



## **SITE CHARACTERIZATION, ASSESSMENT, REMEDIATION, AND CLOSURE REPORT**

**3PD TO BLACK BUCK METER LAY FLAT LINE  
32.157556, -104.142566  
UNIT J, SECTION 01, T25S-R27E  
NMSLO LEASE ID# V057690001  
EDDY COUNY, NEW MEXICO  
INCIDENT # NAPP2514235896**

### **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**

**RANGER REFERENCE #5375**

**AUGUST 1, 2025**

  
**Mr. William Kierdorf, REM  
Project Manager**

  
**Mr. Patrick K. Finn, P.G.  
Project Geologist**

## TABLE OF CONTENTS

---

<b>1.0</b>	<b>SITE LOCATION AND BACKGROUND .....</b>	<b>1</b>
<b>2.0</b>	<b>SITE CHARACTERIZATION AND HISTORY .....</b>	<b>2</b>
2.1	Site Characterization and Area Review .....	2
2.2	Historic Incident Review .....	3
2.3	Historic Aerial Review .....	4
<b>3.0</b>	<b>ARMS INSPECTION/REVIEW .....</b>	<b>4</b>
<b>4.0</b>	<b>CLOSURE CRITERIA .....</b>	<b>4</b>
<b>5.0</b>	<b>SITE ASSESSMENT, REMEDIATION, AND CONFIRMATION SAMPLING .....</b>	<b>4</b>
5.1	June 30, 2025 – Site Assessment .....	4
5.2	Soil Removal Operations and Confirmation Soil Sampling .....	5
5.3	Hand Auger Boring HA-3 Confirmation Investigation .....	6
5.4	Waste Disposal .....	7
<b>6.0</b>	<b>SITE CLOSURE .....</b>	<b>7</b>
6.1	Site Backfill & Seeding .....	7
6.2	Closure Request .....	7

### FIGURES

- Topographic Map
- Area Map
- Depth-to-Groundwater Information Location Map
- National Wetland Inventory Map
- Karst Topography Map
- Observed Impact Area and Assessment Sample Location Map
- Final Excavation Area and Confirmation Sample Location Map

### TABLES

- Site Assessment Soil BTEX (EPA 8260), TPH (EPA 8015) & Chloride (SM 4500) Analytical Data
- Confirmation Sample Soil BTEX (EPA 8260), TPH (EPA 8015) & Chloride (SM 4500) Analytical Data

### ATTACHMENTS

- Attachment 1 – Depth-to-Groundwater Data
- Attachment 2 – Site Photographs
- Attachment 3 – ARMS Inspection/Review Cover Page
- Attachment 4 – Biological Review Reports
- Attachment 5 – NMSLO Loamy (L) Sites Seed Mixture
- Attachment 6 – Laboratory Analytical Reports
- Attachment 7 – NMOCD & NMSLO Correspondence



## **SITE CHARACTERIZATION, ASSESSMENT, REMEDIATION, AND CLOSURE REPORT**

### **3PD TO BLACK BUCK METER LAY FLAT LINE**

**32.157556, -104.142566**

**UNIT J, SECTION 01, T25S-R27E**

**NMSLO LEASE ID# V057690001**

**EDDY COUNTY, NEW MEXICO**

**INCIDENT # NAPP2514235896**

### **1.0 SITE LOCATION AND BACKGROUND**

The 3PD to Blackbuck Meter Lay Flat Line (Site) is located on State Land, approximately 9.2 miles southwest of Loving, within Eddy County, New Mexico. The Site is situated in Unit J, Section 01, T25S-R27E at GPS coordinates 32.157556, -104.142566. The site can be accessed by traveling southwest from the intersection of Black River Road and Road Runner Road (774) on Road Runner Road for approximately 6.09 miles and turning left (southeast) onto an unnamed caliche road. Continue southeast for approximately 0.39 miles and turn left (east) onto another unnamed caliche road. Follow road east for 0.76 miles to well pad. Travel to the northeast corner of the well pad and exit the well pad to the pipeline right-of-way (ROW) heading northeast. Follow the pipeline ROW northeast for 0.70 miles to the Site.

On May 5, 2025, a release originating from a meter located at the 3PD to Black Buck Meter Lay Flat Line was discovered. The incident resulted in the release of approximately 30 barrels (bbls) of produced water. The released fluids impacted and were contained within an existing pipeline ROW. During the emergency response efforts, a vacuum truck was dispatched to the location which successfully recovered 25 bbls of the released fluids. Due to the involvement of a third party operator, the responsible party for the release was not determined until May 22, 2025. Upon determination of the responsible party for the incident, the New Mexico Oil Conservation Division (NMOCD) was notified of the incident on May 22, 2025. Additionally, due to the Site being located on New Mexico State Trust Land, the New Mexico State Land Office (NMSLO) Environmental Compliance Office (ECO) was notified of the incident on June 4, 2025.

EOG Resources, Inc. (EOG) engaged Ranger Environmental Services, LLC (Ranger) to assist in the assessment and remediation efforts at the Site. In June and July 2025, Ranger personnel and representatives of EOG completed assessment and remedial efforts at the Site. This report has been prepared to provide details of the completed efforts.

A *Topographic Map* and *Area Map* noting the location of the Site and surrounding areas are provided in the Figures section. Also included are an *Observed Impact Area and Assessment Sample Location Map* which illustrates the observed boundaries of the impact area and the assessment sampling locations, and a *Final Excavation Area and Confirmation Sample Location Map* which illustrates the boundaries and depths of the excavation/remediation area and the locations of the cleanup confirmation soil samples.

## 2.0 SITE CHARACTERIZATION AND HISTORY

### 2.1 Site Characterization and Area Review

#### Depth-to-Groundwater

Ranger personnel reviewed data available from the U.S. Geological Survey (USGS) and the New Mexico Office of the State Engineer (NMOSE) to determine the depth-to-groundwater in the vicinity of the Site. Based upon the USGS and NMOSE information available, no water wells are located within a half-mile of the Site. Upon review of additional information for wells located outside the NMOCD desired half-mile radius, one well was identified approximately three-quarters of a mile to the southeast which had water level data for the prior 25-year time period. The most recent depth to groundwater in this well was reported to be approximately 44 feet below ground surface (bgs). Based on the available information for the area, the depth-to-groundwater at the subject site is assumed to be less than 50 feet bgs.

A copy of the reviewed depth-to-groundwater information is provided in *Attachment 1*.

#### Water Sources

Based upon the USGS/NMOSE well records detailed above, and a review of aerial imagery, it appears that no water sources are located within a half mile of the Site.

#### Karst Potential

The subject site is situated in an area of "Medium Karst" potential.

#### 100-Year Flood Plain

The Site is situated within a Federal Emergency Management Act (FEMA) designated *Flood Zone X* area, characterized as "*Area of Minimal Flood Hazard*."

#### Wetlands

Upon review of the National Wetland Inventory, the impact area does not lie within 300 feet of a mapped feature.

#### Significant Watercourses

Upon review of available mapping services, the closest mapped significant water course is located approximately 1,200 feet north-northeast of the Site. The unnamed drainage feature is mapped as an intermittent stream in the USGS National Map.

#### Occupied Structures

The closest regularly occupied structure is located approximately 1.1 miles northwest of the Site at approximate GPS coordinates 32.166747, -104.158053.



### Threatened, Endangered, and Sensitive Wildlife and Plant Species

In order to assess the Site for the presence of sensitive environmental features, Ranger completed a desktop review of various available resources for the project area which is summarized below:

- **New Mexico Environmental Review Tool (ERT):** Utilizing the area of the proposed activities, a preliminary environmental screening assessment report was generated. The ERT report (copy attached) indicated that a total of 21 Special Status Animal Species were potentially present within 2000 meters of the project area. In the "Overall Status" portion of the ERT report it stated:

*"No further consultation with the Department is required based on the project's location and, with implementation of mitigation measures described in the Project Recommendations section below, no adverse effects to wildlife or important habitats are anticipated."*

- **Information for Planning and Consultation (IPaC):** A review of the project area was completed using the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) digital project planning tool and a report was generated (copy attached). The IPaC indicates that the Northern Aplomado Falcon, Piping Clover, Texas Hornshell, and Monarch Butterfly have the potential to be present in the project area. However, the report indicates that there are no critical habitats at the project location.
- **Southern Great Plains CHAT Mapper:** A review of the Southern Great Plains CHAT Mapper indicates that the project area is not located in proximity to a known active lek, historic lek location or a protected area managed for biodiversity. The area is mapped as a potential habitat and a crucial habitat is greater than 10 miles east of the Site.
- **Bureau of Land Management (BLM) New Mexico Statewide Spatial Data Web Mapper:** Based upon a review of the BLM New Mexico Statewide Spatial Data web mapper the project area does not fall into an area of critical environmental concern. The closest mapped special status plant and wildlife habitat area(s) are mapped approximately 1.65 miles north of the Site. The areas are mapped for potential habitat of Wright's Waterwillow and Scheer's Beehive Cactus.

Since the release occurred within an existing pipeline right-of-way, all assessment and remediation activities were completed within previously disturbed areas. Prior to and during all site activities, review of the areas of disturbance was completed and no potential for disturbance of potential habitat or species of concern were observed.

## **2.2 Historic Incident Review**

Upon review of the NMOCD online incident portal and Oil and Gas Application Viewer, no historic release incidents are located in the vicinity of the subject Site.

## 2.3 Historic Aerial Review

Ranger completed a review of historic aerial imagery for the Site to determine if any items warranting additional review and/or assessment were present. Upon review of the available imagery, no areas of concern were identified.

## 3.0 ARMS INSPECTION/REVIEW

Prior to the initiation of Site activities an ARMS Inspection/Review was completed. The ARMS survey found that *“The entire area of potential effect or project area has been previously surveyed to current standards and no cultural properties were found within the survey area.”* As all site activities were completed in previously disturbed areas, operations have been completed in accordance with the CPPR and NMAC 19.2.24.

A copy of the ARMS cover page is included in *Attachment 3*.

## 4.0 CLOSURE CRITERIA

Since the release only affected soils in the surface to one foot bgs soil interval, the remediation activities were conducted to bring the area into compliance with the Restoration, Reclamation and Re-Vegetation Criteria (Restoration Criteria) detailed in New Mexico Administrative Code (NMAC) 19.15.29.13. The regulatory criteria are summarized below:

### PROPOSED CLEANUP CRITERIA

REGULATORY STANDARD	CHLORIDE	TPH (GRO+DRO +MRO)	BTEX	BENZENE
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW ≤50') & 19.15.29.13 NMAC Restoration, Reclamation and Re-Vegetation (Soils 0'-4')	600	100 <sup>1</sup>	50 <sup>1</sup>	10 <sup>1</sup>

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

1. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document *Procedures for the Implementation of Digital C-141 and the release rule (19.15.29 NMAC) dated December 1, 2023*.

## 5.0 SITE ASSESSMENT, REMEDIATION, AND CONFIRMATION SAMPLING

### 5.1 June 30, 2025 – Site Assessment

Ranger mobilized to the Site on June 30, 2025 to assess the horizontal and vertical extent of the impacts associated with the release incident. The assessment process included the installation of 14 hand auger soil borings within and surrounding the boundaries of the observed impact area. Based on the surficial nature of the release, the hand auger soil borings were completed to a maximum depth of approximately four feet bgs.

During the hand auger soil boring installation process, Ranger personnel collected soil samples for field screening purposes at the surface and at approximate one-foot intervals thereafter to the boring terminal depths. The field screening of the encountered soils was conducted utilizing an organic vapor monitor (OVM) and field chloride titration kit. The field chloride readings indicated that elevated chloride concentrations were present at the ground surface but did not extend beyond a depth of one foot bgs. No elevated OVM readings were documented.

Soil samples were subsequently collected for laboratory analysis from each hand auger boring location. The samples were collected from the interval within each boring that exhibited the highest field chloride concentration and from the terminal depth of each boring. Upon collection, the soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for analysis of total petroleum hydrocarbons (TPH) using Environmental Protection Agency (EPA) Method 8015; benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021; and, total chloride using Method SM 4500. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

Upon review of the laboratory analytical results it was determined that the site assessment activities, with one exception, had successfully delineated the horizontal and vertical extent of the site impacts. However, the soil sample collected from hand auger boring HA-3 at depth of four feet bgs was documented to contain a soil chloride concentration of 624 mg/Kg which was slightly in exceedance of the applicable 600 mg/Kg closure criteria. This result conflicted with the field chloride readings which did not indicate the presence of any elevated chloride concentrations beyond a depth of one foot bgs. Since the field chloride reading at a depth of four feet bgs in boring HA-3 was determined to be  $\leq 150$  mg/Kg, and since no field readings in excess of the closure criteria were observed below a depth of one foot bgs in this boring, it was suspected that the HA-3/4' sample may have been affected by slough from the overlying affected soil. As discussed in Section 5.4, below, a decision was made to collect an additional soil sample for laboratory analysis in order to confirm the soil chloride concentration in the four foot bgs depth interval at the HA-3 location.

An *Observed Impact Area and Assessment Sample Location Map* is included in the *Figures* section which depicts the observed impact area and assessment sample locations. The site assessment analytical results and field chloride readings are summarized in the *Site Assessment Soil Sample BTEX, TPH & Chloride Analytical Data* table included in the *Tables* section.

## **5.2 Soil Removal Operations and Confirmation Soil Sampling**

Soil removal operations were initiated at the subject site in July 2025 in order to bring the location into compliance with NMAC 19.15.29. Based on the information collected during the June 30, 2025 site assessment activities, soil removal operations were completed to depths and boundaries anticipated to be within the regulatory closure criteria.

During the excavation process, Ranger personnel collected field readings utilizing an OVM and field chloride titration kit to guide the excavation boundaries and depths. Upon completion of the soil removal operations, the excavation had maximum dimensions of approximately 70 feet by 45 feet and a maximum depth of approximately one foot. In order to confirm that the excavation area had been completed to appropriate depths and boundaries, cleanup confirmation soil samples were collected on July 22, 2025.

The cleanup confirmation soil samples were collected as five-part composite samples in accordance with NMAC 19.15.29.12 with each sample representing less than 200 square feet. A

total of 12 cleanup confirmation soil samples were collected from the base and sidewalls of the excavation area for laboratory analysis. Following collection, the cleanup confirmation soil samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods. All of the cleanup confirmation soil sample analytical results were documented to be below the closure criteria.

A *Final Excavation Area and Confirmation Sample Location Map* is included in the *Figures* section which depicts the extent and depths of the excavated area and the cleanup confirmation soil sampling locations.

### **5.3 Hand Auger Boring HA-3 Confirmation Investigation**

As detailed above, the soil sample collected from hand auger boring HA-3 at depth of four feet bgs was documented to contain a soil chloride concentration of 624 mg/Kg which was slightly in exceedance of the applicable 600 mg/Kg closure criteria. This result conflicted with the field chloride readings which did not indicate the presence of any elevated chloride concentrations beyond a depth of one foot bgs. Since the field chloride reading at a depth of four feet bgs in boring HA-3 was determined to be  $\leq 150$  mg/Kg, and since no field readings in excess of the closure criteria were observed below a depth of one foot bgs in this boring, it was suspected that the HA-3/4' sample may have been affected by slough from the overlying affected soil. As such, a decision was made to collect an additional soil sample for laboratory analysis in order to confirm the soil chloride concentration in the four foot bgs depth interval at the HA-3 location.

On July 22, 2025, Ranger personnel completed an additional hand auger boring at the Site. The hand auger soil boring was inadvertently installed in the immediate vicinity of the HA-3A assessment boring location located outside of the observed impact and remediation area. Upon determining that the boring was not installed in the correct location, Ranger personnel returned to the Site on July 31, 2025 and completed the boring (HA-3.1) at the target location, immediately adjacent to the original HA-3 boring location. At the time of the boring installation, this area had been excavated to a depth of approximately one-foot bgs.

The July 2025 hand auger soil boring installation and field screening methodologies were the same as that described above for the June 2025 assessment activities. The field chloride readings again indicated that chloride concentrations were below the closure criteria. No elevated OVM readings were documented.

To confirm the field readings, soil samples were collected for laboratory analysis from the terminal (4 foot) depth of the soil borings. The soil samples were subsequently submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods.

The laboratory analytical results for the soil samples collected from the July 2025 soil borings documented TPH, BTEX and chloride concentrations below the closure criteria, consistent with the field chloride readings. Based upon these results, it appears that the June 30, 2025 HA-3/4' soil sample was affected by slough from the overlying affected soil, and that the analytical results for this sample were not representative of the site conditions at this depth. Based on the final field readings and laboratory analytical results, the subject release incident was confirmed to have been remediated to levels below the closure criteria.

#### **5.4 Waste Disposal**

All soils generated during the remedial excavation activities were disposed of at the Lea Land disposal facility in Lea County, New Mexico.

### **6.0 SITE CLOSURE**

#### **6.1 Site Backfill & Seeding**

The excavated area was backfilled with in accordance with NMAC 19.15.29.12 and NMAC 19.15.29.13. On July 31, 2025, Ranger personnel collected a five-part composite sample of the material designated for use as backfill at the Site. Upon collection, the sample was submitted to Cardinal Laboratories in Hobbs, New Mexico, for analysis of TPH, BTEX, and total chloride using the aforementioned laboratory methods. Upon review of the laboratory analytical results, the sample collected from the backfill source was documented to contain BTEX, TPH, and chloride concentrations within the applicable NMAC 19.15.29.13 criteria. A copy of the laboratory analytical report and associated chain-of-custody documentation is attached.

The impact/remediation area will be seeded with the NMLSO Loamy (L) Sites Seed Mixture.

#### **6.2 Closure Request**

Based on the final laboratory analytical results, the Site has been properly addressed pursuant to NMAC 19.15.29 and EOG respectfully requests closure of the incident.

## **FIGURES**

**Topographic Map**

**Area Map**

**Depth-to-Groundwater Information Location Map**

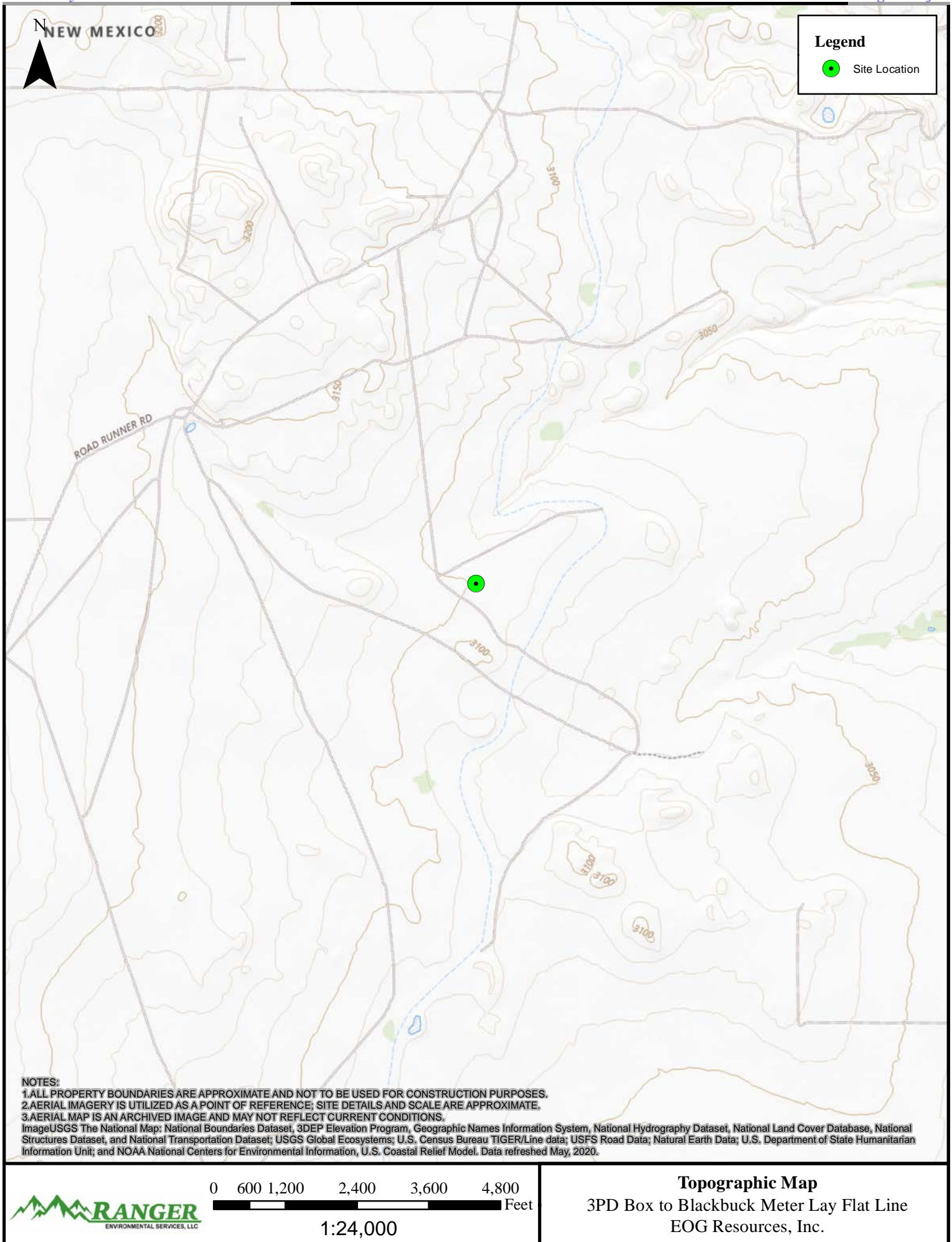
**National Wetland Inventory Map**

**Karst Topography Map**

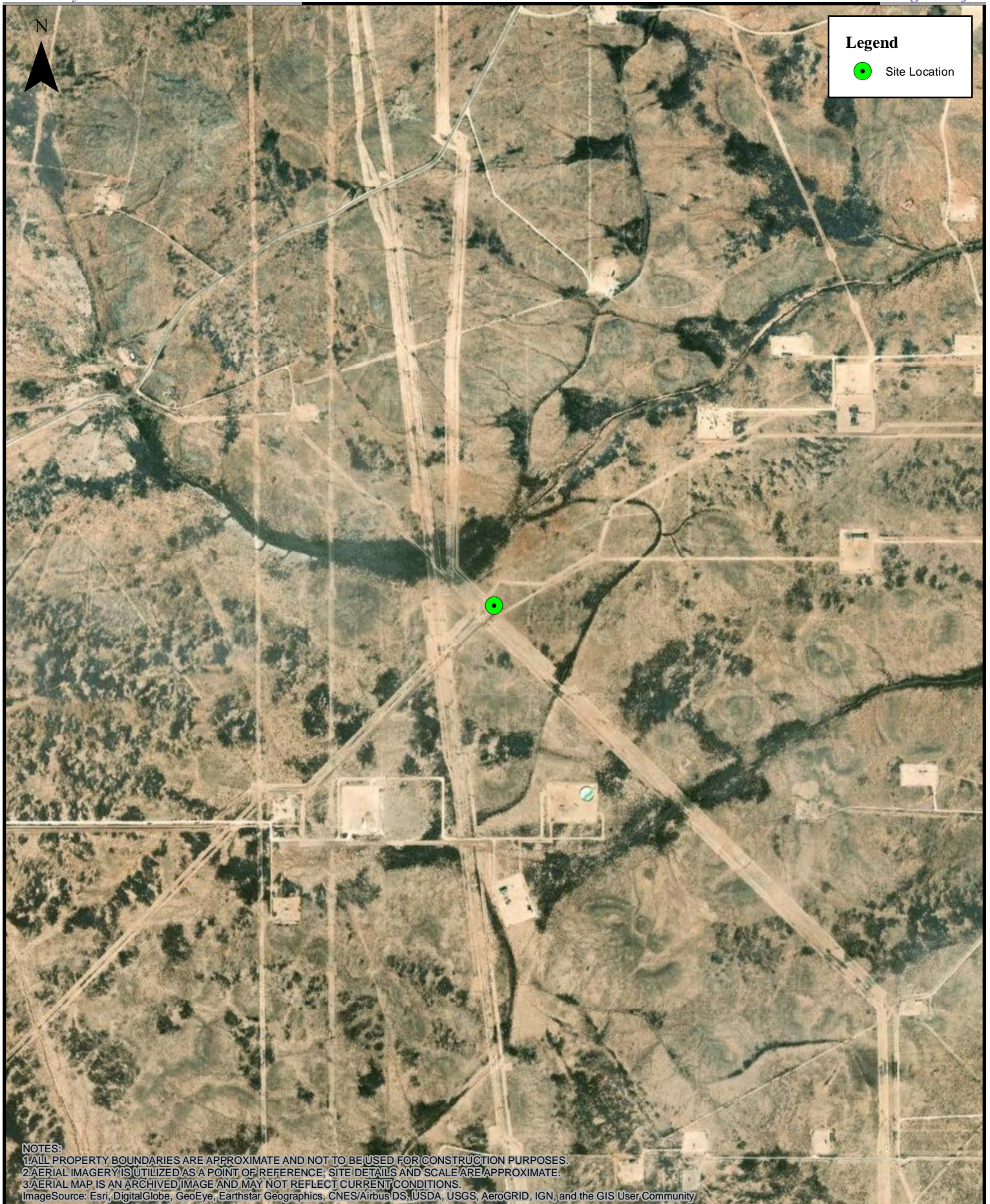
**Observed Impact Area and Assessment Sample Location Map**

**Final Excavation Area and Confirmation Sample Location Map**









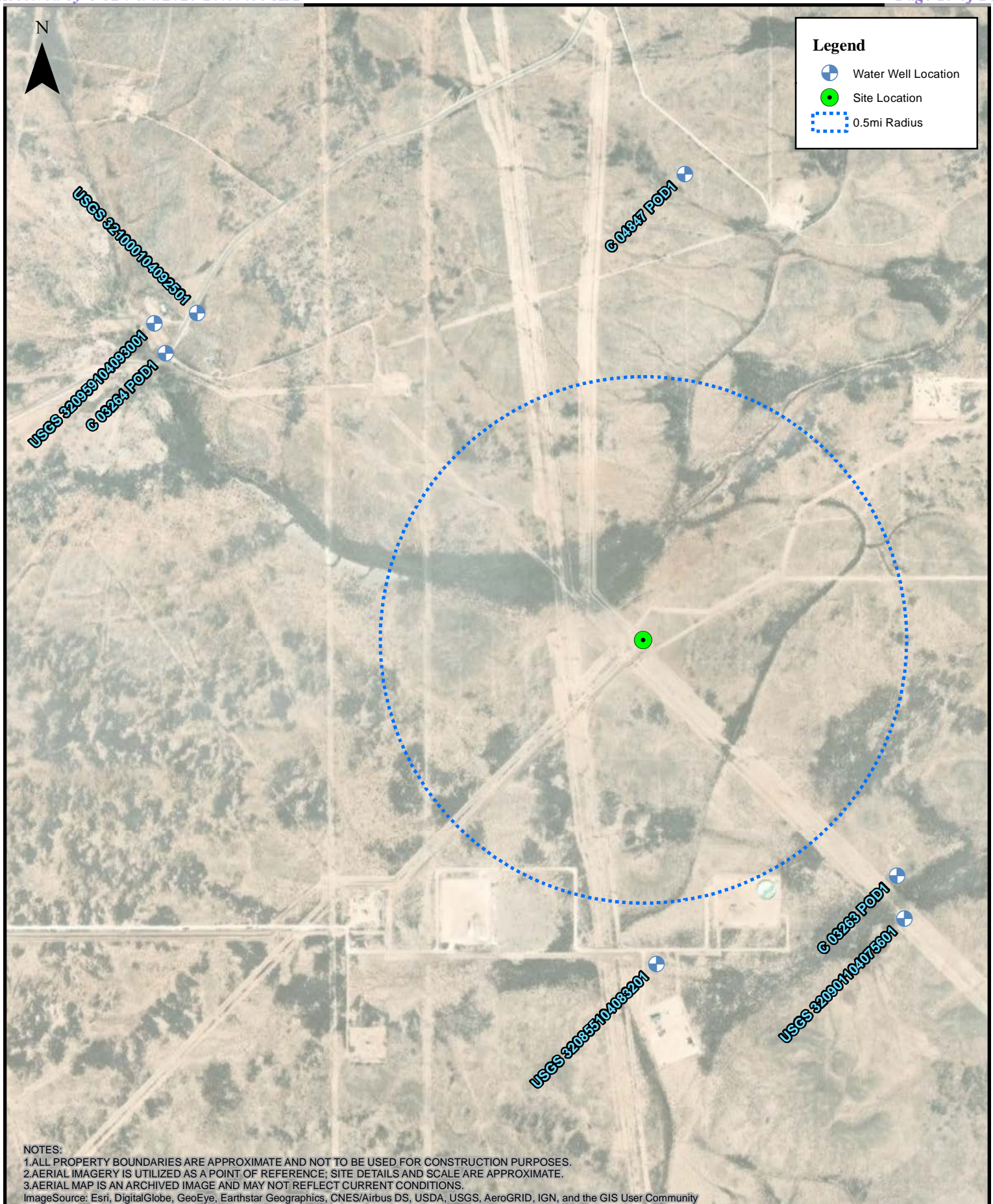
0 495 990 1,980 2,970 3,960 Feet

1:19,818

### Area Map

3PD Box to Blackbuck Meter Lay Flat Line  
EOG Resources, Inc.

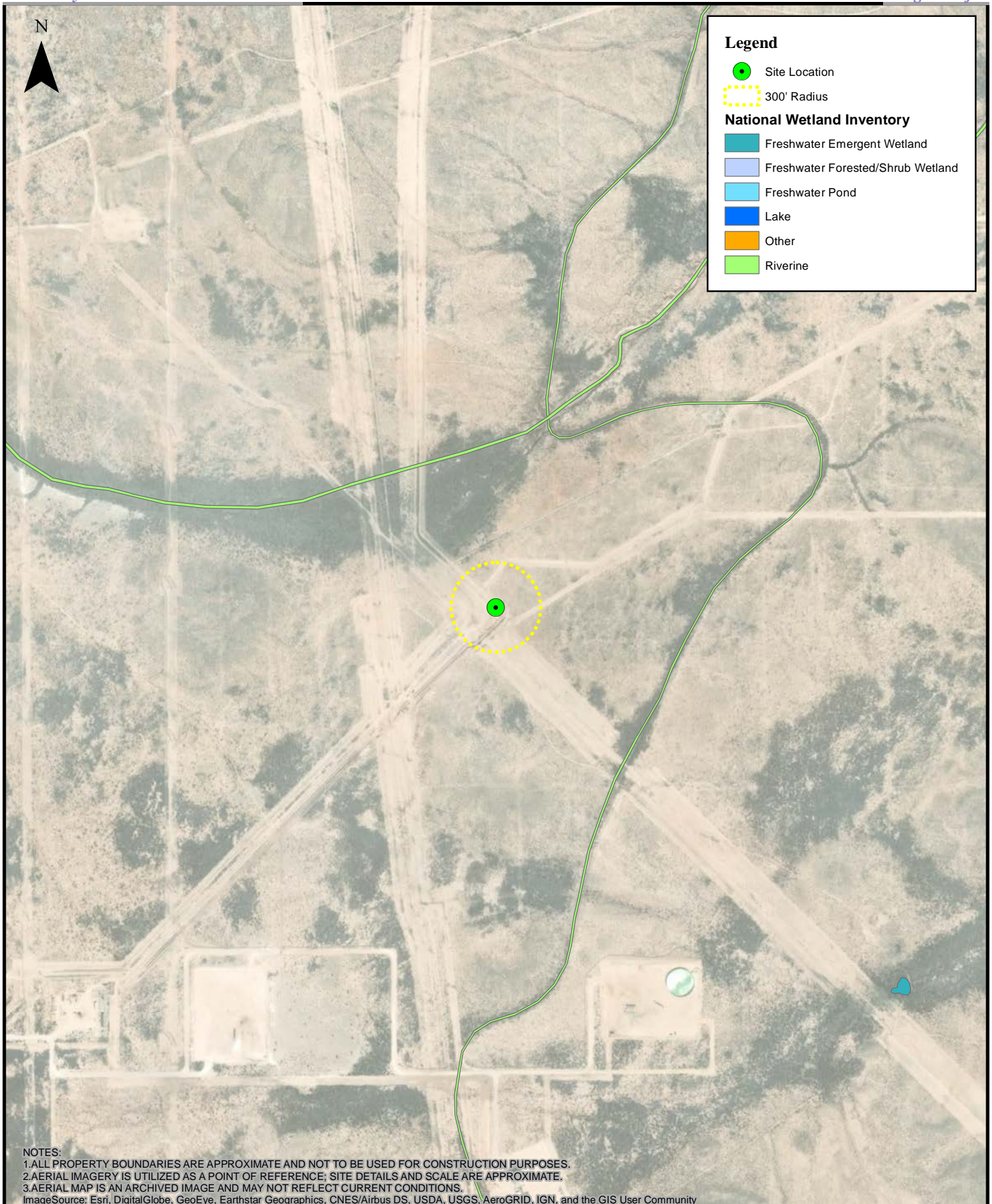




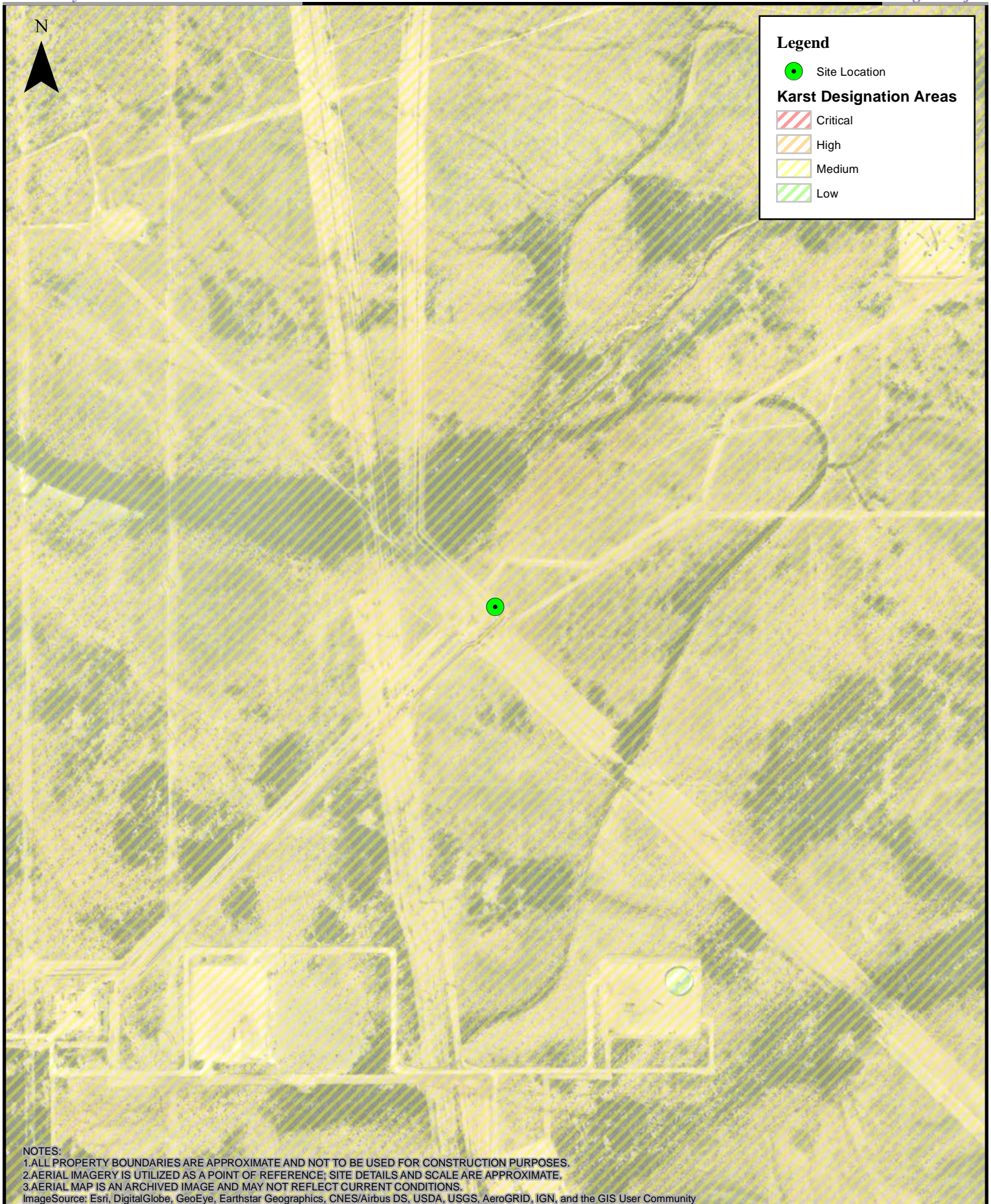
0 375 750 1,500 2,250 3,000 Feet  
1:15,000

**Depth-to-Groundwater Information Location Map**  
3PD Box to Blackbuck Meter Lay Flat Line  
EOG Resources, Inc.





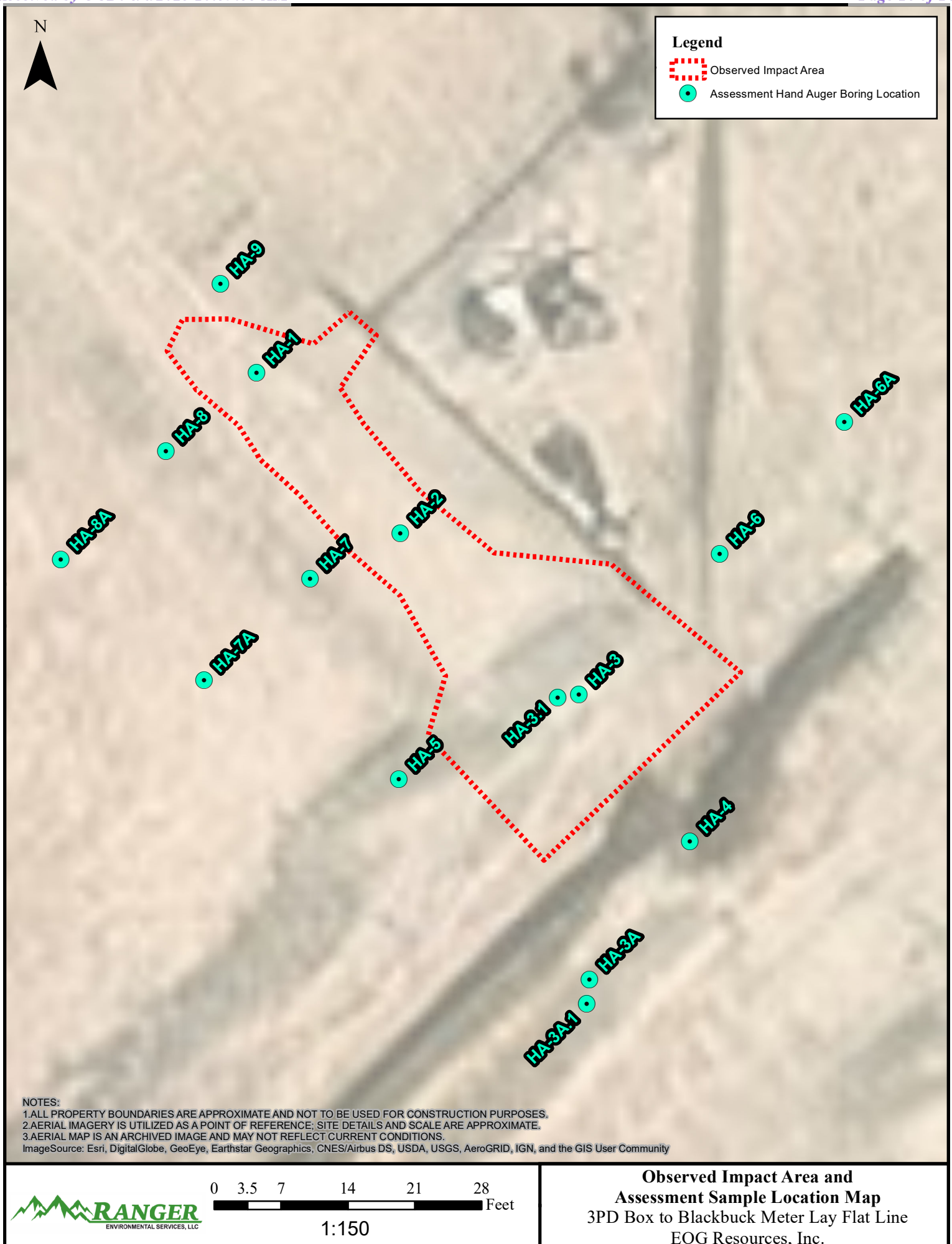


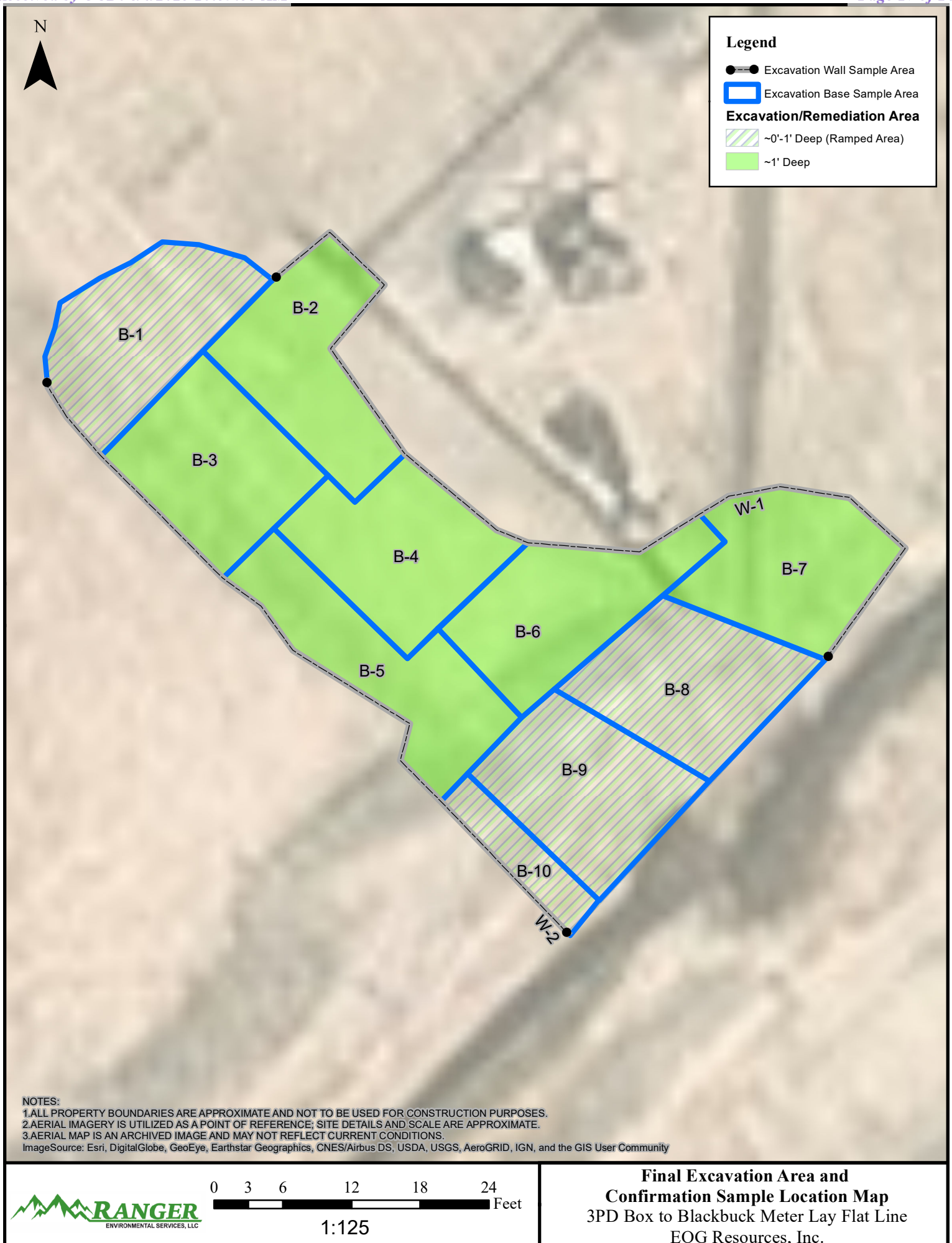


0 250 500 1,000 1,500 2,000 Feet

1:10,000







## **TABLES**

**Site Assessment Soil BTEX (EPA 8260), TPH (EPA 8015) &  
Chloride (SM 4500) Analytical Data**

**Confirmation Sample Soil BTEX (EPA 8260), TPH (EPA 8015) &  
Chloride (SM 4500) Analytical Data**

SITE ASSESSMENT SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (SM 4500) ANALYTICAL DATA EOG RESOURCES, INC. 3PD TO BLACKBUCK METER LAYFLAT LINE														
All values presented in parts per million (mg/Kg)														
SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	FIELD CHLORIDE TITRAION	LABORATORY CHLORIDE RESULTS
HA-1/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	2,250	3,000
HA-1/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	300	---
HA-1/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	300	---
HA-1/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	300	---
HA-1/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	288
HA-2/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	160
HA-2/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-2/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-2/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-2/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	64.0
HA-3/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	1,500	1,800
HA-3/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	450	---
HA-3/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	300	---
HA-3/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	300	---
HA-3/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	624
HA-3.1/1'	7/31/2025	1'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-3.1/2'	7/31/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-3.1/3'	7/31/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-3.1/4'	7/31/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	32.0
HA-4/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	16.0
HA-4/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-4/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-4/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-4/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	48.0
HA-5/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	96.0
HA-5/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-5/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-5/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-5/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	48.0
HA-6/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	900	2,040
HA-6/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	450	---
HA-6/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	450	---
HA-6/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	300	---
HA-6/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	464
HA-7/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	3,000	3,120
HA-7/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	300	---
HA-7/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-7/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-7/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	240
HA-8/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	3,000	2,080
HA-8/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	450	---
HA-8/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-8/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-8/4'	6/30/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	176
HA-9/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	600	144
HA-9/1'	6/30/2025	1'	---	---	---	---	---	---	---	---	---	---	300	---
HA-9/2'	6/30/2025	2'	---	---	---	---	---	---	---	---	---	---	300	---
HA-9/3'	6/30/2025	3'	---	---	---	---	---	---	---	---	---	---	300	---
HA-9/4'	6/30/2025	4'	<0.050	<0.050	<0.500	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	224
HA-1A/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.50	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	64.0
HA-1A/1'	6/30/2025	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	176
HA-3A/0'	6/30/2025	0'	<0.050	<0.050	<0.50	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	144
HA-3A/1'	6/30/2025	1'	<0.050	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<20.0	<30.0	≤150	80.0
HA-3A.1/0'	7/22/2025	0'	---	---	---	---	---	---	---	---	---	---	300	---
HA-3A.1/1'	7/22/2025	1'	---	---	---	---	---	---	---	---	---	---	300	---
HA-3A.1/2'	7/22/2025	2'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-3A.1/3'	7/22/2025	3'	---	---	---	---	---	---	---	---	---	---	≤150	---
HA-3A.1/4'	7/22/2025	4'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	32.0
HA-6A/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	64.0
HA-6A/1'	6/30/2025	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	160
HA-7A/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	64.0
HA-7A/1'	6/30/2025	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	≤150	144
HA-8A/0'	6/30/2025	0'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	160
HA-8A/1'	6/30/2025	1'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<20.0	<30.0	300	96.0
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW ≤ 50')														
			10	---	---	---	50	---	---	---	---	100	600	
19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)														
			10 <sup>3</sup>	---	---	---	50 <sup>3</sup>	---	---	---	---	100 <sup>3</sup>	600	
Notes:														
1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.														
2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.														
3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of Digital C-141 and the release rule (19.15.29 NMAC) dated December 1, 2023.														

**All values presented in parts per million (mg/Kg)**

Notes:
1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.
2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.
3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of Digital C-141 and the release rule (19.15.29 NMAC) dated December 1, 2023.

3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of Digital C-141 and the release rule (19.15.29 NMAC) dated December 1, 2023.




## **ATTACHMENT 1 – DEPTH-TO-GROUNDWATER DATA**

# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	C 03263 POD1	NW	NW	NW	07	25S	28E	581628.0	3557501.0 *	

\* UTM location was derived from PLSS - see Help


Driller License:		Driller Company:			
Driller Name:					
Drill Start Date:		Drill Finish Date: 1964-05-06		Plug Date:	
Log File Date:		PCW Rcv Date:		Source:	
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size: 5.50		Depth Well: 133		Depth Water:	

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
	C 03264 POD1	NE	NW	NE	02	25S	27E	579391.0	3559099.0 *	

\* UTM location was derived from PLSS - see Help

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

1964-05-06

Plug Date:

Log File Date:

PCW Rcv Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size:

Depth Well:


Depth Water:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map
NA	C 04847 POD1	SE	NW	SE	36	24S	27E	580978.9	3559647.0	

\* UTM location was derived from PLSS - see Help

Driller License:	1706	Driller Company:	SUPERIOR DRILLING, LLC		
Driller Name:	BRYCE WALLACE				
Drill Start Date:	2024-07-31	Drill Finish Date:	2024-07-31	Plug Date:	2024-07-31
Log File Date:	2024-09-03	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:		Depth Well:	80	Depth Water:	

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

**National Water Information System: Web Interface**

[USGS Water Resources](#)

**Data Category:**  
Groundwater ▼

**Geographic Area:**  
United States ▼

GO



Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation



Important: [Next Generation Monitoring Location Page](#)

## Search Results -- 1 sites found

site\_no list =

- 320855104083201

**Minimum number of levels = 1**

[Save file of selected sites](#) to local disk for future upload

## USGS 320855104083201 25S.27E.12.12440

Groundwater: Field measurements ▼

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°08'55", Longitude 104°08'32" NAD27

Land-surface elevation 3,080 feet above NAVD88

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Castile Gypsum (312CSTL) local aquifer.

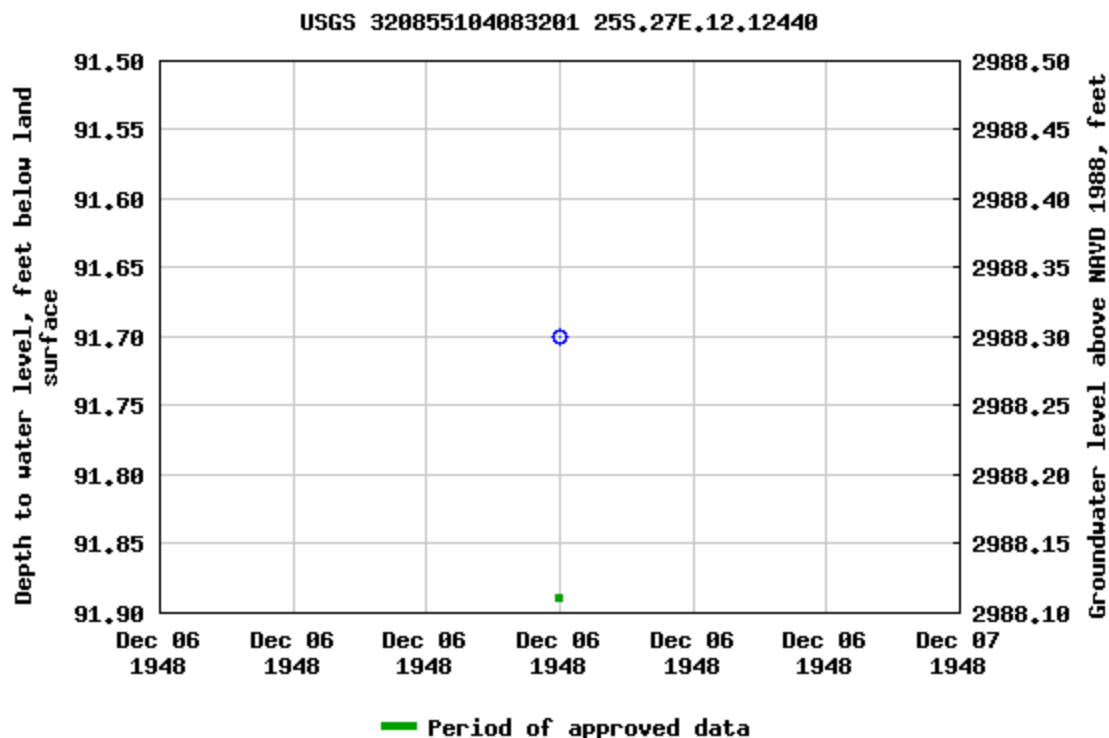
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-05-29 10:00:25 EDT

0.69 0.53 nadww02



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

**National Water Information System: Web Interface**

[USGS Water Resources](#)

**Data Category:**  
Groundwater ▼

**Geographic Area:**  
United States ▼

GO



Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation



Important: [Next Generation Monitoring Location Page](#)

## Search Results -- 1 sites found

site\_no list =

- 320901104075601

**Minimum number of levels = 1**

[Save file of selected sites](#) to local disk for future upload

## USGS 320901104075601 25S.28E.07.11143

Groundwater: Field measurements ▼

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°08'59.3", Longitude 104°08'03.0" NAD83

Land-surface elevation 3,042.00 feet above NGVD29

The depth of the well is 133 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

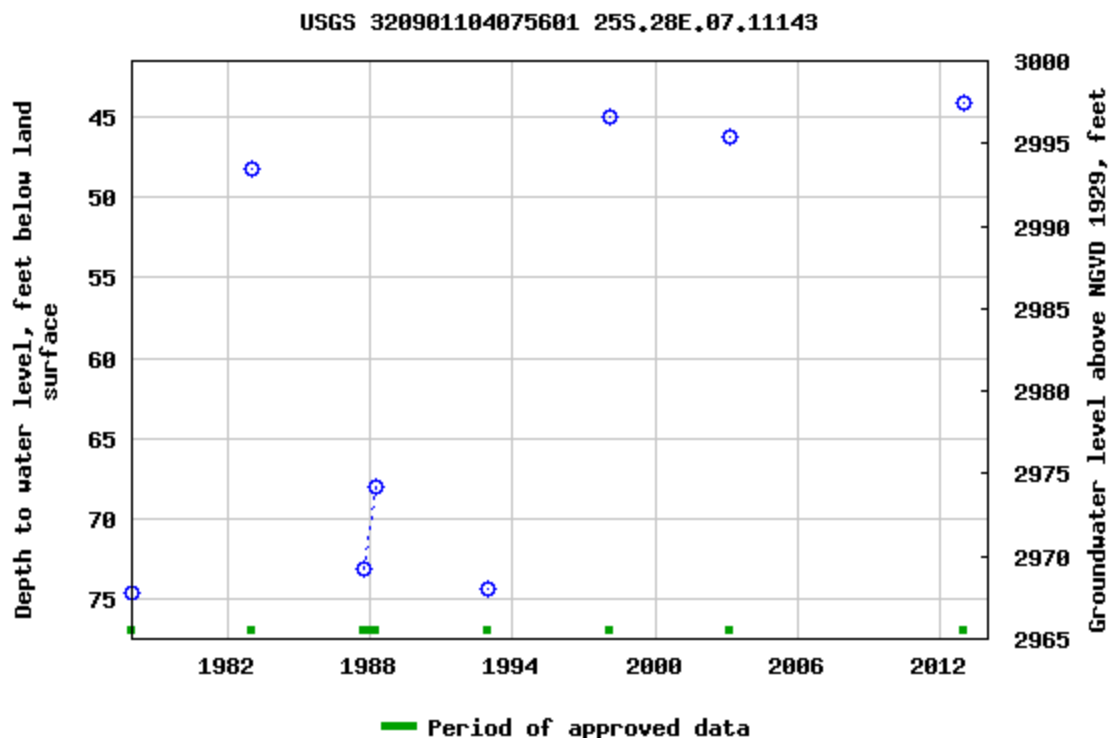
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.  
[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

Accessibility FOIA Privacy Policies and Notices

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-05-29 10:01:06 EDT

0.63 0.47 nadww02





[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

**National Water Information System: Web Interface**

[USGS Water Resources](#)

**Data Category:**  
Groundwater ▼

**Geographic Area:**  
United States ▼

GO



Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation



Important: [Next Generation Monitoring Location Page](#)

## Search Results -- 1 sites found

site\_no list =

- 320959104093001

**Minimum number of levels = 1**

[Save file of selected sites](#) to local disk for future upload

## USGS 320959104093001 25S.27E.02.21211

Groundwater: Field measurements ▼

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°09'59", Longitude 104°09'30" NAD27

Land-surface elevation 3,145.0 feet above NGVD29

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Azotea Tongue of Seven Rivers Formation (313AZOT) local aquifer.

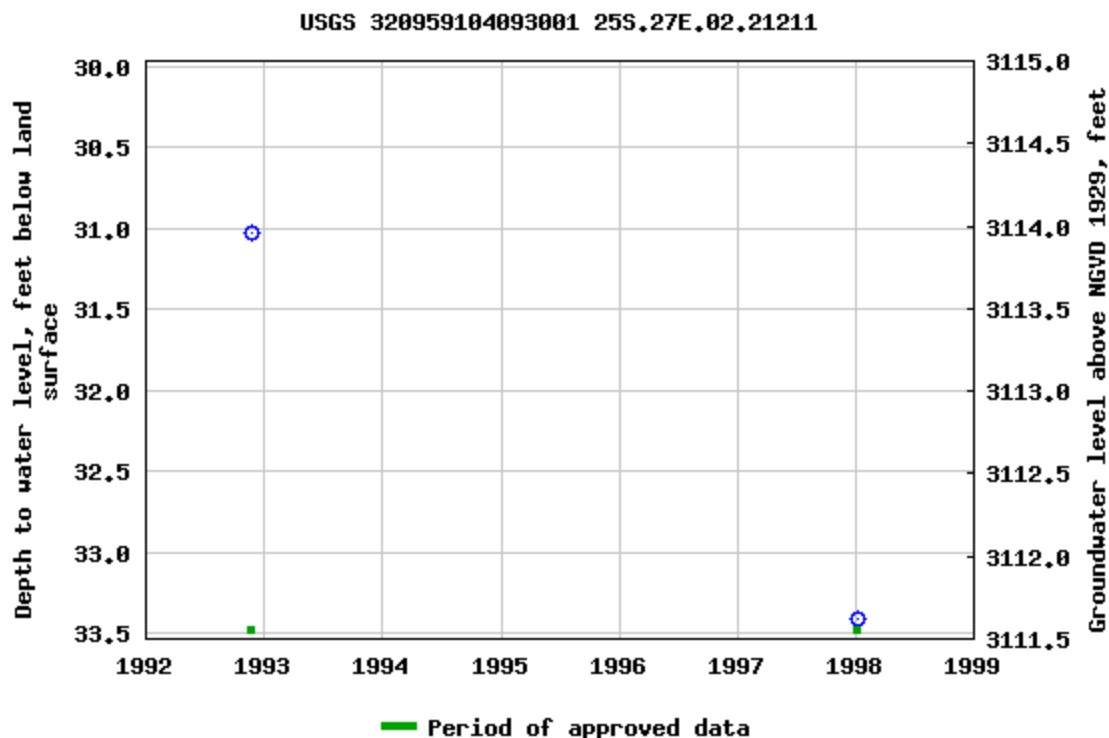
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.  
[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

Accessibility FOIA Privacy Policies and Notices

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-05-29 09:58:34 EDT

0.6 0.43 nadww02



[USGS Home](#)  
[Contact USGS](#)  
[Search USGS](#)

**National Water Information System: Web Interface**

[USGS Water Resources](#)

**Data Category:**  
Groundwater ▼

**Geographic Area:**  
United States ▼

GO



Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation



Important: [Next Generation Monitoring Location Page](#)

## Search Results -- 1 sites found

site\_no list =

- 321000104092501

**Minimum number of levels = 1**

[Save file of selected sites](#) to local disk for future upload

## USGS 321000104092501 25S.27E.02.21122

Groundwater: Field measurements ▼

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°10'00", Longitude 104°09'25" NAD27

Land-surface elevation 3,164 feet above NAVD88

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Castile Gypsum (312CSTL) local aquifer.

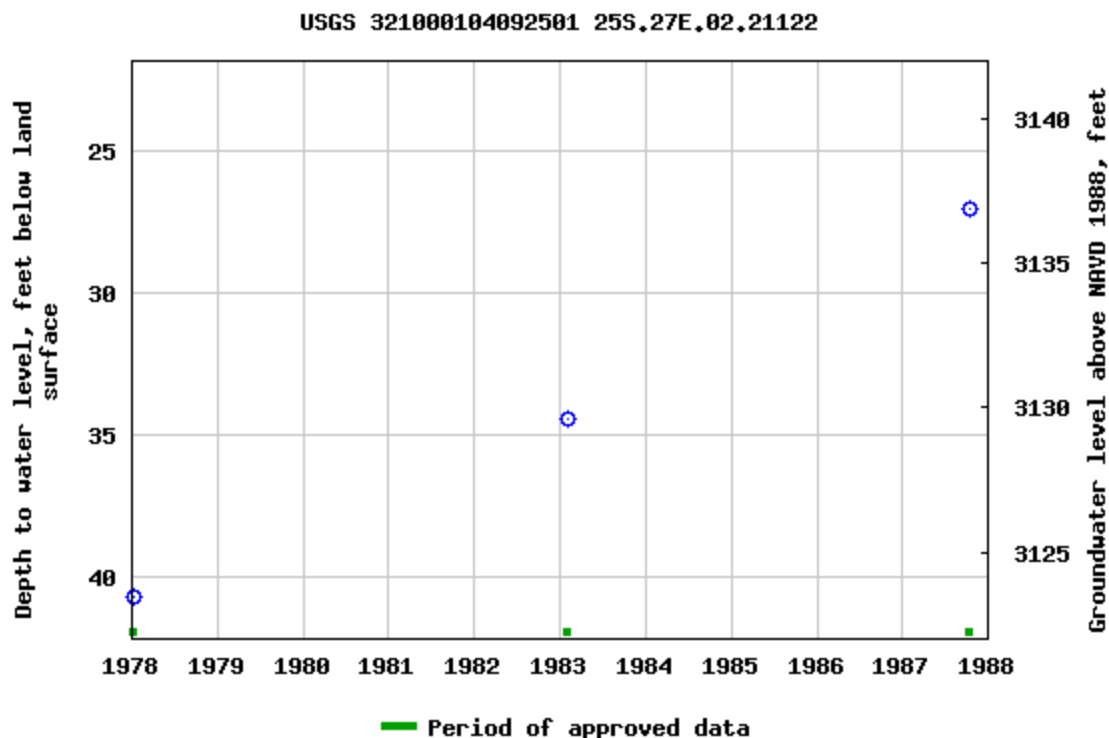
### Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.  
[Download a presentation-quality graph](#)

[Questions or Comments](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2025-05-29 09:59:48 EDT

0.65 0.5 nadww02

## **ATTACHMENT 2 – SITE PHOTOGRAPHS**



**PHOTOGRAPH NO. 1 – A view of the release area during an initial inspection. The view is towards the southeast.**

(Approximate GPS Coordinates: 32.157428, -104.142583)



**PHOTOGRAPH NO. 2 – A view of the Site during the June 30, 2025 site assessment activities. The view is towards the northeast.**





**PHOTOGRAPH NO. 3 – A view of the Site during the remediation process. The view is towards the northwest.**



**PHOTOGRAPH NO. 4 – An additional view of the Site upon completion. The view is towards the north.**



**PHOTOGRAPH NO. 5 – A view of the additional assessment sampling activities on July 31, 2025. The view is towards the southeast.**



# **ATTACHMENT 3 – ARMS INSPECTION/REVIEW COVER PAGE**



Stephanie Garcia Richard, Commissioner of Public Lands  
State of New Mexico

## NMSLO Cultural Resources Cover Sheet Exhibit

**NMCRIS Activity Number:**

(if applicable)

**Exhibit Type** (select one)

**ARMS Inspection/Review** - Summarize the results (select one):

- (A) The entire area of potential effect or project area has been previously surveyed to current standards and **no cultural properties** were found within the survey area.
- (B) The entire area of potential effect or project area has been previously surveyed to current standards and **cultural properties were found** within the survey area.
- (C) The entire area of potential effect or project area has **not** been previously surveyed or **has not been surveyed** to current standards. A complete archaeological survey will be conducted and submitted for review.

**Archaeological Survey**

**Findings:**

**Negative** - No further archaeological review is required.

**Positive** - Have avoidance and protection measures been devised? Select one:

**Comments:**

**Project Details:**

NMSLO Lease Number (if available):

Cultural Resources Consultant:

Project Proponent (Applicant):

Project Title/Description:

**Project Location:**

County(ies):

PLSS/Section/Township/Range):

---

**For NMSLO Agency Use Only:**

NMSLO Lease Number:

Acknowledgment-Only:

Lease Analyst:

Date Exhibit Routed to Cultural Resources Office:

---

*No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.*

Form Revised 12 22

## **ATTACHMENT 4 – BIOLOGICAL REVIEW REPORTS**



---

**PROJECT INFORMATION**

---

**Project Title:** 3PD to Black Buck Meter Lay Flat Line - Oil & Gas Exploratory  
**Project Type:** (NO PROJECT REVIEW) SPECIES LIST ONLY  
**Latitude/Longitude (DMS):** 32.157509 / -104.142513  
**County(s):** EDDY  
**Project Description:** Exploratory

---

**REQUESTOR INFORMATION**

---

**Project Organization:**  
**Contact Name:** Will Kierdorf  
**Email Address:** Will@RangerEnv.com  
**Organization:** Ranger Environmental Services, Inc.  
**Address:** PO Box 201179, Austin TX 78720  
**Phone:** 512-335-1785

---

**OVERALL STATUS**

---

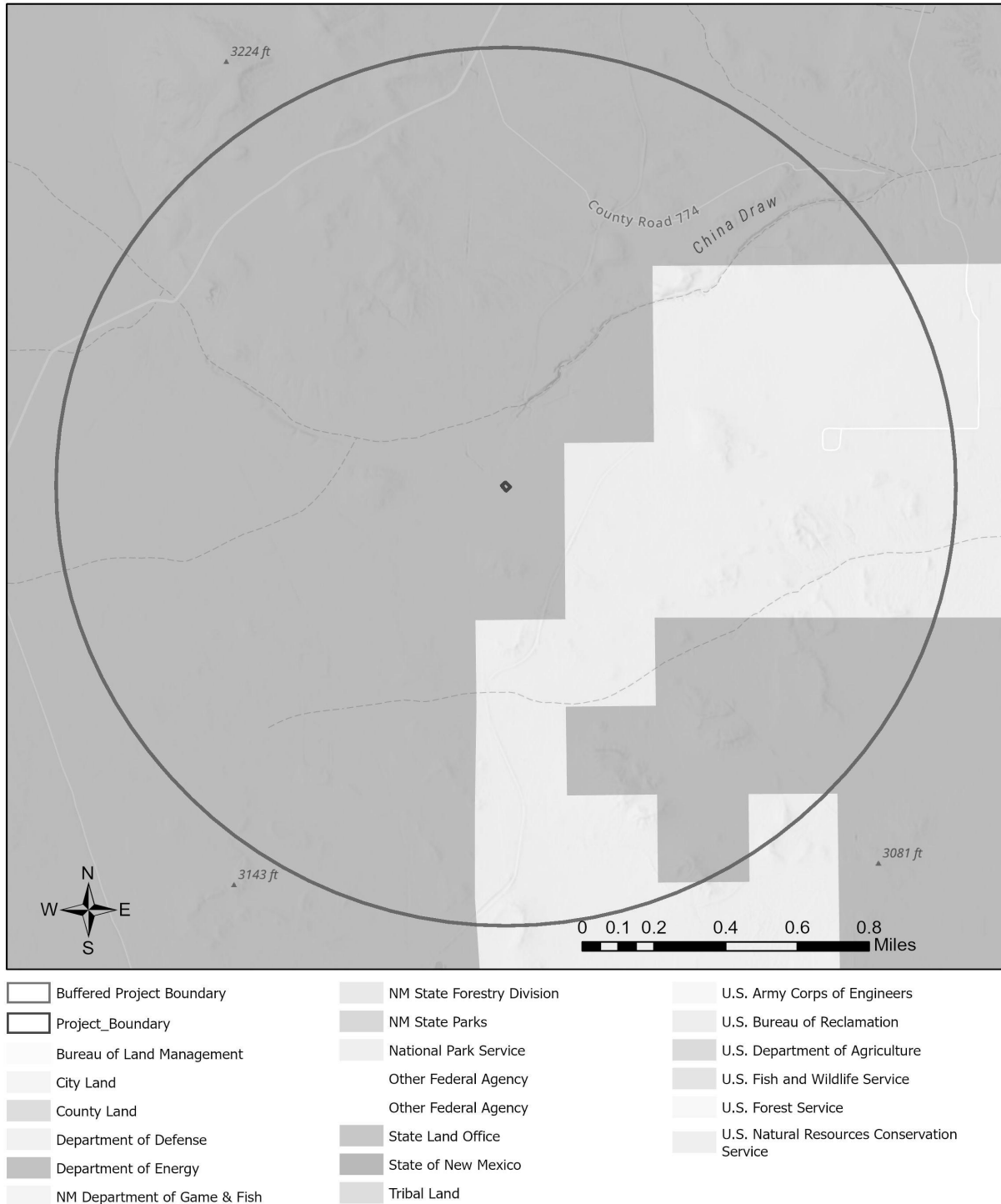
The information contained within this report comprises the recommendations of the New Mexico Department of Game and Fish (Department) for management and mitigation of proposed project impacts to wildlife and habitat resources; see the Project Recommendations section below for further details. No further consultation with the Department is required based on the project's location and, with implementation of mitigation measures described in the Project Recommendations section below, no adverse effects to wildlife or important habitats are anticipated. However, a Department biologist may be in touch within 30 days if they determine that further review is required.

---

**About this report:**

- This environmental review is based on the project description and location that was entered. The report must be updated if the project type, area, or operational components are modified.
- This is a preliminary environmental screening assessment and report. It is not a substitute for the potential wildlife knowledge gained by having a biologist conduct a field survey of the project area. Federal status and plant data are provided as a courtesy to users. The review is also not intended to replace consultation required under the federal Endangered Species Act (ESA), including impact analyses for federal resources from the U.S. Fish and Wildlife Service (USFWS) using their [Information for Planning and Consultation tool](#).
- This report contains information on wildlife species protected under the ESA and the [Wildlife Conservation Act \(WCA\)](#), [Species of Greatest Conservation Need \(SGCN\)](#), and Species of Economic and Recreational Importance (SERI). Species listed under the ESA are protected from take at the federal level and under the WCA are protected from take at the state level. SGCN are identified in the [State Wildlife Action Plan \(SWAP\) for New Mexico](#); all of these species are considered to be of conservation concern but not all of them are protected from take at the state or federal level. The harvest of all SERI is regulated at the state level. The Department has no authority to designate critical habitat for species listed under the WCA; only the USFWS can designate critical habitat for species listed under the ESA.
- The New Mexico Environmental Review Tool (ERT) utilizes species observation locations and species habitat suitability models, both of which are subject to ongoing change and refinement. Inclusion or omission of a species within a report cannot guarantee species presence or absence within your project area. To determine occurrence of any species listed in this report, or other wildlife that may be present within your project area, onsite surveys conducted by a qualified biologist during appropriate, species-specific survey timelines may be necessary.
- The Department encourages use of the ERT to modify proposed projects for avoidance, minimization, or mitigation of wildlife impacts. However, the ERT is not intended to be used in a repeatedly iterative fashion to adjust project attributes until a previously determined recommendation is generated. The ERT serves to assess impacts once project details are developed. The [New Mexico Crucial Habitat Assessment Tool](#), the data layers from which are included in the ERT, is the appropriate system for advising early-stage project planning and design to avoid areas of anticipated wildlife concerns and associated regulatory requirements.

## 3PD to Black Buck Meter Lay Flat Line - Oil &amp; Gas Exploratory



NHNM, USGS, USFS, US Census Bureau, NMDGF  
 Esri, NASA, NGA, USGS, FEMA  
 Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

**Special Status Animal Species Potentially within 2000 Meters of Project Area**

Common Name	Scientific Name	USFWS (ESA)	NMDGF (WCA)	NMDGF SGCN/SERI	USFS	USFS SCC	BLM
<a href="#">Barking Frog</a>	<a href="#">Craugastor augusti</a>			SGCN			
<a href="#">Plains Leopard Frog</a>	<a href="#">Lithobates blairi</a>			SGCN			BLM WATCH
<a href="#">Aplomado Falcon</a>	<a href="#">Falco femoralis</a>		E	SGCN			
<a href="#">Elf Owl</a>	<a href="#">Micrathene whitneyi</a>			SGCN			BLM WATCH
<a href="#">Western Burrowing Owl</a>	<a href="#">Athene cunicularia hypugaea</a>			SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
<a href="#">Common Nighthawk</a>	<a href="#">Chordeiles minor</a>			SGCN			
<a href="#">Sprague's Pipit</a>	<a href="#">Anthus spragueii</a>			SGCN			BLM SENSITIVE
<a href="#">Loggerhead Shrike</a>	<a href="#">Lanius ludovicianus</a>			SGCN		USFS R3 SCC	BLM WATCH
<a href="#">Bell's Vireo</a>	<a href="#">Vireo bellii</a>		T	SGCN			BLM SENSITIVE
<a href="#">Varied Bunting</a>	<a href="#">Passerina versicolor</a>		T	SGCN	Sensitive Species		
<a href="#">Vesper Sparrow</a>	<a href="#">Poocetes gramineus</a>			SGCN			
<a href="#">Thick-billed Longspur</a>	<a href="#">Rhynchophanes mccownii</a>			SGCN			BLM SENSITIVE
<a href="#">Least Shrew</a>	<a href="#">Cryptotis parva</a>		T	SGCN			BLM WATCH
<a href="#">Spotted Bat</a>	<a href="#">Euderma maculatum</a>		T	SGCN	Sensitive Species	USFS R3 SCC	BLM SENSITIVE
<a href="#">Black-Tailed Prairie Dog</a>	<a href="#">Cynomys ludovicianus</a>			SGCN	Sensitive Species		BLM SENSITIVE
<a href="#">Mule Deer</a>	<a href="#">Odocoileus hemionus</a>			SERI			
<a href="#">Pronghorn</a>	<a href="#">Antilocapra americana</a>			SERI			
<a href="#">Gray-Banded Kingsnake</a>	<a href="#">Lampropeltis alterna</a>		E	SGCN			BLM WATCH
<a href="#">Western Ribbon Snake</a>	<a href="#">Thamnophis proximus</a>		T	SGCN	Sensitive Species		
<a href="#">Desert Massasauga</a>	<a href="#">Sistrurus catenatus edwardsii</a>			SGCN			
<a href="#">Texas Hornshell</a>	<a href="#">Popenaias popeii</a>	PE	E	SGCN			BLM SENSITIVE

Common Name hyperlink takes you to species account in [bison-m.org](https://www.bison-m.org/); Scientific Name hyperlink takes you to information in [NatureServe Explorer](https://www.natureserve.org/explorer); ESA = Endangered Species

Act, C = Candidate, LE = Listed Endangered, LT = Listed Threatened, XN = Non-essential Experimental Population, for other ESA codes see this [website](#); WCA = Wildlife Conservation Act, E = Endangered, T = Threatened; SERI = Species of Economic and Recreational Importance; SGCN = Species of Greatest Conservation Need; USFS = U.S. Forest Service, Sensitive Species = A species likely to occur on USFS lands that is of concern for a potential reduction in population viability; SCC = Species of Conservation Concern; BLM = Bureau of Land Management, BLM SENSITIVE = A species that occurs on BLM lands and whose viability is at risk, BLM WATCH = Species that may be added to the sensitive species list in future pending new information regarding species status.



## Project Recommendations

This report includes a preliminary species list that may be used during early stages of project or conservation planning. Even if this report indicates that your proposed project location would require a custom review from a biologist, **no review will be returned** until additional project details are provided. **To obtain a project review**, please submit additional details regarding the **type** of project, project **objectives**, anticipated project **duration**, **timing** of project construction, the composition and dimensions/quantities of **materials** that will be utilized for project implementation, any **equipment** that will be used, anticipated **ground disturbance** that will occur, wildlife surveys or observations that have occurred on or near the project site, and **any other relevant details** regarding potential effects of project activities on wildlife or wildlife habitat. **Photographs** of the project site are especially useful.

Although this project report may include management recommendations based on the project location, additional conservation measures may be needed. The Department can not fully assess potential effects and associated management recommendations until a **project type and description** have been submitted and an appropriate **impact buffer** for that project type has been applied. Also, the species list within this report represents an estimation of special status species that could be present at the site of a small-scale project. Species lists for projects that occur across **broader geographic scales** (e.g., one or more counties, multiple habitat types) are more appropriately obtained from the **Department's Biota Information System of New Mexico (BISON-M) database**. Species lists generated by the ERT may contain modeled species distributions in order to predict species occurrences within areas that lack previous wildlife inventories or surveys. This list can be refined using occurrence-based information within BISON-M regarding wildlife-habitat relationships and biological needs for species that might be present within the project footprint.

Burrowing owl (*Athene cunicularia*) may occur within your project area. Burrowing owls are protected from take by the Migratory Bird Treaty Act and under New Mexico state statute. Before any ground disturbing activities occur, the Department recommends that a preliminary burrowing owl survey be conducted by a qualified biologist using the Department's [Burrowing Owl Survey Protocol](#). Should burrowing owls be documented in the project area, please contact the Department or USFWS for further recommendations regarding relocation or avoidance of impacts.

Prairie dog colonies may occur within the vicinity of your project area. Both black-tailed prairie dogs (*Cynomys ludovicianus*) and Gunnison's prairie dogs (*Cynomys gunnisoni*) are designated as New Mexico SGCN, and their colonies provide important habitat for other grassland wildlife. Wherever possible, occupied prairie dog colonies should be left undisturbed, and all project activities should be directed off the colony. Any burrows that are located on the project site should be surveyed by a qualified biologist to determine whether burrows are active or inactive and whether burrowing owls may be utilizing the site. Colonies within the range of the black-tailed prairie dog can be surveyed by a qualified biologist diurnally, year-round using binoculars. Colonies within the range of the Gunnison's prairie dog can be surveyed by a qualified biologist diurnally, using binoculars during the warmer months from April through October and by searching for fairly fresh scat and lack of cobwebs or debris at the mouths of burrows during the cold months (November through March). If ground-disturbing activities cannot be relocated off the prairie dog colony, or if project activities involve control of prairie dogs, the Department recommends live-trapping and relocation of prairie dogs. The Department can provide recommendations regarding suitability of potential translocation areas and procedures.

The proposed project occurs within or near a riparian area. Because riparian areas are important wildlife habitats, the project footprint should avoid removing any riparian vegetation or creating ground disturbance either directly within or affecting the riparian area, unless the project is intended to restore riparian habitat through non-native plant removal and replanting with native species. If your project involves removal of non-native riparian trees or planting of native riparian vegetation, please refer to the Department's habitat handbook guideline for [Restoration and Management of Native and Non-native Trees in Southwestern Riparian Ecosystems](#). The [New Mexico Riparian Habitat Map \(NMRipMap\)](#) may also provide useful information on local riparian habitat composition and structure.

**Disclaimers regarding recommendations:**

- The Department provides technical guidance to support the persistence of all protected species of native fish and wildlife, including game and nongame wildlife species. Species listed within this report include those that have been documented to occur within the project area, and others that may not have been documented but are projected to occur within the project vicinity.
- Recommendations are provided by the Department under the authority of § 17-1-5.1 New Mexico Statutes Annotated 1978, to provide "communication and consultation with federal and other state agencies, local governments and communities, private organizations and affected interests responsible for habitat, wilderness, recreation, water quality and environmental protection to ensure comprehensive conservation services for hunters, anglers and nonconsumptive wildlife users".
- The Department has no authority for management of plants or Important Plant Areas. The New Mexico Endangered Plant Program, under the Energy, Minerals, and Natural Resources Department's Forestry Division, identifies and develops conservation measures necessary to ensure the survival of plant species within New Mexico. Plant status information is provided within this report as a courtesy to users. Recommendations provided within the ERT may not be sufficient to preclude impacts to rare or sensitive plants, unless conservation measures are identified in coordination with the Endangered Plant Program.
- Additional coordination and/or consultation may also be necessary under the federal ESA or National Environmental Policy Act (NEPA). Further site-specific mitigation recommendations may be proposed during ESA consultation and/or NEPA analyses or through coordination with affected federal agencies.

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Eddy County, New Mexico



## Local office

New Mexico Ecological Services Field Office

☎ (505) 346-2525

📠 (505) 346-2542

2105 Osuna Road Ne

Albuquerque, NM 87113-1001

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
  2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.



The following species are potentially affected by activities in this location:

## Birds

NAME	STATUS
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/1923">https://ecos.fws.gov/ecp/species/1923</a>	<u>EXPN</u>
Piping Plover <i>Charadrius melodus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	Threatened

## Clams

NAME	STATUS
Texas Hornshell <i>Popenaias popeii</i> Wherever found There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/919">https://ecos.fws.gov/ecp/species/919</a>	Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

# Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The data in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the Supplemental Information on Migratory Birds and Eagles document to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## Bald & Golden Eagles FAQs

### **What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

### **Proper interpretation and use of your eagle report**

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests

might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

### **How do I know if eagles are breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### ***How is the probability of presence score calculated? The calculation is done in three steps:***

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### **Breeding Season ()**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### **Survey Effort ()**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### **No Data ()**

A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

# Migratory birds

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

## Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

## Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

## Review the FAQs

The FAQs below provide important additional information and resources.

NAME

BREEDING SEASON



**Cactus Wren** *Campylorhynchus brunneicapillus guttatus*

Breeds Mar 5 to Sep 30

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/8834>

**Cassin's Sparrow** *Peucaea cassinii*

Breeds Aug 1 to Oct 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA  
<https://ecos.fws.gov/ecp/species/9512>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

### Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)



Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

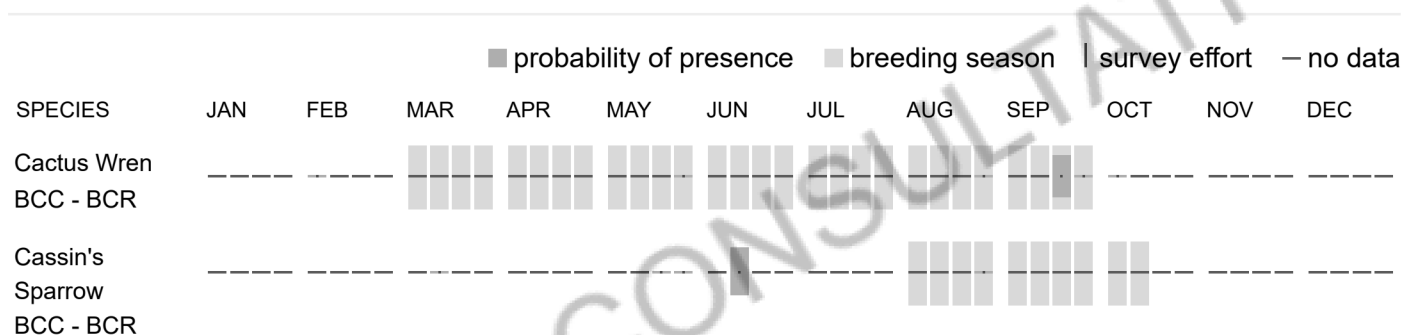
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



## Migratory Bird FAQs

**Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the [Probability of Presence Summary](#). [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **Why are subspecies showing up on my list?**

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential

susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

### **Proper interpretation and use of your migratory bird report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

### **Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### ***How is the probability of presence score calculated? The calculation is done in three steps:***

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability

of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

**Breeding Season ()**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

**Survey Effort ()**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

**No Data ()**

A week is marked as having no data if there were no survey events for that week.

**Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

## Facilities

### Wildlife refuges and fish hatcheries

Refuge and fish hatchery information is not available at this time

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.



### **Data limitations**

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Eddy Area, New Mexico

**3PD to Black Buck Meter Lay Flat  
Line**



July 25, 2025

# Preface

---

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

# Contents

---

**Preface**..... 2

**How Soil Surveys Are Made**.....5

**Soil Map**..... 8

    Soil Map.....9

    Legend.....10

    Map Unit Legend..... 11

    Map Unit Descriptions.....11

        Eddy Area, New Mexico.....13

        UG—Upton gravelly loam, 0 to 9 percent slopes..... 13

**References**..... 15



## How Soil Surveys Are Made

---

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

## Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report  
Soil Map

































Custom Soil Resource Report


### MAP LEGEND






**Area of Interest (AOI)**  
 Area of Interest (AOI)


**Soils**  
 Soil Map Unit Polygons  
 Soil Map Unit Lines  
 Soil Map Unit Points

**Special Point Features**  
 Blowout  
 Borrow Pit  
 Clay Spot  
 Closed Depression  
 Gravel Pit  
 Gravelly Spot  
 Landfill  
 Lava Flow  
 Marsh or swamp  
 Mine or Quarry  
 Miscellaneous Water  
 Perennial Water  
 Rock Outcrop  
 Saline Spot  
 Sandy Spot  
 Severely Eroded Spot  
 Sinkhole  
 Slide or Slip  
 Sodic Spot

 Spoil Area  
 Stony Spot  
 Very Stony Spot  
 Wet Spot  
 Other  
 Special Line Features

**Water Features**  
 Streams and Canals

**Transportation**  
 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

**Background**  
 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico  
Survey Area Data: Version 20, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Page 69 of 149

10

## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UG	Upton gravelly loam, 0 to 9 percent slopes	0.6	100.0%
<b>Totals for Area of Interest</b>		<b>0.6</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

## Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Custom Soil Resource Report

**Eddy Area, New Mexico****UG—Upton gravelly loam, 0 to 9 percent slopes****Map Unit Setting***National map unit symbol: 1w64**Elevation: 1,100 to 4,400 feet**Mean annual precipitation: 7 to 15 inches**Mean annual air temperature: 60 to 70 degrees F**Frost-free period: 200 to 240 days**Farmland classification: Not prime farmland***Map Unit Composition***Upton and similar soils: 96 percent**Minor components: 4 percent**Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Upton****Setting***Landform: Ridges, fans**Landform position (three-dimensional): Side slope, rise**Down-slope shape: Convex**Across-slope shape: Convex**Parent material: Residuum weathered from limestone***Typical profile***H1 - 0 to 9 inches: gravelly loam**H2 - 9 to 13 inches: gravelly loam**H3 - 13 to 21 inches: cemented**H4 - 21 to 60 inches: very gravelly loam***Properties and qualities***Slope: 0 to 9 percent**Depth to restrictive feature: 7 to 20 inches to petrocalcic**Drainage class: Well drained**Runoff class: High**Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high  
(0.01 to 0.60 in/hr)**Depth to water table: More than 80 inches**Frequency of flooding: None**Frequency of ponding: None**Calcium carbonate, maximum content: 75 percent**Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)**Sodium adsorption ratio, maximum: 1.0**Available water supply, 0 to 60 inches: Very low (about 1.4 inches)***Interpretive groups***Land capability classification (irrigated): None specified**Land capability classification (nonirrigated): 7s**Hydrologic Soil Group: D**Ecological site: R070BC025NM - Shallow**Hydric soil rating: No*

Custom Soil Resource Report

**Minor Components**

**Reagan**

*Percent of map unit:* 1 percent

*Ecological site:* R070BC007NM - Loamy

*Hydric soil rating:* No

**Atoka**

*Percent of map unit:* 1 percent

*Ecological site:* R070BC007NM - Loamy

*Hydric soil rating:* No

**Atoka**

*Percent of map unit:* 1 percent

*Ecological site:* R070BC007NM - Loamy

*Hydric soil rating:* No

**Upton**

*Percent of map unit:* 1 percent

*Ecological site:* R070BC025NM - Shallow

*Hydric soil rating:* No



## References

---

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

## **ATTACHMENT 5 – NMSLO LOAMY (L) SITES SEED MIXTURE**

**NMSLO Seed Mix****Loamy (L)****LOAMY (L) SITES SEED MIXTURE:**

COMMON NAME	VARIETY	APPLICATION RATE (PLS/Acre)	DRILL BOX
<b>Grasses:</b>			
Black grama	VNS, Southern	1.0	D
Blue grama	Lovington	1.0	D
Sideoats grama	Vaughn, El Reno	4.0	F
Sand dropseed	VNS, Southern	2.0	S
Alkali sacaton	VNS, Southern	1.0	
Little bluestem	Cimarron, Pastura	1.5	F
<b>Forbs:</b>			
Firewheel ( <i>Gaillardia</i> )	VNS, Southern	1.0	D
<b>Shrubs:</b>			
Fourwing saltbush	Marana, Santa Rita	1.0	D
Common winterfat	VNS, Southern	0.5	F
<b>Total PLS/acre</b>		<b>18.0</b>	

S = Small seed drill box, D = Standard seed drill box, F = Fluffy seed drill box

VNS = Variety Not Stated, PLS = Pure Live Seed

- Seed mixes should be provided in bags separating seed types into the three categories: small (S), standard (D) and fluffy (F).
- VNS, Southern – Seed should be from a southern latitude collection of this species.
- Double seed application rate for broadcast or hydroseeding.
- If one species is not available, contact the SLO for an approved substitute; alternatively the SLO may require other species proportionately increased.
- Additional information on these seed species can be found on the USDA Plants Database website at <http://plants.usda.gov>.



## **ATTACHMENT 6 – LABORATORY ANALYTICAL REPORTS**





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 08, 2025

WILL KIERDORF

RANGER ENVIRONMENTAL SERVICES, INC.

PO BOX 201179

AUSTIN, TX 78729

RE: 3PD TO BLACKBUCK METER LAYFLAT LINE

Enclosed are the results of analyses for samples received by the laboratory on 07/01/25 13:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LII	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 7A / 0' (H253967-01)**

BTX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2025	ND	2.02	101	2.00	2.29	
Toluene*	<0.050	0.050	07/01/2025	ND	2.19	110	2.00	2.19	
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	2.03	101	2.00	0.961	
Total Xylenes*	<0.150	0.150	07/01/2025	ND	6.10	102	6.00	1.57	
Total BTX	<0.300	0.300	07/01/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: KH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	07/02/2025	ND	416	104	400	3.77	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 90.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 87.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 7A / 1' (H253967-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2025	ND	2.02	101	2.00	2.29	
Toluene*	<0.050	0.050	07/01/2025	ND	2.19	110	2.00	2.19	
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	2.03	101	2.00	0.961	
Total Xylenes*	<0.150	0.150	07/01/2025	ND	6.10	102	6.00	1.57	
Total BTEX	<0.300	0.300	07/01/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/02/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 95.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 8A / 0' (H253967-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	2.02	101	2.00	2.29		
Toluene*	<0.050	0.050	07/01/2025	ND	2.19	110	2.00	2.19		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	2.03	101	2.00	0.961		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	6.10	102	6.00	1.57		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 96.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 92.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 8A / 1' (H253967-04)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	2.02	101	2.00	2.29		
Toluene*	<0.050	0.050	07/01/2025	ND	2.19	110	2.00	2.19		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	2.03	101	2.00	0.961		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	6.10	102	6.00	1.57		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 94.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 1A / 0' (H253967-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 79.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 75.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 1A / 1' (H253967-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 86.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 83.2 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 3A / 0' (H253967-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 94.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 3A / 1' (H253967-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	189	94.3	200	1.71	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	204	102	200	2.87	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 75.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 6 / 0' (H253967-09)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2040	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 117 % 44.4-145

Surrogate: 1-Chlorooctadecane 66.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 6 / 4' (H253967-10)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	464	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40		
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17		
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND						

Surrogate: 1-Chlorooctane 124 % 44.4-145

Surrogate: 1-Chlorooctadecane 70.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 7 / 0' (H253967-11)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3120	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 125 % 44.4-145

Surrogate: 1-Chlorooctadecane 69.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 7 / 4' (H253967-12)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	07/02/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 116 % 44.4-145

Surrogate: 1-Chlorooctadecane 64.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 8 / 0' (H253967-13)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2080	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 121 % 44.4-145

Surrogate: 1-Chlorooctadecane 66.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 8 / 4' (H253967-14)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 125 % 44.4-145

Surrogate: 1-Chlorooctadecane 67.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 9 / 0' (H253967-15)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 116 % 44.4-145

Surrogate: 1-Chlorooctadecane 64.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 9 / 4' (H253967-16)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	224	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 118 % 44.4-145

Surrogate: 1-Chlorooctadecane 64.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 6A / 0' (H253967-17)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 127 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 6A / 1' (H253967-18)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 120 % 44.4-145

Surrogate: 1-Chlorooctadecane 66.5 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 1 / 0' (H253967-19)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3000	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 125 % 44.4-145

Surrogate: 1-Chlorooctadecane 69.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 1 / 4' (H253967-20)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	07/02/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 123 % 44.4-145

Surrogate: 1-Chlorooctadecane 68.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 2 / 0' (H253967-21)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 124 % 44.4-145

Surrogate: 1-Chlorooctadecane 69.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 2 / 4' (H253967-22)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 119 % 44.4-145

Surrogate: 1-Chlorooctadecane 66.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 3 / 0' (H253967-23)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEx	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1800	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 128 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 3 / 4' (H253967-24)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/01/2025	ND	1.90	95.0	2.00	1.53		
Toluene*	<0.050	0.050	07/01/2025	ND	1.96	98.0	2.00	1.96		
Ethylbenzene*	<0.050	0.050	07/01/2025	ND	1.95	97.5	2.00	2.87		
Total Xylenes*	<0.150	0.150	07/01/2025	ND	5.75	95.9	6.00	3.12		
Total BTEX	<0.300	0.300	07/01/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	624	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 128 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.5 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 4 / 0' (H253967-25)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2025	ND	1.93	96.4	2.00	10.3		
Toluene*	<0.050	0.050	07/02/2025	ND	1.95	97.7	2.00	7.84		
Ethylbenzene*	<0.050	0.050	07/02/2025	ND	1.98	98.9	2.00	6.99		
Total Xylenes*	<0.150	0.150	07/02/2025	ND	5.85	97.5	6.00	6.54		
Total BTEX	<0.300	0.300	07/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 108 % 44.4-145

Surrogate: 1-Chlorooctadecane 61.2 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 4 / 4' (H253967-26)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2025	ND	1.93	96.4	2.00	10.3		
Toluene*	<0.050	0.050	07/02/2025	ND	1.95	97.7	2.00	7.84		
Ethylbenzene*	<0.050	0.050	07/02/2025	ND	1.98	98.9	2.00	6.99		
Total Xylenes*	<0.150	0.150	07/02/2025	ND	5.85	97.5	6.00	6.54		
Total BTEX	<0.300	0.300	07/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 114 % 44.4-145

Surrogate: 1-Chlorooctadecane 64.0 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 5 / 0' (H253967-27)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2025	ND	1.93	96.4	2.00	10.3		
Toluene*	<0.050	0.050	07/02/2025	ND	1.95	97.7	2.00	7.84		
Ethylbenzene*	<0.050	0.050	07/02/2025	ND	1.98	98.9	2.00	6.99		
Total Xylenes*	<0.150	0.150	07/02/2025	ND	5.85	97.5	6.00	6.54		
Total BTEx	<0.300	0.300	07/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	07/02/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 115 % 44.4-145

Surrogate: 1-Chlorooctadecane 66.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/01/2025	Sampling Date:	06/30/2025
Reported:	07/08/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO NM		

**Sample ID: HA - 5 / 5' (H253967-28)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/02/2025	ND	1.93	96.4	2.00	10.3		
Toluene*	<0.050	0.050	07/02/2025	ND	1.95	97.7	2.00	7.84		
Ethylbenzene*	<0.050	0.050	07/02/2025	ND	1.98	98.9	2.00	6.99		
Total Xylenes*	<0.150	0.150	07/02/2025	ND	5.85	97.5	6.00	6.54		
Total BTEX	<0.300	0.300	07/02/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/02/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/01/2025	ND	183	91.4	200	2.40	
DRO >C10-C28*	<10.0	10.0	07/01/2025	ND	187	93.4	200	3.17	
EXT DRO >C28-C36	<10.0	10.0	07/01/2025	ND					

Surrogate: 1-Chlorooctane 126 % 44.4-145

Surrogate: 1-Chlorooctadecane 71.6 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



---

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

### Notes and Definitions

- S-09            The surrogate recovery in the LCS, MS and/or MSD was bias high. The surrogate recovery in associated samples was within acceptance criteria and the samples were ND. No negative impact on the data is expected.
- ND             Analyte NOT DETECTED at or above the reporting limit
- RPD            Relative Percent Difference
- \*\*              Samples not received at proper temperature of 6°C or below.
- \*\*\*             Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Mike Snyder", is written over a horizontal line.

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 3

Page 31 of 33

Company Name: Ranger Environmental Services, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																
Project Manager: Will Kierdorf				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>TPH: 8015 EXT</div> <div>BTEX 8021B/5030 or BTEX 8260</div> <div>Chloride (300 or 4500)</div> </div>																
Address: PO Box 201179				Company: EOG Resources Inc																				
City: Austin State: TX Zip: 78720				Attn: Chase Settle																				
Phone #: 512-289-3272 Fax #: 512-335-0527				Address: 5509 Champions Dr.																				
Project #: 5375 Project Owner:				City: Midland																				
Project Name: 3PD to Blackbuck Meter Layflat Line				State: TX Zip: 79706																				
Project Location: Eddy County, NM				Phone #:																				
Sampler Name: J. Martinez				Fax #:																				
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME										
HA-53947	HA-7A/0'	G	1			X					X		6/30/2025	1608	X	X	X							
1	HA-7A/1'	G	1			X					X		6/30/2025	1614	X	X	X							
2	HA-8A/0'	G	1			X					X		6/30/2025	1620	X	X	X							
3	HA-8A/1'	G	1			X					X		6/30/2025	1622	X	X	X							
4	HA-1A/0'	G	1			X					X		6/30/2025	1630	X	X	X							
5	HA-1A/1'	G	1			X					X		6/30/2025	1632	X	X	X							
6	HA-3A/0'	G	1			X					X		6/30/2025	1640	X	X	X							
7	HA-3A/1'	G	1			X					X		6/30/2025	1642	X	X	X							
8													6/30/2025											
9													6/30/2025											

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 7/1/25	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: 13:12		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		Please hold the following samples pending initial results:	
Delivered By: (Circle One)	28- / 403-	Sample Condition	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:	31- / #140	Cool Intact		
		<input type="checkbox"/> Yes <input type="checkbox"/> No		
		<input type="checkbox"/> Yes <input type="checkbox"/> No		

Email results to: will@rangerenv.com

Standard



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 32 of 33

Company Name: Ranger Environmental Services, Inc.						<b>BILL TO</b>						<b>ANALYSIS REQUEST</b>													
Project Manager: Will Kierdorf						P.O. #:																			
Address: PO Box 201179						Company: EOG Resources Inc																			
City: Austin State: TX Zip: 78720						Attn: Chase Settle																			
Phone #: 512-289-3272 Fax #: 512-335-0527						Address: 5509 Champions Dr.																			
Project #: 5375 Project Owner:						City: Midland																			
Project Name: 3PD to Blackbuck Meter Layflat Line						State: TX Zip: 79706																			
Project Location: Eddy County, NM						Phone #:																			
Sampler Name: J.Martinez						Fax #:																			
FOR LAB USE ONLY																									
Lab I.D.		Sample I.D.		(GRAB OR C)OMP.	# CONTAINERS	MATRIX				PRESERV.	SAMPLING														
						GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE: ICE / COOL OTHER :	DATE	TIME											
HJ2534U1		HA-6/0'	G 1		X						X	6/30/2025	1350	X X X											
4		HA-6/4'	G 1		X						X	6/30/2025	1408	X X X											
10		HA-7/0'	G 1		X						X	6/30/2025	1416	X X X											
11		HA-7/4'	G 1		X						X	6/30/2025	1434	X X X											
12		HA-8/0'	G 1		X						X	6/30/2025	1452	X X X											
13		HA-8/4'	G 1		X						X	6/30/2025	1510	X X X											
14		HA-9/0'	G 1		X						X	6/30/2025	1538	X X X											
15		HA-9/4'	G 1		X						X	6/30/2025	1550	X X X											
16		HA-6A/0'	G 1		X						X	6/30/2025	1600	X X X											
17		HA-6A/1'	G 1		X						X	6/30/2025	1604	X X X											
18																									
PLEASE NOTE: Liability at HA-TAG analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.																									
Relinquished By:				Date: 7/1/25	Received By:				Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:																
				Time: 1312	apawo				Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #:																
Relinquished By:				Date:	Received By:				REMARKS:																
				Time:					Please hold the following samples pending initial results:																
Delivered By: (Circle One)				Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				CHECKED BY: (Initials) AR																	
Sampler - UPS - Bus - Other: 2.8' / CWO-3- 3.1' #140												Email results to: will@rangerenv.com													





101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3 of 3

Page 33 of 33

Company Name: Ranger Environmental Services, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																					
Project Manager: Will Kierdorf				P.O. #:																									
Address: PO Box 201179				Company: EOG Resources Inc																									
City: Austin State: TX Zip: 78720				Attn: Chase Settle																									
Phone #: 512-289-3272 Fax #: 512-335-0527				Address: 5509 Champions Dr.																									
Project #: 5375 Project Owner:				City: Midland																									
Project Name: 3PD to Blackbuck Meter Layflat Line				State: TX Zip: 79706																									
Project Location: Eddy County, NM				Phone #:																									
Sampler Name: J.Martinez				Fax #:																									
FOR LAB USE ONLY																													
Lab I.D.		Sample I.D.		(GRAB OR (C)OMP. # CONTAINERS		MATRIX														PRESERV.		SAMPLING		TPH: 8015 EXT		BTX 8021B/5030 or BTX 8260		Chloride (300 or 4500)	
1253967																													
19		HA-1/0'		G 1		GROUNDWATER														X		X		6/30/2025		1010		X X X	
20		HA-1/4'		G 1		WASTEWATER														X		X		6/30/2025		1020		X X X	
21		HA-2/0'		G 1		SOIL														X		X		6/30/2025		1130		X X X	
22		HA-2/4'		G 1		OIL														X		X		6/30/2025		1138		X X X	
23		HA-3/0'		G 1		SLUDGE														X		X		6/30/2025		1220		X X X	
24		HA-3/4'		G 1		OTHER :		X		X		6/30/2025		1228		X X X													
25		HA-4/0'		G 1		ACID/BASE:		X		X		6/30/2025		1300		X X X													
26		HA-4/4'		G 1		ICE / COOL		X		X		6/30/2025		1318		X X X													
27		HA-5/0'		G 1		OTHER :		X		X		6/30/2025		1330		X X X													
28		HA-5/5'		G 1		ACID/BASE:		X		X		6/30/2025		1338		X X X													
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.																													
Relinquished By:				Date: 7/1/25				Received By:				Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:																	
				Time:				apc				Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:																	
Relinquished By:				Date:				Received By:				REMARKS:																	
				Time:								Please hold the following samples pending initial results:																	
Delivered By: (Circle One) 28- / C40-30				Sample Condition Cool Intact				CHECKED BY: (Initials) AP				Email results to: will@rangerenv.com																	
Sampler - UPS - Bus - Other: 3-1- / #140				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								Standard																	



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 23, 2025

WILL KIERDORF

RANGER ENVIRONMENTAL SERVICES, INC.

PO BOX 201179

AUSTIN, TX 78729

RE: 3PD TO BLACKBUCK METER LAYFLAT LINE

Enclosed are the results of analyses for samples received by the laboratory on 07/22/25 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LII	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: W - 1 (H254421-01)**

BTX 8021B			mg/kg		Analyzed By: JH				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28	
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144	
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754	
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942	
Total BTX	<0.300	0.300	07/22/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.2 % 71.5-134

Chloride, SM4500Cl-B			mg/kg		Analyzed By: AC				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/23/2025	ND	432	108	400	3.77	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 88.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 96.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: W - 2 (H254421-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 90.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 92.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 1 (H254421-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 84.8 % 44.4-145

Surrogate: 1-Chlorooctadecane 86.3 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 2 (H254421-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 90.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 91.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 3 (H254421-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 88.5 % 44.4-145

Surrogate: 1-Chlorooctadecane 89.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 4 (H254421-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 82.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.1 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 5 (H254421-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 81.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 81.4 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 6 (H254421-08)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 83.6 % 44.4-145

Surrogate: 1-Chlorooctadecane 82.8 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 7 (H254421-09)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/22/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/22/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/22/2025	ND					

Surrogate: 1-Chlorooctane 90.3 % 44.4-145

Surrogate: 1-Chlorooctadecane 89.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 8 (H254421-10)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/23/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/23/2025	ND					

Surrogate: 1-Chlorooctane 89.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 89.6 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 9 (H254421-11)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/23/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/23/2025	ND					

Surrogate: 1-Chlorooctane 89.2 % 44.4-145

Surrogate: 1-Chlorooctadecane 93.2 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: B - 10 (H254421-12)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEX	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/23/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/23/2025	ND					

Surrogate: 1-Chlorooctane 74.7 % 44.4-145

Surrogate: 1-Chlorooctadecane 75.5 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/22/2025	Sampling Date:	07/22/2025
Reported:	07/23/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LI	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: HA - 3A.1 / 4' (H254421-13)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/22/2025	ND	2.01	100	2.00	1.28		
Toluene*	<0.050	0.050	07/22/2025	ND	2.11	106	2.00	0.144		
Ethylbenzene*	<0.050	0.050	07/22/2025	ND	2.09	105	2.00	0.754		
Total Xylenes*	<0.150	0.150	07/22/2025	ND	6.18	103	6.00	0.942		
Total BTEx	<0.300	0.300	07/22/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/23/2025	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2025	ND	192	95.8	200	0.146	
DRO >C10-C28*	<10.0	10.0	07/23/2025	ND	211	106	200	2.93	
EXT DRO >C28-C36	<10.0	10.0	07/23/2025	ND					

Surrogate: 1-Chlorooctane 81.0 % 44.4-145

Surrogate: 1-Chlorooctadecane 80.9 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



---

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

### Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 2

Page 16 of 17

Company Name: Ranger Environmental Services, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																				
Project Manager: Will Kierdorf				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div>TPH: 8015 EXT</div> <div>BTEX 8021B/5030 or BTEX 8260</div> <div>Chloride (SM 4500)</div> <div>HOLD</div> </div>																				
Address: PO Box 201179				Company: EOG Resources																								
City: Austin State: TX Zip: 78720				Attn: Chase Settle																								
Phone #: 512-497-1556 Fax #: 512-335-0527				Address: 104 S. 4th Street																								
Project #: 5375 Project Owner:				City: Artesia																								
Project Name: <u>3PD to Black Buck Meter Lay Flat Line</u>				State: NM Zip: 88210																								
Project Location: Rural Eddy County, NM				Phone #: 575-748-1471																								
Sampler Name: J. Martinez				Fax #:																								
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																				
Lab I.D.	Sample I.D.	(G)RAB OR (C)ON	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME														
H054401																												
1	W-1	G	1			X				X			7/22/25	1000	X	X	X											
2	W-2	G	1											1010														
3	B-1	G	1											1012														
4	B-2	G	1											1014														
5	B-3	G	1											1016														
6	B-4	G	1											1026														
7	B-5	G	1											1026														
8	B-6	G	1											1032														
9	B-7	G	1											1034														
10	B-8	G	1											1040														
11	B-7	C	1											1046														
12	B-10	B	1											1048														

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 7/22/25 Time: 1500	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No REMARKS:
Relinquished By:	Date:	Received By:	Please hold the following samples pending initial results: <div style="border: 2px solid blue; border-radius: 50%; padding: 10px; display: inline-block;">24 hr Rush</div>
Time:	Time:		
Delivered By: (Circle One) 2-8-1/Cto3-1	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other: 3-12-140			

FORM 000 R 2.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476





101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2 of 2

Page 17 of 17

Company Name: Ranger Environmental Services, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																	
Project Manager: Will Kierdorf				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div>TPH: 8015 EXT</div> <div>BTEX 8021B/5030 or BTEX 8260</div> <div>Chloride (SM 4500)</div> <div>HOLD</div> </div>																																	
Address: PO Box 201179				Company: EOG Resources																																					
City: Austin State: TX Zip: 78720				Attn: Chase Settle																																					
Phone #: 512-497-1556 Fax #: 512-335-0527				Address: 104 S. 4th Street																																					
Project #: 5375 Project Owner:				City: Artesia																																					
Project Name: <u>3PD to Blackbox Meter Lay flat Line</u>				State: NM Zip: 88210																																					
Project Location: Rural Eddy County, NM				Phone #: 575-748-1471																																					
Sampler Name: J. Martinez				Fax #:																																					
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		(G)RAB OR (C)ON		# CONTAINERS		MATRIX				PRESERV.		SAMPLING																									
						GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME															
		13		HA-3A.1 / 4'		G		1		X								X		7/22/25		1052		X		X		X													
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	
						G		1																																	





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 01, 2025

WILL KIERDORF

RANGER ENVIRONMENTAL SERVICES, INC.

PO BOX 201179

AUSTIN, TX 78729

RE: 3PD TO BLACKBUCK METER LAYFLAT LINE

Enclosed are the results of analyses for samples received by the laboratory on 07/31/25 11:39.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received:	07/31/2025	Sampling Date:	07/31/2025
Reported:	08/01/2025	Sampling Type:	Soil
Project Name:	3PD TO BLACKBUCK METER LAYFLAT LII	Sampling Condition:	Cool & Intact
Project Number:	5375	Sample Received By:	Alyssa Parras
Project Location:	EOG - EDDY CO NM		

**Sample ID: HA - 3.1 / 4' (H254666-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2025	ND	1.87	93.3	2.00	4.31	
Toluene*	<0.050	0.050	08/01/2025	ND	1.93	96.5	2.00	3.18	
Ethylbenzene*	<0.050	0.050	08/01/2025	ND	1.92	96.1	2.00	1.62	
Total Xylenes*	<0.150	0.150	08/01/2025	ND	5.72	95.3	6.00	1.81	
Total BTEX	<0.300	0.300	08/01/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/31/2025	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/31/2025	ND	192	96.0	200	2.80	
DRO >C10-C28*	<10.0	10.0	07/31/2025	ND	186	92.8	200	3.87	
EXT DRO >C28-C36	<10.0	10.0	07/31/2025	ND					

Surrogate: 1-Chlorooctane 80.1 % 44.4-145

Surrogate: 1-Chlorooctadecane 75.7 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



---

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 2

Page 4 of 4

Company Name: <u>Ranger Environmental Services Inc.</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																					
Project Manager: <u>Will Kiendorf</u>				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TTH: 8015 EXT</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX: 8021 B/5030 or BTEX 8260</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride (SM 4500)</div> </div>																																					
Address: <u>PO Box 201179</u>				Company: <u>Ranger Environmental</u>																																									
City: <u>Austin</u> State: <u>TX</u> Zip: <u>78720</u>				Attn: <u>Will Kiendorf</u>																																									
Phone #: <u>512-497-1556</u> Fax #: <u>512-335-0527</u>				Address: <u>PO Box 201179</u>																																									
Project #: <u>5375</u> Project Owner:				City: <u>Austin</u>																																									
Project Name: <u>3PD to Blackbuck Meter Layflat Line</u>				State: <u>TX</u> Zip: <u>78720</u>																																									
Project Location: <u>Rural Eddy County, NM</u>				Phone #: <u>512-497-1556</u>																																									
Sampler Name: <u>J. Martinez</u>				Fax #: <u>512-335-0527</u>																																									
FOR LAB USE ONLY		Lab I.D.		Sample I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING																															
										GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER:		ACID/BASE:		ICE / COOL		OTHER:		DATE		TIME															
		<u>HA54666</u>		<u>HA-3.1/4'</u>		<u>G</u>		<u>1</u>						<u>X</u>								<u>X</u>		<u>7/31/25</u>		<u>1000</u>		<u>X</u>		<u>X</u>		<u>X</u>													

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>[Signature]</u>		Date: <u>7/31/25</u>		Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:		All Results are emailed. Please provide Email address:	
Relinquished By: <u>[Signature]</u>		Time: <u>1139</u>		Received By: <u>[Signature]</u>		REMARKS:		Email results to: <u>will@ranger-env.com</u>	
Delivered By: (Circle One)		Observed Temp. °C <u>4.2</u>		Sample Condition		CHECKED BY: (Initials)		Turnaround Time: <u>Standard</u> <input type="checkbox"/> <u>Rush</u> <input checked="" type="checkbox"/>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C <u>4.5</u>		Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>		<u>AD</u>		Thermometer ID #140 Correction Factor +0.3°C	
				Cool <input type="checkbox"/> Intact <input type="checkbox"/>				Bacteria (only) Sample Condition Cool <input type="checkbox"/> Intact <input type="checkbox"/>	
				No <input type="checkbox"/> Yes <input type="checkbox"/>				No <input type="checkbox"/> Yes <input type="checkbox"/>	
								Observed Temp. °C Corrected Temp. °C	

FORM-006 R 3.0 02/12/25

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 01, 2025

WILL KIERDORF

RANGER ENVIRONMENTAL SERVICES, INC.

PO BOX 201179

AUSTIN, TX 78729

RE: 3PD BACKFILL SOURCE

Enclosed are the results of analyses for samples received by the laboratory on 07/31/25 11:39.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

RANGER ENVIRONMENTAL SERVICES, INC.  
 WILL KIERDORF  
 PO BOX 201179  
 AUSTIN TX, 78729  
 Fax To: (512) 335-0527

Received: 07/31/2025  
 Reported: 08/01/2025  
 Project Name: 3PD BACKFILL SOURCE  
 Project Number: 5375  
 Project Location: EOG - EDDY CO NM

Sampling Date: 07/31/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Alyssa Parras

**Sample ID: TS - 1 (H254667-01)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/31/2025	ND	1.76	88.0	2.00	2.68	
Toluene*	<0.050	0.050	07/31/2025	ND	1.81	90.7	2.00	0.471	
Ethylbenzene*	<0.050	0.050	07/31/2025	ND	1.85	92.3	2.00	0.790	
Total Xylenes*	<0.150	0.150	07/31/2025	ND	5.61	93.6	6.00	0.646	
Total BTX	<0.300	0.300	07/31/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/31/2025	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/31/2025	ND	192	96.0	200	2.80	
DRO >C10-C28*	<10.0	10.0	07/31/2025	ND	186	92.8	200	3.87	
EXT DRO >C28-C36	<10.0	10.0	07/31/2025	ND					

Surrogate: 1-Chlorooctane 66.9 % 44.4-145

Surrogate: 1-Chlorooctadecane 63.6 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

### Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 1

Page 4 of 4

Company Name: Ranger Environmental Services, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																					
Project Manager: Will Kierdorf				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div>TPH: 8015 EXT</div> <div>BTEX 8021B/5030 or BTEX 8260</div> <div>Chloride (SM 4500)</div> <div>HOLD</div> </div>																					
Address: PO Box 201179				Company: EOG Resources																									
City: Austin State: TX Zip: 78720				Attn: Chase Settle																									
Phone #: 512-497-1556 Fax #: 512-335-0527				Address: 104 S. 4th Street																									
Project #: 5375 Project Owner:				City: Artesia																									
Project Name: <u>3PD Backfill Source</u>				State: NM Zip: 88210																									
Project Location: Rural Eddy County, NM				Phone #: 575-748-1471																									
Sampler Name: J. Martinez				Fax #:																									
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING																					
Lab I.D.	Sample I.D.	GRAB OR (CON)	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME															
<u>H2S-74667</u>	<u>TS-1</u>	G	1			X							<u>7/31/25</u>	<u>0908</u>	X	X	X												
		G	1																										
		G	1																										
		G	1																										
		G	1																										
		G	1																										
		G	1																										
		G	1																										
		G	1																										
		G	1																										
		G	1																										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: <u>7/31/25</u>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <u>11:39</u>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:		Please hold the following samples pending initial results:	
Delivered By: (Circle One) <u>CF+0.3c #140</u>	Sample Condition	CHECKED BY: (Initials) <u>AP</u>	<u>Email Results to:</u> <u>will@rangerenv.com</u>	
Sampler - UPS - Bus - Other: <u>H.2c / 4.5c</u>	<input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No			

FORM 888-R 2.0

† Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

## **ATTACHMENT 7 – NMOCD AND NMOCD CORRESPONDENCE**

to Chase Settle ▾

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o Chase Settle for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2514235896.

The sampling event is expected to take place:

**When:** 07/22/2025 @ 08:00

**Where:** J-01-25S-27E 0 FNL 0 FEL (32.1575569,-104.142566)

**Additional Information:** Will Kierdorf  
512-335-1785

**Additional Instructions:** 32.157420, -104.142593

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**
- **If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**

1220 South St. Francis Drive  
Santa Fe, NM 87505

Subject: (Sampling Notification) EOG Resources, Inc.-3PD Box to Blackbuck Meter (nAPP2514235896)-05-05-2025



**Chase Settle** <Chase\_Settle@eogresources.com>  
to eco@nmslo.gov ▾

8:14 AM (17 minutes ago)

ECO,

All sampling details can be found in the attached email as well as the body this email below.

The sampling event is expected to take place:

**When:** 07/22/2025 @ 08:00  
**Where:** J-01-25S-27E 0 FNL 0 FEL (32.1575569,-104.142566)

**Additional Information:** Will Kierdorf  
512-335-1785

**Additional Instructions:** 32.157420, -104.142593

Thank you,

**Chase Settle**  
Environmental Specialist

EOG Resources, Inc.  
575-703-6537



One attachment • Scanned by Gmail ⓘ



**OCDOnline@state.nm.us**

1:41 PM (16 minutes ago)

to James\_kennedy ▾

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nAPP2514235896.

The sampling event is expected to take place:

**When:** 07/31/2025 @ 08:00

**Where:** J-01-25S-27E 0 FNL 0 FEL (32.1575569,-104.142566)

**Additional Information:** Chase Settle 575-703-6537

**Additional Instructions:** J-01-25S-27E; Eddy County, NM

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.
- If confirmation sampling is going to take place over multiple days, individual C-141N applications must be submitted for each sampling date. Date ranges are not currently accepted on the C-141N application.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505





Will Kierdorf &lt;will@rangerenv.com&gt;

**(4 day Sample notification) EOG-3PD to Blackbuck Meter Lay Flat Line - NAPP2514235896-05/05/2025**

1 message

**James Kennedy** <James\_Kennedy@eogresources.com>

Thu, Jul 24, 2025 at 1:45 PM

To: "eco@nmslo.gov" &lt;eco@nmslo.gov&gt;

Cc: Chase Settle &lt;Chase\_Settle@eogresources.com&gt;, Will Kierdorf &lt;will@rangerenv.com&gt;

Eco,

We will be conducting sampling at the above referenced site on 07/31/2025 at 8 am. Please see details below:

Site Name	3PD to Blackbuck Meter Lay Flat Line
Location	J-01-25S-27E; Eddy County, NM
Incident ID	NAPP2514235896
Source & Description of Activities	Confirmation sampling
Expected Duration for Activities	07/31/2025
Env Consultant	Ranger Environmental Services, LLC
Contractor	NA
Sampling Notification Required	Yes - NMSLO & NMOCD - 7/31/2025 @ 0800
Sq ft and Sample Number	200 ft2 & 1 Sample
Core Rig Boring	No
Surface Owner	NMSLO

Regards,  
James Kennedy

**James F. Kennedy**  
Environmental Supervisor  
Midland Division  
C: 432-258-4346  
O: 432-848-9146



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**

QUESTIONS

Action 491719

**QUESTIONS**

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2514235896
Incident Name	NAPP2514235896 3PD BOX TO BLACKBUCK METER LAY FLAT LINE @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

**Location of Release Source**

Please answer all the questions in this group.

Site Name	3PD Box to Blackbuck Meter Lay Flat Line
Date Release Discovered	05/05/2025
Surface Owner	State

**Incident Details**

Please answer all the questions in this group.

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Pipeline (Any)   Produced Water   Released: 30 BBL   Recovered: 25 BBL   Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Responsible party was undetermined until today, May 22, 2025.

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**

QUESTIONS, Page 2

Action 491719

**QUESTIONS (continued)**

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Chase Settle Title: Safety & Environmental Rep II Email: chase_settle@eogresources.com Date: 06/04/2025
--	--

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**

QUESTIONS, Page 3

Action 491719

**QUESTIONS (continued)**

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Site Characterization</b>	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

<b>Remediation Plan</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	3120
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	06/23/2025
On what date will (or did) the final sampling or liner inspection occur	07/31/2025
On what date will (or was) the remediation complete(d)	07/31/2025
What is the estimated surface area (in square feet) that will be reclaimed	1810
What is the estimated volume (in cubic yards) that will be reclaimed	88
What is the estimated surface area (in square feet) that will be remediated	1810
What is the estimated volume (in cubic yards) that will be remediated	88
<i>These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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**

QUESTIONS, Page 4

Action 491719

**QUESTIONS (continued)**

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	LEA LAND LANDFILL [fEEM0112342028]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Chase Settle Title: Safety & Environmental Rep II Email: chase_settle@eogresources.com Date: 08/04/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

QUESTIONS, Page 5

Action 491719

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No



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**

QUESTIONS, Page 6

Action 491719

**QUESTIONS (continued)**

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	488488
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/31/2025
What was the (estimated) number of samples that were to be gathered	1
What was the sampling surface area in square feet	200

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1810
What was the total volume (cubic yards) remediated	88
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1810
What was the total volume (in cubic yards) reclaimed	88
Summarize any additional remediation activities not included by answers (above)	Full Closure Report with all details is attached.
<i>The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Chase Settle Title: Safety & Environmental Rep II Email: chase_settle@eogresources.com Date: 08/04/2025

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

QUESTIONS, Page 7  
  
Action 491719

QUESTIONS (continued)

Operator:  EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID:  7377
	Action Number:  491719
	Action Type:  [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 491719

CONDITIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 491719
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvez	None	8/25/2025