

BD P-4 EOL Remediation Summary & Closure Report

**NMOCD Incident No. nAPP2110241347
UL "P", Sec. 4, T22S, R37E
32.416894°, -103.161316°
Lea County, New Mexico**

June 25, 2024



PREPARED ON BEHALF OF

Rice Operating Company
122 West Taylor
Hobbs, NM 88240

PREPARED BY

Tasman, Inc.
2620 W. Marland Blvd.
Hobbs, NM 88240



BD P-4 EOL - nAPP2110241347
Remediation Summary and Closure Report



June 25, 2024

Rice Operating Company (ROC)
122 West Taylor, Hobbs, NM 88240

Attn: Ms. Katie Jones Davis
Email: kjones@riceswd.com

Re: Remediation Summary and Closure Report
BD P-4 EOL – BD SWD System
UL “P”, Section 4, Township 22 South, Range 37 East | Lea County, New Mexico
Rice Operating Company Project No. 1R426-06 | Tasman Project No. 2251

Dear Ms. Davis,

Tasman, Inc. (Tasman) is pleased to submit this Remediation Summary and Closure Request for the above referenced site. Site assessment and remediation activities were executed in accordance with the New Mexico Oil Conservation Division (NMOCD) regulations concerning the remediation of the former P-4 EOL junction box.

Tasman conducted additional assessment and remediation activities, identifying an approximately 15,162-square foot area impacted by the former junction box. Heavy equipment was used to remove approximately 1,008 cubic yards of impacted material from the area. Based on laboratory analytical results from soil samples collected during confirmation sampling activities, impacted soil has been remediated below the applicable NMOCD Action Levels and in accordance with NMOCD standards. Additional project details are provided in the attached summary report.

Tasman appreciates the opportunity to provide environmental services to Rice Operating Company. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Sincerely,
Tasman, Inc.

Brett Dennis
Project Manager
bdennis@tasman-geo.com

Kyle Norman
SW Regional Manager
knorman@tasman-geo.com

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1.0 INTRODUCTION

Tasman, Inc. (Tasman) is pleased to submit this Remediation Summary and Closure Report for the BD P-4 EOL (site) on behalf of Rice Operating Company (ROC), documenting the results of field activities conducted according to the Junction Box Work Plan and the NMOCD approved CAP and Variance Request.

ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

1.1 Site Description

The site is located in Unit Letter “P” of Section 4, Township 22 South, Range 37 East in Lea County, New Mexico on private property. The site location is illustrated on Figure 1.

1.2 Background and Previous Work

In 2003, ROC initiated work on the former P-4 EOL junction box. The site was delineated using a backhoe to form a 30x30x12-ft deep excavation. Collected soil samples were screened at regular intervals for hydrocarbon and chloride. A four-wall composite soil sample, a bottom composite soil sample, and remediated soils sample were sent to a commercial laboratory for analysis for analysis. Laboratory analysis of the four-wall composite indicated a chloride concentration of 1,950 milligrams per kilogram (mg/kg) and a Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and BTEX concentrations below the laboratory reported detection limits (RDLs). The bottom composite soil sample indicated a chloride concentration of 3,650 mg/kg, a GRO concentration below the laboratory RDL, a DRO concentration of 102 mg/kg, and BTEX concentration below the laboratory RDL. The remediated soils sample indicated a chloride concentration of 1,100 mg/kg, a GRO concentration below the laboratory RDL, a DRO concentration of 131 mg/kg, and BTEX concentration below the laboratory RDL. A 20-mil reinforced liner was installed at the bottom of the excavation to prevent vertical migration of any constituents of concern to groundwater. The excavation was then backfilled with the excavated soils, contoured to the surrounding area and the disturbed area was seeded with native vegetation. A new water-tight junction box was installed 40 feet west of the site.

On September 29, 2023, ROC submitted a Corrective Action Plan (CAP) to the NMOCD. NMOCD responded, indicating ROC must treat the site with the NMOCD Action Levels of groundwater occurring within 1,000 feet of any freshwater well or spring.

An updated CAP and Variance Request was submitted to NMOCD on December 20, 2023. This Variance Request Addendum formally requested use of constituent values from Table I of NMAC part 19.15.29.12 for sites where groundwater is between 51 and 100 feet below the horizontal boundary of the release. Field personnel investigated the wells within the 1,000 feet radius of the site and determined NMOSE POD CP 00422, located approximately 900 ft southwest of the former junction box, is still in use by the landowner. This well is the closest water well to the site, as referenced in Section 2.1, and is surrounded by non-ROC oilfield activity. At least two non-ROC facilities are located between the former junction box and the water well. The former junction box has not impacted the water well and poses little threat of impact due to the distance and location of the water well. The prevailing groundwater gradient in this area is flowing from the northwest to the southeast, and the well is not located down-gradient of the former junction box. As such, NMOCD granted approval for the water well (NMOSE POD CP 00422) to be excluded from consideration. On January 2, 2024, NMOCD approved the Variance Request with the stipulation that no liner would need to be installed at the base of the excavation.

2.0 SITE CHARACTERISTICS

2.1 Depth to Groundwater

Tasman reviewed available depth to groundwater information available through the New Mexico Office of the State Engineer (NMOSE) and United States Geologic Survey (USGS) for registered water wells near the site. Tasman identified the nearest registered water well as NMOSE POD CP 00422, located 0.17 miles (approximately 900 ft) southwest of the site. The depth to groundwater was measured at 92 feet below ground surface (bgs) in March 1967. POD CP 00255 was identified 0.29 miles from the site. Depth to groundwater was measured at 120 feet bgs in 1975. Figure 1 illustrates the location of the registered water wells within the vicinity of the site, and a summary of depth to groundwater information is provided as Appendix A.

2.2 Karst Potential & Subsurface Mines

Tasman utilized the publicly available karst potential map published by the Bureau of Land Management (BLM) Carlsbad Field Office (CFO) to determine the potential for encountering karst formations beneath the site. Review of the BLM CFO karst potential map indicates that the site is not located in an area of high potential to encounter karstic features.

Tasman utilized the USGS Mineral Resources database to determine that there are no subsurface mines beneath or in the vicinity of the site.

Areas of high/critical karst and subsurface mine locations are illustrated on Figure 2.

2.3 Distance to Nearest Potable Water Well

The nearest potable water well was identified as POD CP 00422, which is approximately 900 ft southwest of the former junction box. The next nearest well is identified as POD CP 00255, which is located 0.29 miles from the site. The location of these wells is shown on the attached Figure 1.

2.4 Distance to Nearest Surface Water

Tasman reviewed aerial imagery and the National Wetland Inventory Map, published by the U.S. Fish and Wildlife Service, for wetlands and surface water in the vicinity of the site. The nearest significant surface water was identified as Whalen Lake, located 20.5 miles from the site. One freshwater pond was identified 0.86 miles from the site. The location of the freshwater pond is illustrated on Figure 1 and Whalen Lake is illustrated on Figure 3.

2.5 100-year Floodplain

Review of flood map data published by the Federal Emergency Management Agency (FEMA) indicates the site is not located within a 100-year floodplain. A copy of the FEMA FIRMette Map can be found attached as Figure 4.

2.6 Residence, School, Hospital, or Institution

Review of aerial imagery did not show that the site is within 300 feet of an occupied permanent residence, school, hospital, or institution.

2.7 Proximity to Sensitive Receptors and Site Characteristics Summary

The table below denotes if the site is located within the minimum allowable distance from a sensitive receptor, as defined in New Mexico Administrative Code (NMAC) 19.15.29.

Site Characteristics Summary		
Approximate depth to groundwater:	~ 93 ft bgs	
Within an area of high karst potential?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within 300 ft. of any continuously flowing of significant watercourse?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within 200 ft. of any lakebed, sinkhole, or playa lake?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within 300 ft. of an occupied permanent residence, school, hospital, or institution?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within 500 ft. of a spring or private, domestic fresh water well?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within 1,000 ft. of any fresh water well?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within the incorporated municipal boundaries or within a municipal well field?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within 300 ft. of a wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within the area overlying a subsurface mine?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within an unstable area?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Within a 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3.0 REMEDIATION ACTION LEVELS

NMOCD assessment and cleanup levels for hydrocarbon and produced water releases are based on depth to groundwater and proximity to sensitive receptors as established in NMAC 19.15.29. Based on site characteristics described in Section 2.0 and NMOCD approval of the CAP and Variance Request received on January 2, 2024, the NMOCD Action Levels for a site with a depth to groundwater of greater than 50 feet but less than 100 feet bgs were utilized; these Action Levels are as follows:

Constituent	Action Level
Chloride	10,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

TPH – total petroleum hydrocarbons

DRO – diesel range organics

BTEX – benzene, toluene, ethylbenzene, total xylenes

GRO – gasoline range organics

MRO – motor/lube oil range organics

mg/kg – milligrams per kilogram

3.1 Reclamation Levels

NMAC 19.15.29.13(D) codifies, and the *Procedures for Implementation of the Spill Rule*, dated September 6, 2019, clarifies that the top four feet of the remediated area should be non-waste containing. Therefore, the NMOCD Reclamation Standards are applied to the top four feet of any area impacted by a release that is not located within an active production facility. NMOCD Reclamation Standards are as follows:

Constituent	Reclamation Standard
Chloride	600 mg/kg
TPH (GRO+DRO+MRO)	100 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg

4.0 RELEASE ASSESSMENT

According to the Investigation and Characterization Plan (ICP), fourteen soil bores were drilled on August 27-28, 2018, June 28, 2019, November 14-15, 2019, and February 21, 2021. Soil samples were collected at regular intervals and field screened for chloride and hydrocarbon using a photoionization detector (PID). Representative samples from each soil bore were sent to a commercial laboratory for analysis.

4.1 Release Assessment Data Evaluation

Laboratory results of the interior soil bores resulted in elevated concentrations of chloride, but concentrations decreased laterally as additional bores were drilled. Laboratory analysis of the 15 ft and 30 ft samples collected from soil bore SB-14 indicated a chloride concentration of 1,230 mg/kg and 176 mg/kg, respectively. Laboratory analysis of the 10 ft and 25 ft samples collected from soil bore SB-11 indicated a chloride concentration of 752 mg/kg and 240 mg/kg, respectively. Laboratory analysis of the 15 ft and 30 ft samples collected from soil bore SB-10 indicated a chloride concentration of 1,260 mg/kg and 240 mg/kg. Field screening results indicated that the chloride concentrations in soil bore SB-8 were low throughout. Therefore, the 10 ft and 15 ft samples were selected for laboratory analysis to confirm field results. The 10 ft sample indicated a chloride concentration of 288 mg/kg and the 15 ft sample indicated a concentration of 128 mg/kg. Hydrocarbons (GRO/DRO/EXT DRO and BTEX) were below detectable limit throughout the site. At the completion of sampling activities, each soil bore was plugged with bentonite to ground surface.

5.0 SOIL SAMPLING PROCEDURES

5.1 Soil Sampling Procedures for Laboratory Analysis

The collection of soil samples for laboratory analysis was conducted in accordance with NMOCD criteria and generally approved industry standards. Collected soil samples were placed in laboratory provided containers, properly labeled, and preserved on ice pending delivery under a



chain of custody form to Cardinal Laboratory in Hobbs, New Mexico.

5.2 Soil Analytical Methods

Each soil sample was analyzed using Environmental Protection Agency (EPA) methods or other NMOCD-approved methods. Laboratory analytical methods are as follows:

- Chloride – EPA Method SM4500.
- Total Petroleum Hydrocarbons (TPH) – gasoline, diesel, and motor/lube oil range organics (GRO+DRO+MRO) – EPA Method 8015M Extended.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) – EPA Method 8021B.

6.0 SUMMARY OF REMEDIAL ACTIONS

6.1 Remedial Activities

From January 2 to January 18, 2024, Tasman utilized mechanical equipment to excavate impacted soil from within the delineated release margins. Excavated material was stockpiled on-site in 50 cubic yard piles. Per the CAP and Variance Request approved by NMOCD on January 2, 2024, one five-point composite sample was collected from each 50 cubic yard spoil pile. The collected excavated soil samples are identified as ES-1 through ES-26. Excavated soil samples ES-9 through ES-15, ES-17 through ES-19, ES-21, ES-22, ES-25, and ES-26 were below reclamation levels, and their corresponding spoil piles were used as backfill material. The remaining samples exceeded reclamation levels and their corresponding spoil piles were transported to an NMOCD approved disposal facility. Copies of laboratory analysis are provided in Appendix B. Excavated soil sample analytical results are summarized in the attached Table 1.

Due to the results of field testing and confirmation samples, the remedial final excavations measured approximately 93 ft long by 80 ft wide, at an approximate depth of 4 feet bgs. A total of 1,152 cubic yards of excavated material were exported to Sundance Services, Inc. landfill.

Copies of solid manifests are available upon request and a photographic log is provided as Appendix C.

6.2 Confirmation Data Evaluation

On January 12, 2024, Tasman provided a 48-hour mobilization notice to the NMOCD via email (Appendix D). On January 17, 2024, Tasman mobilized to the site to collect confirmation soil



samples from the sidewalls of the remedial excavation. Four composite confirmation soil samples were collected from the sidewalls of the excavation. Each confirmation soil sample was collected as a five-point composite representing approximately 200 ft² or less. Confirmation soil sample analytical results are summarized in the attached Table 2.

Benzene, total BTEX and total TPH were below laboratory reported detection limits (RDLs) throughout. Chloride concentrations were detected above laboratory RDLs; however, all detected chloride concentrations were below NMOCD Action Levels.

7.0 RESTORATION AND RECLAMATION

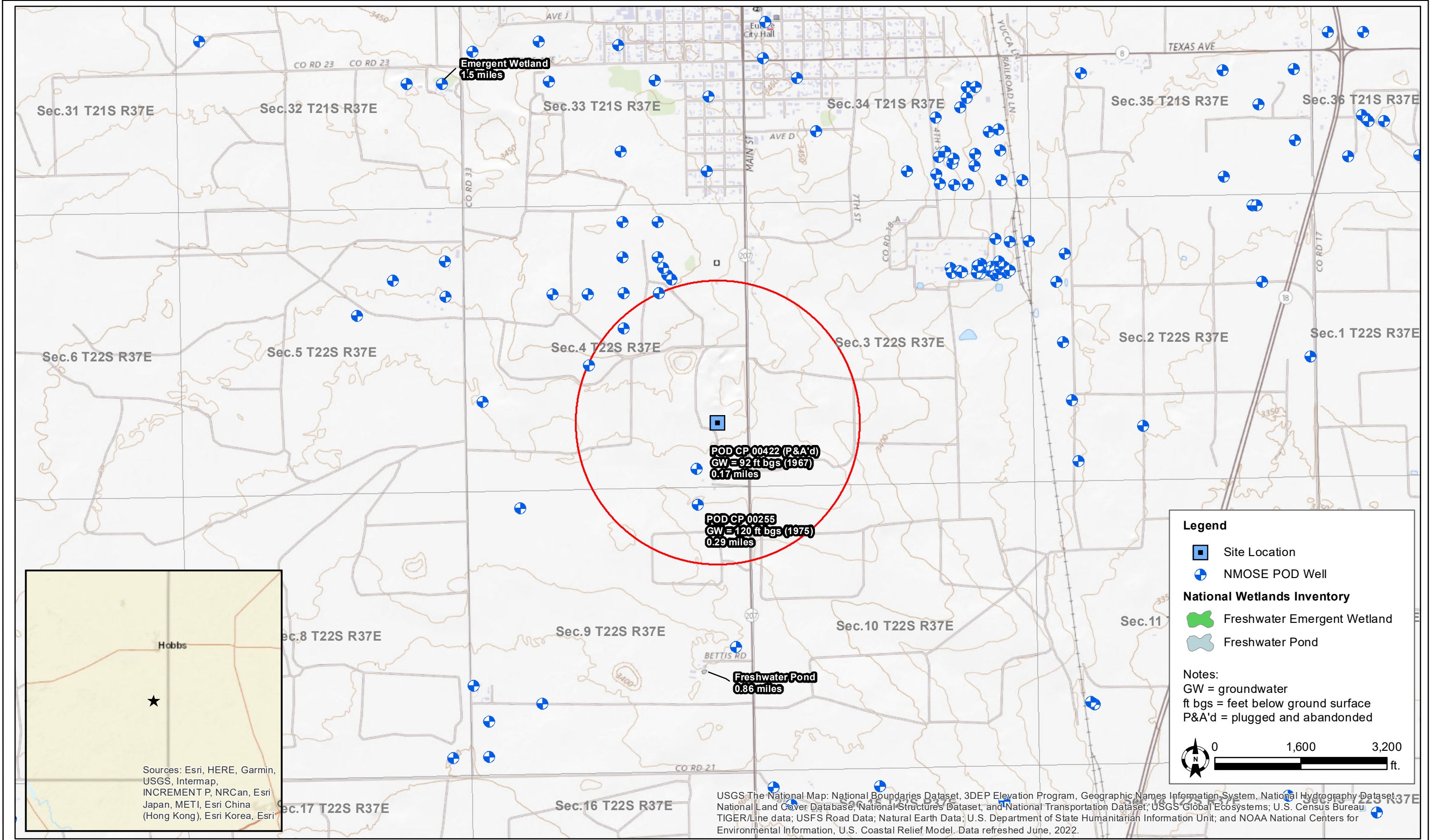
From January 23 to 25, 2024, Tasman personnel were on site to restore the area affected by the former junction box and associated remediation activities were restored to the condition which existed prior to the release to the maximum extent possible. Excavated areas were backfilled with a total of 1,800 cubic yards of non-impacted “like” material and contoured and/or compacted to achieve erosion control, stability, and preservation of surface water flow to the extent practicable. A sample of the imported soil was submitted for laboratory analysis and provided in Table 2 and Appendix B.

On January 30, 2024, the site was seeded with a blend of native vegetation. The blend consisted of: 20 pounds (lbs) of Triticale, 20 lbs Elbon Rye, and 25 lbs of Lea County seed mix. Vegetation will also provide a natural infiltration barrier for the site since plants capture water through their roots, thereby reducing the volume of water moving through the vadose zone.

8.0 SITE CLOSURE REQUEST

Based on laboratory analytical results from soil samples collected during the confirmation sampling events, impacted soil surrounding the former junction box has been remediated below the applicable NMOCD Action Levels in accordance with NMAC 19.15.29. As such, Tasman, on behalf of ROC, respectfully requests that the site be granted closure.

Figures



DATE:	November 2023
DESIGNED BY:	B. Dennis
DRAWN BY:	B. Dennis

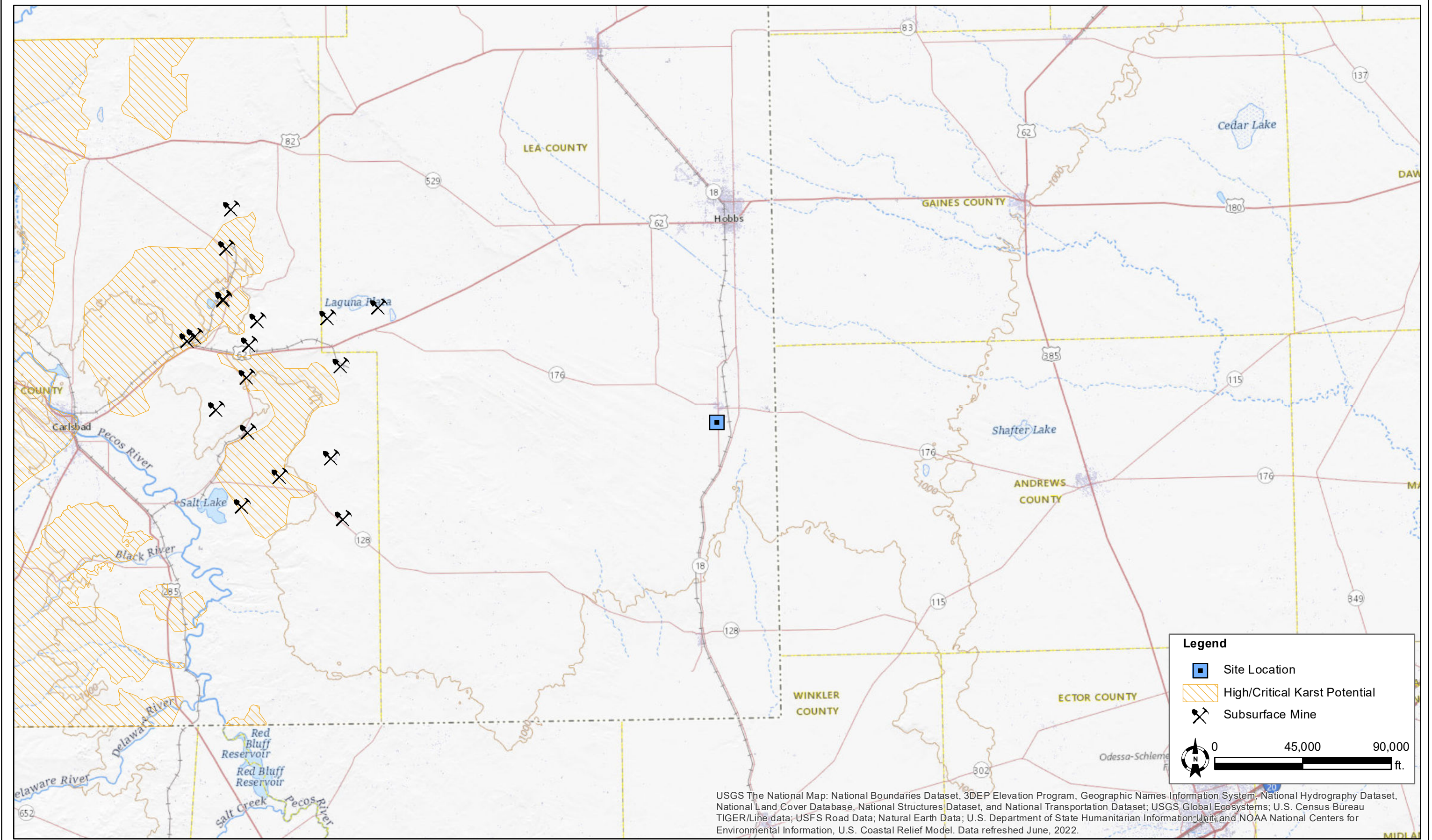


Tasman, Inc.
6855 W. 119th Ave
Broomfield, CO 80020

RICE Operating Company
BD P-4 EOL - [Incident No]
UL "P", Sec. 4, T22S, R37E
Lea County, New Mexico

Site Location & Groundwater
Map

Figure
1



DATE:	November 2023
DESIGNED BY:	B. Dennis
DRAWN BY:	B. Dennis

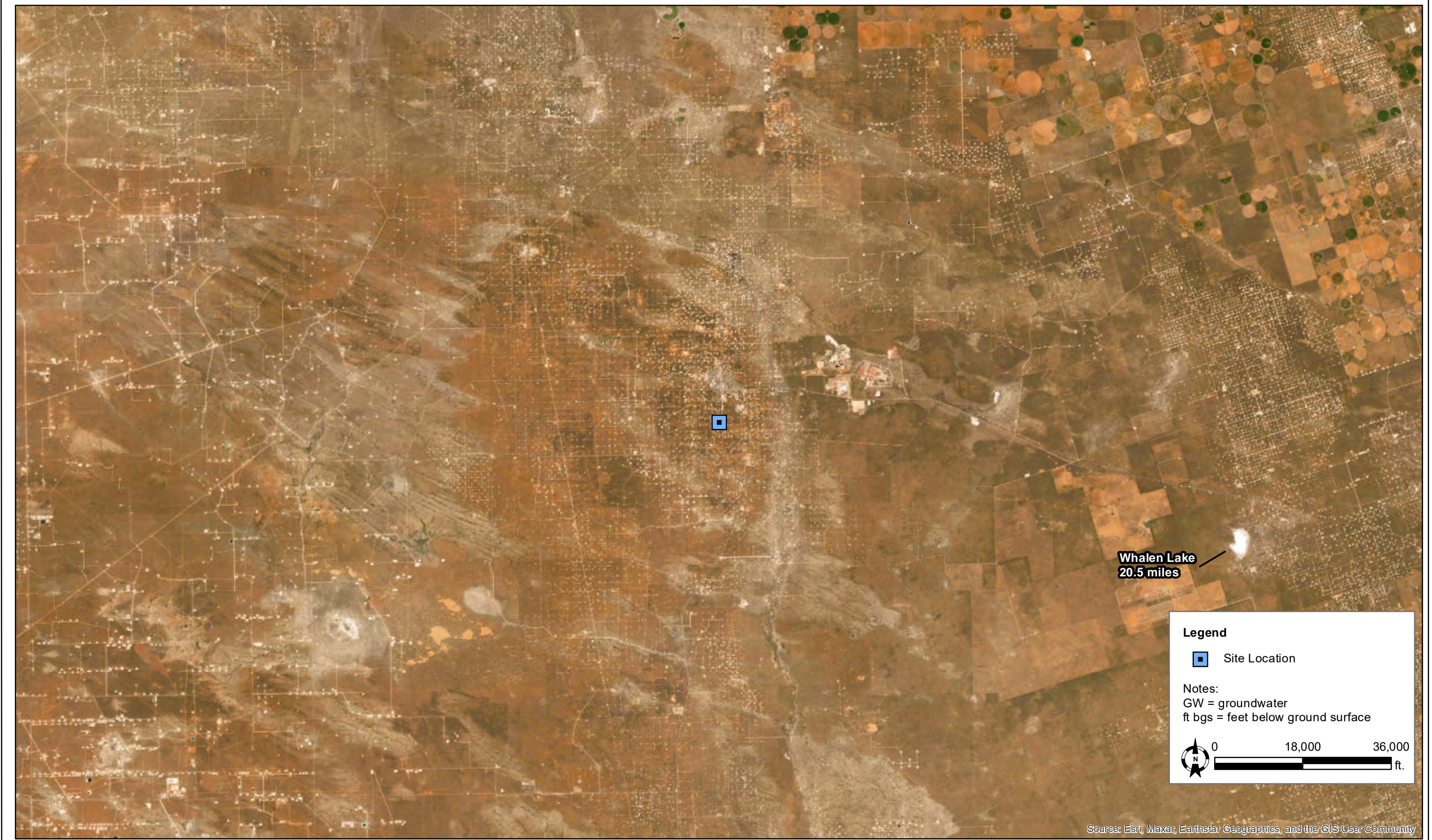


Tasman, Inc.
6855 W. 119th Ave
Broomfield, CO 80020

Rice Operating Company
BD P-4 EOL - nAPP2110241347
UL "P", Sec. 4, T22S, R37E
Lea County, New Mexico

Karst Potential & Subsurface
Mine Map

Figure
2



DATE:	November 2023
DESIGNED BY:	B. Dennis
DRAWN BY:	B. Dennis



Tasman, Inc.
6855 W. 119th Ave
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Rice Operating Company
BD P-4 EOL - nAPP2110241347
UL "P", Sec. 4, T22S, R37E
Lea County, New Mexico

Surface Water Map

Figure
3

National Flood Hazard Layer FIRMette



103°9'59"W 32°25'16"N



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

1:6,000

103°9'22"W 32°24'46"N

Released to Imaging: 8/19/2024 9:35:44 AM

Basemap Imagery Source: USGS National Map 2023

Legend

Figure 4

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **11/6/2023 at 12:35 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



DATE:	January 2024
DESIGNED BY:	C. Flores
DRAWN BY:	C. Flores



Tasman, Inc.
6855 W. 119th Ave
Broomfield, CO 80020

Rice Operating Compay, LP
BD P-4 EOL - nAPP2110241347
UL "P", Sec. 4, T22S, R37E
Lea County, New Mexico

Excavation Overview Map

Figure
5

Tables

TABLE 1
SOIL ANALYTICAL SUMMARY
Rice Operating Company
BD P-4 EOL - nAPP2110241347

Sample ID	Sample Depth (bgs)	Sample Date	Soil Status	PID (ppm)	Field Chloride (mg/kg)	Benzene (mg/kg)	Total BTEX ¹ (mg/kg)	TPH ² (mg/kg)				Chloride ³ (mg/kg)
								GRO	DRO	MRO	TOTAL	
Excavated Soil Samples												
ES-1	N/A	1/5/2024	Excavated	0.7	669	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	656
ES-2	N/A	1/8/2024	Excavated	0.7	851	---	---	---	---	---	---	---
ES-3	N/A			0.3	783	---	---	---	---	---	---	---
ES-4	N/A			0.7	1,007	---	---	---	---	---	---	---
ES-5	N/A			2.1	636	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	736
ES-6	N/A			2.1	779	---	---	---	---	---	---	---
ES-7	N/A			1.7	737	---	---	---	---	---	---	---
ES-8	N/A			1.3	494	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	736
ES-9	N/A			0.7	602	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	576
ES-10	N/A			1.5	382	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	336
ES-11	N/A			1.7	570	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	544
ES-12	N/A			2.1	178	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	144
ES-13	N/A			1.8	447	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	336
ES-14	N/A			2	170	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	112
ES-15	N/A	1/9/2024	Excavated	1.5	422	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	400
ES-16	N/A			1.3	651	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	656
ES-17	N/A	1/10/2024	Excavated	1.5	635	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	480
ES-18	N/A			0.9	510	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	480
ES-19	N/A			1.2	596	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	528
ES-20	N/A			1.6	625	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	640
ES-21	N/A			1.1	425	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	400
ES-22	N/A	1/11/2024	Excavated	1.5	389	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	400
ES-23	N/A			1.4	510	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	656
ES-24	N/A			1.7	570	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	608
ES-25	N/A			1.1	480	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	512
ES-26	N/A			1	450	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	432
NMOCD Action Levels ⁴				N/A	N/A	10	50	N/A			100	600

Notes:

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes by EPA method 8021B
2. TPH = Total petroleum hydrocarbons analyzed by method EPA 8015M (GRO/DRO/MRO)
3. Chloride - Analyzed by EPA method SM4500
4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (NMAC 19.15.29.12(N))

* = Denotes discrete/grab sample. All other samples are five-point composites

N/A = Not applicable

Bold values denote concentrations above laboratory SDL

Red values denote concentrations above NMOCD Action Levels

BGS = Below ground surface

GRO = Gasoline range organics

DRO = Diesel range organics

MRO = Motor/lube oil range organics

PID = Photoionization detector

--- = Sample was not analyzed for this analyte

<RDL = The analyte was not detected above the laboratory reported detection limit (RDL)

TABLE 2
SOIL ANALYTICAL SUMMARY
Rice Operating Company
BD P-4 EOL - nAPP2110241347

Sample ID	Sample Depth (bgs)	Sample Date	Soil Status	PID (ppm)	Field Chloride (mg/kg)	Benzene (mg/kg)	Total BTEX ¹ (mg/kg)	TPH ² (mg/kg)				Chloride ³ (mg/kg)
								GRO	DRO	MRO	TOTAL	
Confirmation Soil Samples												
W-1	4'	1/17/2024	In-Situ	0.8	395	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	352
W-2	4'	1/17/2024	In-Situ	0.5	118	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	16.0
W-3	4'	1/17/2024	In-Situ	0.7	141	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	80.0
W-4	4'	1/17/2024	In-Situ	0.5	476	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	112
Imported Soil	---	1/30/2024	Imported	---	---	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	16.0
NMOCD Action Levels ⁴				N/A	N/A	10	50	N/A			100	600

Notes:

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes by EPA method 8021B

2. TPH = Total petroleum hydrocarbons analyzed by method EPA 8015M (GRO/DRO/MRO)

3. Chloride - Analyzed by EPA method SM4500

4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (NMAC 19.15.29.12(N))

* = Denotes discrete/grab sample. All other samples are five-point composites

N/A = Not applicable

Bold values denote concentrations above laboratory RDL**Red** values denote concentrations above NMOCD Action Levels

BGS = Below ground surface

GRO = Gasoline range organics

DRO = Diesel range organics

MRO = Motor/lube oil range organics

PID = Photoionization detector

--- = Sample was not analyzed for this analyte

<RDL = The analyte was not detected above the laboratory reported detection limit (RDL)

Appendix A – Depth to Groundwater Information



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National Water Information System: Web Interface


USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

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Groundwater levels for the Nation

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Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 322451103094201

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 322451103094201 22S.37E.04.443114

Lea County, New Mexico
Latitude 32°24'51", Longitude 103°09'42" NAD27
Land-surface elevation 3,425 feet above NAVD88
The depth of the well is 125 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1965-11-16		D	62610		3344.08	NGVD29	1	Z			A
1965-11-16		D	62611		3345.40	NAVD88	1	Z			A
1965-11-16		D	72019	79.60			1	Z			A
1986-02-27		D	62610		3345.88	NGVD29	1	Z			A
1986-02-27		D	62611		3347.20	NAVD88	1	Z			A
1986-02-27		D	72019	77.80			1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

- Questions or Comments
- Automated retrievals
- Help
- Data Tips
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Data Category:
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Geographic Area:
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Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 322511103095301

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 322511103095301 22S.37E.04.232140

Lea County, New Mexico
Latitude 32°25'11", Longitude 103°09'53" NAD27
Land-surface elevation 3,444 feet above NAVD88
The depth of the well is 114 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1953-09-28			D	62610	3352.58	NGVD29	1		Z		A
1953-09-28			D	62611	3353.88	NAVD88	1		Z		A
1953-09-28			D	72019	90.12		1		Z		A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

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Agency code = usgs
site_no list =

- 322514103094401

Minimum number of levels = 1
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USGS 322514103094401 22S.37E.04.223431

Lea County, New Mexico
Latitude 32°25'14", Longitude 103°09'44" NAD27
Land-surface elevation 3,436 feet above NAVD88
The depth of the well is 115 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1953-09-29			D	62610	3326.55	NGVD29	1	Z			A
1953-09-29			D	62611	3327.84	NAVD88	1	Z			A
1953-09-29			D	72019	108.16		1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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USGS Water Resources

Data Category:

Groundwater

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Geographic Area:

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Agency code = usgs
site_no list =

- 322509103095301

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 322509103095301 22S.37E.04.23232

Lea County, New Mexico
Latitude 32°25'09", Longitude 103°09'53" NAD27
Land-surface elevation 3,441 feet above NAVD88
The depth of the well is 155 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1954-03-06		D	62610		3324.89	NGVD29	1	Z			A
1954-03-06		D	62611		3326.19	NAVD88	1	Z			A
1954-03-06		D	72019	114.81			1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Geographic Area:
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Agency code = usgs
site_no list =

- 322451103094201

Minimum number of levels = 1

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USGS 322451103094201 22S.37E.04.443114

Lea County, New Mexico
Latitude 32°24'51", Longitude 103°09'42" NAD27
Land-surface elevation 3,425 feet above NAVD88
The depth of the well is 125 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1965-11-16			D 62610		3344.08	NGVD29	1	Z		
1965-11-16			D 62611		3345.40	NAVD88	1	Z		
1965-11-16			D 72019	79.60			1	Z		
1986-02-27			D 62610		3345.88	NGVD29	1	Z		
1986-02-27			D 62611		3347.20	NAVD88	1	Z		
1986-02-27			D 72019	77.80			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929

Section	Code	Description
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

URL: [https://nwis.waterdata.usgs.gov/nwis/gwlevels?](https://nwis.waterdata.usgs.gov/nwis/gwlevels?_no=322451103094201&agency_cd=USGS&format=html)

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


Page Last Modified: 2024-02-12 16:00:13 EST

0.3 0.26 nadww01



Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency
						Groundwater	United States	GO	

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Agency code = usgs
site_no list =

- 322438103094301

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 322438103094301 22S.37E.04.443234

Lea County, New Mexico
Latitude 32°24'38", Longitude 103°09'43" NAD27
Land-surface elevation 3,417 feet above NAVD88
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source (measured)
1965-11-16			D 62610		3332.04	NGVD29	1	Z		
1965-11-16			D 62611		3333.38	NAVD88	1	Z		
1965-11-16			D 72019	83.62			1	Z		
1970-12-08			D 62610		3331.07	NGVD29	1	Z		
1970-12-08			D 62611		3332.41	NAVD88	1	Z		
1970-12-08			D 72019	84.59			1	Z		
1976-01-22			D 62610		3332.91	NGVD29	1	Z		
1976-01-22			D 62611		3334.25	NAVD88	1	Z		
1976-01-22			D 72019	82.75			1	Z		
1986-02-27			D 62610		3331.27	NGVD29	1	Z		
1986-02-27			D 62611		3332.61	NAVD88	1	Z		
1986-02-27			D 72019	84.39			1	Z		
1991-05-02			D 62610		3335.12	NGVD29	1	Z		
1991-05-02			D 62611		3336.46	NAVD88	1	Z		
1991-05-02			D 72019	80.54			1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Mea age
Parameter code				72019	Depth to water level, feet below land surface				
Referenced vertical datum				NAVD88	North American Vertical Datum of 1988				
Referenced vertical datum				NGVD29	National Geodetic Vertical Datum of 1929				
Status				1	Static				
Method of measurement				Z	Other.				
Measuring agency					Not determined				
Source of measurement					Not determined				
Water-level approval status				A	Approved for publication -- Processing and review completed.				

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Title: Groundwater for USA: Water Levels
URL: [https://nwis.waterdata.usgs.gov/nwis/gwlevels?](https://nwis.waterdata.usgs.gov/nwis/gwlevels?_no=322438103094301&agency_cd=USGS&format=html)



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Page Last Modified: 2024-02-12 16:06:16 EST
0.34 0.3 nadww01



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,
O=orphaned,
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Twps	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 00422		CP	LE	3	4	4	04	22S	37E	672777	3587870*	191	130	92	38
CP 00255 POD2		CP	LE	2	2	3	04	22S	37E	672166	3588458*	788	157	120	37

Average Depth to Water:

106 feet

Minimum Depth:

92 feet

Maximum Depth:

120 feet

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 672841

Northing (Y): 3588050.257

Radius: 850

*UTM location was derived from PLSS - see Help

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.

Appendix B – Certified Laboratory Analytical Reports



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

January 18, 2024

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: 2251_BD P-4 EOL

Enclosed are the results of analyses for samples received by the laboratory on 01/17/24 13:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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.

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:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 01/17/2024
 Reported: 01/18/2024
 Project Name: 2251_BD P-4 EOL
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 01/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: W - 1 (H240196-01)

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	01/17/2024	ND	2.16	108	2.00	5.06	
Toluene*	<0.050	0.050	01/17/2024	ND	2.14	107	2.00	4.91	
Ethylbenzene*	<0.050	0.050	01/17/2024	ND	2.13	106	2.00	5.35	
Total Xylenes*	<0.150	0.150	01/17/2024	ND	6.22	104	6.00	5.53	
Total BTEX	<0.300	0.300	01/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	01/18/2024	ND	432	108	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	01/17/2024	ND	192	96.1	200	0.918	
DRO >C10-C28*	<10.0	10.0	01/17/2024	ND	197	98.5	200	2.21	
EXT DRO >C28-C36	<10.0	10.0	01/17/2024	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 01/17/2024
 Reported: 01/18/2024
 Project Name: 2251_BD P-4 EOL
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 01/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: W - 2 (H240196-02)

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	01/17/2024	ND	2.16	108	2.00	5.06	
Toluene*	<0.050	0.050	01/17/2024	ND	2.14	107	2.00	4.91	
Ethylbenzene*	<0.050	0.050	01/17/2024	ND	2.13	106	2.00	5.35	
Total Xylenes*	<0.150	0.150	01/17/2024	ND	6.22	104	6.00	5.53	
Total BTEX	<0.300	0.300	01/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	01/18/2024	ND	432	108	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	01/17/2024	ND	192	96.1	200	0.918	
DRO >C10-C28*	<10.0	10.0	01/17/2024	ND	197	98.5	200	2.21	
EXT DRO >C28-C36	<10.0	10.0	01/17/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 01/17/2024
 Reported: 01/18/2024
 Project Name: 2251_BD P-4 EOL
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 01/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: W - 3 (H240196-03)

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	01/17/2024	ND	2.16	108	2.00	5.06	
Toluene*	<0.050	0.050	01/17/2024	ND	2.14	107	2.00	4.91	
Ethylbenzene*	<0.050	0.050	01/17/2024	ND	2.13	106	2.00	5.35	
Total Xylenes*	<0.150	0.150	01/17/2024	ND	6.22	104	6.00	5.53	
Total BTEX	<0.300	0.300	01/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	01/18/2024	ND	432	108	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	01/17/2024	ND	192	96.1	200	0.918	
DRO >C10-C28*	<10.0	10.0	01/17/2024	ND	197	98.5	200	2.21	
EXT DRO >C28-C36	<10.0	10.0	01/17/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 01/17/2024
 Reported: 01/18/2024
 Project Name: 2251_BD P-4 EOL
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 01/17/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: W - 4 (H240196-04)

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	01/17/2024	ND	2.16	108	2.00	5.06	
Toluene*	<0.050	0.050	01/17/2024	ND	2.14	107	2.00	4.91	
Ethylbenzene*	<0.050	0.050	01/17/2024	ND	2.13	106	2.00	5.35	
Total Xylenes*	<0.150	0.150	01/17/2024	ND	6.22	104	6.00	5.53	
Total BTEX	<0.300	0.300	01/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	01/18/2024	ND	432	108	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	01/17/2024	ND	192	96.1	200	0.918	
DRO >C10-C28*	<10.0	10.0	01/17/2024	ND	197	98.5	200	2.21	
EXT DRO >C28-C36	<10.0	10.0	01/17/2024	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.6 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

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

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Rice Operating				BILL TO				ANALYSIS REQUEST																																											
Project Manager: Katie Jones/Kyle Norman				P.O. #:				<div style="display: flex; justify-content: space-around; font-weight: bold;"> <div>Chlorides</div> <div>TPH 8015 M</div> <div>BTEX</div> <div>Texas TPH</div> <div>Complete Cations/Anions</div> <div>TDS</div> <div>24-Hour Rush</div> <div>48-Hour Rush</div> </div>																																											
Address:				Company: Rice Operating																																															
City: State: NM Zip: 88240				Attn: Katie Jones																																															
Phone #:				Address:																																															
Project #:				City:																																															
Project Name: 2251_BD P-4 EOL				State: Zip:																																															
Project Location:				Phone #:																																															
Fax #:																																																			
Sampler Name: Chris Flores				PRESERV				SAMPLING																																											
Sample I.D.				MATRIX																																															
				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME							
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE				TIME			
				# CONTAINERS				GROUNDWATER				WASTEWATER				SOIL				OIL				SLUDGE				OTHER				ACID/BASE				ICE / COOL				OTHER				DATE							

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

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

February 01, 2024

KYLE NORMAN

TASMAN GEOSCIENCES

6899 PECOS ST. UNIT C

DENVER, CO 80221

RE: 2251_BD P - 4 EOL

Enclosed are the results of analyses for samples received by the laboratory on 01/30/24 14:03.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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.

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:

TASMAN GEOSCIENCES
 KYLE NORMAN
 6899 PECOS ST. UNIT C
 DENVER CO, 80221
 Fax To:

Received: 01/30/2024
 Reported: 02/01/2024
 Project Name: 2251_BD P - 4 EOL
 Project Number: NONE GIVEN
 Project Location: RICE OPERATING

Sampling Date: 01/30/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

Sample ID: IMP SOIL (H240422-01)

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	01/31/2024	ND	2.11	105	2.00	0.496	
Toluene*	<0.050	0.050	01/31/2024	ND	2.09	105	2.00	0.277	
Ethylbenzene*	<0.050	0.050	01/31/2024	ND	2.07	104	2.00	0.458	
Total Xylenes*	<0.150	0.150	01/31/2024	ND	6.07	101	6.00	0.494	
Total BTX	<0.300	0.300	01/31/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	01/31/2024	ND	432	108	400	7.14	

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	01/30/2024	ND	201	101	200	0.352	
DRO >C10-C28*	<10.0	10.0	01/30/2024	ND	220	110	200	0.682	
EXT DRO >C28-C36	<10.0	10.0	01/30/2024	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

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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 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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Released to Imaging: 8/19/2024 9:55:44 AM

Appendix C – Photographic Log

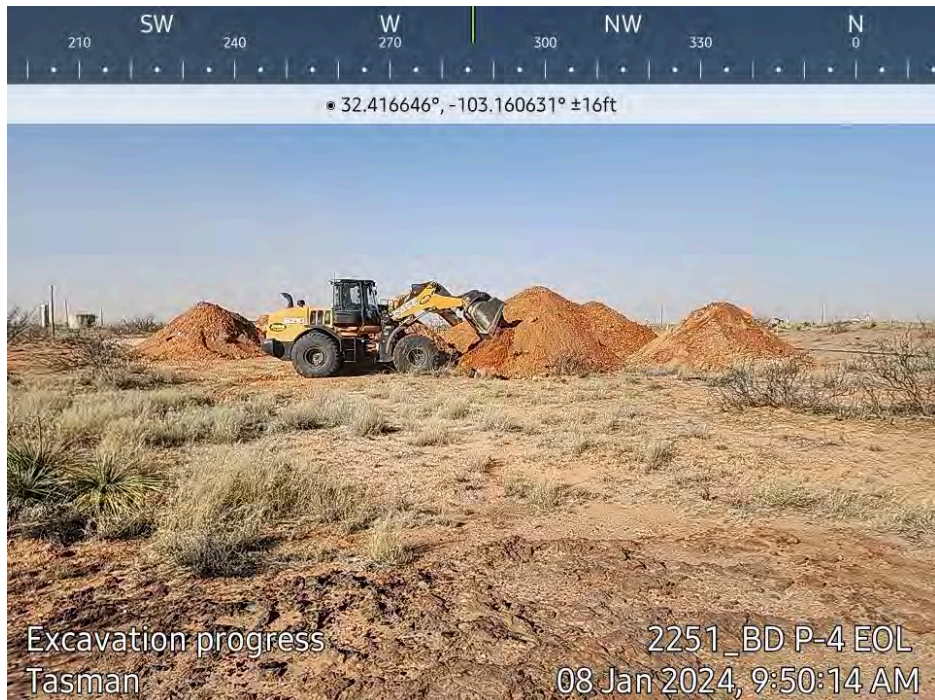
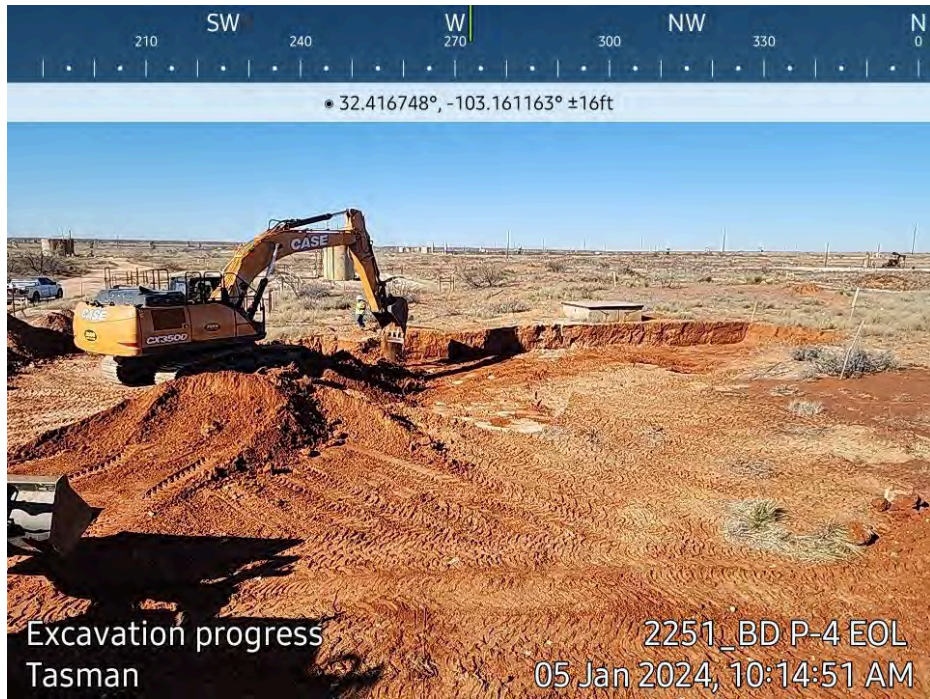
Rice Operating Company

BD P-4 EOL (nAPP2110241347)



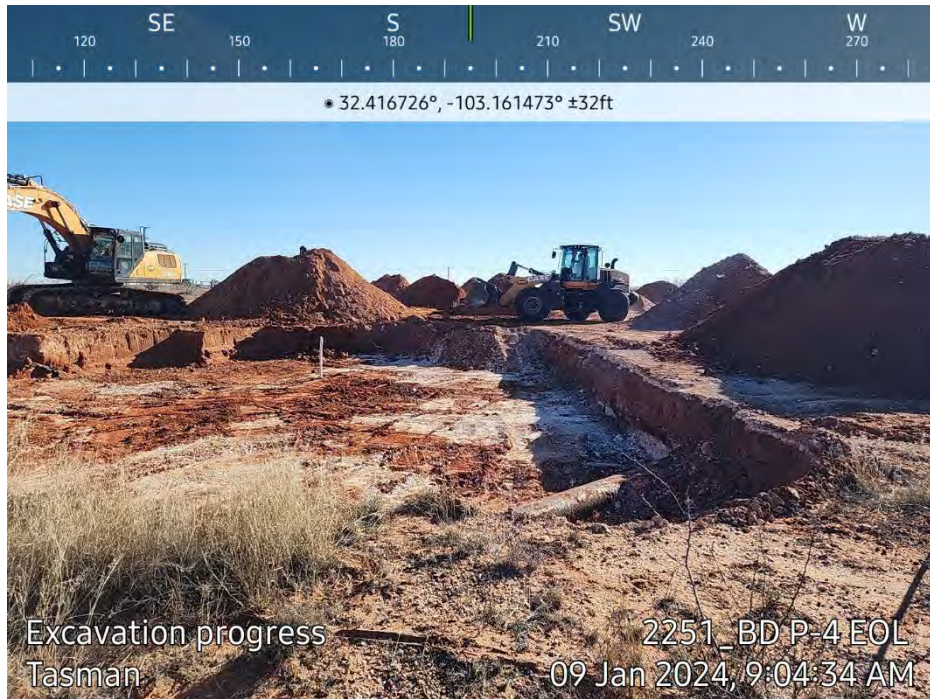
Rice Operating Company

BD P-4 EOL (nAPP2110241347)



Rice Operating Company

BD P-4 EOL (nAPP2110241347)



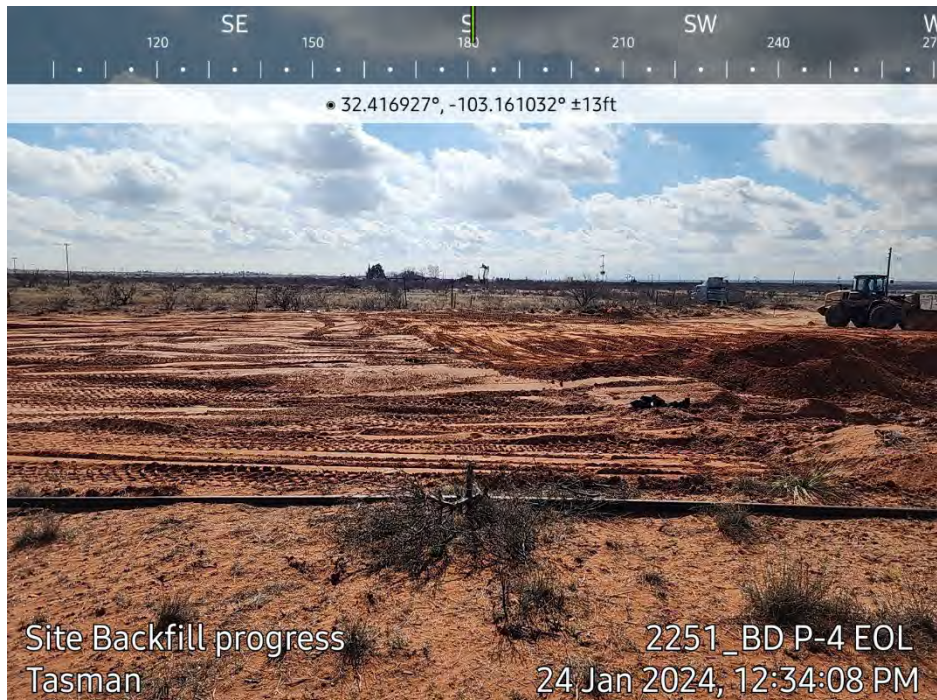
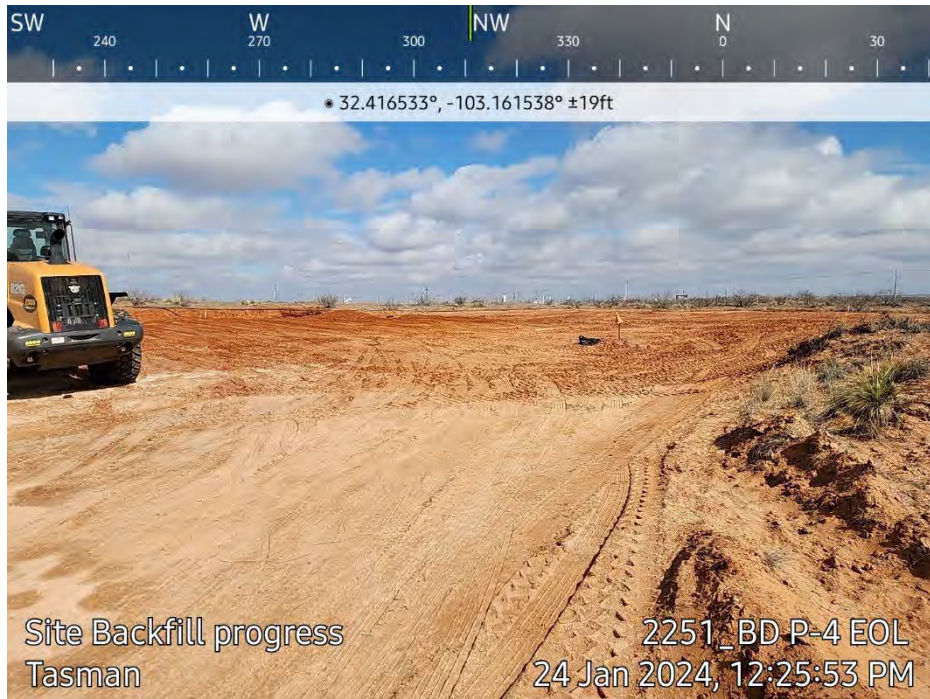
Rice Operating Company

BD P-4 EOL (nAPP2110241347)



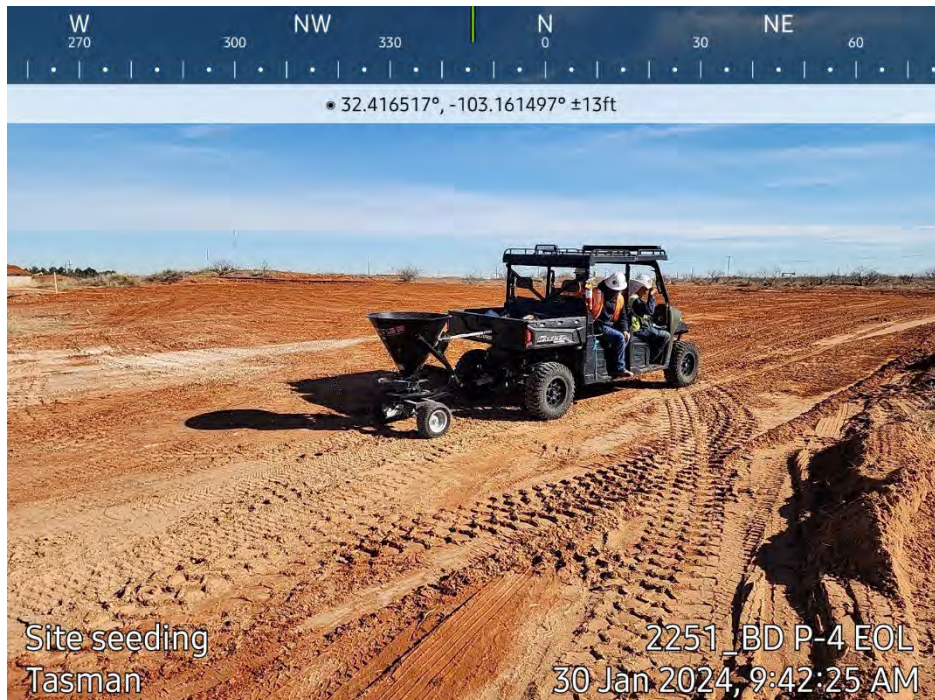
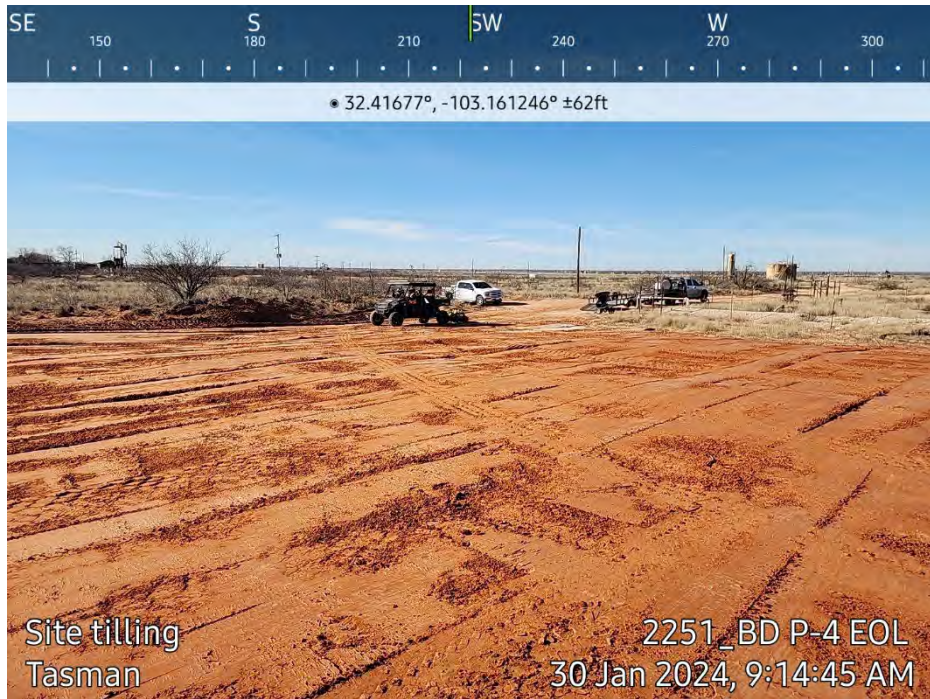
Rice Operating Company

BD P-4 EOL (nAPP2110241347)



Rice Operating Company

BD P-4 EOL (nAPP2110241347)



Appendix D – NMOCD Correspondence

OCD Permitting

Home Operator Data Action Status Action Search Results Action Status Item Details

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	303120	Districts:	Hobbs
Operator:	[19174] RICE OPERATING COMPANY	Counties:	Lea
Description:	RICE OPERATING COMPANY [19174] , RICE BD P-4 EOL , nAPP2110241347		
Status:	APPROVED		
Status Date:	01/12/2024		
References (2):	fEEM0432439763, nAPP2110241347		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2110241347
Incident Name	NAPP2110241347 RICE BD P-4 EOL @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Facility	[fEEM0432439763] RICE BD BRUNSON EOL

Location of Release Source

Site Name	RICE BD P-4 EOL
Date Release Discovered	04/14/2003
Surface Owner	Private

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	9,272
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/17/2024
Time sampling will commence	09:00 AM

Warning: Notification can not be less than two business days prior to conducting final sampling.

Please provide any information necessary for observers to contact samplers	Kyle Norman - (575) 318-5017 Katie Davis - (575) 602-1336
Please provide any information necessary for navigation to sampling site	FROM THE INTERSECTION OF NM-207 AND TEXAS RD GO SOUTH ON NM-207 FOR 1 MILE, TURN WEST ON LEASE ROAD FOR 0.15 MILE, TURN SOUTH FOR 0.3 MILE, TURN EAST FOR 100 YARDS, TURN ON RICE ROW FOR 60 YARDS TO SITE.

Acknowledgments

This submission type does not have acknowledgments, at this time.

Comments

No comments found for this submission.

Conditions

Summary:	bsharp (1/12/2024), 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.
----------	---

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

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

QUESTIONS

Action 357404

QUESTIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 357404
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2110241347
Incident Name	NAPP2110241347 RICE BD P-4 EOL @ 0
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received
Incident Facility	[fEEM0432439763] RICE BD BRUNSON EOL

Location of Release Source	
Please answer all the questions in this group.	
Site Name	RICE BD P-4 EOL
Date Release Discovered	04/14/2003
Surface Owner	Private

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: Other Fitting Produced Water Released: 0 BBL (Unknown Released Amount) Recovered: 0 BBL Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Other (Specify) Released: 0 (Unknown Released Amount) Recovered: 0 Lost: 0
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Historical site being worked under case number 1R426-06. Initial investigation conducted according to the NMOCD approved Junction Box Workplan. A Disclosure Report was submitted with all the 2003 junction box reports.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID:	19174
	Action Number:	357404
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
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: Begie Sharp Title: Executive Assistant Email: bbonds@riceswd.com Date: 12/20/2023
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QUESTIONS, Page 3

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID:
	19174
	Action Number:
	357404
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS**Site Characterization**

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.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 75 and 100 (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
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 500 and 1000 (ft.)
Any other fresh water well or spring	Between 500 and 1000 (ft.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Greater than 5 (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	None
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

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.

Requesting a remediation plan approval with this submission	Yes
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.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	4280
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

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.

On what estimated date will the remediation commence	01/08/2024
On what date will (or did) the final sampling or liner inspection occur	02/19/2024
On what date will (or was) the remediation complete(d)	03/25/2024
What is the estimated surface area (in square feet) that will be reclaimed	7440
What is the estimated volume (in cubic yards) that will be reclaimed	29760
What is the estimated surface area (in square feet) that will be remediated	7440
What is the estimated volume (in cubic yards) that will be remediated	0

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.

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.

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QUESTIONS, Page 4

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID:	19174
	Action Number:	357404
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
<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>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	Sundance Services, Inc [fKJ1600527371]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<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: Begie Sharp Title: Executive Assistant Email: bbonds@riceswd.com Date: 12/20/2023
<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>	

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QUESTIONS, Page 5

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 357404
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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

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QUESTIONS, Page 6

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID:
	19174
	Action Number: 357404
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	303120
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/17/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	9272

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

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	9272
What was the total volume (cubic yards) remediated	1008
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	15162
What was the total volume (in cubic yards) reclaimed	1008
Summarize any additional remediation activities not included by answers (above)	Please see attached Remediation Summary and Closure Report

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 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: Katie Davis Title: Environmental Manager Email: kjones@riceswd.com Date: 06/25/2024
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QUESTIONS, Page 7

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID:	19174
	Action Number:	357404
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS**Reclamation Report**

Only answer the questions in this group if all reclamation steps have been completed.

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	15162
What was the total volume of replacement material (in cubic yards) for this site	1800

Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	01/30/2024

Summarize any additional reclamation activities not included by answers (above)	Please see the attached Remediation Summary and Closure Report.
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The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.

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: Katie Davis Title: Environmental Manager Email: kjones@riceswd.com Date: 06/25/2024
--	--

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QUESTIONS, Page 8

Action 357404

QUESTIONS (continued)

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 357404
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 357404

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 357404
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	8/19/2024