



ASSESSMENT WORKPLAN

WILLIAMS PIT (AP-22)
INCIDENT NO. NAUTOFAB000741
UNIT F, SECTION 25, TOWNSHIP 18S, RANGE 26E
EDDY COUNTY, NEW MEXICO
32.720624, -104.336249
RANGER REFERENCE NO. 5375

PREPARED FOR:

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

PREPARED BY:

RANGER ENVIRONMENTAL SERVICES, LLC
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JANUARY 28, 2025


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1.0 SITE LOCATION AND BACKGROUND

The Williams Pit (Site) is a historic oil and gas production pit formerly located at the Williams Battery facility pad, an oil and gas production facility located on private land, approximately 9.15 miles south-southwest of Artesia, within Eddy County, New Mexico. The facility is situated in Unit F, Section 25, T18S-R26E at GPS coordinates 32.720624, -104.336249. The Williams Battery is currently active and is being operated by Silverback Operating II (Silverback). Based on the Site history and transaction history, EOG Resources, Inc. (EOG) maintains environmental responsibility for the impacts related to NAUTOFAB000741 at the Site.

The Williams Battery was historically operated by H&S Oil Company (H&S) and the unlined earthen production pit (Williams Pit) was formerly utilized by H&S for oil and gas fluid storage/impoundment. In 1997, Yates Petroleum Corporation (Yates) acquired the Williams Battery and associated pit from H&S. While operated by Yates, the pit underwent closure, and an assessment of the former pit location was conducted. In September 2016, EOG acquired Yates and its associated assets including the Williams Battery which included the subject Williams Pit.

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 May 2021, additional soil investigation activities were completed 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 September 19, 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 personnel and delayed response to the draft *Site*

Chronology and Status Update report submitted to the NMOCD, the report was formally submitted to the NMOCD.

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 27, 2024, (*2023 Annual Groundwater Monitoring Report*) documenting the 2023 sampling activities was submitted to the NMOCD for review.

As detailed in the *2023 Annual Groundwater Monitoring Report*, additional sampling events were completed at the Site beginning in the second quarter of 2024 and would be continued on a quarterly basis. 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, recommendations for additional Site assessment that were presented in Ranger's *2023 Annual Groundwater Monitoring Report*, and to determine an appropriate path 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.

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 Monitor 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 previously discussed in Rangers *Site Chronology and Status Update* and *2023 Annual Groundwater Monitoring Report*, additional delineation/background groundwater quality data is needed to determine whether the former production pit is the source for the elevated groundwater concentrations in the Site area. Additionally, due to the positioning and groundwater elevation readings of the four monitoring wells currently on-site, groundwater gradient at the Site appears to be variable. To investigate soil and groundwater conditions and assist in determining groundwater gradient, four monitor well locations are proposed in strategically positioned locations northeast, east, southwest, and west of the former pit location.

2.2 Well Installation Methodologies and Soil Sampling

Installation of the proposed monitor well locations will be completed utilizing air rotary drilling techniques. Based on recent groundwater elevation data collected at the Site, it is apparent that groundwater levels are dropping, and the proposed monitor wells will require completion to greater depths than that of the current on-site monitor wells. The proposed monitor wells will be completed to a depth of approximately 40 feet below ground surface (bgs).



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 five feet bgs and samples will then be collected at approximate five-foot 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;
- 20 feet of well screen consisting of 0.010-foot 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:

- Arsenic
- Benzene
- Chloride
- Chromium
- Iron
- Manganese
- Selenium
- Silver
- 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. Ranger will also provide recommendations for any modifications to the ongoing quarterly groundwater monitoring program, or for any additional assessment activities which may be needed.



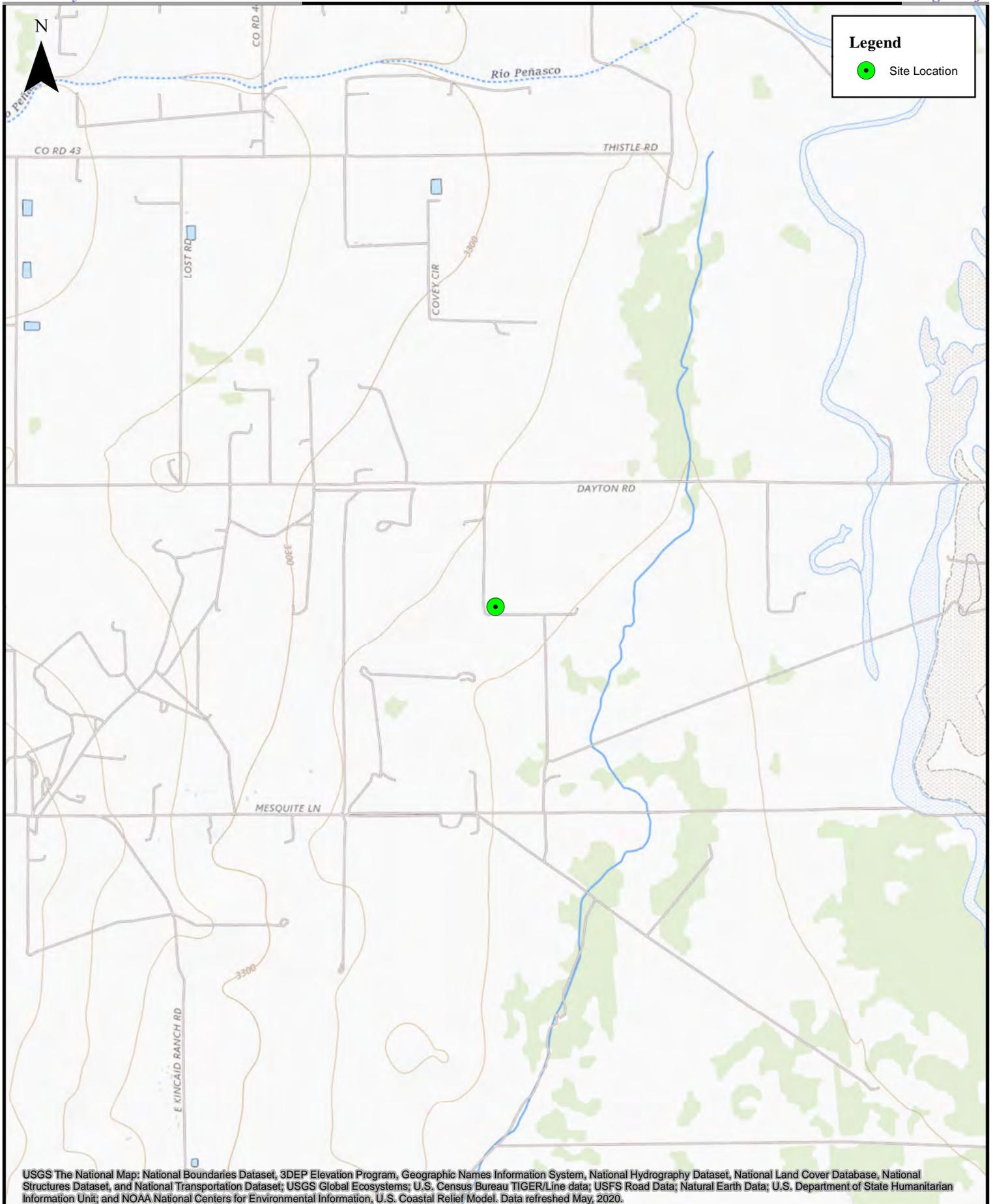
FIGURES

Topographic Map

Area Map

Site Map

Proposed Monitor Well Location Map



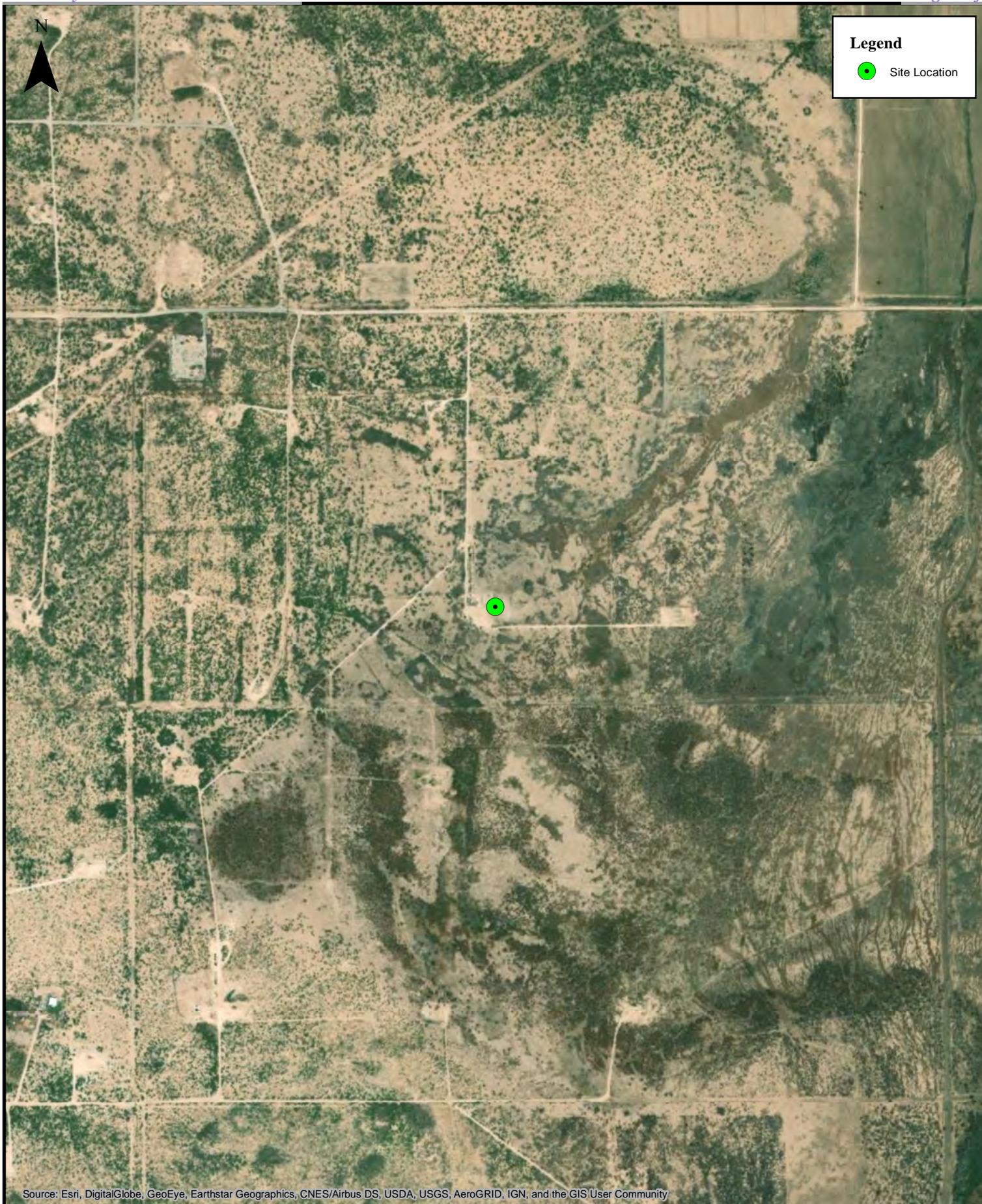
USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS 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

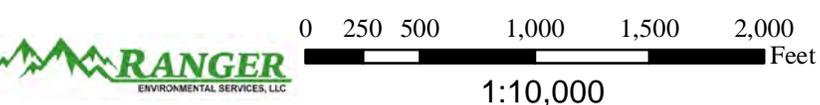
Topographic Map
Williams Pit
EOG Resources, Inc.



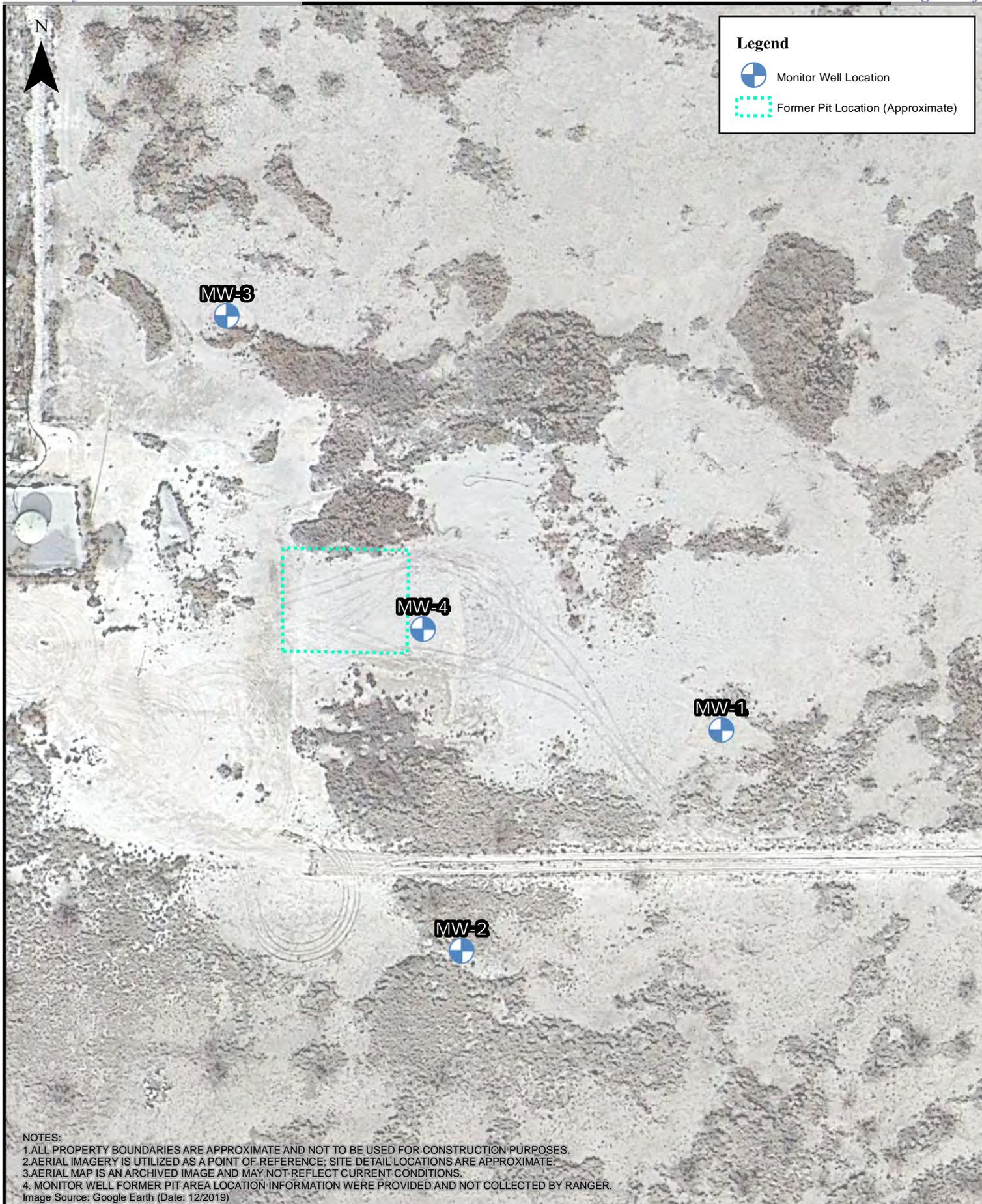
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

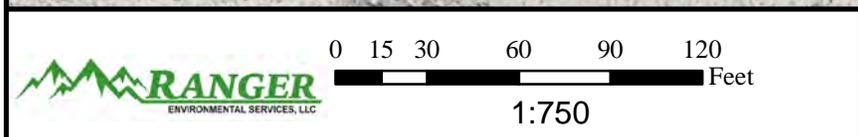
- Site Location



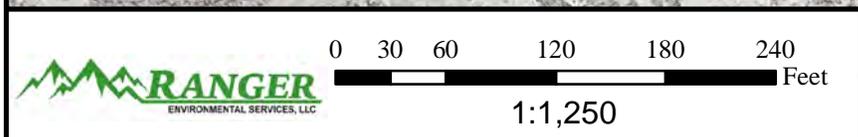
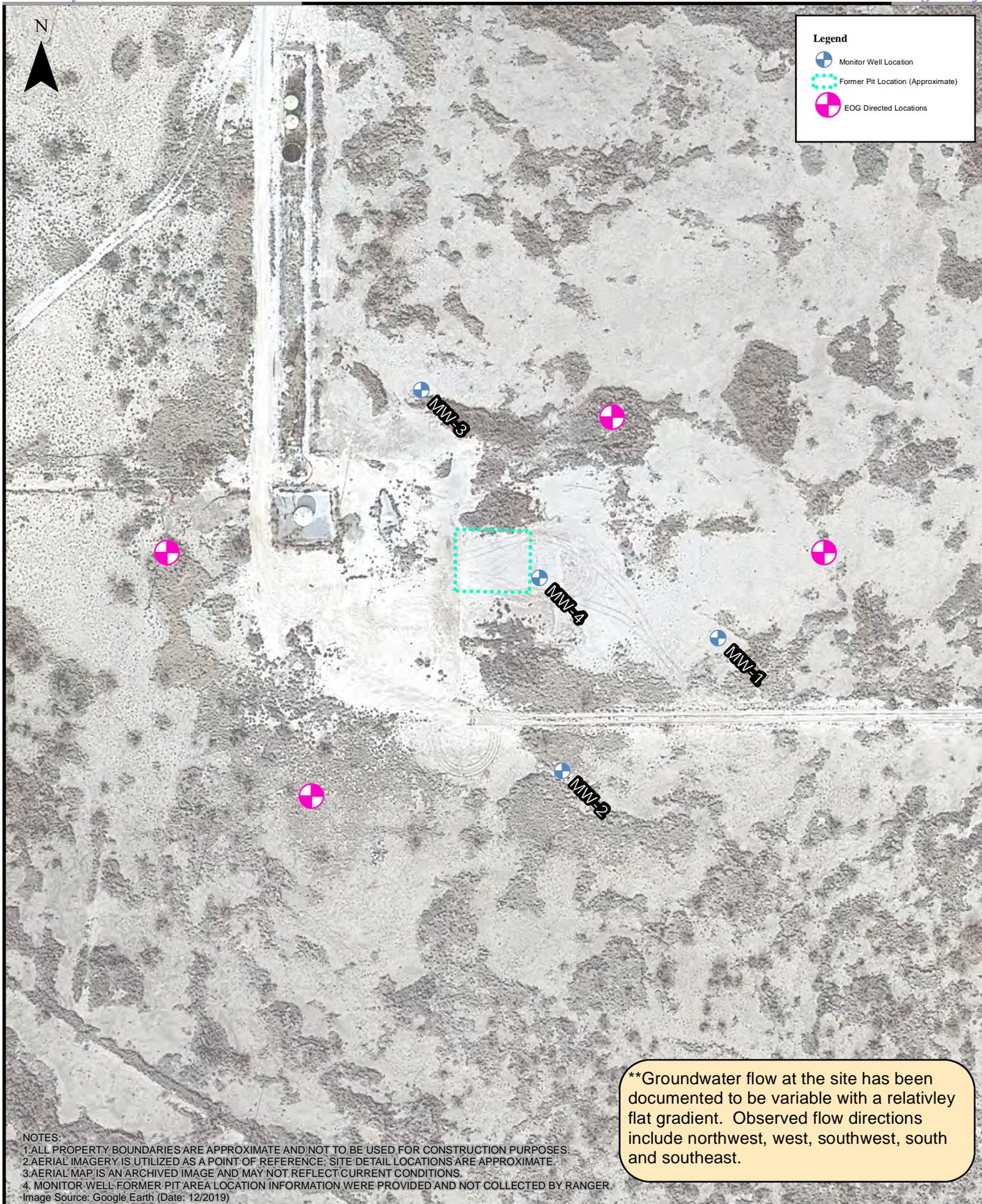
Area Map
Williams Pit
EOG Resources, Inc.



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. MONITOR WELL FORMER PIT AREA LOCATION INFORMATION WERE PROVIDED AND NOT COLLECTED BY RANGER.
 Image Source: Google Earth (Date: 12/2019)



Site Map
 Williams Pit
 EOG Resources, Inc.



Proposed Monitor Well Location Map
Williams Pit
EOG Resources, 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

**WELL GAUGING DATA
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22**

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	3282.57	31.92	0.00	3250.65	20'-40'
MW-1	9/19/2002	3282.57	32.05	0.00	3250.52	20'-40'
MW-1	11/8/2004	3282.57	30.99	0.00	3251.58	20'-40'
MW-1	12/1/2004	3282.57	30.40	0.00	3252.17	20'-40'
MW-1	12/15/2004	3282.57	30.08	0.00	3252.49	20'-40'
MW-1	12/21/2004	3282.57	29.99	0.00	3252.58	20'-40'
MW-1	12/30/2004	3282.57	29.73	0.00	3252.84	20'-40'
MW-1	3/6/2018	3282.57	23.06	0.00	3259.51	20'-40'
MW-1	3/28/2018	3282.57	23.15	0.00	3259.42	20'-40'
MW-1	3/11/2019	3283.94	24.31	0.00	3259.63	20'-40'
MW-1	10/29/2019	3283.94	25.14	0.00	3258.80	20'-40'
MW-1	9/18/2020	3283.94	25.46	0.00	3258.48	20'-40'
MW-1	8/23/2021	3283.94	25.23	0.00	3258.71	20'-40'
MW-1	11/28/2023	3283.94	28.74	0.00	3255.20	20'-40'
MW-1	04/30/2024	3283.94	28.65	0.00	3255.29	20'-40'
MW-1	09/24/2024	3283.94	29.70	0.00	3254.24	20'-40'
MW-2	9/18/2002	3282.34	32.08	0.00	3250.26	23'-43'
MW-2	9/19/2002	3282.34	31.85	0.00	3250.49	23'-43'
MW-2	11/8/2004	3282.34	30.76	0.00	3251.58	23'-43'
MW-2	12/1/2004	3282.34	30.42	0.00	3251.92	23'-43'
MW-2	12/15/2004	3282.34	30.20	0.00	3252.14	23'-43'
MW-2	12/21/2004	3282.34	30.03	0.00	3252.31	23'-43'
MW-2	12/30/2004	3282.34	29.88	0.00	3252.46	23'-43'
MW-2	3/6/2018	3282.34	22.85	0.00	3259.49	23'-43'
MW-2	3/28/2018	3282.34	22.97	0.00	3259.37	23'-43'
MW-2	3/11/2019	3283.66	24.12	0.00	3259.54	23'-43'
MW-2	10/29/2019	3283.66	25.17	0.00	3258.49	23'-43'
MW-2	9/18/2020	3283.66	25.41	0.00	3258.25	23'-43'
MW-2	8/23/2021	3283.66	25.33	0.00	3258.33	23'-43'
MW-2	11/28/2023	3283.66	28.98	0.00	3254.68	23'-43'
MW-2	04/30/2024	3283.66	28.70	0.00	3254.96	23'-43'
MW-2	09/24/2024	3283.66	29.90	0.00	3253.76	23'-43'

WELL GAUGING DATA
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

WELL NUMBER	DATE	CASING ELEV. (FT)	DEPTH TO WATER (FT-BTOC)	LNAPL THICKNESS (FT)	GW ELEVATION (FT)	SCREENED INTERVAL (FT-BGS)
MW-3	9/18/2002	3282.98	32.35	0.00	3250.63	15'-35'
MW-3	9/19/2002	3282.98	32.38	0.00	3250.60	15'-35'
MW-3	11/8/2004	3282.98	31.06	0.00	3251.92	15'-35'
MW-3	12/1/2004	3282.98	30.00	0.00	3252.98	15'-35'
MW-3	12/15/2004	3282.98	30.10	0.00	3252.88	15'-35'
MW-3	12/21/2004	3282.98	29.98	0.00	3253.00	15'-35'
MW-3	12/30/2004	3282.98	29.96	0.00	3253.02	15'-35'
MW-3	3/6/2018	3282.98	23.70	0.00	3259.28	15'-35'
MW-3	3/28/2018	3282.98	23.73	0.00	3259.25	15'-35'
MW-3	3/11/2019	3284.35	24.96	0.00	3259.39	15'-35'
MW-3	10/29/2019	3284.35	25.97	0.00	3258.38	15'-35'
MW-3	9/18/2020	3284.35	26.15	0.00	3258.20	15'-35'
MW-3	8/23/2021	3284.35	26.03	0.00	3258.32	15'-35'
MW-3	11/28/2023	3284.35	29.74	0.00	3254.61	15'-35'
MW-3	04/30/2024	3284.35	29.62	0.00	3254.73	15'-35'
MW-3	09/24/2024	3284.35	30.71	0.00	3253.64	15'-35'
MW-4	9/18/2002	3282.70	31.70	0.00	3251.00	23'-38'
MW-4	9/19/2002	3282.70	31.72	0.00	3250.98	23'-38'
MW-4	11/8/2004	3282.70	30.89	0.00	3251.81	23'-38'
MW-4	12/1/2004	3282.70	31.16	0.00	3251.54	23'-38'
MW-4	12/15/2004	3282.70	30.23	0.00	3252.47	23'-38'
MW-4	12/21/2004	3282.70	30.12	0.00	3252.58	23'-38'
MW-4	12/30/2004	3282.70	29.94	0.00	3252.76	23'-38'
MW-4	3/6/2018	3282.70	23.02	0.00	3259.68	23'-38'
MW-4	3/28/2018	3282.70	23.94	0.00	3258.76	23'-38'
MW-4	3/11/2019	3284.08	23.35	0.00	3260.73	23'-38'
MW-4	10/29/2019	3284.08	28.03	0.00	3256.05	23'-38'
MW-4	9/18/2020	3284.08	25.56	0.00	3258.52	23'-38'
MW-4	8/23/2021	3284.08	25.35	0.00	3258.73	23'-38'
MW-4	11/28/2023	3284.08	28.83	0.00	3255.25	23'-38'
MW-4	4/30/2024	3284.08	27.82	0.00	3256.26	23'-38'
MW-4	9/24/2024	3284.08	29.80	0.00	3254.28	23'-38'

Notes:

1. Elevations referenced to a temporary on-site benchmark.
2. BTOC = below top of casing

GROUNDWATER EPA METHOD 300.0: ANIONS									
WILLIAMS PIT									
EDDY COUNTY, NEW MEXICO									
AP-22									
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-5	10/21/2000	---	30,842	---	---	---	---	---	---
MW-1	9/19/2002	---	26,600	---	---	---	---	---	---
MW-1	11/8/2004	---	26,992	---	---	---	---	---	---
MW-1	3/17/2012	< 2.0	950	1.3	< 0.50	2,100	---	---	1.7
MW-1	6/18/2012	0.73	1,100	1.8	< 0.50	2,200	---	---	1
MW-1	9/12/2012	0.21	2,200	1.8	< 10	2,200	---	---	< 4.0
MW-1	12/7/2012	< 2.0	2,000	< 2.0	< 10	2,100	---	---	2.5
MW-1	3/12/2013	0.76	1,200	< 2.0	< 10	2,200	---	---	1.7
MW-1	6/27/2013	< 0.50	1,100	1.4	< 0.50	2,000	---	---	2.1
MW-1	3/28/2018	0.13	1,000	1.4	< 10	2,400	---	---	2.6
MW-1	3/11/2019	< 2.0	920	< 2.0	< 10	2,100	---	---	2.4
MW-1	10/29/2019	< 1.0	910	1.4	< 5.0	2,000	<1.0	2.3	---
MW-1	9/18/2020	0.55	960	1.4	< 2.5	2,100	---	---	2.3
MW-1	8/23/2021	< 1.0	980	1.5	< 5.0	2,300	---	---	2.4
MW-1	3/22/2022	0.5	4,400	2.3	< 2.5	2,100	---	---	2.3
MW-1	8/3/2022	< 2.0	5,400	3.6	< 10	2,100	---	---	< 4.0
MW-1	11/28/2023	<2.0	9,400	4.4	<10	2,300	---	---	<10
MW-1	04/30/2024	---	9,500	---	---	2,000	---	---	---
MW-1	09/24/2024	---	9,700	---	---	2,200	---	---	---
MW-2	9/19/2002	---	13,300	---	---	---	---	---	---
MW-2	11/8/2004	---	19,994	---	---	---	---	---	---
MW-2	3/17/2012	< 2.0	3,300	2.2	< 0.50	2,200	---	---	< 4.0
MW-2	6/18/2012	0.58	3,700	3.6	< 0.50	2,200	---	---	< 2.0
MW-2	9/12/2012	< 2.0	3,900	< 2.0	< 10	2,200	---	---	< 4.0
MW-2	12/7/2012	< 2.0	2,800	< 2.0	< 10	2,000	---	---	< 4.0
MW-2	3/12/2013	< 2.0	3,500	2.2	< 10	2,200	---	---	< 4.0
MW-2	6/27/2013	< 0.50	3,100	1.7	< 0.50	2,000	---	---	< 4.0
MW-2	3/28/2018	< 2.0	5,400	3	< 0.50	2,400	---	---	< 4.0
MW-2	3/11/2019	< 2.0	4,600	2.2	< 10	1,900	---	---	< 4.0
MW-2	10/29/2019	< 1.0	3,900	2.5	< 5.0	2,100	<1.0	1.9	---
MW-2	9/18/2020	< 0.50	4,200	2.6	< 2.5	2,000	---	---	< 4.0
MW-2	8/23/2021	< 1.0	4,000	2.7	< 5.0	2,300	---	---	< 2.0
MW-2	3/22/2022	< 0.50	5,100	2.8	< 2.5	2,000	---	---	1.7
MW-2	8/3/2022	< 2.0	8,200	5.3	< 10	2,200	---	---	< 10
MW-2	11/28/2023	< 2.0	8,500	4.6	<10	2,200	---	---	< 10
MW-2	04/30/2024	---	4,800	---	---	1,900	---	---	---
MW-2	09/24/2024	---	7,400	---	---	2,100	---	---	---

GROUNDWATER EPA METHOD 300.0: ANIONS
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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-3	9/19/2002	---	33,700	---	---	---	---	---	---
MW-3	11/8/2004	---	35,989	---	---	---	---	---	---
MW-3	3/17/2012	< 2.0	26,000	8.2	< 10	1,900	---	---	< 100
MW-3	6/18/2012	< 2.0	26,000	14	< 10	1,900	---	---	< 10
MW-3	9/12/2012	< 1.0	20,000	< 10	< 50	2,000	---	---	< 4.0
MW-3	12/7/2012	< 2.0	17,000	11	< 10	1,600	---	---	< 20
MW-3	3/12/2013	< 2.0	19,000	3.1	< 10	1,900	---	---	< 20
MW-3	6/27/2013	< 1.0	16,000	6.3	< 10	1,800	---	---	< 10
MW-3	3/28/2018	< 1.0	16,000	4.9	< 5.0	2,400	---	---	< 10
MW-3	3/11/2019	< 2.0	12,000	3.4	< 10	1,700	---	---	< 10
MW-3	10/29/2019	< 1.0	11,000	4	< 5.0	2,000	<10	< 1.0	---
MW-3	9/18/2020	< 2.0	13,000	5.2	< 10	2,100	---	---	< 10
MW-3	8/23/2021	< 1.0	13,000	5.3	< 5.0	2,300	---	---	< 10
MW-3	3/22/2022	< 2.0	12,000	4.7	< 10	2,100	---	---	< 10
MW-3	8/3/2022	< 2.0	9,200	5.7	< 10	2,100	---	---	< 10
MW-3	11/28/2023	< 2.0	9,700	5.4	<10	2,100	---	---	< 4.0
MW-3	04/30/2024	---	9,500	---	---	1,900	---	---	---
MW-3	09/24/2024	---	8,200	---	---	2,000	---	---	---
MW-4	9/19/2002	---	8,150	---	---	---	---	---	---
MW-4	11/8/2004	---	6,098	---	---	---	---	---	---
MW-4	3/17/2012	< 2.0	3,600	2.7	< 0.50	2,200	---	---	< 4.0
MW-4	6/18/2012	0.56	3,300	5.3	< 0.50	2,200	---	---	< 2.0
MW-4	9/12/2012	< 2.0	4,000	< 2.0	< 10	2,300	---	---	< 4.0
MW-4	12/7/2012	< 2.0	3,100	< 2.0	< 0.50	2,100	---	---	< 4.0
MW-4	3/12/2013	< 2.0	3,100	2.4	< 10	2,200	---	---	< 2.0
MW-4	6/27/2013	< 0.50	2,500	2.1	< 0.50	2,100	---	---	< 4.0
MW-4	3/28/2018	< 2.0	5,100	3	< 0.50	2,300	---	---	< 4.0
MW-4	3/11/2019	< 2.0	3,600	< 2.0	< 10	1,900	---	---	< 4.0
MW-4	10/29/2019	< 1.0	3,200	2.3	< 5.0	2,100	< 1.0	1.9	---
MW-4	9/18/2020	< 0.50	3,500	2.5	< 2.5	2,000	---	---	< 4.0
MW-4	8/23/2021	< 1.0	3,100	2.6	< 5.0	2,300	---	---	< 2.0
MW-4	3/22/2022	< 2.0	3,200	2.4	< 10	1,900	---	---	1.7
MW-4	8/3/2022	< 2.0	3,300	3.8	< 10	2,100	---	---	< 4.0
MW-4	11/28/2023	< 2.0	3,200	2.5	<0.50	2,200	---	---	< 4.0
MW-4	04/30/2024	---	2,800	---	---	2,000	---	---	---
MW-4	09/24/2024	---	2,800	---	---	2,000	---	---	---
20.6.2.3103 NMAC GW STANDARDS				---	---				
		(<10,000 mg/L)							
A. Human Health Standards		1.6				1	10	10¹	
B. Other Standards for Domestic Water Supply				250		600			
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 are highlighted in bold, red type.									

GROUNDWATER DISSOLVED METALS (TABLE 1 OF 2)
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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	---	0.008	---	---	< 0.0020	770	< 0.0060	---	0.023	270	0.0041	---	---	2.9	< 0.0050	410	0.017
MW-1	6/18/2012	---	0.01	---	---	< 0.0020	790	< 0.0060	---	0.031	260	0.0033	---	---	2.9	< 0.0050	460	0.012
MW-1	9/12/2012	---	0.0092	---	---	< 0.0020	690	< 0.0060	---	0.039	250	0.0072	---	---	2.7	< 0.0050	520	0.025
MW-1	12/7/2012	---	0.014	---	---	< 0.0020	810	< 0.0060	---	0.41	270	0.018	---	---	5.1	< 0.0050	930	0.022
MW-1	3/12/2013	---	0.0086	---	---	< 0.0020	710	< 0.0060	---	0.039	230	0.0043	---	---	3.5	< 0.0050	510	0.018
MW-1	6/27/2013	---	0.0084	---	---	< 0.0020	800	< 0.0060	---	0.027	250	0.0034	---	---	3.5	< 0.050	520	0.013
MW-1	3/28/2018	---	0.0074	---	---	< 0.010	760	< 0.030	---	< 0.10	290	0.0024	---	---	2.7	0.03	380	< 0.050
MW-1	3/11/2019	0.03	0.0071	---	---	< 0.0020	680	< 0.0060	---	0.058	260	0.0045	---	---	2.7	0.012	360	0.018
MW-1	10/29/2019	< 0.020	0.0058	---	---	< 0.0020	750	< 0.0060	---	< 0.020	260	0.038	---	---	2.7	0.019	360	0.033
MW-1	9/18/2020	< 0.10	0.011	< 0.010	< 0.20	< 0.010	820	< 0.030	< 0.030	< 0.10	280	< 0.010	< 0.040	< 0.050	< 5.0	< 0.025	420	< 0.050
MW-1	8/23/2021	< 0.020	0.0068	< 0.0020	0.15	< 0.0020	690	< 0.0060	< 0.0060	0.037	260	0.0056	< 0.0080	< 0.010	2.9	< 0.0050	340	0.055
MW-1	3/22/2022	< 0.020	0.014	< 0.0020	0.13	< 0.0020	1,100	< 0.0060	0.0086	0.043	380	0.0046	< 0.040	< 0.010	5.2	0.0061	2,100	0.012
MW-1	8/3/2022	< 0.020	0.016	< 0.0020	0.1	< 0.0020	1,300	< 0.0060	< 0.0060	0.059	420	0.0066	< 0.0080	< 0.010	5.2	0.021	3,100	0.022
MW-1	11/28/2023	0.027	0.015	< 0.0020	0.082	< 0.0020	1,500	< 0.0060	< 0.0060	0.024	460	< 0.0020	< 0.0080	< 0.010	6	0.034	4,700	< 0.010
MW-1	4/30/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	< 0.0020	---	---	---	0.015	---	---
MW-1	9/24/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	< 0.0020	---	---	---	0.042	---	---
MW-2	3/17/2012	---	0.014	---	---	< 0.0020	910	< 0.0060	---	0.85	320	1.1	---	---	10	< 0.0050	1,800	0.041
MW-2	6/18/2012	---	0.023	---	---	< 0.0020	990	0.0071	---	0.41	330	1.3	---	---	9.8	< 0.0050	1,800	0.058
MW-2	9/12/2012	---	0.038	---	---	< 0.0020	840	0.1	---	7.9	280	1.4	---	---	11	< 0.0050	1,800	0.053
MW-2	12/7/2012	---	0.013	---	---	< 0.0020	900	< 0.0060	---	0.09	310	1.2	---	---	14	< 0.0050	1,900	0.11
MW-2	3/12/2013	---	0.011	---	---	< 0.0020	790	< 0.0060	---	0.084	280	1.1	---	---	12	< 0.0050	1,800	< 0.010
MW-2	6/27/2013	---	0.011	---	---	< 0.0020	850	< 0.0060	---	0.033	280	1.1	---	---	11	< 0.25	1,900	< 0.010
MW-2	3/28/2018	---	< 0.010	---	---	< 0.010	950	< 0.030	---	< 0.10	380	1.1	---	---	9.3	0.037	2,400	< 0.050
MW-2	3/11/2019	< 0.020	0.011	---	---	< 0.0020	890	< 0.0060	---	0.046	340	0.88	---	---	9.6	0.015	2,500	0.019
MW-2	10/29/2019	0.45	0.011	---	---	< 0.0020	910	< 0.0060	---	0.27	330	0.82	---	---	10	0.023	2,100	0.062
MW-2	9/18/2020	< 0.10	0.015	< 0.010	0.21	< 0.010	860	< 0.030	< 0.030	< 0.10	330	0.72	< 0.040	< 0.050	11	< 0.025	2,400	< 0.050
MW-2	8/23/2021	< 0.10	0.01	< 0.010	0.21	< 0.010	770	< 0.030	< 0.030	0.036	300	0.72	< 0.040	< 0.050	9.6	< 0.025	2,100	< 0.050
MW-2	3/22/2022	< 0.10	< 0.010	< 0.010	0.21	< 0.010	950	< 0.030	< 0.030	< 0.020	360	0.76	< 0.040	< 0.050	11	< 0.025	2,600	< 0.050
MW-2	8/3/2022	< 0.020	0.016	< 0.0020	0.18	< 0.0020	1,200	< 0.0060	< 0.0060	0.034	400	0.64	< 0.0080	< 0.010	14	0.02	5,400	0.13
MW-2	11/28/2023	0.027	0.011	< 0.0020	0.14	< 0.0020	1,100	< 0.0060	< 0.0060	0.032	380	0.39	< 0.0080	< 0.010	13	0.025	4,600	< 0.010
MW-2	4/30/2024	---	---	---	---	---	---	< 0.0060	---	0.023	---	0.27	---	---	---	0.0085	---	---
MW-2	9/24/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	0.71	---	---	---	0.033	---	---
MW-3	3/17/2012	---	0.047	---	---	< 0.010	2,700	< 0.030	---	< 0.10	810	0.015	---	---	12	< 0.025	9,400	< 0.050
MW-3	6/18/2012	---	0.056	---	---	< 0.010	2,900	< 0.030	---	< 0.10	830	0.016	---	---	11	< 0.025	10,000	< 0.050
MW-3	9/12/2012	---	0.047	---	---	< 0.010	2,500	< 0.030	---	< 0.10	750	0.013	---	---	9.3	< 0.025	8,400	< 0.050
MW-3	12/7/2012	---	0.048	---	---	< 0.0020	2,200	< 0.0060	---	0.049	670	0.01	---	---	52	< 0.025	8,800	< 0.010
MW-3	3/12/2013	---	0.048	---	---	< 0.0020	2,700	< 0.0060	---	0.055	820	0.0087	---	---	19	0.0089	8,000	0.017
MW-3	6/27/2013	---	0.042	---	---	< 0.0020	2,400	0.0064	---	0.041	650	0.0073	---	---	16	< 0.25	8,900	< 0.010
MW-3	3/28/2018	---	0.03	---	---	< 0.010	1,400	< 0.030	---	< 0.10	510	< 0.010	---	---	7.5	0.062	6,100	< 0.050
MW-3	3/11/2019	< 0.020	0.028	---	---	< 0.0020	1,500	< 0.0060	---	0.025	470	0.0031	---	---	7	0.024	6,300	< 0.010

GROUNDWATER DISSOLVED METALS (TABLE 1 OF 2)
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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	10/29/2019	< 0.10	0.025			< 0.010	1,500	< 0.030	---	< 0.10	490	< 0.010	---	---	7.5	0.032	6,300	< 0.050
MW-3	9/18/2020	< 0.10	0.032	< 0.010	< 0.20	< 0.010	1,600	< 0.030	< 0.030	< 0.10	520	< 0.010	< 0.040	< 0.050	9.9	< 0.025	5,800	< 0.050
MW-3	8/23/2021	< 0.10	0.026	< 0.010	< 0.20	< 0.010	1,500	< 0.030	< 0.030	0.057	470	< 0.010	< 0.040	< 0.050	10	< 0.025	6,200	< 0.050
MW-3	3/22/2022	< 0.10	0.02	< 0.010	< 0.20	< 0.010	1,300	< 0.030	< 0.030	0.095	440	0.016	< 0.040	< 0.050	9.5	< 0.025	6,300	< 0.050
MW-3	8/3/2022	< 0.020	0.021	< 0.0020	0.096	< 0.0020	1,300	< 0.0060	< 0.0060	0.049	430	0.0039	< 0.0080	< 0.010	6.9	0.021	6,200	0.16
MW-3	11/28/2023	0.033	0.017	< 0.0020	0.076	< 0.0020	1,300	< 0.0060	< 0.0060	< 0.020	430	< 0.0020	< 0.0080	< 0.010	6.5	0.030	5,200	< 0.010
MW-3	4/30/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	< 0.0020	---	---	---	0.014	---	---
MW-3	9/24/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	< 0.0020	---	---	---	0.038	---	---
MW-4	3/17/2012	---	0.014	---	---	< 0.0020	820	< 0.0060	---	0.11	360	0.011	---	---	18	< 0.0050	1,900	0.015
MW-4	6/18/2012	---	0.018	---	---	< 0.0020	870	< 0.0060	---	0.14	360	0.018	---	---	19	< 0.0050	1,900	0.015
MW-4	9/12/2012	---	0.016	---	---	< 0.0020	760	< 0.0060	---	0.043	340	0.19	---	---	18	< 0.0050	1,800	< 0.010
MW-4	12/7/2012	---	0.014	---	---	< 0.0020	800	< 0.0060	---	0.12	370	0.015	---	---	30	< 0.0050	1,700	< 0.010
MW-4	3/12/2013	---	0.014	---	---	< 0.0020	680	< 0.0060	---	0.07	320	0.025	---	---	19	< 0.0050	1,500	< 0.010
MW-4	6/27/2013	---	0.014	---	---	< 0.0020	810	< 0.0060	---	0.082	360	0.03	---	---	18	< 0.10	1,500	< 0.010
MW-4	3/28/2018	---	0.015	---	---	< 0.010	920	< 0.030	---	< 0.10	430	0.014	---	---	18	0.04	2,300	< 0.050
MW-4	3/11/2019	< 0.020	0.012	---	---	< 0.0020	730	< 0.0060	---	0.032	320	0.0085	---	---	16	0.013	2,000	0.013
MW-4	10/29/2019	< 0.020	0.013	---	---	< 0.0020	800	< 0.0060	---	< 0.020	340	0.026	---	---	16	0.02	2,000	0.013
MW-4	9/18/2020	< 0.10	0.017	< 0.010	0.24	< 0.010	790	< 0.030	< 0.030	< 0.10	320	0.029	< 0.040	< 0.050	16	< 0.025	2,100	< 0.050
MW-4	8/23/2021	< 0.10	< 0.010	< 0.010	0.21	< 0.010	770	< 0.030	< 0.030	< 0.020	330	0.015	< 0.040	< 0.050	17	< 0.025	1,600	< 0.050
MW-4	3/22/2022	< 0.020	0.014	< 0.0020	0.25	< 0.0020	790	< 0.0060	0.0062	< 0.020	340	0.039	< 0.0080	< 0.010	20	< 0.0050	2,000	< 0.010
MW-4	8/3/2022	< 0.020	0.013	< 0.0020	0.25	< 0.0020	790	< 0.0060	< 0.0060	0.037	340	0.2	< 0.0080	< 0.010	18	0.014	2,100	< 0.010
MW-4	11/28/2023	0.031	0.0098	< 0.0020	0.16	< 0.0020	810	< 0.0060	< 0.0060	0.037	340	0.11	< 0.0080	< 0.010	17	0.019	1,700	< 0.010
MW-4	4/30/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	0.050	---	---	---	0.0075	---	---
MW-4	9/24/2024	---	---	---	---	---	---	< 0.0060	---	< 0.020	---	0.12	---	---	---	0.023	---	---

20.6.2.3103 NMAC GW STANDARDS
(**<10,000 mg/L**)

A. Human Health Standards	2	0.004	0.005	0.05	0.05	1.0	0.2	1.0	0.2
B. Other Standards for Domestic Water Supply									10
C. Standards for Irrigation Use	5.0		0.75						

Notes:

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

GROUNDWATER DISSOLVED METALS (TABLE 2 OF 2)
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.024	---	0.0062
MW-1	6/18/2012	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.025	---	0.0067
MW-1	9/12/2012	---	0.0022	< 0.0060	< 0.0010	< 0.00020	0.024	---	0.007
MW-1	12/7/2012	---	0.0027	< 0.0060	0.0011	< 0.00020	0.023	---	0.007
MW-1	3/12/2013	---	0.0017	< 0.0060	< 0.0050	< 0.00020	0.022	---	0.007
MW-1	6/27/2013	---	< 0.010	< 0.0060	< 0.0050	< 0.00020	0.032	---	< 0.010
MW-1	3/28/2018	---	< 0.0050	< 0.0050	< 0.0025	< 0.00020	0.02	---	0.0056
MW-1	3/11/2019	< 0.0050	< 0.0050	< 0.0060	< 0.0025	< 0.00020	0.02	< 0.0025	0.0056
MW-1	10/29/2019	< 0.0050	< 0.0050	< 0.0060	< 0.0025	---	0.02	< 0.0025	0.0064
MW-1	9/18/2020	< 0.020	< 0.020	< 0.030	< 0.010	---	< 0.020	< 0.010	< 0.010
MW-1	8/23/2021	< 0.010	< 0.010	< 0.0060	< 0.0050	---	0.017	< 0.0025	0.0056
MW-1	3/22/2022	< 0.020	< 0.020	< 0.020	< 0.010	---	< 0.020	< 0.0050	< 0.010
MW-1	8/3/2022	< 0.010	< 0.010	< 0.0060	< 0.0050	---	0.022	< 0.0025	0.0055
MW-1	11/28/2023	< 0.0010	0.022	< 0.0060	< 0.00050	---	0.019	< 0.00025	0.0050
MW-1	04/30/2024	---	0.0015	---	---	---	0.018	---	---
MW-1	9/25/2024	---	0.0036	---	---	---	0.020	---	---
MW-2	3/17/2012	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.029	---	0.0089
MW-2	6/18/2012	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.028	---	0.01
MW-2	9/12/2012	---	0.0051	< 0.0060	0.0054	< 0.00020	0.025	---	0.0086
MW-2	12/7/2012	---	0.003	< 0.0060	< 0.0050	< 0.00020	0.026	---	0.0099
MW-2	3/12/2013	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.019	---	0.0084
MW-2	6/27/2013	---	0.0056	< 0.0060	< 0.0050	< 0.00020	0.054	---	< 0.010
MW-2	3/28/2018	---	0.0069	< 0.0050	< 0.0025	< 0.00020	0.029	---	0.0081
MW-2	3/11/2019	< 0.0050	< 0.0050	< 0.0060	< 0.0025	< 0.00020	0.024	< 0.0025	0.0079
MW-2	10/29/2019	< 0.010	< 0.010	< 0.0060	< 0.0050	---	0.027	< 0.0050	0.0072
MW-2	9/18/2020	< 0.020	< 0.020	< 0.030	< 0.010	---	0.022	< 0.010	< 0.010
MW-2	8/23/2021	< 0.010	< 0.010	< 0.030	< 0.0050	---	0.019	< 0.0025	0.007
MW-2	3/22/2022	< 0.020	< 0.020	< 0.020	< 0.010	---	< 0.020	< 0.0050	< 0.010
MW-2	8/3/2022	< 0.010	< 0.010	< 0.0060	< 0.0050	---	0.021	< 0.0025	0.0077
MW-2	11/28/2023	< 0.010	0.015	< 0.0060	< 0.00050	---	0.017	0.00032	0.0066
MW-2	04/30/2024	---	0.011	---	---	---	0.017	---	---
MW-2	9/25/2024	---	0.0030	---	---	---	0.018	---	---
MW-3	3/17/2012	---	0.013	< 0.030	< 0.025	< 0.00020	0.04	---	0.01
MW-3	6/18/2012	---	< 0.020	< 0.030	< 0.025	< 0.00020	0.036	---	< 0.020
MW-3	9/12/2012	---	0.0081	< 0.0060	< 0.010	< 0.00020	0.037	---	0.011
MW-3	12/7/2012	---	0.0056	< 0.0060	< 0.020	< 0.00020	0.033	---	< 0.020
MW-3	3/12/2013	---	< 0.010	< 0.0060	< 0.0050	< 0.00020	0.018	---	< 0.010
MW-3	6/27/2013	---	0.019	< 0.0060	< 0.0050	< 0.00020	0.088	---	0.011
MW-3	3/28/2018	---	0.012	< 0.010	< 0.0050	< 0.00020	0.018	---	0.007
MW-3	3/11/2019	< 0.0050	< 0.0050	< 0.0060	< 0.0025	< 0.00020	0.019	< 0.0025	0.0072
MW-3	10/29/2019	< 0.010	< 0.010	< 0.030	< 0.0050	---	0.014	< 0.0050	0.0065
MW-3	9/18/2020	< 0.020	< 0.020	< 0.030	< 0.010	---	< 0.020	< 0.010	< 0.010
MW-3	8/23/2021	< 0.010	< 0.010	< 0.030	< 0.0050	---	0.019	< 0.0025	0.0073
MW-3	3/22/2022	< 0.020	< 0.020	< 0.020	< 0.010	---	< 0.020	< 0.0050	< 0.010
MW-3	8/3/2022	< 0.010	< 0.010	< 0.0060	< 0.0050	---	0.016	< 0.0025	0.0063
MW-3	11/28/2023	< 0.010	0.019	< 0.0060	< 0.00050	---	0.017	< 0.00025	0.0062
MW-3	04/30/2024	---	0.0016	---	---	---	0.016	---	---
MW-3	9/25/2024	---	0.0029	---	---	---	0.018	---	---

**GROUNDWATER DISSOLVED METALS (TABLE 2 OF 2)
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22**

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	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.026	---	0.009
MW-4	6/18/2012	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.028	---	0.01
MW-4	9/12/2012	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.026	---	0.0092
MW-4	12/7/2012	---	0.0035	< 0.0060	< 0.0050	< 0.00020	0.028	---	0.0089
MW-4	3/12/2013	---	< 0.0050	< 0.0060	< 0.0050	< 0.00020	0.022	---	0.0081
MW-4	6/27/2013	---	< 0.010	< 0.0060	< 0.050	< 0.00020	0.046	---	< 0.010
MW-4	3/28/2018	---	0.0061	< 0.0050	< 0.0025	< 0.00020	0.034	---	0.0083
MW-4	3/11/2019	< 0.0050	< 0.0050	< 0.0060	< 0.0025	< 0.00020	0.026	< 0.0025	0.0073
MW-4	10/29/2019	< 0.010	< 0.010	< 0.0060	< 0.0050	---	0.022	< 0.0050	0.007
MW-4	9/18/2020	< 0.020	< 0.020	< 0.030	< 0.010	---	< 0.020	< 0.010	< 0.010
MW-4	8/23/2021	< 0.010	< 0.010	< 0.030	< 0.0050	---	0.021	< 0.0025	0.0071
MW-4	3/22/2022	< 0.020	< 0.020	< 0.020	< 0.010	---	0.025	< 0.0050	< 0.010
MW-4	8/3/2022	< 0.0050	< 0.0050	< 0.0060	< 0.0025	---	0.022	< 0.0012	0.0068
MW-4	11/28/2023	< 0.0050	0.0087	< 0.0060	< 0.0025	---	0.028	< 0.0012	0.0067
MW-4	04/30/2024	---	< 0.0025	---	---	---	0.017	---	---
MW-4	9/25/2024	---	0.0011	---	---	---	0.022	---	---

**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.

GROUNDWATER TPH & VOC DATA SUMMARY
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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-5	10/21/2000	<1.00	<0.5	<0.5	---	0.535	0.012	0.02	0.034	---	---	---	---	---
MW-1	9/19/2002	---	---	---	---	<0.001	<0.001	<0.001	<0.001	---	---	---	---	---
MW-1	11/8/2004	---	---	---	---	<0.002	<0.002	<0.002	<0.006	---	---	---	---	---
MW-1	3/17/2012	---	---	---	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.002	<0.004	<0.004
MW-1	6/18/2012	---	---	---	<0.001	<0.001	<0.001	<0.001	<0.002	---	---	<0.002	---	---
MW-1	9/12/2012	---	---	---	---	<0.001	<0.001	<0.001	<0.002	---	---	<0.002	---	---
MW-1	12/7/2012	---	---	---	---	<0.002	<0.002	<0.002	<0.004	---	---	<0.004	---	---
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	3/28/2018	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	---	---
MW-1	3/11/2019	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-1	10/29/2019	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	---	---
MW-1	9/18/2020	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-1	8/23/2021	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-1	3/22/2022	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-1	8/3/2022	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-1	11/28/2023	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-1	4/30/2024	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	---	---	---
MW-1	9/24/2024	---	---	---	---	<0.001	---	---	---	---	---	---	---	---
MW-2	9/19/2002	---	---	---	---	<0.001	<0.001	<0.001	<0.001	---	---	---	---	---
MW-2	11/8/2004	---	---	---	---	<0.002	<0.002	<0.002	<0.006	---	---	---	---	---
MW-2	3/17/2012	---	---	---	<0.002	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.004	<0.008	<0.008
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	12/7/2012	---	---	---	---	<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	3/28/2018	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	---	---
MW-2	3/11/2019	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-2	10/29/2019	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	---	---
MW-2	9/18/2020	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004

GROUNDWATER TPH & VOC DATA SUMMARY
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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-2	8/23/2021	---	---	---	---	<0.001	<0.001	<0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-2	3/22/2022	---	---	---	---	0.0058	<0.001	< 0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-2	8/3/2022	---	---	---	---	0.047	< 0.001	< 0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-2	11/28/2023	---	---	---	---	0.026	< 0.001	< 0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-2	4/30/2024	---	---	---	---	0.0012	< 0.001	< 0.001	<0.0015	---	---	---	---	---
MW-2	9/24/2024	---	---	---	---	0.0012	---	---	---	---	---	---	---	---
MW-3	9/19/2002	---	---	---	---	0.002	<0.001	<0.001	<0.001	---	---	---	---	---
MW-3	11/8/2004	---	---	---	---	<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	12/7/2012	---	---	---	---	< 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	---	---
MW-3	6/27/2013	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.002	---	---	< 0.002	---	---
MW-3	3/28/2018	---	---	---	---	< 0.001	< 0.001	< 0.001	<0.0015	---	---	< 0.002	---	---
MW-3	3/11/2019	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-3	10/29/2019	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	< 0.002	---	---
MW-3	9/18/2020	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	< 0.002	< 0.004	< 0.004
MW-3	8/23/2021	---	---	---	---	<0.001	<0.001	<0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-3	3/22/2022	---	---	---	---	<0.001	<0.001	<0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-3	8/3/2022	---	---	---	---	<0.001	<0.001	<0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-3	11/28/2023	---	---	---	---	<0.001	<0.001	<0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-3	4/30/2024	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	---	---	---
MW-3	9/24/2024	---	---	---	---	< 0.001	---	---	---	---	---	---	---	---

GROUNDWATER TPH & VOC DATA SUMMARY
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22

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-4	9/19/2002	---	---	---	---	0.142	<0.001	<0.001	0.006	---	---	---	---	---
MW-4	11/8/2004	---	---	---	---	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	---	---	---	---	0.0014	< 0.001	< 0.001	< 0.002	---	---	< 0.002	---	---
MW-4	12/7/2012	---	---	---	---	0.0022	< 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	---	---	---	---	0.0014	<0.001	<0.001	<0.002	---	---	<0.002	---	---
MW-4	3/28/2018	---	---	---	---	< 0.001	< 0.001	< 0.001	<0.0015	---	---	< 0.002	---	---
MW-4	3/11/2019	---	---	---	---	<0.001	<0.001	<0.001	<0.0015	---	---	<0.002	<0.004	<0.004
MW-4	10/29/2019	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	< 0.002	---	---
MW-4	9/18/2020	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	< 0.002	< 0.004	< 0.004
MW-4	8/23/2021	---	---	---	---	<0.001	<0.001	<0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-4	3/22/2022	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-4	8/3/2022	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-4	11/28/2023	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	<0.002	<0.004	<0.004
MW-4	4/30/2024	---	---	---	---	< 0.001	< 0.001	< 0.001	< 0.0015	---	---	---	---	---
MW-4	9/24/2024	---	---	---	---	< 0.001	---	---	---	---	---	---	---	---

20.6.2.3103 NMAC GW STANDARDS
 (<10,000 mg/L)

A. Human Health Standards

B. Other Standards for Domestic Water Supply

C. Standards for Irrigation Use

---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
						0.005	1	0.7	0.62			0.03¹	0.03¹	0.03¹
					0.1									

Notes:

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

**GROUNDWATER SPECIFIC CONDUCTANCE, pH, ALKALINITY, AND TDS
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22**

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	---	---	---	---	---	36,800
MW-1	11/8/2004	---	---	---	---	---	33,500
MW-1	3/17/2012	5,700	7.28	200	< 2.0	200	4,820
MW-1	6/18/2012	5,800	7.09	200	< 2.0	200	5,400
MW-1	9/12/2012	8,400	6.98	220	< 2.0	220	6,300
MW-1	12/7/2012	8,600	6.99	200	< 2.0	200	7,260
MW-1	3/12/2013	6,400	7.34	210	< 2.0	210	5,730
MW-1	6/27/2013	6,900	7.18	210	< 2.0	210	5,270
MW-1	3/28/2018	5,700	---	208	< 2.000	208	5,060
MW-1	3/11/2019	5,900	7.14	202	< 2.000	202	4,620
MW-1	10/29/2019	6,100	---	204.5	< 2.000	204.5	4,880
MW-1	9/18/2020	6,100	7.23	202.4	< 2.000	202.4	5,110
MW-1	8/23/2021	6,100	---	200.2	< 2.000	200.2	4,970
MW-1	3/22/2022	18,000	7.52	188	< 2.000	188	10,500
MW-1	8/3/2022	25,000	7.24	184.8	< 2.000	184.8	14,600
MW-1	11/28/2023	33,000	7.01	181.0	<2.000	181.0	19,700
MW-1	4/30/2024	---	---	---	---	---	24,000
MW-1	9/24/2024	---	---	---	---	---	23,000
MW-2	9/19/2002	---	---	---	---	---	22,500
MW-2	11/8/2004	---	---	---	---	---	25,000
MW-2	3/17/2012	13,000	7.23	230	< 2.0	230	8,800
MW-2	6/18/2012	14,000	7.01	220	< 2.0	220	9,880
MW-2	9/12/2012	16,000	6.92	280	< 2.0	280	9,640
MW-2	12/7/2012	14,000	6.94	220	< 2.0	220	8,980
MW-2	3/12/2013	14,000	7.28	230	< 2.0	230	9,630
MW-2	6/27/2013	15,000	7.12	230	< 2.0	230	8,960
MW-2	3/28/2018	18,000	---	227.8	< 2.000	227.8	11,500
MW-2	3/11/2019	20,000	7.09	224.7	< 2.000	224.7	11,200
MW-2	10/29/2019	18,000	---	224.9	< 2.000	224.9	10,500
MW-2	9/18/2020	18,000	7.13	224.1	< 2.000	224.1	10,400
MW-2	8/23/2021	21,000	---	214.7	< 2.000	214.7	10,500
MW-2	3/22/2022	21,000	7.61	207.4	< 2.000	207.4	11,900
MW-2	8/3/2022	38,000	7.00	208.9	< 2.000	208.9	20,700
MW-2	11/28/2023	32,000	7.04	207.4	<2.000	207.4	18,500
MW-2	4/30/2024	---	---	---	---	---	13,000
MW-2	9/24/2024	---	---	---	---	---	19,000
MW-3	9/19/2002	---	---	---	---	---	50,100
MW-3	11/8/2004	---	---	---	---	---	54,500
MW-3	3/17/2012	69,000	7.05	210	< 2.0	210	39,000
MW-3	6/18/2012	70,000	6.87	210	< 2.0	210	35,800
MW-3	9/12/2012	67,000	6.78	210	< 2.0	210	38,700
MW-3	12/7/2012	68,000	6.7	200	< 2.0	200	35,300
MW-3	3/12/2013	64,000	7.15	210	< 2.0	210	35,400
MW-3	6/27/2013	65,000	6.96	210	< 2.0	210	34,200
MW-3	3/28/2018	41,000	---	231.7	< 2.000	231.7	24,300
MW-3	3/11/2019	40,000	7.01	222.4	< 2.000	222.4	23,600
MW-3	10/29/2019	38,000	---	223.9	< 2.000	223.9	25,200
MW-3	9/18/2020	42,000	7.12	218.2	< 2.000	218.2	25,000
MW-3	8/23/2021	45,000	---	215.9	< 2.000	215.9	24,300
MW-3	3/22/2022	38,000	7.52	223.4	< 2.000	223.4	22,300
MW-3	8/3/2022	41,000	7.17	224.2	< 2.000	224.2	22,100
MW-3	11/28/2023	36,000	7.05	215.5	< 2.000	215.5	21,300

**GROUNDWATER SPECIFIC CONDUCTANCE, pH, ALKALINITY, AND TDS
WILLIAMS PIT
EDDY COUNTY, NEW MEXICO
AP-22**

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	---	---	---	---	---	22,000
MW-3	9/24/2024	---	---	---	---	---	20,000
MW-4	9/19/2002	---	---	---	---	---	14,700
MW-4	11/8/2004	---	---	---	---	---	10,800
MW-4	3/17/2012	15,000	7.27	260	< 2.0	260	8,870
MW-4	6/18/2012	14,000	7.14	260	< 2.0	260	9,310
MW-4	9/12/2012	16,000	7.07	270	< 2.0	270	9,430
MW-4	12/7/2012	13,000	6.94	250	< 2.0	250	8,410
MW-4	3/12/2013	12,000	7.34	250	< 2.0	250	8,300
MW-4	6/27/2013	12,000	7.11	250	< 2.0	250	8,200
MW-4	3/28/2018	18,000	---	243.8	< 2.000	243.8	10,600
MW-4	3/11/2019	16,000	7.12	231.9	< 2.000	231.9	9,620
MW-4	10/29/2019	16,000	---	230.6	< 2.000	230.6	9,340
MW-4	9/18/2020	15,000	7.20	225	< 2.000	225	9,000
MW-4	8/23/2021	17,000	---	217.9	< 2.000	217.9	9,290
MW-4	3/22/2022	16,000	7.58	216.8	< 2.000	216.8	9,230
MW-4	8/3/2022	17,000	7.28	219.8	< 2.000	219.8	9,460
MW-4	11/28/2023	15,000	7.16	232.2	< 2.000	232.2	8,560
MW-4	4/30/2024	---	---	---	---	---	8,800
MW-4	9/24/2024	---	---	---	---	---	8,000
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
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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

Action 435299

CONDITIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 435299
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
jburdine	Proposed workplan schedule and reporting for Williams Pit, Incident # nAUTOFAB000741 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.	6/17/2025