16882-5	FIELD DUP.	Total/NA	Water	300.0	
MB 885-17579/51	Method Blank	Total/NA	Water	300.0	
LCS 885-17579/52	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-17579/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 17697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-1	MW-1	Total/NA	Water	300.0	
885-16882-3	MW-3	Total/NA	Water	300.0	
MB 885-17697/61	Method Blank	Total/NA	Water	300.0	
LCS 885-17697/62	Lab Control Sample	Total/NA	Water	300.0	
MRL 885-17697/3	Lab Control Sample	Total/NA	Water	300.0	

Metals

Analysis Batch: 18081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-1	MW-1	Dissolved	Water	200.7 Rev 4.4	
885-16882-1	MW-1	Dissolved	Water	200.7 Rev 4.4	
885-16882-2	MW-2	Dissolved	Water	200.7 Rev 4.4	
885-16882-2	MW-2	Dissolved	Water	200.7 Rev 4.4	
885-16882-3	MW-3	Dissolved	Water	200.7 Rev 4.4	
885-16882-3	MW-3	Dissolved	Water	200.7 Rev 4.4	
885-16882-4	MW-4	Dissolved	Water	200.7 Rev 4.4	
885-16882-4	MW-4	Dissolved	Water	200.7 Rev 4.4	
885-16882-5	FIELD DUP.	Dissolved	Water	200.7 Rev 4.4	
885-16882-5	FIELD DUP.	Dissolved	Water	200.7 Rev 4.4	
MB 885-18081/30	Method Blank	Total/NA	Water	200.7 Rev 4.4	
LCS 885-18081/32	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
LLCS 885-18081/35	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
MRL 885-18081/27	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	
885-16882-4 MS	MW-4	Dissolved	Water	200.7 Rev 4.4	
885-16882-4 MSD	MW-4	Dissolved	Water	200.7 Rev 4.4	

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QC Association Summary

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Metals (Continued)

Analysis Batch: 18081 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-5 MS	FIELD DUP.	Dissolved	Water	200.7 Rev 4.4	
885-16882-5 MSD	FIELD DUP.	Dissolved	Water	200.7 Rev 4.4	

General Chemistry

Analysis Batch: 17794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-1	MW-1	Total/NA	Water	SM 2320B	
885-16882-2	MW-2	Total/NA	Water	SM 2320B	
885-16882-3	MW-3	Total/NA	Water	SM 2320B	
885-16882-4	MW-4	Total/NA	Water	SM 2320B	
885-16882-5	FIELD DUP.	Total/NA	Water	SM 2320B	
MB 885-17794/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 885-17794/3	Lab Control Sample	Total/NA	Water	SM 2320B	
MRL 885-17794/1	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 17842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-16882-1	MW-1	Total/NA	Water	2540C	
885-16882-2	MW-2	Total/NA	Water	2540C	
885-16882-3	MW-3	Total/NA	Water	2540C	
885-16882-4	MW-4	Total/NA	Water	2540C	
885-16882-5	FIELD DUP.	Total/NA	Water	2540C	
MB 885-17842/1	Method Blank	Total/NA	Water	2540C	
LCS 885-17842/2	Lab Control Sample	Total/NA	Water	2540C	
885-16882-5 DU	FIELD DUP.	Total/NA	Water	2540C	

Lab Chronicle

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: MW-1

Lab Sample ID: 885-16882-1

Date Collected: 12/09/24 15:17

Matrix: Water

Date Received: 12/12/24 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	17965	AT	EET ALB	12/18/24 06:42
Total/NA	Analysis	300.0		100	17579	EH	EET ALB	12/12/24 17:24
Total/NA	Analysis	300.0		200	17697	EH	EET ALB	12/13/24 19:29
Dissolved	Analysis	200.7 Rev 4.4		1	18081	VP	EET ALB	12/19/24 07:44
Dissolved	Analysis	200.7 Rev 4.4		10	18081	VP	EET ALB	12/19/24 07:46
Total/NA	Analysis	2540C		1	17842	KS	EET ALB	12/16/24 12:09
Total/NA	Analysis	SM 2320B		1	17794	DL	EET ALB	12/13/24 18:14

Client Sample ID: MW-2

Lab Sample ID: 885-16882-2

Date Collected: 12/09/24 13:01

Matrix: Water

Date Received: 12/12/24 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	17965	AT	EET ALB	12/18/24 07:04
Total/NA	Analysis	300.0		20	17579	EH	EET ALB	12/12/24 17:46
Dissolved	Analysis	200.7 Rev 4.4		1	18081	VP	EET ALB	12/19/24 07:48
Dissolved	Analysis	200.7 Rev 4.4		10	18081	VP	EET ALB	12/19/24 07:49
Total/NA	Analysis	2540C		1	17842	KS	EET ALB	12/16/24 12:09
Total/NA	Analysis	SM 2320B		1	17794	DL	EET ALB	12/13/24 18:42

Client Sample ID: MW-3

Lab Sample ID: 885-16882-3

Date Collected: 12/09/24 14:33

Matrix: Water

Date Received: 12/12/24 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	17965	AT	EET ALB	12/18/24 07:25
Total/NA	Analysis	300.0		20	17579	EH	EET ALB	12/12/24 18:30
Total/NA	Analysis	300.0		50	17697	EH	EET ALB	12/13/24 19:39
Dissolved	Analysis	200.7 Rev 4.4		1	18081	VP	EET ALB	12/19/24 07:51
Dissolved	Analysis	200.7 Rev 4.4		10	18081	VP	EET ALB	12/19/24 07:53
Total/NA	Analysis	2540C		1	17842	KS	EET ALB	12/16/24 12:09
Total/NA	Analysis	SM 2320B		1	17794	DL	EET ALB	12/13/24 18:55

Client Sample ID: MW-4

Lab Sample ID: 885-16882-4

Date Collected: 12/09/24 13:50

Matrix: Water

Date Received: 12/12/24 07:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	17965	AT	EET ALB	12/18/24 08:29
Total/NA	Analysis	300.0		20	17579	EH	EET ALB	12/12/24 18:53
Dissolved	Analysis	200.7 Rev 4.4		10	18081	VP	EET ALB	12/19/24 08:00
Dissolved	Analysis	200.7 Rev 4.4		1	18081	VP	EET ALB	12/19/24 08:02
Total/NA	Analysis	2540C		1	17842	KS	EET ALB	12/16/24 12:09

Eurofins Albuquerque

Lab Chronicle

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Client Sample ID: MW-4
Date Collected: 12/09/24 13:50
Date Received: 12/12/24 07:45

Lab Sample ID: 885-16882-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2320B		1	17794	DL	EET ALB	12/13/24 19:06

Client Sample ID: FIELD DUP.
Date Collected: 12/09/24 13:02
Date Received: 12/12/24 07:45

Lab Sample ID: 885-16882-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	17965	AT	EET ALB	12/18/24 08:51
Total/NA	Analysis	300.0		20	17579	EH	EET ALB	12/12/24 19:37
Dissolved	Analysis	200.7 Rev 4.4		1	18081	VP	EET ALB	12/19/24 08:07
Dissolved	Analysis	200.7 Rev 4.4		10	18081	VP	EET ALB	12/19/24 08:13
Total/NA	Analysis	2540C		1	17842	KS	EET ALB	12/16/24 12:09
Total/NA	Analysis	SM 2320B		1	17794	DL	EET ALB	12/13/24 19:18

Client Sample ID: TRIP BLANK
Date Collected: 12/09/24 00:00
Date Received: 12/12/24 07:45

Lab Sample ID: 885-16882-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8021B		1	17965	AT	EET ALB	12/18/24 09:12

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Ranger Environmental Services, Inc
Project/Site: Lmpsu Trash Pit

Job ID: 885-16882-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-25-25
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
SM 2320B		Water	Bicarbonate Alkalinity as CaCO3
SM 2320B		Water	Carbonate Alkalinity as CaCO3
SM 2320B		Water	Hydroxide Alkalinity as CaCO3

Chain-of-Custody Record

Client: Ranger Env.

☒ Standard ☐ Rush

Project Name:

Lmpsu Traisu pIT

Mailing Address: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

QA/QC Package:

■ **Standard** ☐ **Level 4 (Full Validation)**

Accreditation: ☐ Az Compliance

■ NELAC □ Other

■ EDD (Type) _____ Excel _____

Page 22 of 24

12/19/2024

Chain-of-Custody Record			
Client: Ranger Env.			
Mailing Address: PO Box 201179, Austin TX 78720			
Phone #: 521-335-1785			
Email or Fax#: Will@RangerEnv.com			
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation: <input type="checkbox"/> AZ Compliance			
<input checked="" type="checkbox"/> NELAC <input type="checkbox"/> Other			
<input checked="" type="checkbox"/> EDD (Type) <u>Excel</u>			
Date	Time	Matrix	Sample Name
12/9/24	1517	AR	MW-1
	1301		MW-2
	1433		MW-3
	1350		MW-4
	1302		FIELD DUP.
			TRIP BLANK
Date:	Time:	Relinquished by:	
12/11/24	1153		
Date:	Time:	Relinquished by:	
12/11/24	1900		

Turn-Around Time:		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Project Name: LMPsu TRASH PET			
Project #: 5375 6875			
Project Manager: W. Kierdorf			
Sampler: W. Kierdorf			
On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
# of Coolers: 1		HEAL No.	
Cooler Temp (including CP): 0.0-0.1 = 0.7			
Container Type and #	Preservative Type		
SEE NOTES	SEE NOTES	1	
	ICE	2	
		3	
		4	
		5	
		6	
Received by:	Via:	Date	Time
Curran		12/11/24	1153
Received by:	Via:	Date	Time
SK		12/11/24	1900

HALL ENVIRONMENT ANALYSIS LABORATORY



4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

885-16882 COC

Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Please have all samples analyzed for the following constituents

Test	Method
BTEX	8021B
Anions :: including Chloride & Sulfate	300
Dissolved Metals :: including Calcium, Magnesium, Potassium, Sodium	6020B
Alkalinity :: including Bicarbonate, Carbonate, Hydroxide, Total Alkalinity	M2320B
TDS	M2540C

Ranger - LmPSU Trash Pit

Login Sample Receipt Checklist

Client: Ranger Environmental Services, Inc

Job Number: 885-16882-1

Login Number: 16882

List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	

ATTACHMENT 3 – NMOCD CORRESPONDENCE



Will Kierdorf <will@rangerenv.com>

Legacy Reserves LMPSU Trash Pit (nTO1427254875) Groundwater Sampling Notice2 messages

Will Kierdorf <will@rangerenv.com>

Tue, Jun 18, 2024 at 4:36 PM

To: ocd.enviro@emnrd.nm.gov, michael.buchanan@emnrd.nm.gov, "Velez, Nelson, EMNRD" <nelson.velez@emnrd.nm.gov>

Cc: Max Cook <max@rangerenv.com>, Chris Kowalski <chris.kowalski@teamoperating.com>

On behalf of Team Operating, LLC, please let this email service as notification that personnel from Ranger Environmental Services will be at the LMPSU (nTO1427254875) on Tuesday June 25, 2024, at approximately 8:00 AM MST to collect groundwater samples from the four monitoring wells associated with the site.

If you have any questions please do not hesitate to contact me.

Thank you!

--

Will Kierdorf, REM
Project Manager
Ranger Environmental Services, LLC
P.O. Box 201179
Austin, TX 78720
Phone: 512-335-1785
Fax: 512-335-0527

Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Tue, Jun 18, 2024 at 4:55 PM

To: Will Kierdorf <will@rangerenv.com>, "Buchanan, Michael, EMNRD" <Michael.Buchanan@emnrd.nm.gov>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>

Cc: Max Cook <max@rangerenv.com>, Chris Kowalski <chris.kowalski@teamoperating.com>

Good afternoon Will,

Thank you for providing notice to the OCD of the upcoming groundwater sampling at NTO1427254875 LANGLEIE MATTIX PENROSE SAND UNIT TRASH PIT. This notice has been received and noted in the incident events of the site.

Kind regards,

Shelly

[Shelly Wells](#) * Environmental Specialist-Advanced

Environmental Bureau

EMNRD-Oil Conservation Division

[1220 S. St. Francis Drive|Santa Fe, NM 87505](#)

(505)469-7520|Shelly.Wells@emnrd.nm.gov

<http://www.emnrd.state.nm.us/OCD/>

From: Will Kierdorf <will@rangerenv.com>

Sent: Tuesday, June 18, 2024 3:36 PM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Cc: Max Cook <max@rangerenv.com>; Chris Kowalski <chris.kowalski@teamoperating.com>

Subject: [EXTERNAL] Legacy Reserves LMPSU Trash Pit (nTO1427254875) Groundwater Sampling Notice

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Will Kierdorf <will@rangerenv.com>

Legacy Reserves LMPSU Trash Pit (nTO1427254875) Groundwater Sampling Notice

4 messages

Will Kierdorf <will@rangerenv.com>

Tue, Nov 26, 2024 at 9:02 AM

To: ocd.enviro@emnrd.nm.gov, michael.buchanan@emnrd.nm.gov, "Velez, Nelson, EMNRD" <nelson.velez@emnrd.nm.gov>

Cc: Ty Thompson <ty.thompson@teamoperating.com>

Good morning,

On behalf of Team Operating, LLC, please let this email service as notification that personnel from Ranger Environmental Services will be at the LMPSU (nTO1427254875) on Monday December 9, 2024, at approximately 12:00 PM MST to collect groundwater samples from the four monitoring wells associated with the site.

If you have any questions please do not hesitate to contact me.

Thank you!

--

Will Kierdorf, REM
Project Manager
Ranger Environmental Services, LLC
P.O. Box 201179
Austin, TX 78720
Phone: 512-335-1785
Fax: 512-335-0527

Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>

Tue, Nov 26, 2024 at 9:15 AM

To: Will Kierdorf <will@rangerenv.com>, "Enviro, OCD, EMNRD" <OCD.Enviro@emnrd.nm.gov>, "Velez, Nelson, EMNRD"

<Nelson.Velez@emnrd.nm.gov>

Cc: Ty Thompson <ty.thompson@teamoperating.com>

Good morning, Will. Thank you for the notification, it has been received.

Mike

From: Will Kierdorf <will@rangerenv.com>**Sent:** Tuesday, November 26, 2024 8:02 AM**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>**Cc:** Ty Thompson <ty.thompson@teamoperating.com>**Subject:** [EXTERNAL] Legacy Reserves LMPSU Trash Pit (nTO1427254875) Groundwater Sampling Notice

You don't often get email from will@rangerenv.com. [Learn why this is important](#)

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attachments.

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Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov> Tue, Nov 26, 2024 at 9:16 AM
To: Will Kierdorf <will@rangerenv.com>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>
Cc: Ty Thompson <ty.thompson@teamoperating.com>

Good morning, Will

The groundwater sampling notification has been received. Thank you.

From: Will Kierdorf <will@rangerenv.com>
Sent: Tuesday, November 26, 2024 8:02 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Ty Thompson <ty.thompson@teamoperating.com>
Subject: [EXTERNAL] Legacy Reserves LMPSU Trash Pit (nTO1427254875) Groundwater Sampling Notice

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Good morning,

[Quoted text hidden]

Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov> Tue, Nov 26, 2024 at 9:52 AM
To: Will Kierdorf <will@rangerenv.com>
Cc: Ty Thompson <ty.thompson@teamoperating.com>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>, "Buchanan, Michael, EMNRD" <Michael.Buchanan@emnrd.nm.gov>, "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>

Good morning Will,

Your message has been received and the incident events updated to reflect this.

Kind regards,

Shelly

Shelly Wells * Environmental Specialist-Advanced

Environmental Bureau

EMNRD-Oil Conservation Division

1220 S. St. Francis Drive|Santa Fe, NM 87505

(505)469-7520|Shelly.Wells@emnrd.nm.gov

<http://www.emnrd.state.nm.us/OCD/>

From: Will Kierdorf <will@rangerenv.com>

Sent: Tuesday, November 26, 2024 8:02 AM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Cc: Ty Thompson <ty.thompson@teamoperating.com>

Subject: [EXTERNAL] Legacy Reserves LMPSU Trash Pit (nTO1427254875) Groundwater Sampling Notice

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Good morning,

[Quoted text hidden]

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 447410

CONDITIONS

Operator: TEAM OPERATING, L.L.C. PO Box 835 Pinehurst, TX 77362	OGRID: 332148
	Action Number: 447410
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
shanna.smith	Provide groundwater samples from all 4 monitor wells for constituents listed under 20.6.2.3103 NMAC	8/12/2025
shanna.smith	Fully delineate extent of the contamination plume.	8/12/2025