RANGER
ENVIRONMENTAL SERVICES, LLC

# ASSESSMENT WORKPLAN

**LATTION PIT (AP-23)**
**INCIDENT NO. NAUTOFAB000337**
**UNIT O, SECTION 23, TOWNSHIP 18S, RANGE 26E**
**EDDY COUNTY, NEW MEXICO**
**32.729187, -104.349760**
**RANGER REFERENCE NO. 5375**

**PREPARED FOR:**

**EOG RESOURCES, INC.**
**MIDLAND DIVISION**
**5509 CHAMPIONS DRIVE**
**MIDLAND, TEXAS 79706**

**PREPARED BY:**

**RANGER ENVIRONMENTAL SERVICES, LLC**
**P.O. BOX 201179**
**AUSTIN, TEXAS 78720**

**JANUARY 28, 2025**

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## 1.0 SITE LOCATION AND BACKGROUND

The Lattion Pit (Site) is a historic oil and gas production pit formerly located at the Lattion Battery and former Lattion #1 well pad, an oil and gas production facility located on private land, approximately 8.25 miles south-southwest of Artesia, within Eddy County, New Mexico. The facility is situated in Unit O, Section 23, T18S-R26E at GPS coordinates 32.729187, -104.349760. In November 2021, operations of the Lattion Battery were transferred from EOG Resources, Inc. to Silverback Operating II (Silverback). Under the new operator, the Lattion Battery has been decommissioned, the Lattion #1 well has been plugged and abandoned, all production equipment has been removed for the Site, and reclamation efforts have been completed. Based on the site history and transaction history, EOG Resources, Inc. (EOG) maintains environmental responsibility for the impacts related to NAUTOFAB000337at the Site.

The Lattion #1 well and Lattion Battery were historically operated by H&S Oil Company (H&S) and an unlined earthen pit was formerly utilized by H&S for oil and gas fluid storage/impoundment (hereafter referred to as the “former production pit”). Based upon review of a historical aerial photograph from 1981, a former reserve pit is also located at the site to the north of the Lattion #1 well and to the east of the former production pit.

In 1997, Yates Petroleum Corporation (Yates) acquired from H&S the Lattion #1 well and Lattion Battery, as well as the former production pit. While operated by Yates, the former production pit underwent closure, and assessment of the former pit was conducted. In September 2016, EOG acquired Yates and its associated assets including the Lattion #1 well and Lattion Battery which included the former production pit. The Lattion #1 well was subsequently plugged and abandoned by Silverback in March 2023. In 2024, the Lattion Battery was decommissioned, and all production equipment was removed from the former Lattion Battery/Lattion #1 facility pad.

The production pit closure and assessment activities completed by Yates documented impacts to the native soil. Groundwater impacts were also documented at the site in the 2002 timeframe. Due to the documented conditions at the Site, coordination with the New Mexico Oil and Gas Division (NMOCD) was initiated. Communication and coordination between the NMOCD and Yates continued until 2005 when a Stage I & II Abatement Plan was submitted to the NMOCD. Based on available information, no response was ever received from the NMOCD regarding this plan. During the 2005 to 2022 timeframe, a total of 13 groundwater monitoring events were conducted at the Site.

In 2023 EOG engaged Ranger Environmental Services, LLC (Ranger) to assist in the continuation of the assessment and remediation efforts at the Site as well as to re-establish communications with the NMOCD regarding the Site. In May 2023, Ranger personnel established communications with the NMOCD and began discussion of the Site with Mr. Nelson Velez of the NMOCD including the steps needed to bring the Site into compliance with the current regulatory criteria and New Mexico Administrative Code (NMAC). Based on Ranger's communications with the NMOCD, on August 9, 2023, a draft comprehensive *Site Chronology and Status Update* report was submitted to the NMOCD to provide the NMOCD with a summary of the Site history and the cumulative soil and groundwater data so that a regulatory path forward could be established. Due to change in regulatory representative oversight and lack of response to the draft *Site Chronology and Status Update* report submitted to the NMOCD in August 2023, the report was formally submitted to the NMOCD on February 15, 2024.

Based on initial direction by Mr. Velez, an additional groundwater monitoring event was completed in the fourth quarter of 2023. A Ranger prepared *Annual Groundwater Monitoring Report* dated March 26, 2024, (*2023 Annual Groundwater Monitoring Report*) documenting the 2023 sampling activities was submitted to the NMOCD for review.

As proposed in the *2023 Annual Groundwater Monitoring Report*, a quarterly groundwater monitoring program was initiated at the Site beginning in the second quarter of 2024. Groundwater sampling events were completed by Ranger personnel in April, September, and December 2024. Full details of the 2024 groundwater sampling activities will be included in an Annual Groundwater Monitoring Report to be submitted to the NMOCD no later than April 1, 2025.

On October 23, 2024, EOG and NMOCD representatives participated in a meeting to discuss the site status, the recommendations for additional site assessment that were presented in Ranger's *2023 Annual Groundwater Monitoring Report*, and to determine an appropriate pathway forward for the site. During the meeting, the NMOCD requested modifications to the assessment workplan presented in Ranger's 2023 annual report. As such, Ranger has prepared the following assessment workplan to conduct additional soil and groundwater assessment activities at the subject site which incorporates the NMOCD-requested revisions to Ranger's prior assessment workplan.

A *Topographic Map* and *Area Map* noting the location of the subject Site and surrounding areas are attached. A *Site Map* depicting the pertinent site features is also attached.

## 2.0 PROPOSED ASSESSMENT ACTIVITIES

### *2.1 Proposed Monitoring Well Locations*

Ranger proposes to install a total of four additional monitoring wells at the subject site at the locations illustrated on the attached *Proposed Monitor Well Location Map*.

As detailed in the Ranger prepared *Site Chronology and Status Update* and *2023 Annual Groundwater Monitoring Report,* existing monitor well MW-1 has been documented to contain the most elevated groundwater TDS, chloride and sulfate concentrations at the Site. Monitor well MW-1 is located upgradient from the subject site and the impacts in this well potentially suggest that affected groundwater may be flowing onto the site from the irrigated agricultural fields to the north. In order to further investigate the upgradient groundwater conditions and determine if affected groundwater may be flowing onto the site, Ranger proposes to install a monitoring well

(PMW-5) to the northwest (upgradient) of the site in an area which is anticipated to be unimpacted by the historic site operations.

As summarized in Ranger's *2023 Annual Groundwater Monitoring Report*, based upon aerial photograph review and review of available site information, it has now become clear that existing monitor well MW-4 was installed through the former site reserve pit, not the former production pit which was the subject of the NMOCD-requested Stage I & II Abatement Plans. Soil sample data collected during the installation of monitor well MW-4 indicates a separation of soil and groundwater impacts at the location. Initial soil borings completed in the former production pit indicated elevated soil and groundwater concentrations were present in the area, however, the limited soil analysis completed during the installation of the borings lacks adequate data linking the elevated soil and groundwater concentrations. As such, Ranger proposes installing proposed monitoring well PMW-6 in the approximate mid-point of the former production pit to further investigate the subsurface conditions at this location.

In order to further assess the groundwater conditions downgradient of the former production pit, Ranger proposes to install proposed monitoring well PMW-7 to the southeast of the former production pit location.

Lastly, Ranger proposes to install a fourth monitoring well (PMW-8) to the west of the subject site in an upgradient/cross-gradient direction from the subject site to further delineate the site groundwater conditions and to gather additional upgradient groundwater quality data.

### *2.2 Well Installation Methodologies and Soil Sampling*

Installation of the proposed monitoring wells will be completed utilizing air rotary drilling techniques. Due to the current declining water table condition, such as the 29.51' water level decline in monitor well MW-1 between 2004 and 2024, Ranger proposes to install the proposed monitoring wells to greater depths than the current on-site monitor wells. Ranger proposes to install proposed monitoring well PMW-5 to a depth of 75' below ground surface (bgs) and PMW's 6-8 to a depth of 80' bgs. Due to the potential for future rebounding of the site water table, Ranger proposes 25 feet of well screen in each well to help ensure that the site water levels remain within the well screen intervals.

During the drilling process, the encountered soils will be described by Ranger personnel on the basis of lithology, color, texture, and visual observations of any potential contaminant impacts. Field screening of the soil column will be completed utilizing an organic vapor monitor (OVM) and a field chloride titration kit. Discrete grab soil samples will be collected for laboratory analysis at approximate five-foot intervals using split spoon sampling techniques. The initial proposed soil sample will be collected at a depth of 5' bgs and samples will then be collected at approximate 5'-intervals to the boring terminal depths.

Upon collection, the soil samples will be transported to an approved laboratory for analysis of total petroleum hydrocarbons (TPH) using EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021; and, total chloride using either EPA 300 or SM 4500.

Upon completion of the drilling activities, each soil boring will be completed as a two-inch diameter monitor well. The monitor wells will be completed as follows:

- Two-inch diameter schedule 40 PVC well pipe assembly;
- 25 feet of well screen consisting of 0.010-feet machine-slotted openings with threaded/flush joint assembly with a sufficient length of riser pipe to reach the surface;
- 20-40 graded silica sand placed in the annular space between the borehole and the casing from the bottom of the hole to two feet above the screened interval;
- A minimum of two feet of hydrated bentonite pellets placed above the sand pack;
- Portland cement grout mixture placed from the top of the bentonite pack to the surface; and;
- A 3' x 3' concrete surface completion with an approximate three-foot PVC riser contained within a locking metal shroud, a locking well cap, and protective bollards.

Following the completion of the well installation process, the newly installed monitor wells will be developed by removing five resident well water volumes (or until the well goes dry). A level survey will also be conducted and the top of casing of each monitor well will be surveyed to an existing monitor well.

All produced soil cuttings and purge water will be containerized in 55-gallon drums or other suitable containers and stored on the subject site. The drums will be labeled with the source and date information and will be transported off-site for disposal at an appropriate facility.

### *2.3 Groundwater Sampling*

Following installation, the proposed monitoring wells will be incorporated into the ongoing quarterly groundwater monitoring program detailed in Ranger's *2023 Annual Groundwater Monitoring Report.* However, the groundwater samples collected during the initial sampling of the newly installed wells will be analyzed for the comprehensive chemicals of concern (COCs) that the existing site monitoring wells were initially sampled for rather than the abbreviated list of COCs which were proposed in Ranger's *2023 Annual Groundwater Monitoring Report*. These COCs include the following:

- **EPA Method 200.8**: Antimony, arsenic, lead, selenium, thallium and uranium
- **EPA Method 300.0**: Fluoride, chloride, bromide, phosphorus, orthophosphate (as P), sulfate, Nitrogen, Nitrite (As N), and Nitrogen, Nitrate (As N).
- **SM2510B**: Conductivity
- **SM2320B**: Bicarbonate (as CaCO3), carbonate (as CaCO3), and total alkalinity (as CaCO3)
- **SM2540C MOD**: Total dissolved solids
- **SM4500-H+B / 9040C**: pH
- **EPA METHOD 200.7**: Aluminum, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, molybdenum, nickel, potassium, silver, sodium, and zinc
- **EPA METHOD 8260B**: Benzene, toluene, ethylbenzene, and total xylenes (BTEX); naphthalene, 1-methylnaphthalene and 2-methylnaphthalene

Following the initial sampling of the newly installed monitor wells for the comprehensive historical site COCs, Ranger will review the analytical results and identify all constituents which were detected in exceedance of the NMAC 20.6.2.3103 criteria. Ranger will then compare these constituents to the reduced groundwater COC list that the existing monitoring wells are currently being analyzed for which include:

- Chloride
- Fluoride
- Iron
- Manganese
- Sulfate
- Total Dissolved Solids

If any COCs are detected in the new monitoring wells which are not on the above list, then these COCs will be added to the above COC list for the future site groundwater monitoring events.

All purge water generated during the well purging process will be placed in sealed and labeled 55-gallon drums and temporarily stored on-site pending off-site disposal.

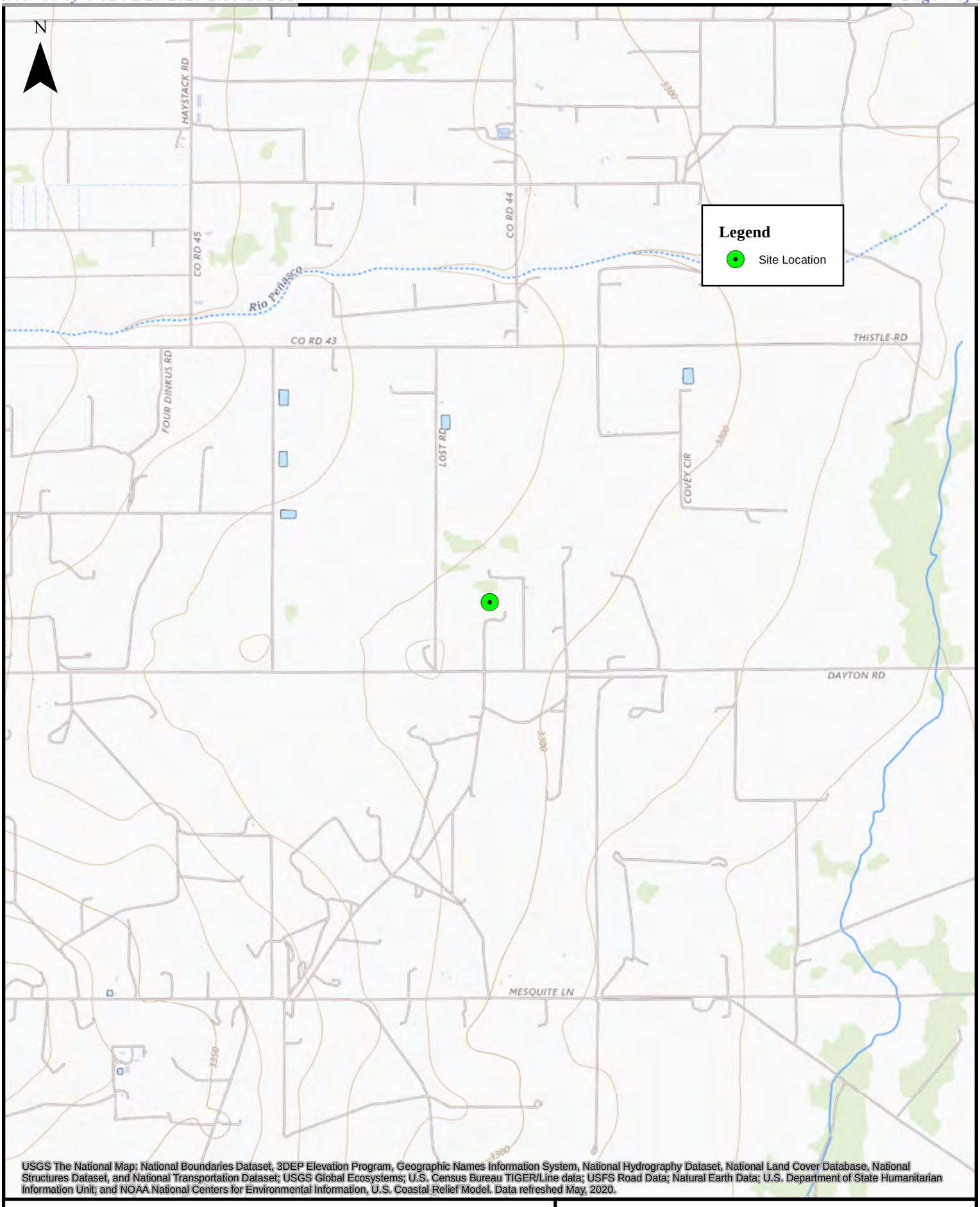
## 3.0 PROPOSED WORK PLAN SCHEDULE AND REPORTING

Upon NMOCD approval of this work plan, the proposed monitoring well installations will be scheduled as soon as possible given driller availability and schedule. The newly installed wells will then be sampled during the next scheduled quarterly groundwater monitoring event. A stand-alone assessment report will be submitted to the NMOCD within 60 days of receipt of the initial groundwater analytical results from the proposed monitoring wells.

The reporting of the completed site assessment activities will include a summary of the monitor well installation activities and will provide copies of the soil boring/monitoring wells logs, the soil analytical results and the initial groundwater analytical results from the proposed monitor wells. The report will also provide recommendations for any needed modifications to the ongoing quarterly groundwater monitoring program, or for any additional assessment activities which may be needed.

# FIGURES

**Topographic Map**
**Area Map**
**Site Map**
**Proposed Monitor Well Location Map**



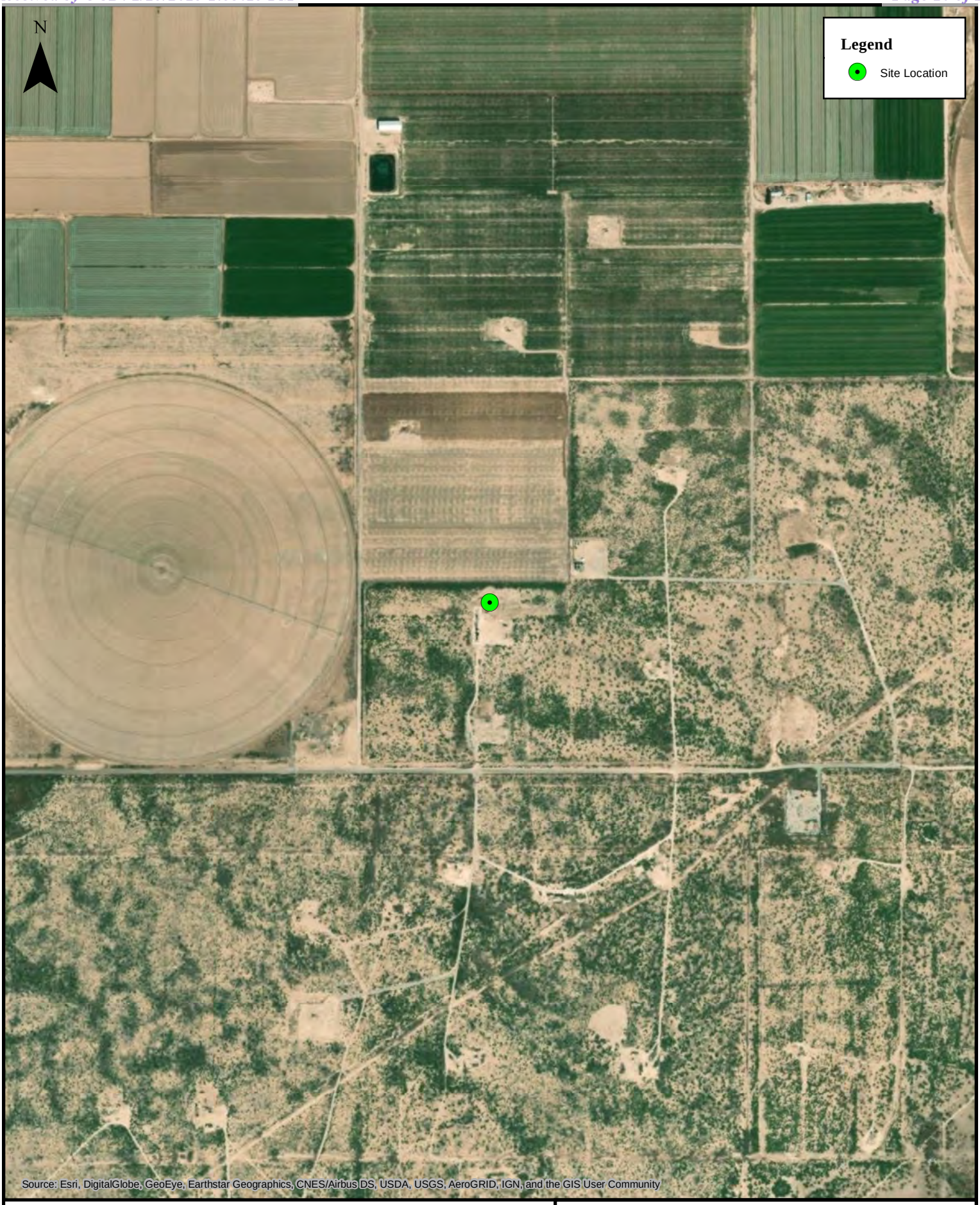

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road Data; Natural Earth Data; U.S. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed May, 2020.

RANGER ENVIRONMENTAL SERVICES, LLC

0 600 1,200 2,400 3,600 4,800 Feet

1:24,000

**Topographic Map**
Lattion Pit
EOG Resources, Inc.

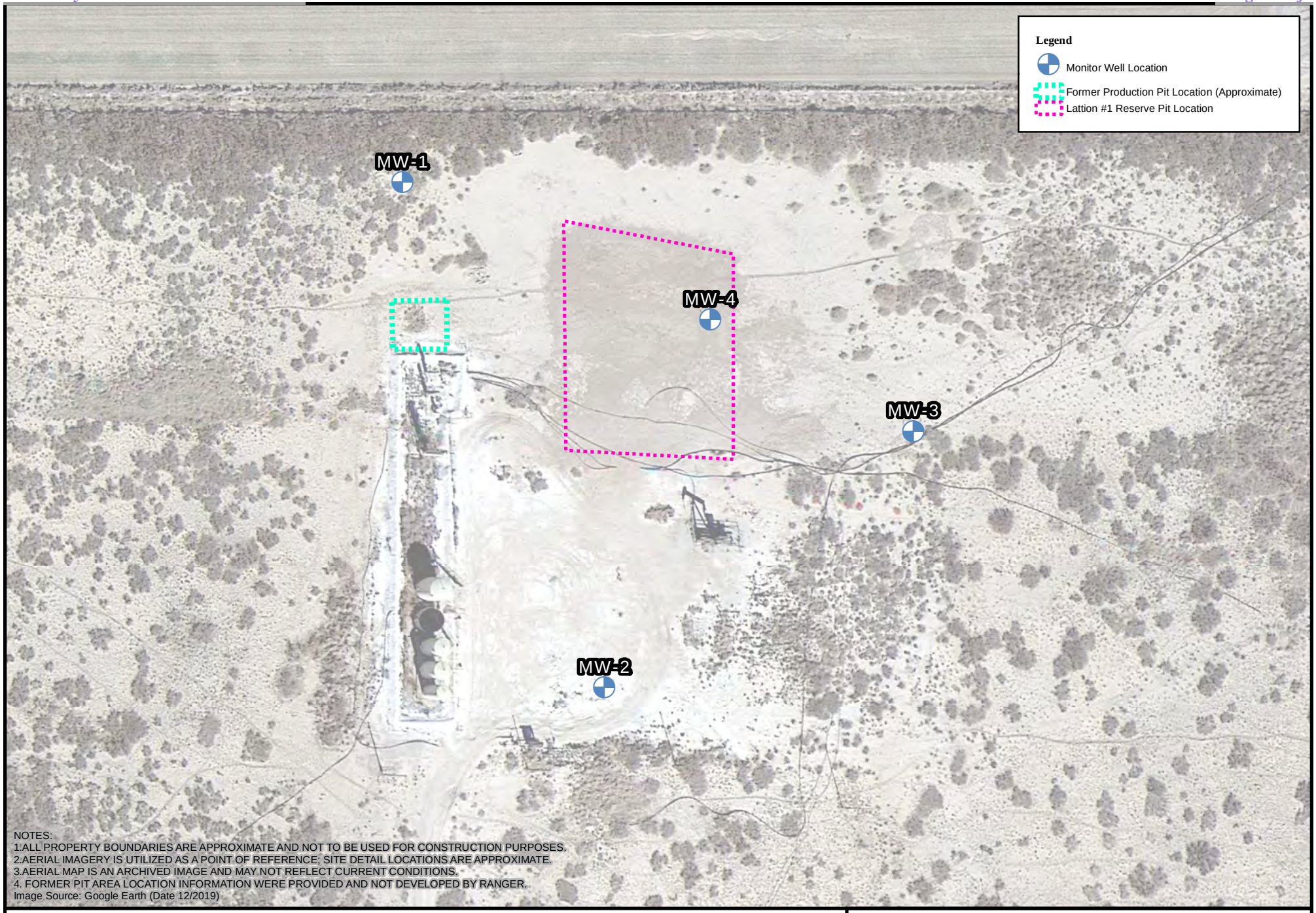



RANGER ENVIRONMENTAL SERVICES, LLC

0 250 500 1,000 1,500 2,000 Feet

1:10,000

**Area Map**
Lattion Pit
EOG Resources, Inc.




NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
4. FORMER PIT AREA LOCATION INFORMATION WERE PROVIDED AND NOT DEVELOPED BY RANGER.
Image Source: Google Earth (Date 12/2019)

RANGER ENVIRONMENTAL SERVICES, LLC

0 25 50 100 150 200 Feet

1:1,000

N

**Site Map**
Lattions Pit
EOG Resouces, Inc.

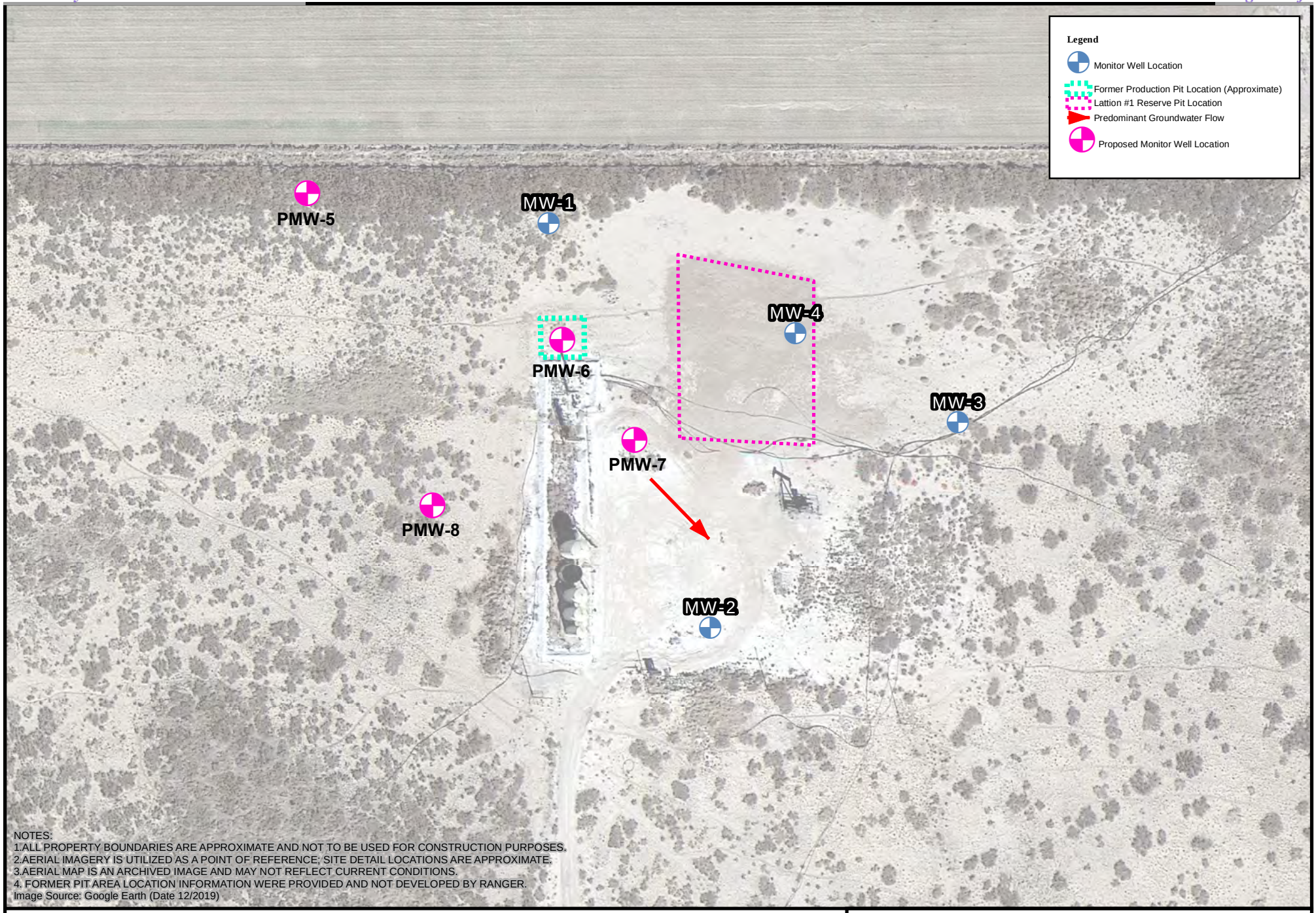



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Image Source: Google Earth (Date 12/2019)

RANGER ENVIRONMENTAL SERVICES, LLC

0 35 70 140 210 280 Feet

1:1,250

N

**Proposed Monitor Well Location Map**
Lattions Pit
EOG Resouces, Inc.

# TABLES

**Cumulative Well Gauging Data**
**Cumulative Groundwater EPA Method 300.0: Anions**
**Cumulative Groundwater Dissolved Metals (Table 1 of 2)**
**Cumulative Groundwater Dissolved Metals (Table 2 of 2)**
**Cumulative Groundwater TPH and VOC Data Summary**
**Cumulative Groundwater Specific Conductance, pH, Alkalinity, and TDS**

**CUMULATIVE WELL GAUGING DATA**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

| WELL NUMBER | DATE | CASING ELEV. (FT) | DEPTH TO WATER (FT-BTOC) | LNAPL THICKNESS (FT) | GW ELEVATION (FT) | SCREENED INTERVAL (FT-BGS) |
|---|---|---|---|---|---|---|
| MW-1 | 9/18/2002 | 3,309.05 | 34.42 | 0.00 | 3274.63 | 35'-70' |
| MW-1 | 9/19/2002 | 3,309.05 | 34.54 | 0.00 | 3274.51 | 35'-70' |
| MW-1 | 11/3/2004 | 3,309.05 | 28.75 | 0.00 | 3280.30 | 35'-70' |
| MW-1 | 12/2/2004 | 3,309.05 | 31.02 | 0.00 | 3278.03 | 35'-70' |
| MW-1 | 12/15/2004 | 3,309.05 | 31.94 | 0.00 | 3277.11 | 35'-70' |
| MW-1 | 12/21/2004 | 3,309.05 | 31.92 | 0.00 | 3277.13 | 35'-70' |
| MW-1 | 12/30/2004 | 3,309.05 | 32.41 | 0.00 | 3276.64 | 35'-70' |
| MW-1 | 3/6/2018 | 3,309.05 | 45.66 | 0.00 | 3263.39 | 35'-70' |
| MW-1 | 3/27/2018 | 3,309.05 | 44.21 | 0.00 | 3264.84 | 35'-70' |
| MW-1 | 3/21/2019 | 3,310.27 | 48.82 | 0.00 | 3261.45 | 35'-70' |
| MW-1 | 10/28/2019 | 3,310.27 | 49.59 | 0.00 | 3260.68 | 35'-70' |
| MW-1 | 9/17/2020 | 3,310.27 | 52.39 | 0.00 | 3257.88 | 35'-70' |
| MW-1 | 8/17/2021 | 3,310.27 | 48.95 | 0.00 | 3261.32 | 35'-70' |
| MW-1 | 11/29/2023 | 3,310.27 | 55.17 | 0.00 | 3255.10 | 35'-70' |
| MW-1 | 4/30/2024 | 3,310.27 | 55.74 | 0.00 | 3254.53 | 35'-70' |
| MW-1 | 9/24/2024 | 3,310.27 | 58.26 | 0.00 | 3252.01 | 35'-70' |
| | | | | | | |
| MW-2 | 9/18/2002 | 3307.92 | 61.40 | 0.00 | 3246.52 | 40'-70' |
| MW-2 | 9/19/2002 | 3307.92 | 61.65 | 0.00 | 3246.27 | 40'-70' |
| MW-2 | 11/3/2004 | 3307.92 | 62.04 | 0.00 | 3245.88 | 40'-70' |
| MW-2 | 12/2/2004 | 3307.92 | 61.67 | 0.00 | 3246.25 | 40'-70' |
| MW-2 | 12/15/2004 | 3307.92 | 61.76 | 0.00 | 3246.16 | 40'-70' |
| MW-2 | 12/21/2004 | 3307.92 | 61.31 | 0.00 | 3246.61 | 40'-70' |
| MW-2 | 12/30/2004 | 3307.92 | 61.13 | 0.00 | 3246.79 | 40'-70' |
| MW-2 | 3/6/2018 | 3307.92 | 54.04 | 0.00 | 3253.88 | 40'-70' |
| MW-2 | 3/27/2018 | 3307.92 | 53.97 | 0.00 | 3253.95 | 40'-70' |
| MW-2 | 3/21/2019 | 3,309.19 | 55.54 | 0.00 | 3253.65 | 40'-70' |
| MW-2 | 10/28/2019 | 3,309.19 | 57.90 | 0.00 | 3251.29 | 40'-70' |
| MW-2 | 9/17/2020 | 3,309.19 | 58.03 | 0.00 | 3251.16 | 40'-70' |
| MW-2 | 8/17/2021 | 3,309.19 | 57.73 | 0.00 | 3251.46 | 40'-70' |
| MW-2 | 11/29/2023 | 3,309.19 | 64.28 | 0.00 | 3244.91 | 40'-70' |
| MW-2 | 4/30/2024 | 3,309.29 | 63.35 | 0.00 | 3245.94 | 40'-70' |
| MW-2 | 9/24/2024 | 3,309.29 | 64.57 | 0.00 | 3244.72 | 40'-70' |
| | | | | | | |
| MW-3 | 9/18/2002 | 3307.90 | 55.08 | 0.00 | 3252.82 | 40'-65' |
| MW-3 | 9/19/2002 | 3307.90 | 58.73 | 0.00 | 3249.17 | 40'-65' |
| MW-3 | 11/3/2004 | 3307.90 | 51.28 | 0.00 | 3256.62 | 40'-65' |

**CUMULATIVE WELL GAUGING DATA**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

| WELL NUMBER | DATE | CASING ELEV. (FT) | DEPTH TO WATER (FT-BTOC) | LNAPL THICKNESS (FT) | GW ELEVATION (FT) | SCREENED INTERVAL (FT-BGS) |
|---|---|---|---|---|---|---|
| MW-3 | 12/2/2004 | 3307.90 | 50.38 | 0.00 | 3257.52 | 40'-65' |
| MW-3 | 12/15/2004 | 3307.90 | 50.30 | 0.00 | 3257.60 | 40'-65' |
| MW-3 | 12/21/2004 | 3307.90 | 50.01 | 0.00 | 3257.89 | 40'-65' |
| MW-3 | 12/30/2004 | 3307.90 | 49.91 | 0.00 | 3257.99 | 40'-65' |
| MW-3 | 3/6/2018 | 3307.90 | 57.43 | 0.00 | 3250.47 | 40'-65' |
| MW-3 | 3/27/2018 | 3307.90 | 57.38 | 0.00 | 3250.52 | 40'-65' |
| MW-3 | 3/21/2019 | 3309.00 | 59.13 | 0.00 | 3249.87 | 40'-65' |
| MW-3 | 10/28/2019 | 3309.00 | 61.29 | 0.00 | 3247.71 | 40'-65' |
| MW-3 | 9/17/2020 | 3309.00 | 61.75 | 0.00 | 3247.25 | 40'-65' |
| MW-3 | 8/17/2021 | 3309.00 | 62.22 | 0.00 | 3246.78 | 40'-65' |
| MW-3 | 11/29/2023 | 3309.00 | 65.74 | 0.00 | 3243.26 | 40'-65' |
| MW-3 | 4/30/2024 | 3309.00 | 66.40 | 0.00 | 3242.60 | 40'-65' |
| MW-3 | 9/24/2024 | 3309.00 | 66.52 | 0.00 | 3242.48 | 40'-65' |
| | | | | | | |
| MW-4 | 9/18/2002 | 3307.63 | 38.17 | 0.00 | 3269.46 | 30'-55' |
| MW-4 | 9/19/2002 | 3307.63 | 38.23 | 0.00 | 3269.40 | 30'-55' |
| MW-4 | 11/3/2004 | 3307.63 | 32.95 | 0.00 | 3274.68 | 30'-55' |
| MW-4 | 12/2/2004 | 3307.63 | 33.96 | 0.00 | 3273.67 | 30'-55' |
| MW-4 | 12/15/2004 | 3307.63 | 34.43 | 0.00 | 3273.20 | 30'-55' |
| MW-4 | 12/21/2004 | 3307.63 | 34.32 | 0.00 | 3273.31 | 30'-55' |
| MW-4 | 12/30/2004 | 3307.63 | 34.70 | 0.00 | 3272.93 | 30'-55' |
| MW-4 | 3/6/2018 | 3307.63 | 47.31 | 0.00 | 3260.32 | 30'-55' |
| MW-4 | 3/27/2018 | 3307.63 | 47.47 | 0.00 | 3260.16 | 30'-55' |
| MW-4 | 3/21/2019 | 3308.88 | 51.51 | 0.00 | 3257.37 | 30'-55' |
| MW-4 | 10/28/2019 | 3308.88 | 51.39 | 0.00 | 3257.49 | 30'-55' |
| MW-4 | 9/17/2020 | 3308.88 | 52.58 | 0.00 | 3256.30 | 30'-55' |
| MW-4 | 8/17/2021 | 3308.88 | 51.49 | 0.00 | 3257.39 | 30'-55' |
| MW-4 | 11/29/2023 | 3308.88 | 56.19 | 0.00 | 3252.69 | 30'-55' |
| MW-4 | 04/30/224 | 3308.88 | 56.58 | 0.00 | 3252.30 | 30'-55' |
| MW-4 | 9/24/2024 | 3308.88 | 57.53 | 0.00 | 3251.35 | 30'-55' |

***Notes:***
1. Elevations referenced to a temporary on-site benchmark.
2. MW-1 located immediately adjacent to irrigated field.
3. BTOC = below top of casing

**CUMULATIVE GROUNDWATER EPA METHOD 300.0: ANIONS**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

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

| SAMPLE ID | DATE | Fluoride | Chloride | Bromide | Phosphorus, Orthophosphate (As P) | Sulfate | Nitrogen, Nitrite (As N) | Nitrogen, Nitrate (As N) | Nitrate+Nitrite as N |
|---|---|---|---|---|---|---|---|---|---|
| SB-2 | 10/20/2000 | --- | 81,535 | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | |
| MW-1 | 9/19/2002 | --- | 1,770 | --- | --- | --- | --- | --- | --- |
| MW-1 | 11/3/2004 | --- | 2,899 | --- | --- | --- | --- | --- | --- |
| MW-1 | 3/17/2012 | < 2.0 | 1,400 | 2.5 | < 10 | 1,900 | --- | --- | < 1.0 |
| MW-1 | 6/18/2012 | 1.3 | 1,800 | 3.1 | < 0.50 | 2,000 | --- | --- | < 1.0 |
| MW-1 | 9/12/2012 | 1.1 | 1,600 | 1.6 | < 25 | 2,000 | --- | --- | < 1.0 |
| MW-1 | 12/6/2012 | 1 | 1,700 | < 2.0 | < 0.50 | 2,000 | < 2.0 | <0.10 | --- |
| MW-1 | 3/12/2013 | 1.9 | 1,500 | 2.3 | < 10 | 1,800 | --- | --- | < 2.0 |
| MW-1 | 6/27/2013 | 1.3 | 1,400 | 2.1 | < 0.50 | 1,600 | --- | --- | < 1.0 |
| MW-1 | 3/27/2018 | 0.42 | 1,700 | 2.2 | < 0.50 | 1,700 | --- | --- | < 1.0 |
| MW-1 | 3/21/2019 | 0.62 | 1,500 | 2.1 | < 0.50 | 1,600 | --- | --- | < 1.0 |
| MW-1 | 10/28/2019 | 1 | 1,500 | 2 | < 0.50 | 1,600 | <2.0 | <0.10 | --- |
| MW-1 | 9/17/2020 | 1.1 | 1,400 | 2.3 | < 2.5 | 1,500 | --- | --- | < 1.0 |
| MW-1 | 8/17/2021 | 2 | 1,800 | 2.5 | < 2.5 | 1,800 | <2.0 | <0.50 | --- |
| MW-1 | 3/21/2022 | 2 | 1,600 | 2.6 | < 10 | 1,500 | --- | --- | < 1.0 |
| MW-1 | 8/4/2022 | 3.2 | 1,500 | 3.2 | < 10 | 1,800 | --- | --- | < 1.0 |
| MW-1 | 11/29/2023 | <2.0 | 2,000 | 1.1 | < 0.50 | 2,000 | <2.0 | <0.10 | --- |
| MW-1 | 4/30/2024 | <2.0 | 1,800 | --- | --- | 1,900 | --- | --- | --- |
| MW-1 | 9/24/2024 | <2.0 | 1,800 | --- | --- | 1,800 | --- | --- | --- |
| | | | | | | | | | |
| MW-2 | 9/19/2002 | --- | 709 | --- | --- | --- | --- | --- | --- |
| MW-2 | 11/3/2004 | --- | 740 | --- | --- | --- | --- | --- | --- |
| MW-2 | 3/17/2012 | 1.3 | 790 | 1 | < 0.50 | 1,200 | --- | --- | 2.2 |
| MW-2 | 6/18/2012 | 1.2 | 790 | 1.6 | < 0.50 | 1,200 | --- | --- | 1.5 |
| MW-2 | 9/12/2012 | 0.6 | 940 | 1.2 | < 25 | 1,300 | --- | --- | 3.2 |
| MW-2 | 12/6/2012 | 0.98 | 890 | < 2.0 | < 0.50 | 1,200 | <2.0 | 4.5 | --- |
| MW-2 | 3/12/2013 | 0.62 | 880 | 1.2 | < 10 | 1,200 | --- | --- | 2.8 |
| MW-2 | 6/27/2013 | 0.98 | 720 | 1.4 | < 0.50 | 1,000 | --- | --- | 3.2 |
| MW-2 | 3/27/2018 | 0.44 | 640 | 1.1 | < 0.50 | 980 | --- | --- | 2.4 |
| MW-2 | 3/21/2019 | 1 | 810 | 1.1 | < 0.50 | 1,100 | --- | --- | 2 |
| MW-2 | 10/28/2019 | 0.87 | 800 | 1.2 | < 2.5 | 1,000 | <0.50 | 2.6 | --- |
| MW-2 | 9/17/2020 | <0.10 | 760 | 1.2 | < 0.50 | 1,000 | --- | --- | 2.4 |
| MW-2 | 8/17/2021 | 0.9 | 730 | 1.1 | < 2.5 | 1,100 | <0.50 | 2.3 | --- |
| MW-2 | 3/21/2022 | < 2.0 | 690 | 1 | < 10 | 1,000 | --- | --- | 2.3 |
| MW-2 | 8/4/2022 | 0.75 | 890 | 1.2 | < 0.50 | 1,100 | --- | --- | 1.9 |
| MW-2 | 11/29/2023 | 0.84 | 810 | 0.67 | < 0.50 | 1,100 | <2.0 | 3.0 | --- |

**CUMULATIVE GROUNDWATER EPA METHOD 300.0: ANIONS**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

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

| SAMPLE ID | DATE | Fluoride | Chloride | Bromide | Phosphorus, Orthophosphate (As P) | Sulfate | Nitrogen, Nitrite (As N) | Nitrogen, Nitrate (As N) | Nitrate+Nitrite as N |
|---|---|---|---|---|---|---|---|---|---|
| MW-2 | 4/30/2024 | 0.38 | 530 | --- | --- | 1,100 | --- | --- | --- |
| MW-2 | 9/24/2024 | 0.79 | 450 | --- | --- | 920 | --- | --- | --- |
| | | | | | | | | | |
| MW-3 | 9/19/2002 | --- | 59.1 | --- | --- | --- | --- | --- | --- |
| MW-3 | 11/3/2004 | --- | 64 | --- | --- | --- | --- | --- | --- |
| MW-3 | 3/17/2012 | < 2.0 | 42 | 0.13 | < 0.50 | 950 | --- | --- | < 1.0 |
| MW-3 | 6/18/2012 | 1.4 | 45 | 0.2 | < 0.50 | 900 | --- | --- | < 1.0 |
| MW-3 | 9/12/2012 | 1.3 | 45 | 0.11 | < 10 | 990 | --- | --- | < 1.0 |
| MW-3 | 12/6/2012 | 1.3 | 45 | 0.1 | < 0.50 | 1,000 | <0.10 | <0.10 | --- |
| MW-3 | 3/12/2013 | 1.4 | 43 | 0.12 | < 10 | 960 | --- | --- | < 1.0 |
| MW-3 | 6/27/2013 | 1.4 | 43 | 0.12 | < 0.50 | 1,000 | --- | --- | < 1.0 |
| MW-3 | 3/27/2018 | 1.7 | 41 | 0.15 | < 0.50 | 880 | --- | --- | < 1.0 |
| MW-3 | 3/21/2019 | 1.6 | 47 | 0.12 | < 0.50 | 900 | --- | --- | < 1.0 |
| MW-3 | 10/28/2019 | 1.6 | 45 | < 0.50 | < 2.5 | 870 | <0.50 | <0.50 | --- |
| MW-3 | 9/17/2020 | 1.3 | 45 | < 0.50 | < 2.5 | 920 | --- | --- | < 1.0 |
| MW-3 | 8/17/2021 | 1.5 | 43 | 0.13 | < 0.50 | 880 | <0.10 | <0.10 | --- |
| MW-3 | 3/21/2022 | 1.4 | 42 | 0.14 | < 0.50 | 970 | --- | --- | < 1.0 |
| MW-3 | 8/4/2022 | 1.3 | 42 | 0.15 | < 0.50 | 860 | --- | --- | < 1.0 |
| MW-3 | 11/29/2023 | 1.3 | 43 | 0.14 | < 0.50 | 890 | <0.10 | <0.10 | --- |
| MW-3 | 4/30/2024 | 1.4 | 42 | --- | --- | 870 | --- | --- | --- |
| | | | | | | | | | |
| MW-4 | 9/19/2002 | --- | 1,280 | --- | --- | --- | --- | --- | --- |
| MW-4 | 11/3/2004 | --- | 1,899 | --- | --- | --- | --- | --- | --- |
| MW-4 | 3/17/2012 | < 2.0 | 1,200 | < 2.0 | < 10 | 1,800 | --- | --- | < 1.0 |
| MW-4 | 6/18/2012 | 1.7 | 1,200 | 2.3 | < 0.50 | 1,800 | --- | --- | < 1.0 |
| MW-4 | 9/12/2012 | 1.3 | 1,200 | 1.5 | < 25 | 2,000 | --- | --- | < 1.0 |
| MW-4 | 12/6/2012 | 1.1 | 1,200 | < 2.0 | < 0.50 | 1,800 | <2.0 | <0.10 | --- |
| MW-4 | 3/12/2013 | 1.9 | 1,100 | 1.5 | < 10 | 1,700 | --- | --- | < 1.0 |
| MW-4 | 6/27/2013 | 1.2 | 1,000 | 1.7 | < 0.50 | 1,600 | --- | --- | < 1.0 |
| MW-4 | 3/27/2018 | 0.62 | 930 | 1.7 | < 0.50 | 1,400 | --- | --- | < 1.0 |
| MW-4 | 3/21/2019 | 0.87 | 1,100 | 1.5 | < 0.50 | 1,700 | --- | --- | < 1.0 |
| MW-4 | 10/28/2019 | 1.2 | 990 | 1.5 | < 0.50 | 1,500 | <2.0 | <0.10 | --- |
| MW-4 | 9/17/2020 | 1.2 | 960 | 1.7 | < 2.5 | 1,500 | --- | --- | < 1.0 |
| MW-4 | 8/17/2021 | 2.5 | 1,100 | 1.6 | < 2.5 | 1,800 | <0.50 | <0.50 | --- |
| MW-4 | 3/21/2022 | < 2.0 | 1,100 | 1.7 | < 10 | 1,700 | --- | --- | < 1.0 |
| MW-4 | 8/4/2022 | 2.2 | 1,000 | 1.6 | < 0.50 | 1,700 | --- | --- | < 1.0 |
| MW-4 | 11/29/2023 | 1.2 | 960 | 0.57 | < 0.50 | 1,700 | <2.0 | <0.10 | --- |

**CUMULATIVE GROUNDWATER EPA METHOD 300.0: ANIONS**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

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

| SAMPLE ID | DATE | Fluoride | Chloride | Bromide | Phosphorus, Orthophosphate (As P) | Sulfate | Nitrogen, Nitrite (As N) | Nitrogen, Nitrate (As N) | Nitrate+Nitrite as N |
|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 4/30/2024 | 0.55 | **910** | --- | --- | **1,600** | --- | --- | --- |
| MW-4 | 9/24/2024 | 1.1 | **930** | --- | --- | **1,500** | --- | --- | --- |
| | | | | | | | | | |
| **20.6.2.3103 NMAC GW STANDARDS (<10,000 mg/L)** | | | | **---** | **---** | | | | |
| ***A. Human Health Standards*** | | **1.6** | | | | | **1** | **10** | **10** [1] |
| ***B. Other Standards for Domestic Water Supply*** | | | **250** | | | **600** | | | |
| ***C. Standards for Irrigation Use*** | | | | | | | | | |

Notes:
1. This standarad is for nitrate. The nitrite standard is 1.0 mg/L.
2. Exceedances of the listed closure criteria are highlighted in bold, red type.

**CUMULATIVE GROUNDWATER DISSOLVED METALS (TABLE 1 OF 2)**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | Aluminum | Barium | Beryllium | Boron | Cadmium | Calcium | Chromium | Cobalt | Iron | Magnesium | Manganese | Molybdenum | Nickel | Potassium | Silver | Sodium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 3/17/2012 | --- | 0.02 | --- | --- | < 0.0020 | 880 | < 0.0060 | --- | 0.41 | 350 | 0.032 | --- | --- | 4.8 | < 0.0050 | 290 | 0.015 |
| MW-1 | 6/18/2012 | --- | 0.018 | --- | --- | < 0.0020 | 940 | < 0.0060 | --- | < 0.020 | 350 | 0.028 | --- | --- | 4.3 | < 0.0050 | 370 | 0.012 |
| MW-1 | 9/12/2012 | --- | 0.02 | --- | --- | < 0.0020 | 830 | < 0.0060 | --- | 0.68 | 320 | 0.25 | --- | --- | 4.2 | < 0.0050 | 230 | 0.017 |
| MW-1 | 12/6/2012 | --- | 0.022 | --- | --- | < 0.0020 | 940 | < 0.0060 | --- | < 0.020 | 370 | 0.2 | --- | --- | 5.5 | < 0.0050 | 310 | 0.033 |
| MW-1 | 3/12/2013 | --- | 0.019 | --- | --- | < 0.0020 | 820 | < 0.0060 | --- | 0.2 | 300 | 0.33 | --- | --- | 4.3 | < 0.0050 | 230 | < 0.010 |
| MW-1 | 6/27/2013 | --- | 0.018 | --- | --- | < 0.0020 | 910 | < 0.0060 | --- | 0.031 | 300 | 0.16 | --- | --- | 4.9 | < 0.050 | 200 | 0.021 |
| MW-1 | 3/27/2018 | --- | 0.015 | --- | --- | < 0.0020 | 910 | < 0.0060 | --- | < 0.020 | 350 | 0.14 | --- | --- | 4.2 | 0.031 | 280 | 0.02 |
| MW-1 | 3/21/2019 | < 0.020 | 0.014 | < 0.0020 | 0.32 | < 0.0020 | 940 | < 0.0060 | < 0.0060 | 0.048 | 320 | 0.22 | < 0.0080 | < 0.010 | 4.1 | 0.011 | 230 | 0.017 |
| MW-1 | 10/28/2019 | < 0.020 | 0.018 | < 0.0020 | 0.35 | < 0.0020 | 920 | < 0.0060 | < 0.0060 | < 0.020 | 330 | 0.14 | < 0.0080 | < 0.010 | 4.3 | 0.016 | 230 | 0.046 |
| MW-1 | 9/17/2020 | <0.10 | 0.017 | < 0.010 | 0.39 | < 0.010 | 970 | < 0.030 | < 0.030 | <0.10 | 370 | 0.25 | < 0.040 | < 0.050 | 5.1 | < 0.025 | 320 | <0.050 |
| MW-1 | 8/17/2021 | < 0.10 | 0.04 | < 0.010 | 0.36 | < 0.010 | 940 | < 0.030 | < 0.030 | 0.3 | 370 | 1.7 | < 0.040 | < 0.050 | 5.3 | < 0.025 | 270 | < 0.050 |
| MW-1 | 3/21/2022 | < 0.020 | 0.027 | < 0.0020 | 0.39 | < 0.0020 | 1,000 | < 0.0060 | 0.0071 | 1.2 | 340 | 0.33 | < 0.0080 | < 0.010 | 6.1 | < 0.0050 | 250 | < 0.010 |
| MW-1 | 8/4/2022 | < 0.20 | < 0.020 | < 0.020 | < 0.40 | < 0.020 | 920 | < 0.060 | < 0.060 | < 0.20 | 330 | 0.13 | < 0.080 | < 0.10 | < 10 | < 0.050 | 220 | 0.29 |
| MW-1 | 11/29/2023 | < 0.020 | 0.018 | < 0.0020 | 0.37 | < 0.0020 | 980 | < 0.0060 | < 0.0060 | < 0.020 | 410 | 0.077 | < 0.0080 | < 0.010 | 5.3 | 0.023 | 400 | < 0.010 |
| MW-1 | 4/30/2024 | --- | --- | --- | --- | --- | --- | --- | --- | < 0.020 | --- | 0.18 | --- | --- | --- | --- | --- | --- |
| MW-1 | 9/24/2024 | --- | --- | --- | --- | --- | --- | --- | --- | < 0.020 | --- | 0.16 | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | | | | | | | | |
| MW-2 | 3/17/2012 | --- | 0.014 | --- | --- | < 0.0020 | 570 | < 0.0060 | --- | 0.044 | 180 | 0.0027 | --- | --- | 4.6 | < 0.0050 | 81 | < 0.010 |
| MW-2 | 6/18/2012 | --- | 0.014 | --- | --- | < 0.0020 | 550 | < 0.0060 | --- | 0.061 | 180 | 0.0032 | --- | --- | 4.6 | < 0.0050 | 89 | 0.01 |
| MW-2 | 9/12/2012 | --- | 0.013 | --- | --- | < 0.0020 | 570 | < 0.0060 | --- | 0.041 | 180 | 0.0026 | --- | --- | 4.1 | < 0.0050 | 86 | 0.011 |
| MW-2 | 12/6/2012 | --- | 0.016 | --- | --- | < 0.0020 | 600 | < 0.0060 | --- | < 0.020 | 200 | 0.0023 | --- | --- | 5.1 | < 0.0050 | 100 | < 0.010 |
| MW-2 | 3/12/2013 | --- | 0.012 | --- | --- | < 0.0020 | 560 | < 0.0060 | --- | 0.023 | 180 | 0.0021 | --- | --- | 4.6 | < 0.0050 | 92 | < 0.010 |
| MW-2 | 6/27/2013 | --- | 0.013 | --- | --- | < 0.0020 | 610 | < 0.0060 | --- | 0.035 | 170 | 0.0021 | --- | --- | 4.7 | < 0.050 | 87 | < 0.010 |
| MW-2 | 3/27/2018 | --- | 0.013 | --- | --- | < 0.0020 | 580 | < 0.0060 | --- | 0.04 | 180 | 0.0023 | --- | --- | 4.5 | 0.021 | 97 | 0.028 |
| MW-2 | 3/21/2019 | < 0.020 | 0.012 | < 0.0020 | 0.067 | < 0.0020 | 570 | < 0.0060 | < 0.0060 | 0.025 | 170 | 0.0025 | < 0.0080 | < 0.010 | 4.2 | 0.0079 | 85 | 0.022 |
| MW-2 | 10/28/2019 | < 0.020 | 0.012 | < 0.0020 | 0.067 | < 0.0020 | 600 | < 0.0060 | < 0.0060 | 0.026 | 190 | < 0.0020 | < 0.0080 | < 0.010 | 4.5 | 0.015 | 94 | 0.031 |
| MW-2 | 9/17/2020 | <0.10 | 0.015 | <0.010 | <0.20 | <0.010 | 610 | <0.030 | <0.030 | <0.10 | 200 | < 0.010 | <0.040 | <0.050 | 5.4 | <0.025 | 100 | <0.050 |
| MW-2 | 8/17/2021 | < 0.020 | 0.012 | < 0.0020 | 0.071 | < 0.0020 | 510 | < 0.0060 | < 0.0060 | 0.039 | 160 | 0.0029 | < 0.0080 | < 0.010 | 4.5 | < 0.0050 | 89 | 0.015 |
| MW-2 | 3/21/2022 | < 0.020 | 0.014 | < 0.0020 | 0.083 | < 0.0020 | 520 | < 0.0060 | < 0.0060 | 0.027 | 160 | 0.0041 | < 0.0080 | < 0.010 | 4.3 | < 0.0050 | 100 | 0.011 |
| MW-2 | 8/4/2022 | < 0.20 | < 0.020 | < 0.020 | < 0.40 | < 0.020 | 570 | < 0.060 | < 0.060 | < 0.20 | 180 | < 0.020 | < 0.080 | < 0.10 | < 10 | < 0.050 | 99 | < 0.10 |
| MW-2 | 11/29/2023 | < 0.020 | 0.010 | < 0.0020 | 0.062 | < 0.0020 | 610 | < 0.0060 | < 0.0060 | < 0.020 | 200 | < 0.0020 | < 0.0080 | < 0.010 | 4.7 | 0.014 | 110 | < 0.010 |
| MW-2 | 4/30/2024 | --- | --- | --- | --- | --- | --- | --- | --- | 0.020 | --- | 0.0030 | --- | --- | --- | --- | --- | --- |
| MW-2 | 9/24/2024 | --- | --- | --- | --- | --- | --- | --- | --- | <0.020 | --- | 0.050 | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | | | | | | | | |
| MW-3 | 3/17/2012 | --- | 0.019 | --- | --- | < 0.0020 | 270 | < 0.0060 | --- | < 0.020 | 100 | 0.042 | --- | --- | 2.7 | < 0.0050 | 34 | 0.016 |
| MW-3 | 6/18/2012 | --- | 0.017 | --- | --- | < 0.0020 | 270 | < 0.0060 | --- | < 0.020 | 99 | 0.0029 | --- | --- | 2.8 | < 0.0050 | 36 | 0.026 |
| MW-3 | 9/12/2012 | --- | 0.017 | --- | --- | < 0.0020 | 270 | < 0.0060 | --- | < 0.020 | 97 | 0.03 | --- | --- | 2.3 | < 0.0050 | 33 | < 0.010 |
| MW-3 | 12/6/2012 | --- | 0.019 | --- | --- | < 0.0020 | 270 | < 0.0060 | --- | < 0.020 | 110 | < 0.0020 | --- | --- | 3.2 | < 0.0050 | 39 | < 0.010 |
| MW-3 | 3/12/2013 | --- | 0.018 | --- | --- | < 0.0020 | 240 | < 0.0060 | --- | 0.22 | 92 | 0.06 | --- | --- | 2.4 | < 0.0050 | 34 | < 0.010 |
| MW-3 | 6/27/2013 | --- | 0.018 | --- | --- | < 0.0020 | 260 | < 0.0060 | --- | < 0.020 | 98 | 0.0034 | --- | --- | 2.8 | < 0.025 | 34 | < 0.010 |
| MW-3 | 3/27/2018 | --- | 0.018 | --- | --- | < 0.0020 | 280 | < 0.0060 | --- | < 0.020 | 100 | 0.089 | --- | --- | 2.8 | 0.011 | 37 | 0.032 |
| MW-3 | 3/21/2019 | < 0.020 | 0.018 | < 0.0020 | 0.11 | < 0.0020 | 270 | < 0.0060 | < 0.0060 | < 0.020 | 95 | 0.037 | 0.009 | < 0.010 | 2.5 | < 0.0050 | 34 | 0.027 |

**CUMULATIVE GROUNDWATER DISSOLVED METALS (TABLE 1 OF 2)**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | Aluminum | Barium | Beryllium | Boron | Cadmium | Calcium | Chromium | Cobalt | Iron | Magnesium | Manganese | Molybdenum | Nickel | Potassium | Silver | Sodium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 10/28/2019 | < 0.020 | 0.018 | < 0.0020 | 0.11 | < 0.0020 | 240 | < 0.0060 | < 0.0060 | < 0.020 | 100 | 0.012 | < 0.0080 | < 0.010 | 2.8 | 0.0071 | 34 | 0.068 |
| MW-3 | 9/17/2020 | <0.10 | 0.018 | <0.010 | <0.20 | <0.010 | 290 | <0.030 | <0.030 | <0.10 | 110 | 0.011 | <0.040 | <0.050 | <5.0 | <0.025 | 36 | <0.050 |
| MW-3 | 8/17/2021 | < 0.020 | 0.019 | < 0.0020 | 0.12 | < 0.0020 | 280 | < 0.0060 | < 0.0060 | < 0.020 | 100 | < 0.0020 | < 0.0080 | < 0.010 | 2.7 | < 0.0050 | 33 | 0.047 |
| MW-3 | 3/21/2022 | < 0.020 | 0.024 | < 0.0020 | 0.14 | < 0.0020 | 270 | < 0.0060 | < 0.0060 | < 0.020 | 100 | **0.22** | < 0.0080 | < 0.010 | 3 | < 0.0050 | 40 | 0.014 |
| MW-3 | 8/4/2022 | < 0.20 | 0.021 | < 0.020 | < 0.40 | < 0.020 | 280 | < 0.060 | < 0.060 | < 0.20 | 110 | < 0.020 | < 0.080 | < 0.10 | < 10 | < 0.050 | 34 | 0.19 |
| MW-3 | 11/29/2023 | < 0.020 | 0.021 | < 0.0020 | 0.11 | < 0.0020 | 280 | < 0.0060 | < 0.0060 | < 0.020 | 110 | 0.0074 | < 0.0080 | < 0.010 | 2.8 | 0.0072 | 33 | < 0.010 |
| MW-3 | 4/30/2024 | --- | --- | --- | --- | --- | --- | --- | --- | < 0.020 | --- | 0.051 | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | | | | | | | | |
| MW-4 | 3/17/2012 | --- | 0.016 | --- | --- | < 0.0020 | 780 | < 0.0060 | --- | 0.071 | 310 | 0.051 | --- | --- | 3.6 | < 0.0050 | 200 | 0.012 |
| MW-4 | 6/18/2012 | --- | 0.016 | --- | --- | < 0.0020 | 780 | < 0.0060 | --- | 0.14 | 300 | 0.073 | --- | --- | 3.5 | < 0.0050 | 220 | 0.043 |
| MW-4 | 9/12/2012 | --- | 0.013 | --- | --- | < 0.0020 | 760 | < 0.0060 | --- | 0.021 | 300 | 0.048 | --- | --- | 3.2 | < 0.0050 | 200 | < 0.010 |
| MW-4 | 12/6/2012 | --- | 0.016 | --- | --- | < 0.0020 | 780 | < 0.0060 | --- | 0.086 | 320 | 0.076 | --- | --- | 4.2 | < 0.0050 | 230 | 0.02 |
| MW-4 | 3/12/2013 | --- | 0.013 | --- | --- | < 0.0020 | 710 | < 0.0060 | --- | 0.089 | 280 | 0.049 | --- | --- | 3.7 | < 0.0050 | 180 | 0.038 |
| MW-4 | 6/27/2013 | --- | 0.014 | --- | --- | < 0.0020 | 750 | < 0.0060 | --- | 0.27 | 280 | 0.063 | --- | --- | 4.3 | < 0.050 | 180 | 0.019 |
| MW-4 | 3/27/2018 | --- | 0.011 | --- | --- | < 0.0020 | 770 | < 0.0060 | --- | 0.023 | 290 | 0.027 | --- | --- | 3.7 | 0.025 | 150 | 0.027 |
| MW-4 | 3/21/2019 | < 0.020 | 0.011 | < 0.0020 | 0.16 | < 0.0020 | 750 | < 0.0060 | < 0.0060 | < 0.020 | 280 | 0.031 | < 0.0080 | < 0.010 | 3.5 | 0.0092 | 140 | 0.03 |
| MW-4 | 10/28/2019 | < 0.020 | 0.012 | 0.0023 | 0.17 | < 0.0020 | 720 | < 0.0060 | < 0.0060 | < 0.020 | 250 | 0.032 | < 0.0080 | < 0.010 | 3.6 | 0.019 | 130 | 0.023 |
| MW-4 | 9/17/2020 | <0.10 | 0.012 | <0.010 | <0.20 | <0.010 | 760 | <0.030 | <0.030 | <0.10 | 300 | 0.053 | <0.040 | <0.050 | <5.0 | <0.025 | 150 | <0.050 |
| MW-4 | 8/17/2021 | < 0.020 | 0.012 | < 0.0020 | 0.19 | < 0.0020 | 710 | < 0.0060 | < 0.0060 | 0.03 | 280 | 0.042 | < 0.0080 | < 0.010 | 4.2 | < 0.0050 | 140 | 0.019 |
| MW-4 | 3/21/2022 | < 0.020 | 0.014 | < 0.0020 | 0.2 | < 0.0020 | 730 | < 0.0060 | 0.0066 | < 0.020 | 300 | 0.035 | < 0.0080 | < 0.010 | 4 | < 0.0050 | 150 | < 0.010 |
| MW-4 | 8/4/2022 | < 0.20 | < 0.020 | < 0.020 | < 0.40 | < 0.020 | 720 | < 0.060 | < 0.060 | < 0.20 | 290 | 0.036 | < 0.080 | < 0.10 | < 10 | < 0.050 | 120 | < 0.10 |
| MW-4 | 11/29/2023 | 0.12 | 0.010 | < 0.0020 | 0.16 | < 0.0020 | 720 | < 0.0060 | < 0.0060 | 0.24 | 290 | 0.043 | < 0.0080 | < 0.010 | 3.8 | 0.016 | 140 | < 0.010 |
| MW-4 | 4/30/2024 | --- | --- | --- | --- | --- | --- | --- | --- | 0.04 | --- | 0.076 | --- | --- | --- | --- | --- | --- |
| MW-4 | 9/24/2024 | --- | --- | --- | --- | --- | --- | --- | --- | <0.020 | --- | 0.11 | --- | --- | --- | --- | --- | --- |
| | | | | | | | | | | | | | | | | | | |
| **20.6.2.3103 NMAC GW STANDARDS (<10,000 mg/L)** | | | | | | | **---** | | | | **---** | | | | **---** | **---** | | |
| ***A. Human Health Standards*** | | | **2** | **0.004** | | **0.005** | | **0.05** | | | | | | | | **0.05** | | |
| ***B. Other Standards for Domestic Water Supply*** | | | | | | | | | | **1.0** | | **0.2** | | | | | | **10** |
| ***C. Standards for Irrigation Use*** | | **5.0** | | | **0.75** | | | | **0.05** | | | | **1.0** | **0.2** | | | | |

Notes:
1. Exceedances of the listed closure criteria are highlighted in bold, red type.

**CUMULATIVE GROUNDWATER DISSOLVED METALS (TABLE 2 OF 2)**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | Antimony | Arsenic | Copper | Lead | Mercury | Selenium | Thallium | Uranium |
|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 3/17/2012 | --- | 0.0015 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0052 | --- | 0.002 |
| MW-1 | 6/18/2012 | --- | 0.0021 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0086 | --- | 0.0027 |
| MW-1 | 9/12/2012 | --- | 0.0023 | 0.0062 | < 0.0010 | < 0.00020 | 0.0083 | --- | 0.0057 |
| MW-1 | 12/6/2012 | --- | 0.0018 | < 0.0060 | < 0.0010 | < 0.00020 | 0.0093 | --- | 0.0045 |
| MW-1 | 3/12/2013 | --- | 0.0025 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0045 | --- | 0.0027 |
| MW-1 | 6/27/2013 | --- | 0.0063 | < 0.0060 | < 0.0050 | < 0.00020 | 0.022 | --- | < 0.0050 |
| MW-1 | 3/27/2018 | --- | < 0.0050 | < 0.0050 | < 0.0025 | < 0.00020 | < 0.0050 | --- | < 0.0025 |
| MW-1 | 3/21/2019 | < 0.0050 | < 0.0050 | < 0.010 | < 0.0050 | < 0.00020 | < 0.010 | < 0.0025 | < 0.0050 |
| MW-1 | 10/28/2019 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | < 0.0050 | < 0.0025 | < 0.0025 |
| MW-1 | 9/17/2020 | < 0.010 | < 0.010 | < 0.030 | < 0.0050 | --- | < 0.010 | < 0.0050 | < 0.0050 |
| MW-1 | 8/17/2021 | < 0.0010 | 0.0023 | < 0.030 | < 0.0025 | --- | < 0.0010 | < 0.0012 | < 0.0025 |
| MW-1 | 3/21/2022 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | < 0.0050 | < 0.0012 | 0.0036 |
| MW-1 | 8/4/2022 | < 0.0010 | 0.0016 | < 0.060 | < 0.00050 | --- | < 0.0010 | < 0.00025 | 0.0009 |
| MW-1 | 11/29/2023 | < 0.0050 | 0.0073 | < 0.0060 | < 0.0025 | --- | < 0.0050 | < 0.0012 | 0.0028 |
| | | | | | | | | | |
| MW-2 | 3/17/2012 | --- | 0.0019 | < 0.0060 | < 0.0050 | < 0.00020 | 0.025 | --- | 0.0061 |
| MW-2 | 6/18/2012 | --- | 0.0022 | < 0.0060 | < 0.0050 | < 0.00020 | 0.024 | --- | 0.0069 |
| MW-2 | 9/12/2012 | --- | 0.0019 | 0.0021 | < 0.0010 | < 0.00020 | 0.027 | --- | 0.0071 |
| MW-2 | 12/6/2012 | --- | 0.0018 | < 0.0060 | < 0.0010 | < 0.00020 | 0.026 | --- | 0.0078 |
| MW-2 | 3/12/2013 | --- | 0.0017 | < 0.0060 | 0.0060 | < 0.00020 | 0.026 | --- | 0.0068 |
| MW-2 | 6/27/2013 | --- | 0.0045 | < 0.0060 | < 0.0050 | < 0.00020 | 0.037 | --- | 0.0069 |
| MW-2 | 3/27/2018 | --- | < 0.0050 | < 0.0010 | < 0.0025 | < 0.00020 | 0.017 | --- | 0.0059 |
| MW-2 | 3/21/2019 | < 0.0010 | < 0.0010 | < 0.0010 | < 0.00050 | < 0.00020 | 0.013 | < 0.00050 | 0.0054 |
| MW-2 | 10/28/2019 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | 0.018 | < 0.0025 | 0.0058 |
| MW-2 | 9/17/2020 | < 0.010 | < 0.010 | < 0.030 | < 0.0050 | --- | 0.013 | < 0.0050 | 0.0052 |
| MW-2 | 8/17/2021 | < 0.0010 | < 0.0010 | < 0.0060 | < 0.00050 | --- | 0.012 | < 0.00025 | 0.0054 |
| MW-2 | 3/21/2022 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | 0.012 | < 0.0012 | 0.0043 |
| MW-2 | 8/4/2022 | < 0.0010 | 0.0011 | < 0.060 | < 0.00050 | --- | 0.016 | < 0.00025 | 0.0056 |
| MW-2 | 11/29/2023 | < 0.0050 | 0.0044 | < 0.0060 | 0.0051 | --- | 0.020 | < 0.0012 | 0.0055 |
| | | | | | | | | | |
| MW-3 | 3/17/2012 | --- | 0.0012 | < 0.0060 | < 0.0050 | < 0.00020 | < 0.0010 | --- | < 0.0010 |
| MW-3 | 6/18/2012 | --- | < 0.0010 | < 0.0060 | < 0.0050 | < 0.00020 | < 0.0010 | --- | < 0.0010 |
| MW-3 | 9/12/2012 | --- | 0.0012 | 0.0021 | < 0.0010 | < 0.00020 | < 0.0010 | --- | < 0.0010 |
| MW-3 | 12/6/2012 | --- | < 0.0010 | < 0.0060 | < 0.0010 | < 0.00020 | 0.001 | --- | 0.0011 |
| MW-3 | 3/12/2013 | --- | < 0.0010 | < 0.0060 | 0.0064 | < 0.00020 | < 0.0010 | --- | < 0.0010 |
| MW-3 | 6/27/2013 | --- | 0.0013 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0027 | --- | 0.0011 |
| MW-3 | 3/27/2018 | --- | 0.0011 | < 0.0010 | < 0.00050 | < 0.00020 | < 0.0010 | --- | 0.00057 |
| MW-3 | 3/21/2019 | < 0.0010 | < 0.0010 | < 0.0010 | < 0.00050 | < 0.00020 | < 0.010 | < 0.00050 | < 0.0050 |
| MW-3 | 10/28/2019 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | < 0.0050 | < 0.0025 | < 0.0025 |
| MW-3 | 9/17/2020 | < 0.010 | < 0.010 | < 0.030 | < 0.0050 | --- | < 0.010 | < 0.0050 | < 0.0050 |
| MW-3 | 8/17/2021 | < 0.0010 | 0.0014 | < 0.0060 | < 0.00050 | --- | < 0.0010 | < 0.00025 | 0.00056 |
| MW-3 | 3/21/2022 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | < 0.0050 | < 0.0012 | < 0.0025 |
| MW-3 | 8/4/2022 | < 0.0010 | 0.0024 | < 0.060 | < 0.00050 | --- | < 0.0010 | < 0.00025 | 0.00057 |
| MW-3 | 11/29/2023 | < 0.0050 | 0.0030 | < 0.0060 | < 0.0025 | --- | < 0.0050 | < 0.0012 | < 0.0025 |
| | | | | | | | | | |

**CUMULATIVE GROUNDWATER DISSOLVED METALS (TABLE 2 OF 2)**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | Antimony | Arsenic | Copper | Lead | Mercury | Selenium | Thallium | Uranium |
|---|---|---|---|---|---|---|---|---|---|
| MW-4 | 3/17/2012 | --- | 0.0014 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0042 | --- | 0.0036 |
| MW-4 | 6/18/2012 | --- | 0.002 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0058 | --- | 0.0036 |
| MW-4 | 9/12/2012 | --- | 0.0017 | < 0.0050 | < 0.0050 | < 0.00020 | < 0.0050 | --- | 0.0033 |
| MW-4 | 12/6/2012 | --- | 0.0014 | < 0.0060 | < 0.0010 | < 0.00020 | 0.0059 | --- | 0.0037 |
| MW-4 | 3/12/2013 | --- | 0.0012 | < 0.0060 | < 0.0050 | < 0.00020 | 0.0036 | --- | 0.0028 |
| MW-4 | 6/27/2013 | --- | 0.0041 | < 0.0060 | < 0.0050 | < 0.00020 | 0.017 | --- | 0.0025 |
| MW-4 | 3/27/2018 | --- | < 0.0050 | < 0.0050 | < 0.0025 | < 0.00020 | < 0.0050 | --- | < 0.0025 |
| MW-4 | 3/21/2019 | < 0.0010 | < 0.0010 | 0.0015 | < 0.00050 | < 0.00020 | < 0.010 | < 0.00050 | < 0.0050 |
| MW-4 | 10/28/2019 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | < 0.0050 | < 0.0025 | < 0.0025 |
| MW-4 | 9/17/2020 | < 0.010 | < 0.010 | <0.030 | < 0.0050 | --- | < 0.010 | < 0.0050 | < 0.0050 |
| MW-4 | 8/17/2021 | < 0.0010 | 0.001 | < 0.0060 | < 0.0025 | --- | < 0.0010 | < 0.0012 | < 0.0025 |
| MW-4 | 3/21/2022 | < 0.0050 | < 0.0050 | < 0.0050 | < 0.0025 | --- | < 0.0050 | < 0.0012 | < 0.0025 |
| MW-4 | 8/4/2022 | < 0.0010 | 0.0016 | < 0.060 | < 0.00050 | --- | < 0.0010 | < 0.00025 | 0.00096 |
| MW-4 | 11/29/2023 | < 0.0050 | 0.0054 | < 0.0060 | < 0.0025 | --- | < 0.0050 | < 0.0012 | < 0.0025 |
| | | | | | | | | | |
| **20.6.2.3103 NMAC GW STANDARDS (<10,000 mg/L)** | | | | | | | | | |
| ***A. Human Health Standards*** | | **0.006** | **0.01** | | **0.015** | **0.002** | **0.05** | **0.002** | **0.03** |
| ***B. Other Standards for Domestic Water Supply*** | | | | **1.0** | | | | | |
| ***C. Standards for Irrigation Use*** | | | | | | | | | |

Notes:
1. Exceedances of the listed closure criteria are highlighted in bold, red type.

**CUMULATIVE GROUNDWATER TPH AND VOC DATA SUMMARY**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | TPH TOTAL | TPH GRO | TPH DRO | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | 1,2,4-Trimethyl benzene | 1,3,5-Trimethyl benzene | Naphthalene | 1-Methyl naphthalene | 2-Methyl naphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SB-2 | 10/20/2000 | <1.00 | <0.5 | <0.5 | --- | 0.004 | <0.001 | <0.001 | <0.002 | --- | --- | --- | --- | --- |
| | | | | | | | | | | | | | | |
| MW-1 | 9/19/2002 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | --- | --- | --- |
| MW-1 | 11/3/2004 | --- | --- | --- | --- | <0.002 | <0.002 | <0.002 | <0.006 | --- | --- | --- | --- | --- |
| MW-1 | 3/17/2012 | --- | --- | --- | <0.002 | <0.002 | <0.002 | <0.002 | <0.004 | <0.002 | <0.002 | <0.004 | <0.008 | <0.008 |
| MW-1 | 6/18/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-1 | 9/12/2012 | --- | --- | --- | --- | <0.002 | <0.002 | <0.002 | <0.004 | --- | --- | <0.004 | --- | --- |
| MW-1 | 12/6/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-1 | 3/12/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-1 | 6/27/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-1 | 3/27/2018 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-1 | 3/21/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | --- | --- |
| MW-1 | 10/28/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-1 | 9/17/2020 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-1 | 8/17/2021 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-1 | 3/21/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-1 | 8/4/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-1 | 11/29/2023 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| | | | | | | | | | | | | | | |
| MW-2 | 9/19/2002 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | --- | --- | --- |
| MW-2 | 11/3/2004 | --- | --- | --- | --- | <0.002 | <0.002 | <0.002 | <0.006 | --- | --- | --- | --- | --- |
| MW-2 | 3/17/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 | <0.001 | <0.002 | <0.004 | <0.004 |
| MW-2 | 6/18/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-2 | 9/12/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-2 | 12/6/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-2 | 3/12/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-2 | 6/27/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-2 | 3/27/2018 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-2 | 3/21/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | --- | --- |
| MW-2 | 10/28/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-2 | 9/17/2020 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-2 | 8/17/2021 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-2 | 3/21/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-2 | 8/4/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-2 | 11/29/2023 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| | | | | | | | | | | | | | | |
| MW-3 | 9/19/2002 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | --- | --- | --- |
| MW-3 | 11/3/2004 | --- | --- | --- | --- | <0.002 | <0.002 | <0.002 | <0.006 | --- | --- | --- | --- | --- |
| MW-3 | 3/17/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 | <0.001 | <0.002 | <0.004 | <0.004 |
| MW-3 | 6/18/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-3 | 9/12/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-3 | 12/6/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-3 | 3/12/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |

**CUMULATIVE GROUNDWATER TPH AND VOC DATA SUMMARY**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | TPH TOTAL | TPH GRO | TPH DRO | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | 1,2,4-Trimethyl benzene | 1,3,5-Trimethyl benzene | Naphthalene | 1-Methyl naphthalene | 2-Methyl naphthalene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 6/27/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-3 | 3/27/2018 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-3 | 3/21/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | --- | --- |
| MW-3 | 10/28/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-3 | 9/17/2020 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-3 | 8/17/2021 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-3 | 3/21/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-3 | 8/4/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-3 | 11/29/2023 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| | | | | | | | | | | | | | | |
| MW-4 | 9/19/2002 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | --- | --- | --- |
| MW-4 | 11/3/2004 | --- | --- | --- | --- | <0.002 | <0.002 | <0.002 | <0.006 | --- | --- | --- | --- | --- |
| MW-4 | 3/17/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | <0.001 | <0.001 | <0.002 | <0.004 | <0.004 |
| MW-4 | 6/18/2012 | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-4 | 9/12/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-4 | 12/6/2012 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-4 | 3/12/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-4 | 6/27/2013 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.002 | --- | --- | <0.002 | --- | --- |
| MW-4 | 3/27/2018 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-4 | 3/21/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | --- | --- |
| MW-4 | 10/28/2019 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-4 | 9/17/2020 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-4 | 8/17/2021 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-4 | 3/21/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-4 | 8/4/2022 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| MW-4 | 11/29/2023 | --- | --- | --- | --- | <0.001 | <0.001 | <0.001 | <0.0015 | --- | --- | <0.002 | <0.004 | <0.004 |
| | | | | | | | | | | | | | | |
| **20.6.2.3103 NMAC GW STANDARDS (<10,000 mg/L)** | | --- | --- | --- | | | | | | --- | --- | | | |
| ***A. Human Health Standards*** | | | | | | **0.005** | **1** | **0.7** | **0.62** | | | **0.03** [1] | **0.03** [1] | **0.03** [1] |
| ***B. Other Standards for Domestic Water Supply*** | | | | | **0.1** | | | | | | | | | |
| ***C. Standards for Irrigation Use*** | | | | | | | | | | | | | | |

Notes:

1. The 0.03 mg/L standard is for total naphthalene plus monomethylnaphthalenes.
2. Exceedances of the listed closure criteria are highlighted in bold, red type.

**CUMULATIVE GROUNDWATER SPECIFIC CONDUCTANCE, pH, ALKALINITY, AND TDS**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | Conductivity µmhos/c | pH | Alkalinity (mg/L) | | | TDS (mg/L) |
|---|---|---|---|---|---|---|---|
| | | | | Bicarbonate (As CaCO3) | Carbonate (As CaCO3) | Total Alkalinity (as CaCO3) | |
| MW-1 | 9/19/2002 | --- | --- | --- | --- | --- | 6,140 |
| MW-1 | 11/3/2004 | --- | --- | --- | --- | --- | 8,172 |
| MW-1 | 3/17/2012 | 6300 | 7.07 | 170 | < 2.0 | 170 | 5,080 |
| MW-1 | 6/18/2012 | 6700 | 7.19 | 200 | < 2.0 | 200 | 5,940 |
| MW-1 | 9/12/2012 | 6600 | --- | 160 | < 2.0 | 160 | 5,270 |
| MW-1 | 12/6/2012 | 7000 | 7.13 | 170 | < 2.0 | 170 | 5,760 |
| MW-1 | 3/12/2013 | 6500 | 7.38 | 160 | < 2.0 | 160 | 5,380 |
| MW-1 | 6/27/2013 | 6800 | 7.28 | 140 | < 2.0 | 140 | 5,330 |
| MW-1 | 3/27/2018 | 6600 | 7.48 | 151.7 | < 2.000 | 151.7 | 5,460 |
| MW-1 | 3/21/2019 | 6400 | 6.99 | 177.8 | < 2.000 | 177.8 | 5,230 |
| MW-1 | 10/28/2019 | 6900 | 7.39 | 168.6 | < 2.000 | 168.6 | 5,550 |
| MW-1 | 9/17/2020 | 7000 | 7.41 | 169.8 | < 2.000 | 169.8 | 5,650 |
| MW-1 | 8/17/2021 | 7500 | 7.05 | 186.4 | < 2.000 | 186.4 | 5,970 |
| MW-1 | 3/21/2022 | 7200 | 7.76 | 152.8 | < 2.000 | 152.8 | 6,140 |
| MW-1 | 8/4/2022 | 6800 | 7.53 | 124.9 | < 2.000 | 124.9 | 5,990 |
| MW-1 | 11/29/2023 | 8100 | 7.33 | 205.2 | < 2.000 | 205.2 | 6,400 |
| MW-1 | 4/30/2024 | --- | --- | --- | --- | --- | 6,200 |
| MW-1 | 9/24/2024 | --- | --- | --- | --- | --- | 6,400 |
| | | | | | | | |
| MW-2 | 9/19/2002 | --- | --- | --- | --- | --- | 3,420 |
| MW-2 | 11/3/2004 | --- | --- | --- | --- | --- | 3,216 |
| MW-2 | 3/17/2012 | 3,800 | 7.28 | 150 | < 2.0 | 150 | 3,090 |
| MW-2 | 6/18/2012 | 3,900 | 7.34 | 150 | < 2.0 | 150 | 3,260 |
| MW-2 | 9/12/2012 | 4,300 | --- | 140 | < 2.0 | 140 | 3,370 |
| MW-2 | 12/6/2012 | 4,300 | 7.75 | 140 | < 2.0 | 140 | 3,510 |
| MW-2 | 3/12/2013 | 4,200 | 7.48 | 150 | < 2.0 | 150 | 3,360 |
| MW-2 | 6/27/2013 | 4,300 | 7.36 | 150 | < 2.0 | 150 | 3,380 |
| MW-2 | 3/27/2018 | 3,600 | 7.66 | 156.9 | < 2.000 | 156.9 | 2,870 |
| MW-2 | 3/21/2019 | 3,900 | 7.2 | 146.8 | < 2.000 | 146.8 | 2,920 |
| MW-2 | 10/28/2019 | 4,300 | 7.52 | 150.7 | < 2.000 | 150.7 | 3,110 |
| MW-2 | 9/17/2020 | 4,000 | 7.67 | 149.2 | < 2.000 | 149.2 | 3,160 |
| MW-2 | 8/17/2021 | 3,800 | 7.40 | 152.5 | < 2.000 | 152.5 | 2,920 |
| MW-2 | 3/21/2022 | 3,600 | 7.83 | 152.7 | < 2.000 | 152.7 | 2,840 |
| MW-2 | 8/4/2022 | 4,200 | 7.69 | 150.4 | < 2.000 | 150.4 | 3,530 |
| MW-2 | 11/29/2023 | 4,700 | 7.37 | 144.5 | < 2.000 | 144.5 | 3,350 |
| MW-2 | 4/30/2024 | --- | --- | --- | --- | --- | 2,800 |
| MW-2 | 9/24/2024 | --- | --- | --- | --- | --- | 2,600 |
| | | | | | | | |
| MW-3 | 9/19/2002 | --- | --- | --- | --- | --- | 1,700 |
| MW-3 | 11/3/2004 | --- | --- | --- | --- | --- | 1,545 |
| MW-3 | 3/17/2012 | 1,800 | 7.43 | 180 | < 2.0 | 180 | 1,590 |
| MW-3 | 6/18/2012 | 1,900 | 7.55 | 180 | < 2.0 | 180 | 1,590 |
| MW-3 | 9/12/2012 | 1,900 | --- | 180 | < 2.0 | 180 | 1,580 |
| MW-3 | 12/6/2012 | 1,800 | 7.60 | 180 | < 2.0 | 180 | 1,600 |
| MW-3 | 3/12/2013 | 1,900 | 7.70 | 190 | < 2.0 | 190 | 1,620 |
| MW-3 | 6/27/2013 | 2,000 | 7.61 | 190 | < 2.0 | 190 | 1,630 |
| MW-3 | 3/27/2018 | 1,900 | 7.86 | 180.8 | < 2.000 | 180.8 | 1,620 |
| MW-3 | 3/21/2019 | 1,900 | 7.35 | 175.8 | < 2.000 | 175.8 | 1,610 |
| MW-3 | 10/28/2019 | 1,900 | 7.73 | 182.6 | < 2.000 | 182.6 | 1,590 |
| MW-3 | 9/17/2020 | 1,900 | 7.69 | 177.7 | < 2.000 | 177.7 | 1,600 |
| MW-3 | 8/17/2021 | 1,900 | 7.53 | 176.2 | < 2.000 | 176.2 | 1,590 |
| MW-3 | 3/21/2022 | 1,900 | 7.85 | 183 | < 2.000 | 183 | 1,630 |
| MW-3 | 8/4/2022 | 1,900 | 7.88 | 195.5 | < 2.000 | 195.5 | 1,670 |
| MW-3 | 11/29/2023 | 1,900 | 7.68 | 194.8 | < 2.000 | 194.8 | 1,610 |

**CUMULATIVE GROUNDWATER SPECIFIC CONDUCTANCE, pH, ALKALINITY, AND TDS**
**LATTION PIT**
**EDDY COUNTY, NEW MEXICO**
**AP-23**

**All Values Presented in Parts Per Million (mg/L)**

| SAMPLE ID | DATE | Conductivity µmhos/c | pH | Alkalinity (mg/L) | | | TDS (mg/L) |
|---|---|---|---|---|---|---|---|
| | | | | Bicarbonate (As CaCO3) | Carbonate (As CaCO3) | Total Alkalinity (as CaCO3) | |
| MW-3 | 4/30/2024 | --- | --- | --- | --- | --- | **1,700** |
| | | | | | | | |
| MW-4 | 9/19/2002 | --- | --- | --- | --- | --- | **5,350** |
| MW-4 | 11/3/2004 | --- | --- | --- | --- | --- | **5,650** |
| MW-4 | 3/17/2012 | 5,400 | 7.16 | 160 | < 2.0 | 160 | **4,470** |
| MW-4 | 6/18/2012 | 5,500 | 7.27 | 160 | < 2.0 | 160 | **4,880** |
| MW-4 | 9/12/2012 | 5,800 | --- | 160 | < 2.0 | 160 | **4,370** |
| MW-4 | 12/6/2012 | 5,700 | 7.26 | 160 | < 2.0 | 160 | **4,550** |
| MW-4 | 3/12/2013 | 5,600 | 7.46 | 160 | < 2.0 | 160 | **4,450** |
| MW-4 | 6/27/2013 | 5,800 | 7.36 | 160 | < 2.0 | 160 | **4,340** |
| MW-4 | 3/27/2018 | 5,400 | 7.66 | 146.7 | < 2.000 | 146.7 | **4,360** |
| MW-4 | 3/21/2019 | 5,400 | 7.16 | 144.7 | < 2.000 | 144.7 | **4,170** |
| MW-4 | 10/28/2019 | 5,500 | 7.46 | 147.6 | < 2.000 | 147.6 | **4,200** |
| MW-4 | 9/17/2020 | 5,300 | 7.68 | 141.6 | < 2.000 | 141.6 | **4,310** |
| MW-4 | 8/17/2021 | 5,500 | 7.27 | 148.2 | < 2.000 | 148.2 | **4,200** |
| MW-4 | 3/21/2022 | 5,400 | 7.74 | 142.7 | < 2.000 | 142.7 | **4,280** |
| MW-4 | 8/4/2022 | 5,400 | 7.54 | 140 | < 2.000 | 140 | **4,640** |
| MW-4 | 11/29/2023 | 5,200 | 7.55 | 157.5 | < 2.000 | 157.5 | **3,950** |
| MW-4 | 4/30/2024 | --- | --- | --- | --- | --- | **4,300** |
| MW-4 | 9/24/2024 | --- | --- | --- | --- | --- | **4,200** |
| | | | | | | | |
| **20.6.2.3103 NMAC GW STANDARDS (<10,000 mg/L)** | | **---** | | **---** | **---** | **---** | |
| ***A. Human Health Standards*** | | | | | | | |
| ***B. Other Standards for Domestic Water Supply*** | | | **6 to 9** | | | | **1,000** |
| ***C. Standards for Irrigation Use*** | | | | | | | |

Notes:
1. Exceedances of the listed closure criteria are highlighted in bold, red type.

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

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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



## CONDITIONS

| | |
|---|---|
| Operator:<br>EOG RESOURCES INC<br>5509 Champions Drive<br>Midland, TX 79706 | OGRID:<br>7377 |
| | Action Number:<br>435296 |
| | Action Type:<br>[UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| jburdine | Proposed workplan schedule and reporting for Lattion Pit, Incident # nAUTOFAB000337 approved. Proceed with installation of monitoring wells and sampling as proposed. Send in reporting of completed site activities and summary of all monitoring well installation as well as initial sampling as a standalone report to OCD as proposed. | 6/20/2025 |