

Site Assessment Report, Alternative Sampling Plan & Proposed Remediation Workplan

3R Operating, LLC Shell State 4 Flowline


Lea County, New Mexico
Unit Letter B, Section 18, Township 11 South, Range 33 East
Latitude 33.370642 North, Longitude 103.651417 West
NMOCD Reference No. NAPP2301367245

Prepared By:

Etech Environmental & Safety Solutions, Inc.
2617 W. Marland
Hobbs, New Mexico 88240



Ben Arguijo



Joel W. Lowry



Midland • San Antonio • Lubbock • Hobbs • Lafayette

TABLE OF CONTENTS

	<i>Section</i>
PROJECT INFORMATION.....	1.0
SITE CHARACTERIZATION.....	2.0
CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE.....	3.0
BACKGROUND INFORMATION.....	4.0
PROPOSED REMEDIATION PLAN.....	5.0
ALTERNATIVE SAMPLING PLAN.....	6.0
TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED.....	7.0
RESTORATION, RECLAMATION, AND RE-VEGETATION PLAN.....	8.0
LIMITATIONS.....	9.0
DISTRIBUTION.....	10.0

FIGURES

- Figure 1 - Topographic Map
- Figure 2a- Site Characterization Map (0.5-Mile Radius)
- Figure 2b- Site Characterization Map (5-Mile Radius)
- Figure 3 - Site and Sample Location Map
- Figure 4 - Anticipated Excavation and Proposed Sample Location Map

TABLES

- Table 1 - Concentrations of BTEX, TPH, and Chloride in Soil

APPENDICES

- Appendix A - Depth to Groundwater Information
- Appendix B - Field Data and Soil Profile Logs
- Appendix C - Laboratory Analytical Reports
- Appendix D - Photographic Log
- Appendix E - Regulatory Correspondence
- Appendix F - Cultural Properties Protection Rule Documentation
- Appendix G - Special Species or Critical Habit Report

1.0 PROJECT INFORMATION

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of 3R Operating, LLC (3R) has prepared this *Site Assessment Report, Alternative Sampling Plan & Proposed Remediation Workplan* for the release site known as the Shell State 4 Flowline (henceforth, "Site"). Details of the release are summarized below:

Location of Release Source

Latitude: 33.370642 Longitude: -103.651417

Provided GPS are in WGS84 format.

Site Name:	Shell State 4 Flowline	Site Type:	Flowline
Date Release Discovered:	1/12/2024	API # (if applicable):	30-025-23190

Unit Letter	Section	Township	Range	County
B	18	11S	33E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name _____)

Nature and Volume of Release

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 20	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 25	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water > 10,000 mg/L?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released	Volume/Weight Recovered

Cause of Release:

The release was attributed to the failure of a flowline.

Initial Response

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Release materials have been contained via the use of berms or dikes, absorbent pad, or other containment devices
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

Previously submitted portions of the Release Notification and Correction Action (Form C-141) are available on the NMOCD Imaging System.

2.0 SITE CHARACTERIZATION

A search of groundwater databases maintained by the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) was conducted in an effort to determine the horizontal distance to known water sources within a half-mile radius of the Site. Probable groundwater depth was determined using data generated by numeric models based on available water well data and published information. Depth to groundwater information is provided as Appendix A.

What is the shallowest depth to groundwater beneath the area affected by the release?	55 Feet	
Did the release impact groundwater or surface water?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of any occupied permanent residence, school, hospital, institution or church?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within the incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production or storage site?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

NMOCD Siting Criteria data was gathered from available resources including Bureau of Land Management (BLM) and Fish and Wildlife Services (FWS) shapefiles; topographic maps; NMOSE and USGS databases; and aerial imagery. The results are depicted on Figures 1, 2a and 2b.

3.0 CLOSURE CRITERIA FOR SOILS IMPACTED BY A RELEASE

Based on the volume and nature of the release, inferred depth to groundwater, and NMOCD Siting Criteria, the NMOCD Closure Criteria and NMOCD Reclamation Standards for the Site are as follows:

Probable Depth to Groundwater	Constituent	Laboratory Analytical Method	Closure Criteria*†	Reclamation Standard*‡
55 Feet	Chloride (Cl-)	EPA 300.0 or SM4500 Cl B	10,000	600
	Total Petroleum Hydrocarbons (TPH)	EPA SW-846 Method 8015M Ext	2,500	100
	Gas Range Organics + Diesel Range Organics (GRO + DRO)	EPA SW-846 Method 8015M	1,000	-
	Benzene	EPA SW-846 Methods 8021b or 8260b	10	10
	Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA SW-846 Methods 8021b or 8260b	50	50

* Measured in milligrams per kilogram (mg/kg)

† Table I, Section 19.15.29.12 of the New Mexico Administrative Code (NMAC).

‡ The NMOCD Reclamation Standard applies only to the top 4' of soil in non-production areas. Section 19.15.29.13 D.(1) NMAC.

4.0 BACKGROUND INFORMATION

Review of available environmental records indicates the presence of an open reportable release on a flowline for the Shell State #004. The release occurred prior to 3R assuming ownership of the well. Review of the Initial Form C-141 indicated that on January 12, 2023, a break in the poly flowline resulted in the release of approximately 20 bbls of crude oil along with 20-25 bbls of produced water. During initial response activities the release site was secured and the flowline was repaired. Copies of the Initial Form C-141, along with additional regulatory correspondence, are provided in Appendix E.

Beginning January 21, 2023, an alternative environmental contractor conducted limited remediation activities at the Site. The affected area was excavated to an approximate depth of four (4) ft. bgs. Upon excavating impacted material from within the release margins, five (5) confirmation soil samples (SP1 @ 3' through SP5 @ 3') were collected from the base of the excavated area along with four (4) sidewall soil samples (East Wall, North Wall, South Wall and West Wall). The collected soil samples were submitted to a certified, commercial laboratory (henceforth, "the laboratory") the laboratory for analysis of chloride concentrations, which were determined to be below the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples, with the exception of soil sample SP 5 @ 3', which exhibited a chloride concentration of 656 mg/kg. A "Site and Sample Location Map" is provided as Figure 3. A "Soil Chemistry Table" is provided as Table 1. Laboratory analytical reports are provided in Appendix C. Field data and soil profile logs are provided as Appendix B.

On November 15, 2023, a second environmental contractor visited the Site in an effort characterize BTEX and TPH concentrations remaining in-situ. During the site visit, a total of twenty (20) soil samples (SP1 through SP20) were collected and submitted to the laboratory for analysis of BTEX and TPH concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standards in each of the submitted soil samples; with the exception of soil sample SP1 @ 0.5', which exhibited a TPH concentration of 163 mg/kg; SP6 @ 4', which exhibited a TPH concentration of 4,030 mg/kg; and soil sample SP9, which exhibited a GRO + DRO concentration of 1,040 mg/kg. The excavation was advanced in the areas characterized by soil samples SP1, SP6 and SP9. A Photographic Log is provided as Appendix D.

On November 19, 2024, the Site was revisited in an effort to determine if additional excavation in the areas characterized by soil samples SP1, SP6 and SP9 was effective in removing impacted material affected above the NMOCD Closure Criteria and/or the NMOCD Reclamation Standards and to collect additional confirmation soil samples. During the site visit, thirty (30) soil samples (SW1 thorough SW5 and SP1 through SP25) were collected from the affected area and submitted to the laboratory for analysis of BTEX, TPH and chloride concentrations. Laboratory analytical results indicated BTEX and TPH concentrations were below the applicable NMOCD Closure Criteria and/or the NMOCD Reclamation Standards in each of the submitted soil samples, with the exception of soil samples SW3, SW4, SW5 and SP24, which exhibited TPH concentrations of 159 mg/kg, 568 mg/kg, 718 mg/kg and 172 mg/kg, respectively. Analytical results indicated chloride concentrations were below the NMOCD Closure Criteria and/or the NMOCD Reclamation Standard in each of the submitted soil samples with the exception of soil samples SW2, SW3, SW4, SW5 and SP24, which exhibited chloride concentrations of 1,030 mg/kg; 2,430 mg/kg; 3,400 mg/kg; 1,710 mg/kg and 13,700 mg/kg, respectively.

On or around December 9, 2024, a *Remediation Closure Report* containing laboratory analytical results and remediation details for a separate, non-reportable release on the subject flowline was inadvertently submitted under incident number nAPP2301367245. Careful review of environmental records suggests it was largely an administrative error and that there was no overlap or duplication of data. A second report containing accurate information was prepared but not submitted due to other potential deficiencies. Please reference NMOCD application ID 409710 for a copy of the inadvertently submitted closure report.

On December 18, 2024, Etech assumed remediation and technical oversight at the Site. Upon assuming remediation oversight, areas previously disturbed by remediation activities along with those anticipated to be disturbed were surveyed by an NMSLO-approved archaeologist, as necessary. A copy of the NMSLO Cultural Resources Cover Sheet for the negative finding report is provided in Appendix F. In addition, previous and anticipated remediation activities were assessed for their potential to interfere with threatened or endangered wildlife. Based on site conditions and the location of the release, remediation activities

are not anticipated to interfere with threatened or endangered wildlife. In the event threatened or endangered wildlife are encountered during the course or remediation activities, the project scope will be reevaluate and adjusted, as necessary. A special species or critical habitat report is provided as Appendix G.

On February 12, 2025, representatives of the NMOCD, New Mexico State Land Office (NMSLO), 3R and Etech met to discuss the Site. During the meeting, existing data and field activities conducted to date were discussed, along with future remediation activities that would be required to bring the Site into regulatory compliance.

5.0 PROPOSED REMEDIATION PLAN

Based on a review of existing environmental records, field activities conducted to date and discussions during the February 12, 2025, meeting, Etech, on behalf of 3R, proposes the following activities designed to bring the Site into regulatory compliance:

- Submit an electronic sampling notification, post-dated, to include each of the previous confirmation soil sampling events. Additional electronic sampling notifications will be submitted to address future confirmation soil sampling, as necessary.
- Excavate impacted material affected above the NMOCD Reclamation Standards formerly left in-situ beneath the surface poly flowlines in the areas characterized by soil samples SW2, SW3, SW4 and SW5. The floor and sidewalls of the excavated areas will be advanced until laboratory analytical results from excavation confirmation soil samples indicate concentrations of BTEX, TPH and chloride are below the applicable NMOCD Closure Criteria and/or Reclamation Standards.
- Excavate impacted material affected above the NMOCD Closure Criteria and/or Reclamation Standards in the areas characterized by soil samples SP1 (11/15/2023) and SP24 (11/19/2024). The floor and sidewalls of the excavated areas will be advanced until laboratory analytical results from excavation confirmation soil samples indicate concentrations of BTEX, TPH and chloride are below the applicable NMOCD Closure Criteria and/or Reclamation Standards.
- Collect missing excavation confirmation soil samples characterizing the floor of the excavation in the area represented by soil sample SP1 @ 3' (8/2/2023), along with soil samples characterizing the east, south and west sidewalls, as necessary.

6.0 ALTERNATIVE SAMPLING PLAN

Based on abundance of soil investigation data, the size of the affected area and field activities conducted to date, Etech, on behalf of 3R, requests permission to adjust excavation confirmation sampling requirements from the collection of soil samples representing every 200 sq. ft. to the collection of soil samples representing no more than 400 sq. ft. Additional, discrete grab samples will be collected from wet or visibly stained areas inferred to have been affected by the release, as necessary.

7.0 TIMELINE AND ESTIMATED VOLUME OF SOIL TO BE REMEDIATED

Remediation activities are expected to be completed within ninety (90) days of receiving necessary approval(s) of the *Site Assessment Summary and Proposed Remediation Plan*. Based on laboratory analytical results, site characteristics, and field observations made during the initial site visit, it is estimated that approximately 1,580 cubic yards (cy) of impacted soil is in need of removal. Approximately 1,720 cy of impacted material has already been excavated and transported off-site.

8.0 RESTORATION, RECLAMATION, AND RE-VEGETATION PLAN

Areas affected by remediation and closure activities will be substantially restored to the condition that existed prior to the release, to the extent practicable. Excavated areas will be backfilled with locally sourced, non-impacted "like" material placed at or near original relative positions. The affected area will be compacted and contoured to achieve erosion control, stability, and preservation of surface water flow, to the extent practicable. Areas affected by remediation activities will be reseeded with an agency-approved seed mixture during the first favorable growing season following closure of the Site.

9.0 LIMITATIONS

Etech Environmental & Safety Solutions, Inc., has prepared this *Site Assessment Report, Alternative Sampling Plan & Proposed Remediation Workplan* to the best of its ability. No other warranty, expressed or implied, is made or intended. Etech has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Etech has not conducted an independent examination of the facts contained in referenced materials and statements. Etech has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Etech has prepared the report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Etech notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of 3R Operating, LLC. Use of the information contained in this report is prohibited without the consent of Etech and/or 3R Operating, LLC.

10.0 DISTRIBUTION

3R Operating, LLC

20405 State Highway 249

Ste 820

Houston, TX 77070

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 1

1220 South St. Francis Drive

Santa Fe, NM 87505

New Mexico State Land Office

Environmental Compliance Office

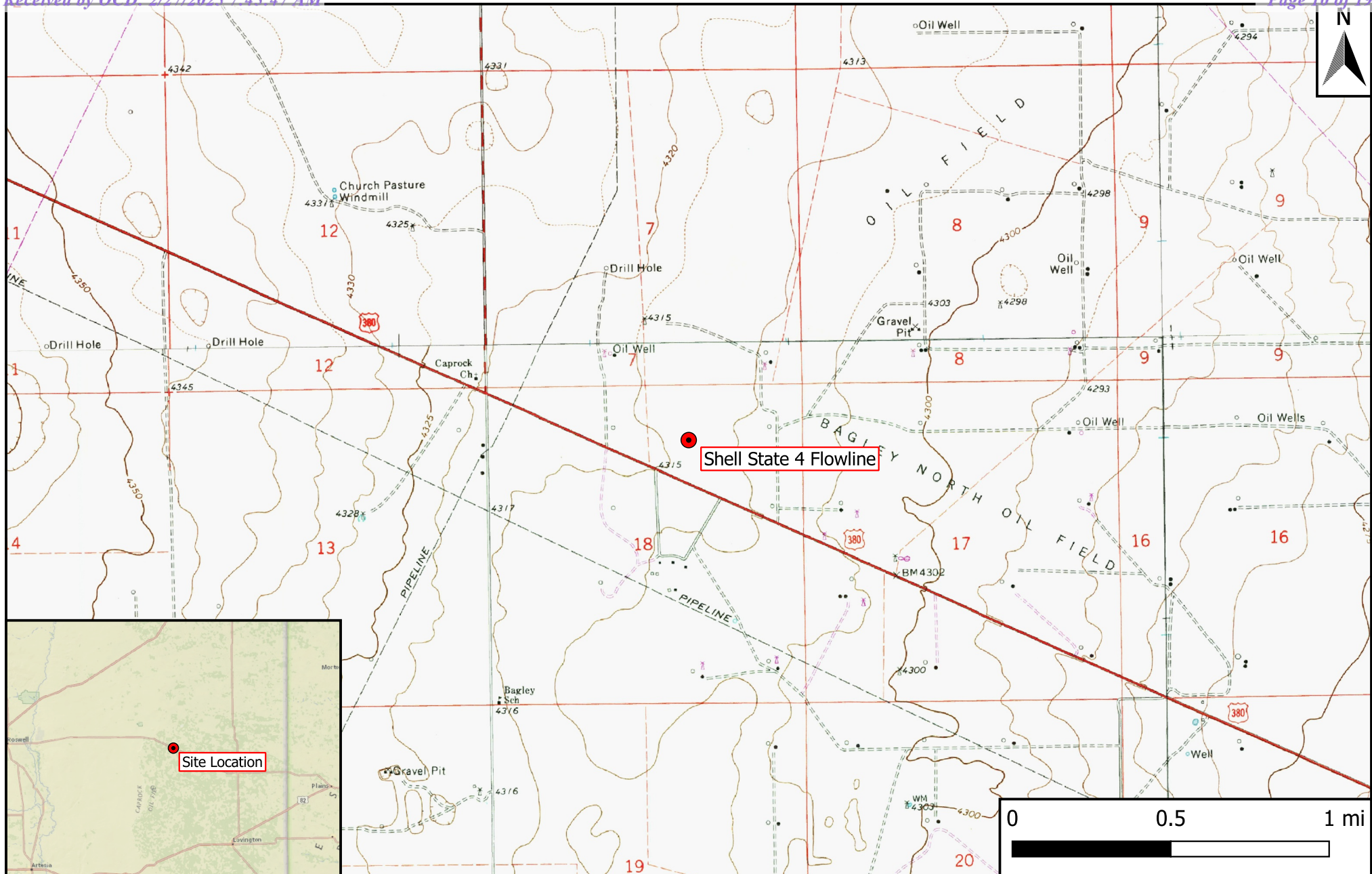
310 Old Santa Fe Trail

Santa Fe, NM 87501

(Electronic Submission)

Figure 1

Topographic Map



Legend

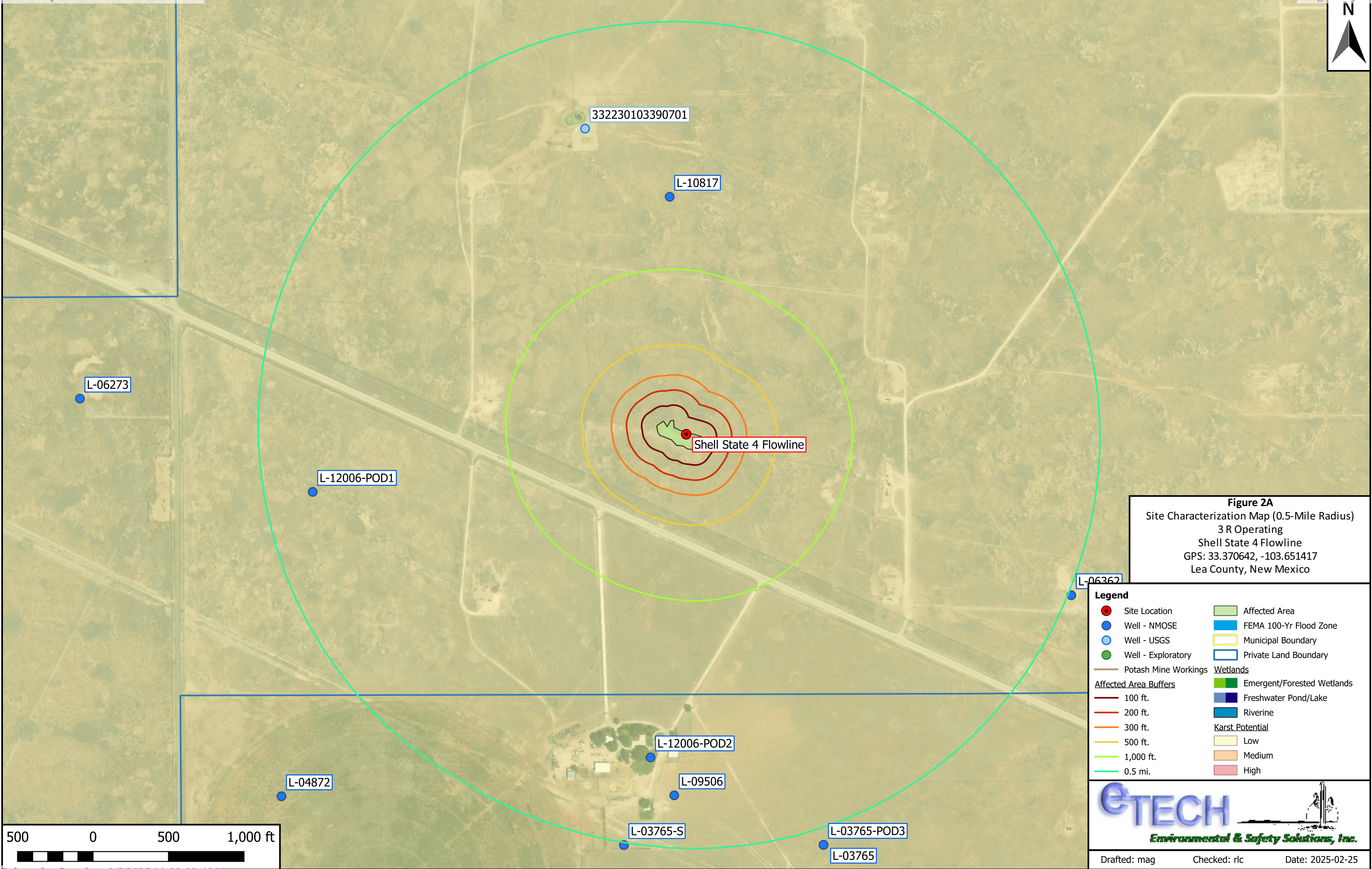
- Site Location

Figure 1
 Site Location Map
 3 R Operating
 Shell State 4 Flowline
 GPS: 33.370642, -103.651417
 Lea County, New Mexico



Figures 2a & 2b

Site Characterization Maps



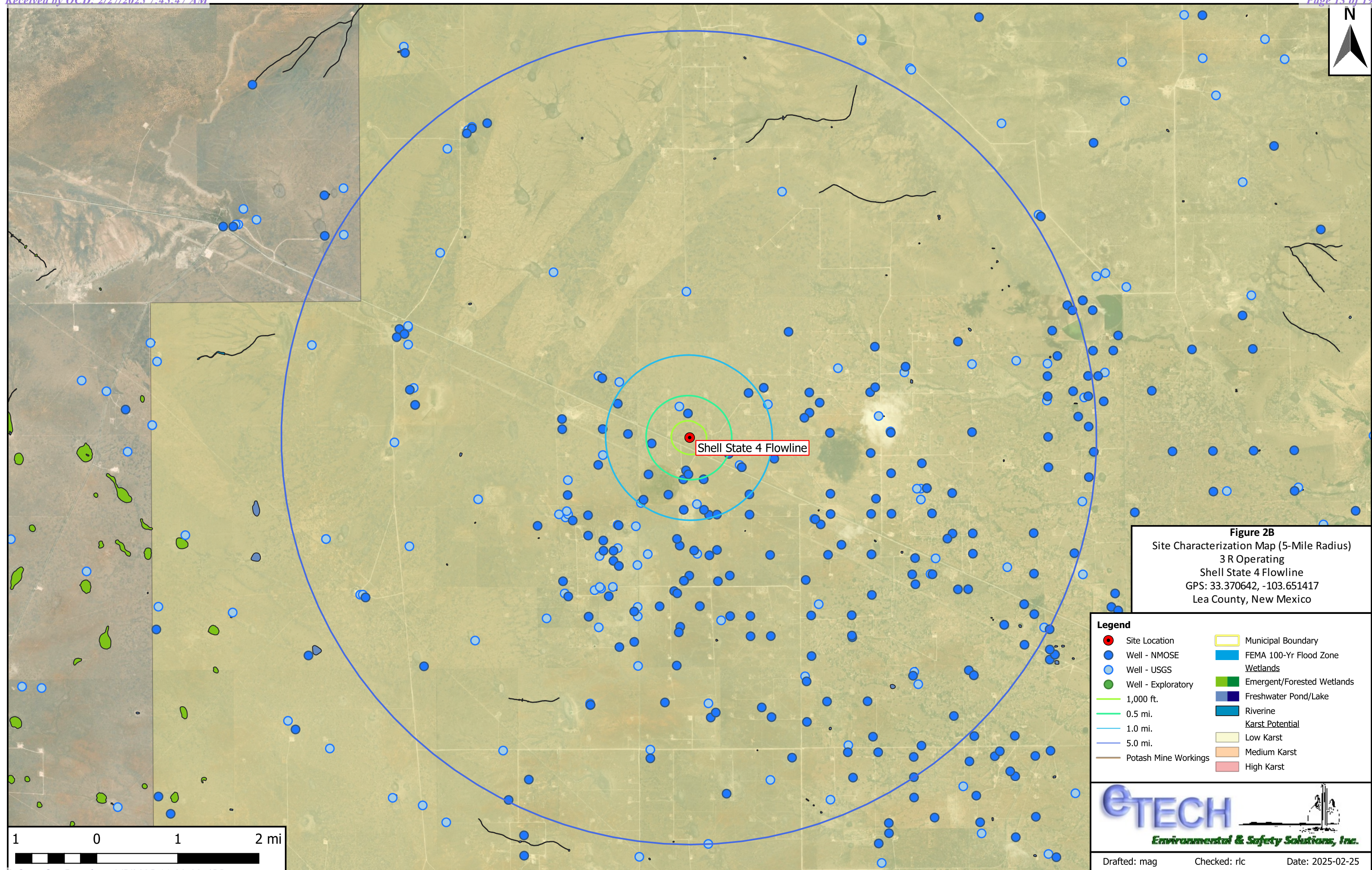
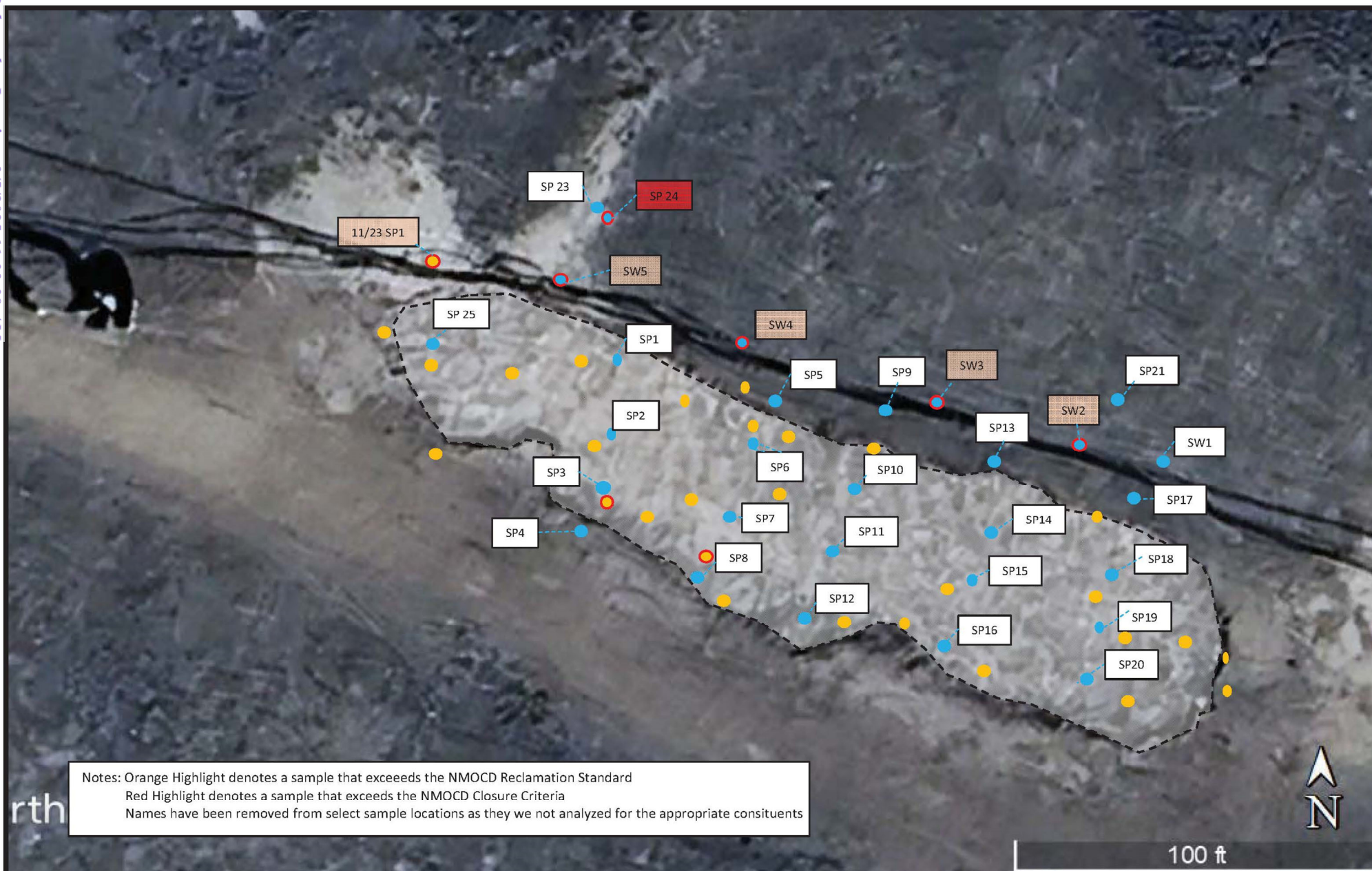


Figure 3

Site and Sample Location Map



Legend:

- Historic Sample Locations
- 11/19/2024 Sample Location
- Excavated Area
- Analytical Exceedance

Figure 3
 Site and Sample Location Map
 3R Operating, LLC
 Shell State 4 Flowline
 GPS: 33.370642, -103.651417
 Lea Co, NM

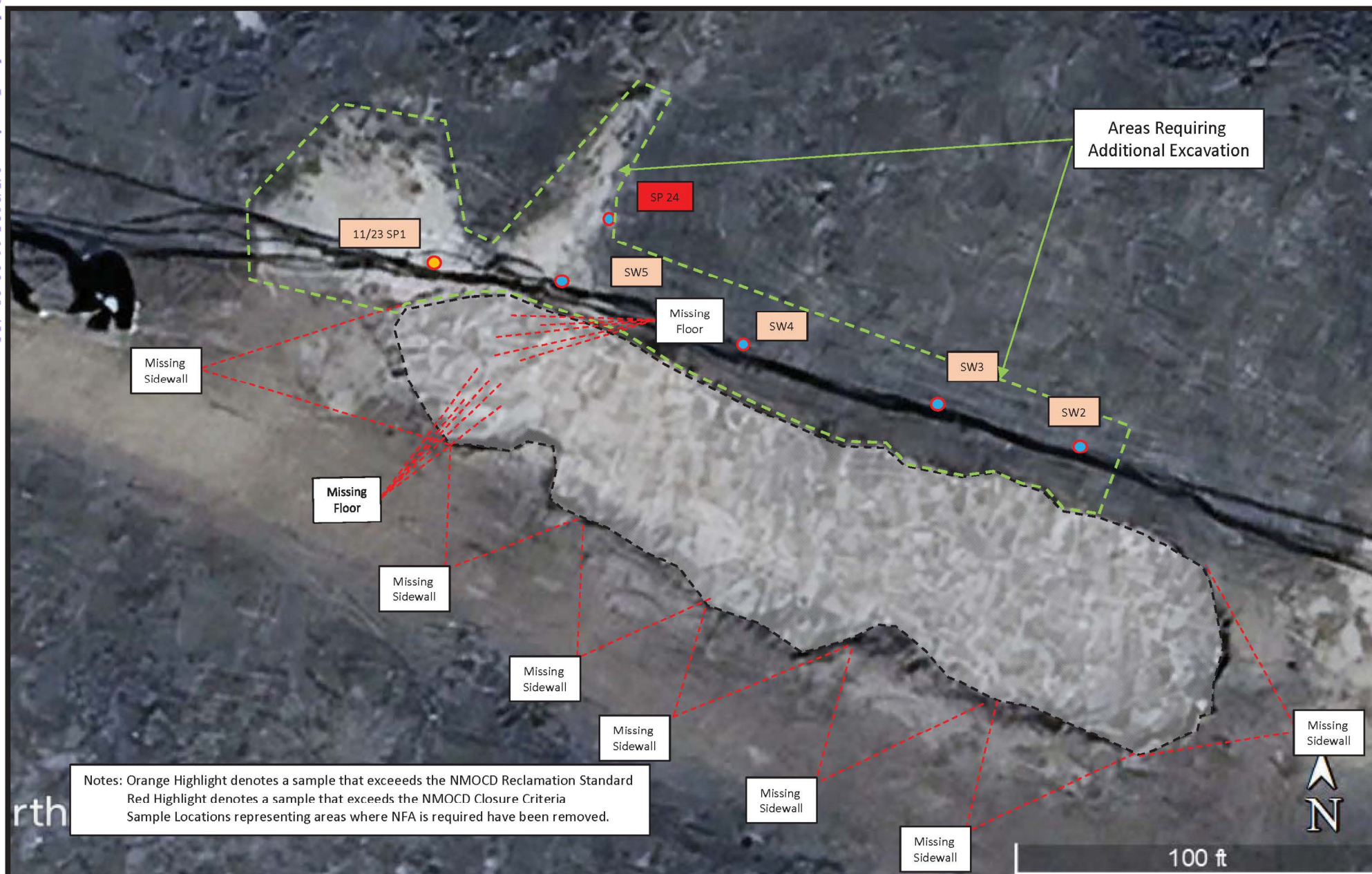


Drafted: jwl

Checked: client

Date: 2/25/25

Figure 4
Anticipated Excavation and Proposed Sample Location Map



Legend:

- Historic Sample Locations
- 11/19/2024 Sample Location
- Exceeding Sampling Location
- Excavated Area
- Anticipated Excavation

Figure 4

Anticipated Excavation & Proposed Sample Location Map
 3 R Operating
 Shell State 4 Flowline
 GPS: 33.370642, -103.651417
 Lea Co, NM



Drafted: jwl

Checked: client

Date:

2/25/25

Table 1
Concentrations of BTEX, TPH, and Chloride in Soil

Table 1
Concentrations of BTEX, TPH, and Chloride in Soil
3 R Operating
Shell State 4 Flowline
NMOCD Ref. #: NAPP2301367245

NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth (Feet)	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SP 1 @ 3'	8/2/2023	3	In-Situ	-	-	-	-	-	-	-	80.0
SP 2 @ 3'	8/2/2023	3	In-Situ	-	-	-	-	-	-	-	32.0
SP 3 @ 3'	8/2/2023	3	In-Situ	-	-	-	-	-	-	-	32.0
SP 4 @ 3'	8/2/2023	3	In-Situ	-	-	-	-	-	-	-	576
SP 5 @ 3'	8/2/2023	3	Excavated	-	-	-	-	-	-	-	656
EAST WALL @ 2'	8/2/2023	2	In-Situ	-	-	-	-	-	-	-	240
NORTH WALL @ 2'	8/2/2023	2	In-Situ	-	-	-	-	-	-	-	464
SOUTH WALL @ 2'	8/2/2023	2	In-Situ	-	-	-	-	-	-	-	144
WEST WALL @ 2'	8/2/2023	2	In-Situ	-	-	-	-	-	-	-	96.0
SP1	11/15/2023	0.5	In-Situ	<0.0250	<0.0100	<20.0	96.5	96.5	66.9	163	-
SP2	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	261	261	154	415	-
SP3	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	425	425	218	643	-
SP4	11/15/2023	0.5	In-Situ	<0.0250	<0.0100	<20.0	30.3	30.3	<50.0	30.3	-
SP5	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	315	315	171	486	-
SP6	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	2,940	2,940	1,090	4,030	-
SP7	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	238	238	154	392	-
SP8	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	82.8	82.8	57.0	140	-
SP9	11/15/2023	4	Excavated	<0.0250	<0.0100	<20.0	1,040	1,040	572	1,610	-
SP10	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	567	567	314	881	-
SP11	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	129	129	107	236	-
SP12	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	<25.0	<45.0	<50.0	<95.0	-
SP13	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	405	405	219	624	-
SP14	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	176	176	127	303	-
SP15	11/15/2023	0.5	In-Situ	<0.0250	<0.0100	<20.0	<25.0	<45.0	<50.0	<95.0	-
SP16	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	<25.0	<45.0	<50.0	<95.0	-
SP17	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	111	111	66.4	177	-
SP18	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	<25.0	<45.0	<50.0	<95.0	-
SP19	11/15/2023	4	In-Situ	<0.0250	<0.0100	<20.0	320	320	164	484	-
SP20	11/15/2023	0.5	In-Situ	<0.0250	<0.0100	<20.0	<25.0	<45.0	<50.0	<95.0	-
SW1	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SW2	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	1,030
SW3	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	87.4	87.4	71.3	159	2,430
SW4	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	291	291	277	568	3,400
SW5	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	463	463	255	718	1,710
SP1	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP2	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	178
SP3	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	565	565	327	892	3,280
SP4	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP5	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP6	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	128
SP7	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	168

Dash (-): Sample not analyzed for that constituent.

Bold: NMOCD Closure Criteria exceedance.

Red: NMOCD Reclamation Standard exceedance.

Red Border with Shading: Highest observed concentration.

Table 1 Concentrations of BTEX, TPH, and Chloride in Soil 3 R Operating Shell State 4 Flowline NMOCD Ref. #: NAPP2301367245											
NMOCD Closure Criteria				10	50	-	-	1,000	-	2,500	10,000
NMOCD Reclamation Standard				10	50	-	-	-	-	100	600
Sample ID	Date	Depth (Feet)	Soil Status	SW 846 8021B		SW 846 8015M Ext.					4500 Cl
				Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SP8	11/19/2024	5	Excavate	<0.0250	<0.100	<20.0	615	615	396	1,010	3,470
SP9	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	128
SP10	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	72.6
SP11	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	61.5
SP12	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	213
SP13	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	48.2
SP14	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	133
SP15	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP16	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP17	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	444
SP18	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP19	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	20.0
SP20	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	129
SP21	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP22	11/19/2024	5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	<20.0
SP23	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	23.0
SP24	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	60.1	60.1	112	172	13,700
SP25	11/19/2024	0.5	In-Situ	<0.0250	<0.100	<20.0	<25.0	<45.0	<50.0	<95.0	516

Dash (-): Sample not analyzed for that constituent.

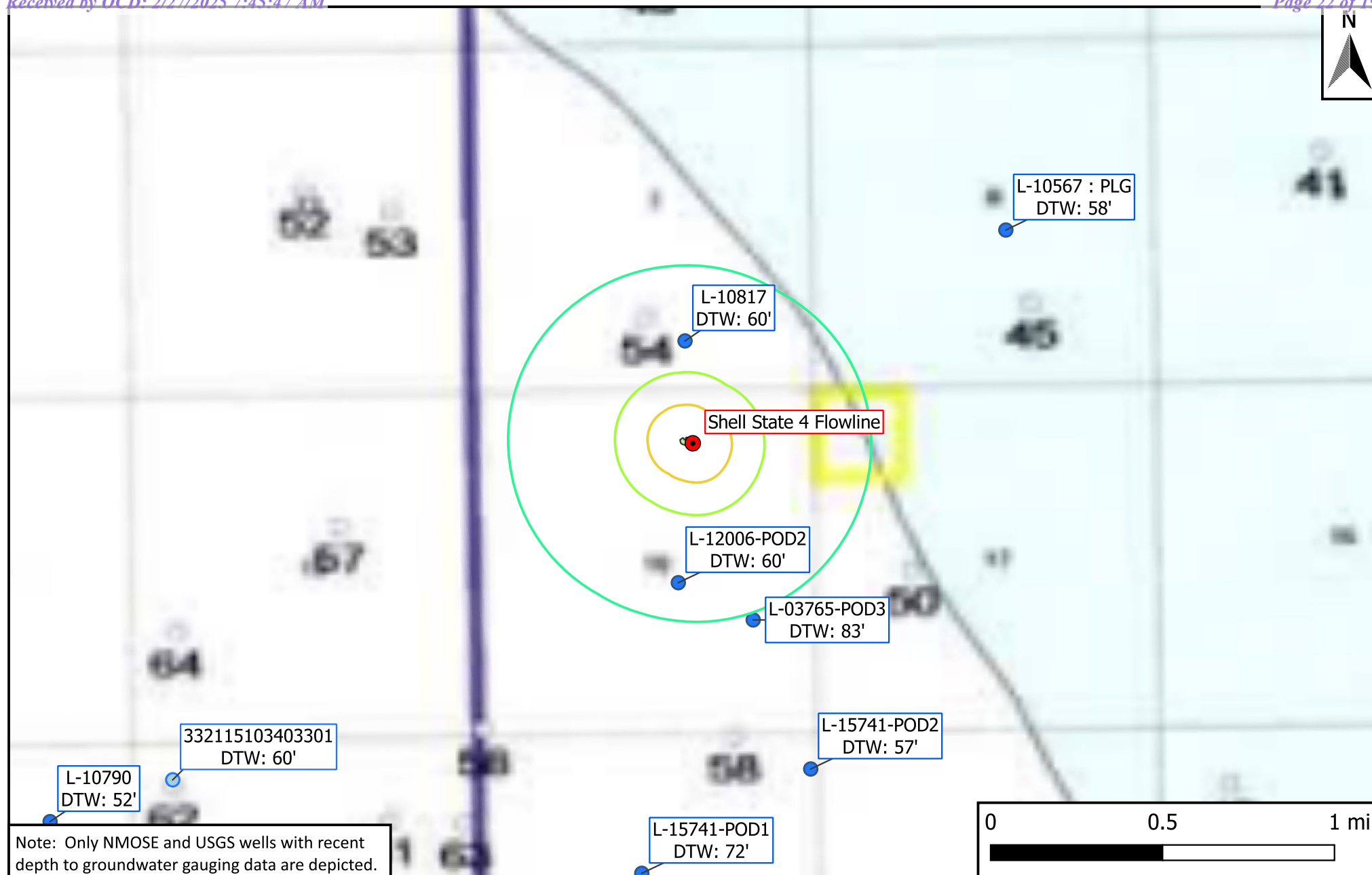
Bold: NMOCD Closure Criteria exceedance.

Red: NMOCD Reclamation Standard exceedance.

Red Border with Shading: Highest observed concentration.

Appendix A

Depth to Groundwater Information



Legend

- | | |
|-------------------------|-----------------|
| ● Active Site Locations | ■ Affected Area |
| ● Well - NMOSE | — 500 ft. |
| ● Well - USGS | — 1,000 ft. |
| ● Well - Exploratory | — 0.5 mi. |

Figure 4
 Inferred Depth to Groundwater Map
 3 R Operating
 Shell State 4 Flowline
 GPS: 33.370642, -103.651417
 Lea County, New Mexico



Drafted: mag


Checked: rlc

Date: 2025-02-25

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	Tws	Rng	X	Y	Map
	L 10817		SW	SE	07	11S	33E	625418.0	3693669.0 *	

* UTM location was derived from PLSS - see Help

Driller License:	421	Driller Company:	GLENN'S WATER WELL SERVICE
Driller Name:	GLENN, CLARK A."CORKY" (LD)		
Drill Start Date:	1998-06-05	Drill Finish Date:	1998-06-05
Log File Date:	1998-06-17	PCW Rcv Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield:	40
Casing Size:	5.50	Depth Well:	125
		Depth Water:	60

Water Bearing Stratifications:

Top	Bottom	Description
65	122	Other/Unknown

Casing Perforations:

Top	Bottom
65	125

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.

STATE ENGINEER OFFICE

WELL RECORD

Revised June 1972

Section 1. GENERAL INFORMATION

148170

(A) Owner of well Pearce Ranch Owner's Well No. _____

Street or Post Office Address West Star Box 52

City and State Tatum, New Mexico 88267

Well was drilled under Permit No. #1-10,817 and is located in the:

a. _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 7 Township 11-S. Range 33-E. N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____

Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor Glenn's Wager Well Service License No. WD-421

Address P.O. Box 692 Tatum, New Mexico 88267

Drilling Began 6/5/98 Completed 6/5/98 Type tools rotary Size of hole 9 7/8 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 125 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
65	122	57	Sand	40 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 $\frac{1}{2}$ "	.250	T&C			125	none	65	125

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

Date Received 06/17/98

FOR USE OF STATE ENGINEER ONLY

507088

Quad _____ FWL _____ FSL _____

File No. L-10,817 Use Stock Location No. 11.33.7.4330

[illegible]

Section 7. REMARKS AND ADDITIONAL INFORMATION

98 JUN 17 AM 10 23

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Corby Henry
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

STATE ENGINEER OFFICE
WELL RECORD

June 15 '98
Revised June 1972

Section 1. GENERAL INFORMATION

(A) Owner of well Pearce Ranch Owner's Well No. _____
Street or Post Office Address West Star Box 52
City and State Tatum, New Mexico 88267

Well was drilled under Permit No. #1-10,817 and is located in the:
a. _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 7 Township 11-S. Range 33-E. N.M.P.M.
b. Tract No. _____ of Map No. _____ of the _____
c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.
d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in
the _____ Grant.

(B) Drilling Contractor Glenn's Wafer Well Service License No. WD-421
Address P.O. Box 692 Tatum, New Mexico 88267
Drilling Began 6/5/98 Completed 6/5/98 Type tools rotary Size of hole 9 7/8 in.
Elevation of land surface or _____ at well is _____ ft. Total depth of well 125 ft.
Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
65	122	57	Sand	40 GPM

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5 1/2"	.250	T&C			125	none	65	125

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

#148130

Date Received 11/7/00

Quad _____ FWL _____ FSL _____

Section 7. REMARKS AND ADDITIONAL INFORMATION


Cosky Blum
Driller

Released to Imaging: 3/5/2025 11:33:39 AM

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	TwS	Rng	X	Y	Map
	L 12006 POD2	SE	NW	NW	18	11S	33E	625386.5	3692537.3	

* UTM location was derived from PLSS - see Help

Driller License:	421	Driller Company:	GLENN'S WATER WELL SERVICE		
Driller Name:	CORKY GLENN				
Drill Start Date:	2008-08-27	Drill Finish Date:	2008-08-27	Plug Date:	
Log File Date:	2008-09-04	PCW Rcv Date:		Source:	Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:	6.63	Depth Well:	155	Depth Water:	60

Casing Perforations:

Top	Bottom
60	152

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.

9/3/08

OSE FILE NUMBER _____

For OSE Use Only

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD and DRILLING LOG

1. PERMIT HOLDER(S)

Name: PEARCE TRUST

Name: _____

Address: 1717 JACKSON

Address: _____

City: PECOS

City: _____

State: TX Zip: 79772

State: _____ Zip: _____

Phone: _____

Phone: _____

Contact: _____

Contact Phone: _____

2. STATE ENGINEER REFERENCE NUMBERS:

File # L-12006, Well # 1

3. LOCATION OF WELL (The Datum Is Assumed To Be WGS 84 Unless Otherwise Specified)

Latitude: N 33° Deg 21 Min 53.16 Sec

Longitude: W 103° Deg 39 Min 8.05 Sec

(Enter Lat/Long To At Least 1/10th Of A Second)

Datum If Not WGS 84: SE 1/4 NW 1/4 SEC. 18, T11-S, R33-EAST

4. DRILLING CONTRACTOR

License Number: WD 421

Name: GLENN'S WATER WELL SERVICE, Work Phone: 505-398-2424

Drill Rig Serial Number: 0582

List The Name Of Each Drill Rig Supervisor That Managed On-Site Operations During The Drilling Process:

CORKY GLENN

5. DRILLING RECORD

Drilling Began: 8/27/08; Completed: 8/27/08; Drilling Method: ROTARY MUD

Diameter Of Bore Hole: _____ (in);

Total Depth Of Well: 155 (ft);

Completed Well Is (Circle One) Shallow Artesian;

Depth To Water First Encountered: 60' (ft);

Depth To Water Upon Completion Of Well: 60' (ft).

Do Not Write Below This Line

TRN Number: 485546

File Number: L-12206

Form: wr-20 May 07

L-12006

page 1 of 4

CLW

29

OSE FILE NUMBER _____
For OSE Use Only

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD and DRILLING LOG

6. RECORD OF CASING

Diameter (inches)	Pounds (per ft.)	Threads (per inch)	Depth (feet)	Length Top to Bottom (feet)	Type of Shoe	Perforations (from to)
10 3/4	1/4 WELL	PE		21	NONE	NONE
6 5/8	.188	PE		152	NONE	60-152

RECORD OF MUDDING AND CEMENTING

Depth (feet)	Hole (diameter)	Mud Used (# of sacks)	Cement (cubic feet)	Method of Placement
0-21	14 3/4		14 SACKS	POUR

Do Not Write Below This Line

Trn Number: _____
Form: wr-20 May 07

File Number: _____

page 2 of 4

For OSE Use Only

8. LOG OF HOLE. For Each Water Bearing Strata, Estimate The Yield Of The Formation In Gallons Per Minute.

[illegible]

Do Not Write Below This Line

File Number:

OSE FILE NUMBER _____

For OSE Use Only

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

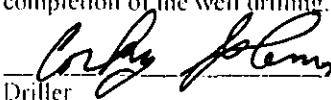
9. ADDITIONAL STATEMENTS OR EXPLANATIONS:

DRILLED 14 3/4" HOLE TO 21' AND SET 21' OF 10 3/4"
CASING AND CEMENTED TO TOP OF WELL

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

The undersigned hereby certifies that, to the best of his or her knowledge and belief, the foregoing is a true and correct record of the above described bore hole. The undersigned further certifies that he or she will file this well record with the Office Of The State Engineer and permit holder within 20 days after completion of the well drilling.

Driller

9/3/08
(mm/dd/year)

Do Not Write Below This Line

Trn Number: _____

Form wr-20 May 07

page 4 of 4

File Number: _____

Appendix B

Field Data and Soil Profile Logs



Soil Profile

Date: 2/25/2025

Project: Shell State 4 Flowline
Project Number: 21644 Latitude: 33.370642 Longitude: -103.651417

Depth (ft. bgs)	Description
1	brown clayey loam, topsoil
2	
3	white/pink calcrete
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	

Appendix C

Laboratory Analytical Reports



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

August 14, 2023

MICHAEL ALVES

ALVES OILFIELD SOLUTIONS

2215 W BENDER

HOBBS, NM 88240

RE: SHELL STATE BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 08/11/23 10:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. 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:

ALVES OILFIELD SOLUTIONS
 MICHAEL ALVES
 2215 W BENDER
 HOBBS NM, 88240
 Fax To:

Received: 08/11/2023
 Reported: 08/14/2023
 Project Name: SHELL STATE BATTERY
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY

Sampling Date: 08/02/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 3' (H234340-01)

Chloride, SM4500CI-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	08/14/2023	ND	432	108	400	0.00	

Sample ID: SP 2 @ 3' (H234340-02)

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	08/14/2023	ND	432	108	400	0.00	

Sample ID: SP 3 @ 3' (H234340-03)

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	08/14/2023	ND	432	108	400	0.00	

Sample ID: SP 4 @ 3' (H234340-04)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	08/14/2023	ND	432	108	400	0.00	

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:

ALVES OILFIELD SOLUTIONS
 MICHAEL ALVES
 2215 W BENDER
 HOBBS NM, 88240
 Fax To:

Received: 08/11/2023
 Reported: 08/14/2023
 Project Name: SHELL STATE BATTERY
 Project Number: NONE GIVEN
 Project Location: LEA COUNTY

Sampling Date: 08/02/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 5 @ 3' (H234340-05)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	08/14/2023	ND	432	108	400	0.00		

Sample ID: NORTH WALL @ 2' (H234340-06)

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	08/14/2023	ND	432	108	400	0.00	

Sample ID: EAST WALL @ 2' (H234340-07)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	08/14/2023	ND	432	108	400	0.00		

Sample ID: SOUTH WALL @ 2' (H234340-08)

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	08/14/2023	ND	432	108	400	0.00		

Sample ID: WEST WALL @ 2' (H234340-09)

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	08/14/2023	ND	432	108	400	0.00	

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 cursive script, appearing to read "Celey D. Keene", is written in black ink.

Celey D. Keene, Lab Director/Quality Manager

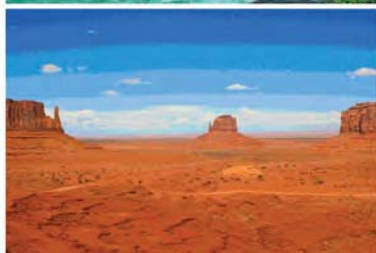


101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Alves Oilfield Solutions		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: Michael Alves		Company: Alves Oilfield Solutions					
Address:		City: Albuquerque, NM					
City: Albuquerque		State: NM		Zip: 87101			
Phone #: 505-241-1111		Fax #: 505-241-1111		Address: 10000 1st Ave NE, Suite 100			
Project #: 3180		Project Owner: 3R Operating		City: Hobbs			
Project Name: Shell State Battery		State: NM		Zip: 88240			
Project Location: Lea County		Phone #: 575-631-4310		Fax #:			
Sampler Name: D. Seanaus		FOR LAB USE ONLY					
Lab I.D. 4234340		Sample I.D.					
1 502031		(G)RAB OR (C)OMP.					
2 502031		# CONTAINERS					
3 503031		GROUNDWATER					
4 504031		WASTEWATER					
5 505031		SOIL					
6 506031		OIL					
7 507031		SLUDGE					
8 508031		OTHER:					
9 509031		ACID/BASE:					
10 510031		ICE / COOL					
11 511031		OTHER:					
12 512031		DATE		TIME			
13 513031		8/10		8:10			
14 514031		8/10		8:23			
15 515031		8/10		8:45			
16 516031		8/10		9:03			
17 517031		8/10		9:17			
18 518031		8/10		9:24			
19 519031		8/10		9:34			
20 520031		8/10		9:42			
21 521031		8/10		9:52			
22 522031		8/10		9:52			
23 523031		8/10		9:52			
24 524031		8/10		9:52			
25 525031		8/10		9:52			
26 526031		8/10		9:52			
27 527031		8/10		9:52			
28 528031		8/10		9:52			
29 529031		8/10		9:52			
30 530031		8/10		9:52			
31 531031		8/10		9:52			
32 532031		8/10		9:52			
33 533031		8/10		9:52			
34 534031		8/10		9:52			
35 535031		8/10		9:52			
36 536031		8/10		9:52			
37 537031		8/10		9:52			
38 538031		8/10		9:52			
39 539031		8/10		9:52			
40 540031		8/10		9:52			
41 541031		8/10		9:52			
42 542031		8/10		9:52			
43 543031		8/10		9:52			
44 544031		8/10		9:52			
45 545031		8/10		9:52			
46 546031		8/10		9:52			
47 547031		8/10		9:52			
48 548031		8/10		9:52			
49 549031		8/10		9:52			
50 550031		8/10		9:52			
51 551031		8/10		9:52			
52 552031		8/10		9:52			
53 553031		8/10		9:52			
54 554031		8/10		9:52			
55 555031		8/10		9:52			
56 556031		8/10		9:52			
57 557031		8/10		9:52			
58 558031		8/10		9:52			
59 559031		8/10		9:52			
60 560031		8/10		9:52			
61 561031		8/10		9:52			
62 562031		8/10		9:52			
63 563031		8/10		9:52			
64 564031		8/10		9:52			
65 565031		8/10		9:52			
66 566031		8/10		9:52			
67 567031		8/10		9:52			
68 568031		8/10		9:52			
69 569031		8/10		9:52			
70 570031		8/10		9:52			
71 571031		8/10		9:52			
72 572031		8/10		9:52			
73 573031		8/10		9:52			
74 574031		8/10		9:52			
75 575031		8/10		9:52			
76 576031		8/10		9:52			
77 577031		8/10		9:52			
78 578031		8/10		9:52			
79 579031		8/10		9:52			
80 580031		8/10		9:52			
81 581031		8/10		9:52			
82 582031		8/10		9:52			
83 583031		8/10		9:52			
84 584031		8/10		9:52			
85 585031		8/10		9:52			
86 586031		8/10		9:52			
87 587031		8/10		9:52			
88 588031		8/10		9:52			
89 589031		8/10		9:52			
90 590031		8/10		9:52			
91 591031		8/10		9:52			
92 592031		8/10		9:52			
93 593031		8/10		9:52			
94 594031		8/10		9:52			
95 595031		8/10		9:52			
96 596031		8/10		9:52			
97 597031		8/10		9:52			
98 598031		8/10		9:52			
99 599031		8/10		9:52			
100 600031		8/10		9:52			
101 601031		8/10		9:52			
102 602031		8/10		9:52			
103 603031		8/10		9:52			
104 604031		8/10		9:52			
105 605031		8/10		9:52			
106 606031		8/10		9:52			
107 607031		8/10		9:52			
108 608031		8/10		9:52			
109 609031		8/10		9:52			
110 610031		8/10		9:52			
111 611031		8/10		9:52			
112 612031		8/10		9:52			
113 613031		8/10		9:52			
114 614031		8/10		9:52			
115 615031		8/10		9:52			
116 616031		8/10		9:52			
117 617031		8/10		9:52			
118 618031		8/10		9:52			
119 619031		8/10		9:52			
120 620031		8/10		9:52			
121 621031		8/10		9:52			
122 622031		8/10		9:52			
123 623031		8/10		9:52			
124 624031		8/10		9:52			
125 625031		8/10		9:52			
126 626031		8/10		9:52			
127 627031		8/10		9:52			
128 628031		8/10		9:52			
129 629031		8/10		9:52			
130 630031		8/10		9:52			
131 631031		8/10		9:52			
132 632031		8/10		9:52			
133 633031		8/10		9:52			
134 634031		8/10		9:52			
135 635031		8/10		9:52			
136 636031		8/10		9:52			
137 637031		8/10		9:52			
138 638031		8/10		9:52			
139 639031		8/10		9:52			
140 640031		8/10		9:52			
141 641031		8/10		9:52			
142 642031		8/10		9:52			
143 643031		8/10		9:52			
144 644031		8/10		9:52			
145 645031		8/10		9:52			
146 646031		8/10		9:52			
147 647031		8/10		9:52			
148 648031		8/10		9:52			
149 649031		8/10		9:52			
150 650031		8/10		9:52			
151 651031		8/10		9:52			
152 652031		8/10		9:52			
153 653031		8/10		9:52			
154 654031		8/10		9:52			
155 655031		8/10		9:52			
156 656031		8/10		9:52			
157 657031		8/10		9:52			
158 658031		8/10		9:52			
159 659031		8/10		9:52			
160 660031		8/10		9:52			
161 661031		8/10		9:52			
162 662031		8/10		9:52			
163 663031		8/10		9:52			
164 664031		8/10		9:52			
165 665031		8/10		9:52			
166 666031		8/10		9:52			
167 667031		8/10		9:52			
168 668031		8/10		9:52			
169 669031		8/10		9:52			
170 670031		8/10		9:52			
171 671031		8/10		9:52			
172 672031		8/10		9:52			
173 673031		8/10		9:52			
174 674031		8/10		9:52			
175 675031		8/10		9:52			
176 676031		8/10		9:52			
177 677031		8/10		9:52			
178 678031		8/10		9:52			
179 679031		8/10		9:52			
180 680031		8/10		9:52			
181 681031		8/10		9:52			
182 682031		8/10		9:52			
183 683031		8/10		9:52			
184 684031		8/10		9:52			
185 685031		8/10		9:52			
186 686031		8/10		9:52			
187 687031		8/10		9:52			
188 688031		8/10		9:52			
189 689031		8/10		9:52			
190 690031		8/10		9:52			
191 691031		8/10		9:52			
192 692031		8/10		9:52			
193 693031		8/10		9:52			

Report to:
Austin Weyant



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Atkins Engineering Associates Inc.

Project Name: Shell #3
Work Order: E411245
Job Number: 20071-0001
Received: 11/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/27/24

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 11/27/24

Austin Weyant
2904 W. 2nd
Roswell, NM 88201



Project Name: Shell #3
Workorder: E411245
Date Received: 11/22/2024 1:45:00PM

Austin Weyant,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/22/2024 1:45:00PM, under the Project Name: Shell #3.

The analytical test results summarized in this report with the Project Name: Shell #3 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzaless@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
SW1	6
SW2	7
SW3	8
SW4	9
SW5	10
SP1	11
SP2	12
SP3	13
SP4	14
SP5	15
SP6	16
SP7	17
SP8	18
SP9	19
SP10	20
SP11	21
SP12	22
SP13	23
SP14	24
QC Summary Data	25

Table of Contents (continued)

QC - Volatile Organics by EPA 8021B	25
QC - Nonhalogenated Organics by EPA 8015D - GRO	26
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	27
QC - Anions by EPA 300.0/9056A	28
Definitions and Notes	29
Chain of Custody etc.	30

Sample Summary

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported: 11/27/24 11:10
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SW1	E411245-01A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SW2	E411245-02A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SW3	E411245-03A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SW4	E411245-04A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SW5	E411245-05A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP1	E411245-06A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP2	E411245-07A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP3	E411245-08A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP4	E411245-09A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP5	E411245-10A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP6	E411245-11A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP7	E411245-12A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP8	E411245-13A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP9	E411245-14A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP10	E411245-15A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP11	E411245-16A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP12	E411245-17A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP13	E411245-18A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP14	E411245-19A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SW1

E411245-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: 4-Bromochlorobenzene-PID	88.4 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.9 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/25/24	
Surrogate: n-Nonane	120 %	50-200		11/25/24	11/25/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	ND	20.0	1	11/25/24	11/25/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SW2

E411245-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: 4-Bromochlorobenzene-PID	88.3 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.3 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/25/24	
Surrogate: n-Nonane	116 %	50-200		11/25/24	11/25/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	1030	40.0	2	11/25/24	11/25/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SW3

E411245-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: 4-Bromochlorobenzene-PID	89.4 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.8 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	87.4	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	71.3	50.0	1	11/25/24	11/25/24	
Surrogate: n-Nonane	112 %	50-200		11/25/24	11/25/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	2430	20.0	1	11/25/24	11/25/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SW4

E411245-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2448004
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.5 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2448004
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.1 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448007
Diesel Range Organics (C10-C28)	291	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	277	50.0	1	11/25/24	11/25/24	
<i>Surrogate: n-Nonane</i>						
	110 %	50-200		11/25/24	11/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2448009
Chloride	3400	40.0	2	11/25/24	11/25/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SW5

E411245-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: 4-Bromochlorobenzene-PID	88.1 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.7 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	463	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	255	50.0	1	11/25/24	11/25/24	
Surrogate: n-Nonane	127 %	50-200		11/25/24	11/25/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	1710	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP1

E411245-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.4 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.9 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/25/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/25/24	
<i>Surrogate: n-Nonane</i>						
	115 %	50-200		11/25/24	11/25/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP2

E411245-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.3 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.6 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	178	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP3
E411245-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: 4-Bromochlorobenzene-PID	87.2 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.9 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	565	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	327	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane	115 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	3280	40.0	2	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP4
E411245-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	89.4 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.2 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP5
E411245-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.2 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.6 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP6

E411245-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
Surrogate: 4-Bromochlorobenzene-PID	87.7 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.8 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane	116 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	128	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP7

E411245-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.7 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.7 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	114 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	168	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP8
E411245-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
Surrogate: 4-Bromochlorobenzene-PID	87.3 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.3 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	615	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	396	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane	119 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	3470	40.0	2	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP9

E411245-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	88.0 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.1 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>	111 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	128	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP10

E411245-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2448004
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
Surrogate: 4-Bromochlorobenzene-PID	88.1 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2448004
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID	94.7 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448007
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane	116 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: DT		Batch: 2448009
Chloride	72.6	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP11

E411245-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	86.9 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.3 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>	110 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	61.5	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP12

E411245-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	88.7 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.2 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	213	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/27/2024 11:10:32AM
--	--	------------------------------------

SP13

E411245-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.6 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	94.4 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	114 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	48.2	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/27/2024 11:10:32AM

SP14

E411245-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	87.6 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: SL		Batch: 2448004	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.9 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448007	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
<i>Surrogate: n-Nonane</i>						
	116 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: DT		Batch: 2448009	
Chloride	133	20.0	1	11/25/24	11/26/24	



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	11/27/2024 11:10:32AM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2448004-BLK1)

Prepared: 11/25/24 Analyzed: 11/25/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	6.87		8.00		85.9	70-130			

LCS (2448004-BS1)

Prepared: 11/25/24 Analyzed: 11/25/24

Benzene	4.58	0.0250	5.00		91.5	70-130			
Ethylbenzene	4.39	0.0250	5.00		87.7	70-130			
Toluene	4.49	0.0250	5.00		89.8	70-130			
o-Xylene	4.36	0.0250	5.00		87.2	70-130			
p,m-Xylene	8.92	0.0500	10.0		89.2	70-130			
Total Xylenes	13.3	0.0250	15.0		88.5	70-130			
Surrogate: 4-Bromochlorobenzene-PID	6.99		8.00		87.4	70-130			

LCS Dup (2448004-BS1)

Prepared: 11/25/24 Analyzed: 11/25/24

Benzene	5.54	0.0250	5.00		111	70-130	19.0	20	
Ethylbenzene	5.34	0.0250	5.00		107	70-130	19.6	20	
Toluene	5.46	0.0250	5.00		109	70-130	19.4	20	
o-Xylene	5.31	0.0250	5.00		106	70-130	19.7	20	
p,m-Xylene	10.8	0.0500	10.0		108	70-130	19.5	20	
Total Xylenes	16.2	0.0250	15.0		108	70-130	19.5	20	
Surrogate: 4-Bromochlorobenzene-PID	7.09		8.00		88.6	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	11/27/2024 11:10:32AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2448004-BLK1) Prepared: 11/25/24 Analyzed: 11/25/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.64		8.00		95.5	70-130			

LCS (2448004-BS2) Prepared: 11/25/24 Analyzed: 11/25/24

Gasoline Range Organics (C6-C10)	45.1	20.0	50.0		90.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.67		8.00		95.9	70-130			

LCS Dup (2448004-BSD2) Prepared: 11/25/24 Analyzed: 11/25/24

Gasoline Range Organics (C6-C10)	48.4	20.0	50.0		96.8	70-130	7.01	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.69		8.00		96.1	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	11/27/2024 11:10:32AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2448007-BLK1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.7		50.0		103	50-200			

LCS (2448007-BS1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Diesel Range Organics (C10-C28)	259	25.0	250		104	38-132			
Surrogate: n-Nonane	53.8		50.0		108	50-200			

Matrix Spike (2448007-MS1)					Source: E411245-13		Prepared: 11/25/24 Analyzed: 11/25/24		
Diesel Range Organics (C10-C28)	877	25.0	250	615	105	38-132			
Surrogate: n-Nonane	56.2		50.0		112	50-200			

Matrix Spike Dup (2448007-MSD1)					Source: E411245-13		Prepared: 11/25/24 Analyzed: 11/25/24		
Diesel Range Organics (C10-C28)	862	25.0	250	615	98.5	38-132	1.74	20	
Surrogate: n-Nonane	55.6		50.0		111	50-200			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	11/27/2024 11:10:32AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2448009-BLK1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Chloride	ND	20.0							
LCS (2448009-BS1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Chloride	257	20.0	250		103	90-110			
LCS Dup (2448009-BSD1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Chloride	257	20.0	250		103	90-110	0.206	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.

Definitions and Notes

Atkins Engineering Associates Inc.	Project Name:	Shell #3	
2904 W. 2nd	Project Number:	20071-0001	Reported:
Roswell NM, 88201	Project Manager:	Austin Weyant	11/27/24 11:10

- ND Analyte NOT DETECTED at or above the reporting limit
 - NR Not Reported
 - RPD Relative Percent Difference
 - DNI Did Not Ignite
 - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Page 1 of 4

Client Information				Invoice Information		Lab Use Only		TAT		State	
Client:	Atkins Eng			Company:		Lab WO#	Job Number	1D	2D	3D	Std
Project Name:	SHEL #3			Address:		E411245	26071000d				
Project Manager:	J. Austin Weyant			City, State, Zip:							
Address:				Phone:							
City, State, Zip:	2904 W 2nd, Roswell, 88201			Email:							
Phone:				Miscellaneous:							
Email:	austin@atkinseng.com										

Sample Information				Analysis and Method										EPA Program		Remarks							
Time Sampled	Date Sampled	Matrix	No. of Containers	Field	Filter	Lab Number	DRD/ORD by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA	Compliance	Y	or	N	PWSID #	
15:16	11/14	S	1202			1																	
15:23						2																	
15:30						3																	
15:31						4																	
15:34						5																	
15:09						6																	
15:10						7																	
15:11						8																	
15:13						9																	
15:14						10																	

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Relinquished by:	Signature	Date	Time	Received by:	Signature	Date	Time
Relinquished by:	(Signature)	11/21/24	13:45	Received by:	Carla Mar	11/22/24	13:45
Relinquished by:	(Signature)			Received by:	(Signature)		
Relinquished by:	(Signature)			Received by:	(Signature)		
Relinquished by:	(Signature)			Received by:	(Signature)		

Container type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

AVG Temp °C 4

Received on ice: Y N

Lab Use Only

Received on ice: Y N

T1 T2 T3

AVG Temp °C 4

Sample Matrix: S - Soil, SD - Solid, Sg - Sludge, A - Aqueous, O - Other

Note: Samples are discarded 14 days after results are reported unless otherwise arranged. The liability of the laboratory is limited to the amount paid for on the report.



envirotech

Chain of Custody

Page 2 of 4

Client Information				Invoice Information				Lab Use Only				TAT				State							
Client: <u>Atkins, Eng</u> Project Name: <u>SHILL #3</u> Project Manager: <u>J. Austin Weyant</u> Address: <u>2904 W 2nd, Roswell, 88201</u> City, State, Zip: <u>2904 W 2nd, Roswell, 88201</u> Phone: <u>2904 W 2nd, Roswell, 88201</u> Email: <u>austin@atkinseng.com</u>				Company: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Miscellaneous: _____				Lab WO# <u>E41245</u> Job Number <u>20071.0001</u>				1D _____ 2D _____ 3D _____ Std _____				NM _____ CO _____ UT _____ TX _____							
Sample Information								Analysis and Method								EPA Program							
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Filter	Lab Number	Remarks	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCFQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA	Compliance	Y	or	N	PWSID #
15:15	11/19	S	1206	SP6		11																	
15:36				SP7		12																	
15:16				SP8		13																	
15:17				SP9		14																	
15:16				SP10		15																	
15:19				SP11		16																	
15:20				SP12		17																	
15:21				SP13		18																	
15:22				SP14		19																	
15:23				SP14		20																	

Additional Instructions:			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.			
Sampled by: <u>Austin Weyant</u>	Time: <u>11:24</u>	Date: <u>11/22/24</u>	Time: <u>13:45</u>
Relinquished by: (Signature)	Time	Date	Time
Relinquished by: (Signature)	Time	Date	Time
Relinquished by: (Signature)	Time	Date	Time
Relinquished by: (Signature)	Time	Date	Time
Received on ice: <u>Y</u> N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>			
Container Type: <u>g - glass, p - poly/plastic, ag - amber glass, v - VOA</u>			

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



envirotech

Chain of Custody

Page 1 of 4

Client Information				Invoice Information				Lab Use Only				TAT				State			
Client: <u>Alkins Eng</u> Project Name: <u>Shell #3</u> Project Manager: <u>J. Austin Weyant</u> Address: <u>2804 W 2nd, Roswell, 88201</u> Phone: <u></u> Email: <u>austin@alkinseng.com</u>				Company: <u></u> Address: <u></u> City, State, Zip: <u></u> Phone: <u></u> Email: <u></u> Miscellaneous: <u></u>				Lab WO# <u>EH11245</u> Job Number <u>20071000</u>				1D <u></u> 2D <u></u> 3D <u></u> Std <u></u>				NM <u></u> CO <u></u> UT <u></u> TX <u></u>			
Sample Information								Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field	Lab Number	Remarks	DRD/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	SGDOC - NM	TCED 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA	
15:16	1/14	S	1202	SW1		1	Client asked to Cancel Sample #20 due to duplicate Name, CM 11/22/24												
15:23				SW2		2													
15:30				SW3		3													
15:31				SW4		4													
15:34				SW5		5													
15:09				SP1		6													
15:10				SP2		7													
15:11				SP3		8													
15:13				SP4		9													
15:14				SP5		10													
Additional Instructions:																			
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																			
Sample by: <u>Hayden</u> Relinquished by: (Signature) <u>Hayden</u> Date <u>11/22/24</u> Time <u>13:45</u>				Received by: (Signature) <u>Caitlin Mar</u> Date <u>11/22/24</u> Time <u>13:45</u>				Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent day.				Lab Use Only Received on ice: <u>Y</u> N T1 <u></u> T2 <u></u> T3 <u></u>							
Relinquished by: (Signature) <u>Hayden</u> Date <u>11/22/24</u> Time <u>13:45</u>				Received by: (Signature) <u>Caitlin Mar</u> Date <u>11/22/24</u> Time <u>13:45</u>				AVG Temp °C <u>4</u>				Container Type: <u>g</u> - glass, <u>p</u> - poly/plastic, <u>ag</u> - amber glass, <u>v</u> - VOA							
Relinquished by: (Signature) <u>Hayden</u> Date <u>11/22/24</u> Time <u>13:45</u>				Received by: (Signature) <u>Caitlin Mar</u> Date <u>11/22/24</u> Time <u>13:45</u>				Sample Matrix: <u>S</u> - Soil, <u>sd</u> - Solid, <u>Sl</u> - Sludge, <u>A</u> - Aqueous, <u>O</u> - Other				Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this report. The liability of the laboratory is limited to the amount paid for on the report.							

envirotech

Chain of Custody

Page 2 of 4

Client Information				Invoice Information				Lab Use Only				TAT				State						
Client: <u>Alkins Eng</u> Project Name: <u>SHL #3</u> Project Manager: <u>J. Austin Wevart</u> Address: <u>2904 W 2nd, Roswell, 88201</u> Phone: <u></u> Email: <u>austin@alkinseng.com</u>				Company: <u></u> Address: <u></u> City, State, Zip: <u></u> Phone: <u></u> Email: <u></u> Miscellaneous: <u></u>				Lab WO# <u>E41245</u> Job Number <u>2001001</u>				1D <u></u> 2D <u></u> 3D <u></u> Std <u></u>				NM <u></u> CO <u></u> UT <u></u> TX <u></u>						
Sample Information								Analysis and Method								EPA Program						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field #	Lab Number		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCED 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA	Compliance	Y or N	PWSID #	Remarks
15:15	11/19	S	1206	SP6		11							X									
15:36				SP7		12							X									
15:46				SP8		13							X									
15:17				SP9		14							X									
15:16				SP10		15							X									
15:19				SP11		16							X									
15:20				SP12		17							X									
15:21				SP13		18							X									
15:22				SP14		19							X									
15:23				SP14		20							X									
Additional Instructions: <u>CM 11/22/24</u>																						
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																						
Relinquished by: <u>[Signature]</u> Date: <u>11/21/24</u> Time: <u>13:58</u>				Received by: <u>[Signature]</u> Date: <u>11/22/24</u> Time: <u>13:45</u>				Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on <u>11/22/24</u> .														
Relinquished by: (Signature) Date: <u></u> Time: <u></u>				Received by: (Signature) Date: <u></u> Time: <u></u>				Lab Use Only Received on ice: <u>Y</u> <u>N</u> T1 <u></u> T2 <u></u> T3 <u></u>														
Relinquished by: (Signature) Date: <u></u> Time: <u></u>				Received by: (Signature) Date: <u></u> Time: <u></u>				AVG Temp °C <u>4</u>														
Relinquished by: (Signature) Date: <u></u> Time: <u></u>				Received by: (Signature) Date: <u></u> Time: <u></u>				Container Type: <u>g - glass, p - poly/plastic, ag - amber glass, v - VOA</u>														
Sample Matrix: <u>S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other</u> Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this CCO. The liability of the laboratory is limited to the amount paid for on the report.																						



envirotech

Envirotech Analytical Laboratory

Printed: 11/22/2024 2:51:32PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Atkins Engineering Associates Inc.	Date Received:	11/22/24 13:45	Work Order ID:	E411245
Phone:	(575) 626-3993	Date Logged In:	11/22/24 14:00	Logged In By:	Caitlin Mars
Email:	austin@atkinseng.com	Due Date:	11/28/24 17:00 (4 day TAT)		

Chain of Custody (COC)

- | | |
|---|-----|
| 1. Does the sample ID match the COC? | Yes |
| 2. Does the number of samples per sampling site location match the COC | No |
| 3. Were samples dropped off by client or carrier? | Yes |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | No |
| 5. Were all samples received within holding time? | Yes |

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: FedExComments/Resolution

Project Shell #3 has been separated into 2 reports due to sample volume. WO are E411245 & E411246. Sampled by not provided on COC. Sample 19 & 20 had same name. Client asked to cancel sample #20.

Sample Turn Around Time (TAT)

- | | |
|---|-----|
| 6. Did the COC indicate standard TAT, or Expedited TAT? | Yes |
|---|-----|

Sample Cooler

- | | |
|--|-----|
| 7. Was a sample cooler received? | Yes |
| 8. If yes, was cooler received in good condition? | Yes |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes |
| 10. Were custody/security seals present? | No |
| 11. If yes, were custody/security seals intact? | NA |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C | Yes |

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

- | | |
|---|--|
| 13. If no visible ice, record the temperature. Actual sample temperature: 4°C | |
|---|--|

Sample Container

- | | |
|--|-----|
| 14. Are aqueous VOC samples present? | No |
| 15. Are VOC samples collected in VOA Vials? | NA |
| 16. Is the head space less than 6-8 mm (pea sized or less)? | NA |
| 17. Was a trip blank (TB) included for VOC analyses? | NA |
| 18. Are non-VOC samples collected in the correct containers? | Yes |
| 19. Is the appropriate volume/weight or number of sample containers collected? | Yes |

Field Label

- | | |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | No |

Sample Preservation

- | | |
|---|----|
| 21. Does the COC or field labels indicate the samples were preserved? | No |
| 22. Are sample(s) correctly preserved? | NA |
| 24. Is lab filtration required and/or requested for dissolved metals? | No |

Multiphase Sample Matrix

- | | |
|--|----|
| 26. Does the sample have more than one phase, i.e., multiphase? | No |
| 27. If yes, does the COC specify which phase(s) is to be analyzed? | NA |

Subcontract Laboratory

- | | |
|---|------------------------|
| 28. Are samples required to get sent to a subcontract laboratory? | No |
| 29. Was a subcontract laboratory specified by the client and if so who? | NA Subcontract Lab: NA |

Client Instruction

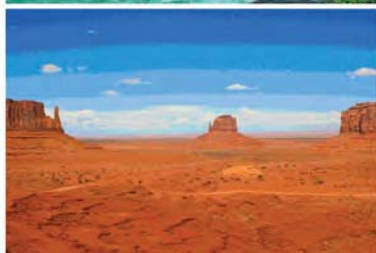
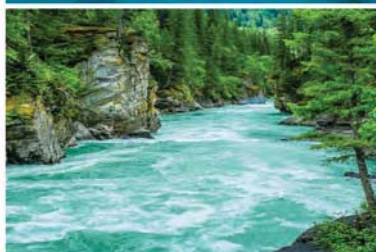
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Austin Weyant



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Atkins Engineering Associates Inc.

Project Name: Shell St
Work Order: E311146
Job Number: 20071-0001
Received: 11/17/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/30/23

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 11/30/23

Austin Weyant
2904 W. 2nd
Roswell, NM 88201



Project Name: Shell St
Workorder: E311146
Date Received: 11/17/2023 1:17:00PM

Austin Weyant,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/17/2023 1:17:00PM, under the Project Name: Shell St.

The analytical test results summarized in this report with the Project Name: Shell St apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
SP 1	6
SP 2	7
SP 3	8
SP 4	9
SP 5	10
SP 6	11
SP 7	12
SP 8	13
SP 9	14
SP 10	15
SP 11	16
SP 12	17
SP 13	18
SP 14	19
SP 15	20
SP 16	21
SP 17	22
SP 18	23
SP 19	24
SP 20	25

Table of Contents (continued)

QC Summary Data	26
QC - Volatile Organics by EPA 8021B	26
QC - Nonhalogenated Organics by EPA 8015D - GRO	27
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	28
Definitions and Notes	29
Chain of Custody etc.	30

Sample Summary

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell St Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/30/23 14:05
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP 1	E311146-01A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 2	E311146-02A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 3	E311146-03A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 4	E311146-04A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 5	E311146-05A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 6	E311146-06A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 7	E311146-07A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 8	E311146-08A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 9	E311146-09A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 10	E311146-10A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 11	E311146-11A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 12	E311146-12A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 13	E311146-13A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 14	E311146-14A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 15	E311146-15A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 16	E311146-16A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 17	E311146-17A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 18	E311146-18A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 19	E311146-19A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.
SP 20	E311146-20A	Soil	11/15/23	11/17/23	Glass Jar, 2 oz.



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell St Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/30/2023 2:05:02PM
--	--	--

SP 1

E311146-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	86.0 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	97.3 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	96.5	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	66.9	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>	109 %	50-200		11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 2

E311146-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		89.8 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.4 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	261	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	154	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>		109 %	50-200	11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 3

E311146-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	<i>91.3 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/28/23</i>	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	<i>95.9 %</i>	<i>70-130</i>		<i>11/20/23</i>	<i>11/28/23</i>	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	423	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	218	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>	<i>106 %</i>	<i>50-200</i>		<i>11/22/23</i>	<i>11/22/23</i>	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 4

E311146-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		92.9 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.7 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	30.3	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>		107 %	50-200	11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 5

E311146-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.4 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	97.1 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	315	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	171	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>	111 %	50-200		11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 6

E311146-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.6 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		98.6 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	2940	125	5	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	1090	250	5	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>		112 %	50-200	11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 7

E311146-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.8 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.3 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	238	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	154	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>		106 %	50-200	11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 8

E311146-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		91.8 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.6 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	82.8	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	57.0	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>		107 %	50-200	11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 9

E311146-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	92.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	96.6 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	1040	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	572	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>	101 %	50-200		11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 10

E311146-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		93.4 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.5 %	70-130	11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	567	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	314	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>		107 %	50-200	11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 11

E311146-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	129	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	107	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 12

E311146-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.2 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	95.3 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/22/23	11/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/22/23	11/22/23	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		11/22/23	11/22/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 13

E311146-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.7 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.1 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	405	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	219	50.0	1	11/22/23	11/23/23	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 14

E311146-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.9 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.1 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	176	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	127	50.0	1	11/22/23	11/23/23	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell St Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/30/2023 2:05:02PM
--	--	-----------------------------------

SP 15

E311146-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
Surrogate: 4-Bromochlorobenzene-PID	97.4 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.6 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/22/23	11/23/23	
Surrogate: n-Nonane	101 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 16

E311146-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.1 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	92.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	ND	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/22/23	11/23/23	
<i>Surrogate: n-Nonane</i>						
	105 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 17

E311146-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.6 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	93.4 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	111	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	66.4	50.0	1	11/22/23	11/23/23	
<i>Surrogate: n-Nonane</i>						
	104 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell St Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/30/2023 2:05:02PM
--	--	-----------------------------------

SP 18

E311146-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
Surrogate: 4-Bromochlorobenzene-PID	98.0 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	92.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/22/23	11/23/23	
Surrogate: n-Nonane	108 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell St
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
11/30/2023 2:05:02PM

SP 19

E311146-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	97.6 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2347013
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	91.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2347079
Diesel Range Organics (C10-C28)	320	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	164	50.0	1	11/22/23	11/23/23	
<i>Surrogate: n-Nonane</i>						
	109 %	50-200		11/22/23	11/23/23	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell St Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 11/30/2023 2:05:02PM
--	--	-----------------------------------

SP 20

E311146-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Benzene	ND	0.0250	1	11/20/23	11/28/23	
Ethylbenzene	ND	0.0250	1	11/20/23	11/28/23	
Toluene	ND	0.0250	1	11/20/23	11/28/23	
o-Xylene	ND	0.0250	1	11/20/23	11/28/23	
p,m-Xylene	ND	0.0500	1	11/20/23	11/28/23	
Total Xylenes	ND	0.0250	1	11/20/23	11/28/23	
Surrogate: 4-Bromochlorobenzene-PID	98.5 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2347013	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/20/23	11/28/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID	93.7 %	70-130		11/20/23	11/28/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2347079	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/22/23	11/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	11/22/23	11/23/23	
Surrogate: n-Nonane	106 %	50-200		11/22/23	11/23/23	



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell St	Reported: 11/30/2023 2:05:02PM
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	

Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2347013-BLK1)

Prepared: 11/20/23 Analyzed: 11/28/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.12		8.00		89.0	70-130			

LCS (2347013-BS1)

Prepared: 11/20/23 Analyzed: 11/28/23

Benzene	5.01	0.0250	5.00		100	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.8	70-130			
Toluene	4.97	0.0250	5.00		99.4	70-130			
o-Xylene	4.89	0.0250	5.00		97.8	70-130			
p,m-Xylene	9.94	0.0500	10.0		99.4	70-130			
Total Xylenes	14.8	0.0250	15.0		98.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.34		8.00		91.7	70-130			

Matrix Spike (2347013-MS1)

Source: E311146-06

Prepared: 11/20/23 Analyzed: 11/28/23

Benzene	5.21	0.0250	5.00	ND	104	54-133			
Ethylbenzene	5.10	0.0250	5.00	ND	102	61-133			
Toluene	5.19	0.0250	5.00	ND	104	61-130			
o-Xylene	5.09	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.3	0.0500	10.0	ND	103	63-131			
Total Xylenes	15.4	0.0250	15.0	ND	103	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.31		8.00		91.4	70-130			

Matrix Spike Dup (2347013-MSD1)

Source: E311146-06

Prepared: 11/20/23 Analyzed: 11/28/23

Benzene	4.65	0.0250	5.00	ND	93.0	54-133	11.4	20	
Ethylbenzene	4.61	0.0250	5.00	ND	92.1	61-133	10.2	20	
Toluene	4.70	0.0250	5.00	ND	94.1	61-130	9.79	20	
o-Xylene	4.56	0.0250	5.00	ND	91.2	63-131	10.9	20	
p,m-Xylene	9.28	0.0500	10.0	ND	92.8	63-131	10.7	20	
Total Xylenes	13.8	0.0250	15.0	ND	92.3	63-131	10.8	20	
Surrogate: 4-Bromochlorobenzene-PID	6.87		8.00		85.9	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell St	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	11/30/2023 2:05:02PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2347013-BLK1) Prepared: 11/20/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.82		8.00		97.7	70-130			

LCS (2347013-BS2) Prepared: 11/20/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	49.6	20.0	50.0		99.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.02		8.00		100	70-130			

Matrix Spike (2347013-MS2) Source: E311146-06 Prepared: 11/20/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	53.4	20.0	50.0	ND	107	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.82		8.00		97.8	70-130			

Matrix Spike Dup (2347013-MSD2) Source: E311146-06 Prepared: 11/20/23 Analyzed: 11/28/23

Gasoline Range Organics (C6-C10)	55.0	20.0	50.0	ND	110	70-130	2.96	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.63		8.00		95.3	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell St	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	11/30/2023 2:05:02PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2347079-BLK1)

Prepared: 11/22/23 Analyzed: 11/22/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.1		50.0		108	50-200			

LCS (2347079-BS1)

Prepared: 11/22/23 Analyzed: 11/22/23

Diesel Range Organics (C10-C28)	300	25.0	250		120	38-132			
Surrogate: n-Nonane	60.2		50.0		120	50-200			

Matrix Spike (2347079-MS1)

Source: E311146-04

Prepared: 11/22/23 Analyzed: 11/22/23

Diesel Range Organics (C10-C28)	323	25.0	250	30.3	117	38-132			
Surrogate: n-Nonane	51.7		50.0		103	50-200			

Matrix Spike Dup (2347079-MSD1)

Source: E311146-04

Prepared: 11/22/23 Analyzed: 11/22/23

Diesel Range Organics (C10-C28)	294	25.0	250	30.3	106	38-132	9.45	20	
Surrogate: n-Nonane	46.7		50.0		93.5	50-200			

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

Atkins Engineering Associates Inc.	Project Name:	Shell St	
2904 W. 2nd	Project Number:	20071-0001	Reported:
Roswell NM, 88201	Project Manager:	Austin Weyant	11/30/23 14:05

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client Information				Invoice Information				Lab Use Only				TAT				State			
Client: ATKINS				Company: ATKINS ENG				Lab WO# E3WAW				Job Number 20071-0001				NM CO UT TX			
Project Name: SHELL ST				Address:															
Project Manager: AUSTIN WEYANT				City, State, Zip:															
Address: 2404 W 2ND				Phone:															
City, State, Zip: DALLAS, TX				Email:															
Phone:				Miscellaneous:															
Email: AUSTIN@ATKINSENG.COM																			
Sample Information																			
Time Sampled		Date Sampled		Matrix		No. of Containers		Sample ID		Field		Lab Number							
11/15		11/15		S		1		SP1											
				I		1		SP2											
				I		1		SP3											
				I		1		SP4											
				I		1		SP5											
				I		1		SP6											
				I		1		SP7											
				I		1		SP8											
				I		1		SP9											
				I		1		SP10											

Additional Instructions:			
(Field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.			
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent date.			
Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N			
T1 T2 T3			
AVG Temp °C 4			
Container type: g - glass, p - poly/plastic, ag - amber glass, v - VOA			

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other			
Note: Samples are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.			

Client Information				Invoice Information				Lab Use Only				TAT				State					
Client: _____ Project Name: <u>SHAW ST</u> Project Manager: _____ Address: <u>STATE</u> City, State, Zip: _____ Phone: _____ Email: _____				Company: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Miscellaneous: _____				Lab WO# <u>E31146</u> Job Number <u>20071-0001</u>				1D _____ 2D _____ 3D _____ Std _____				NM CO UT TX _____					
Sample Information																					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	Analysis and Method										EPA Program				Remarks
							DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCED 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA				
	<u>11/15</u>	<u>S</u>	<u>1208</u>	<u>SP11</u>		<u>11</u>						<u>X</u>									
				<u>SP12</u>		<u>12</u>						<u>X</u>									
				<u>SP13</u>		<u>13</u>						<u>X</u>									
				<u>SP14</u>		<u>14</u>						<u>X</u>									
				<u>SP15</u>		<u>15</u>						<u>X</u>									
				<u>SP16</u>		<u>16</u>						<u>X</u>									
				<u>SP17</u>		<u>17</u>						<u>X</u>									
				<u>SP18</u>		<u>18</u>						<u>X</u>									
				<u>SP19</u>		<u>19</u>						<u>X</u>									
				<u>SP20</u>		<u>20</u>						<u>X</u>									
Additional Instructions:																					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																					
Relinquished by: (Signature) <u>[Signature]</u> Date: <u>11/15</u>				Received by: (Signature) <u>[Signature]</u> Date: <u>11/15</u>				Time: <u>9:00 AM</u>				Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent date.									
Relinquished by: (Signature) _____ Date: _____				Received by: (Signature) _____ Date: _____				Time: _____				Lab Use Only Received on ice: <u>Y</u> / N									
Relinquished by: (Signature) _____ Date: _____				Received by: (Signature) _____ Date: _____				Time: _____				I1 _____ I2 _____ I3 _____									
Relinquished by: (Signature) _____ Date: _____				Received by: (Signature) _____ Date: _____				Time: _____				AVG Temp °C <u>4</u>									
Sample Matrix: <u>S</u> - Soil, <u>sd</u> - Solid, <u>sg</u> - Sludge, <u>A</u> - Aqueous, <u>O</u> - Other																					
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																					

Envirotech Analytical Laboratory

Printed: 11/17/2023 2:00:54PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Atkins Engineering Associates Inc.	Date Received:	11/17/23 13:17	Work Order ID:	E311146
Phone:	(575) 626-3993	Date Logged In:	11/17/23 13:16	Logged In By:	Jordan Montano
Email:	austin@atkinseng.com	Due Date:	11/27/23 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Time sampled not provided on COC per client.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:

Sample ID?	Yes
Date/Time Collected?	No
Collectors name?	No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Austin Weyant



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Atkins Engineering Associates Inc.

Project Name: Shell #3
Work Order: E411246
Job Number: 20071-0001
Received: 11/22/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/2/24

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 12/2/24

Austin Weyant
2904 W. 2nd
Roswell, NM 88201



Project Name: Shell #3
Workorder: E411246
Date Received: 11/22/2024 1:45:00PM

Austin Weyant,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/22/2024 1:45:00PM, under the Project Name: Shell #3.

The analytical test results summarized in this report with the Project Name: Shell #3 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Field Offices:

Southern New Mexico Area

Lynn Jarboe
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzaless@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
SP15	5
SP16	6
SP17	7
SP18	8
SP19	9
SP20	10
SP21	11
SP22	12
SP23	13
SP24	14
SP25	15
QC Summary Data	16
QC - Volatile Organic Compounds by EPA 8260B	16
QC - Nonhalogenated Organics by EPA 8015D - GRO	17
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	18
QC - Anions by EPA 300.0/9056A	19
Definitions and Notes	20
Chain of Custody etc.	21

Sample Summary

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 12/02/24 17:22
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP15	E411246-01A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP16	E411246-02A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP17	E411246-03A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP18	E411246-04A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP19	E411246-05A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP20	E411246-06A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP21	E411246-07A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP22	E411246-08A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP23	E411246-09A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP24	E411246-10A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.
SP25	E411246-11A	Soil	11/19/24	11/22/24	Glass Jar, 2 oz.



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 12/2/2024 5:22:28PM
--	--	----------------------------------

SP15
E411246-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2448005	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2448005	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448015	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		98.7 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2448011	
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
12/2/2024 5:22:28PM

SP16

E411246-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		108 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		108 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		97.4 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
12/2/2024 5:22:28PM

SP17

E411246-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		105 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		105 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		101 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	444	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
12/2/2024 5:22:28PM

SP18

E411246-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		103 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.9 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		93.9 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
12/2/2024 5:22:28PM

SP19

E411246-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		105 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		106 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		105 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		95.7 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		106 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		100 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	20.0	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
12/2/2024 5:22:28PM

SP20

E411246-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		109 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		90.0 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		104 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		109 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		90.0 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		104 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		100 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	129	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 12/2/2024 5:22:28PM
--	--	----------------------------------

SP21

E411246-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2448005	
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene	107 %	70-130		11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130		11/25/24	11/26/24	
Surrogate: Toluene-d8	107 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2448005	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene	107 %	70-130		11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130		11/25/24	11/26/24	
Surrogate: Toluene-d8	107 %	70-130		11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448015	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane	97.1 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2448011	
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc.
2904 W. 2nd
Roswell NM, 88201

Project Name: Shell #3
Project Number: 20071-0001
Project Manager: Austin Weyant

Reported:
12/2/2024 5:22:28PM

SP22

E411246-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		106 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		106 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		96.3 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		91.2 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	ND	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 12/2/2024 5:22:28PM
--	--	----------------------------------

SP23

E411246-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/26/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/26/24	
Toluene	ND	0.0250	1	11/25/24	11/26/24	
o-Xylene	ND	0.0250	1	11/25/24	11/26/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/26/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		104 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/26/24	
Surrogate: Bromofluorobenzene		104 %	70-130	11/25/24	11/26/24	
Surrogate: 1,2-Dichloroethane-d4		93.1 %	70-130	11/25/24	11/26/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/26/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		99.5 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	23.0	20.0	1	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 12/2/2024 5:22:28PM
--	--	----------------------------------

SP24

E411246-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
Surrogate: Bromofluorobenzene		109 %	70-130	11/25/24	11/27/24	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130	11/25/24	11/27/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2448005
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
Surrogate: Bromofluorobenzene		109 %	70-130	11/25/24	11/27/24	
Surrogate: 1,2-Dichloroethane-d4		98.7 %	70-130	11/25/24	11/27/24	
Surrogate: Toluene-d8		105 %	70-130	11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: AF		Batch: 2448015
Diesel Range Organics (C10-C28)	60.1	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	112	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane		97.7 %	50-200	11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: JM		Batch: 2448011
Chloride	13700	200	10	11/25/24	11/26/24	



Sample Data

Atkins Engineering Associates Inc. 2904 W. 2nd Roswell NM, 88201	Project Name: Shell #3 Project Number: 20071-0001 Project Manager: Austin Weyant	Reported: 12/2/2024 5:22:28PM
--	--	----------------------------------

SP25

E411246-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2448005	
Benzene	ND	0.0250	1	11/25/24	11/27/24	
Ethylbenzene	ND	0.0250	1	11/25/24	11/27/24	
Toluene	ND	0.0250	1	11/25/24	11/27/24	
o-Xylene	ND	0.0250	1	11/25/24	11/27/24	
p,m-Xylene	ND	0.0500	1	11/25/24	11/27/24	
Total Xylenes	ND	0.0250	1	11/25/24	11/27/24	
Surrogate: Bromofluorobenzene	109 %	70-130		11/25/24	11/27/24	
Surrogate: 1,2-Dichloroethane-d4	97.5 %	70-130		11/25/24	11/27/24	
Surrogate: Toluene-d8	105 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: RKS		Batch: 2448005	
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/25/24	11/27/24	
Surrogate: Bromofluorobenzene	109 %	70-130		11/25/24	11/27/24	
Surrogate: 1,2-Dichloroethane-d4	97.5 %	70-130		11/25/24	11/27/24	
Surrogate: Toluene-d8	105 %	70-130		11/25/24	11/27/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: AF		Batch: 2448015	
Diesel Range Organics (C10-C28)	ND	25.0	1	11/25/24	11/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	11/25/24	11/26/24	
Surrogate: n-Nonane	103 %	50-200		11/25/24	11/26/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: JM		Batch: 2448011	
Chloride	516	20.0	1	11/25/24	11/26/24	



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	12/2/2024 5:22:28PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2448005-BLK1) Prepared: 11/25/24 Analyzed: 11/26/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		95.0	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2448005-BS1) Prepared: 11/25/24 Analyzed: 12/02/24

Benzene	2.35	0.0250	2.50		94.2	70-130			
Ethylbenzene	2.29	0.0250	2.50		91.7	70-130			
Toluene	2.31	0.0250	2.50		92.3	70-130			
o-Xylene	2.39	0.0250	2.50		95.6	70-130			
p,m-Xylene	4.74	0.0500	5.00		94.9	70-130			
Total Xylenes	7.13	0.0250	7.50		95.1	70-130			
Surrogate: Bromofluorobenzene	0.579		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.526		0.500		105	70-130			

LCS Dup (2448005-BSD1) Prepared: 11/25/24 Analyzed: 11/26/24

Benzene	2.38	0.0250	2.50		95.2	70-130	1.14	23	
Ethylbenzene	2.36	0.0250	2.50		94.3	70-130	2.80	27	
Toluene	2.38	0.0250	2.50		95.1	70-130	3.05	24	
o-Xylene	2.36	0.0250	2.50		94.5	70-130	1.14	27	
p,m-Xylene	4.69	0.0500	5.00		93.9	70-130	1.08	27	
Total Xylenes	7.06	0.0250	7.50		94.1	70-130	1.10	27	
Surrogate: Bromofluorobenzene	0.528		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.500		0.500		100	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	12/2/2024 5:22:28PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2448005-BLK1)

Prepared: 11/25/24 Analyzed: 11/26/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		95.0	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2448005-BS2)

Prepared: 11/25/24 Analyzed: 11/26/24

Gasoline Range Organics (C6-C10)	43.2	20.0	50.0		86.4	70-130			
Surrogate: Bromofluorobenzene	0.541		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.7	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			

LCS Dup (2448005-BSD2)

Prepared: 11/25/24 Analyzed: 11/26/24

Gasoline Range Organics (C6-C10)	47.1	20.0	50.0		94.2	70-130	8.63	20	
Surrogate: Bromofluorobenzene	0.568		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.546		0.500		109	70-130			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	12/2/2024 5:22:28PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: AF

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2448015-BLK1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.1		50.0		98.1	50-200			

LCS (2448015-BS1)					Prepared: 11/25/24 Analyzed: 11/25/24				
Diesel Range Organics (C10-C28)	250	25.0	250		99.9	38-132			
Surrogate: n-Nonane	49.6		50.0		99.1	50-200			

Matrix Spike (2448015-MS1)					Source: E411246-03		Prepared: 11/25/24 Analyzed: 11/25/24		
Diesel Range Organics (C10-C28)	239	25.0	250	ND	95.7	38-132			
Surrogate: n-Nonane	48.0		50.0		96.0	50-200			

Matrix Spike Dup (2448015-MSD1)					Source: E411246-03		Prepared: 11/25/24 Analyzed: 11/26/24		
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132	4.63	20	
Surrogate: n-Nonane	47.1		50.0		94.2	50-200			



QC Summary Data

Atkins Engineering Associates Inc.	Project Name:	Shell #3	Reported:
2904 W. 2nd	Project Number:	20071-0001	
Roswell NM, 88201	Project Manager:	Austin Weyant	12/2/2024 5:22:28PM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2448011-BLK1)					Prepared: 11/25/24 Analyzed: 11/26/24				
Chloride	ND	20.0							
LCS (2448011-BS1)					Prepared: 11/25/24 Analyzed: 11/26/24				
Chloride	251	20.0	250		101	90-110			
Matrix Spike (2448011-MS1)					Source: E411240-04		Prepared: 11/25/24 Analyzed: 11/26/24		
Chloride	1370	20.0	250	1040	131	80-120			M4
Matrix Spike Dup (2448011-MSD1)					Source: E411240-04		Prepared: 11/25/24 Analyzed: 11/26/24		
Chloride	1390	20.0	250	1040	140	80-120	1.64	20	M4

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Atkins Engineering Associates Inc.	Project Name:	Shell #3	
2904 W. 2nd	Project Number:	20071-0001	Reported:
Roswell NM, 88201	Project Manager:	Austin Weyant	12/02/24 17:22

- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Page 3 of 4

Client Information				Invoice Information				Lab Use Only				TAT				State							
Client: <u>Atkins Eng</u> Project Name: <u>SHAW #3</u> Project Manager: <u>J. Austin Weyant</u> Address: <u>2904 W 2nd, Roswell, 88201</u> City, State, Zip: <u>2904 W 2nd, Roswell, 88201</u> Phone: <u>88201</u> Email: <u>austin@atkinseng.com</u>				Company: _____ Address: _____ City, State, Zip: _____ Phone: _____ Email: _____ Miscellaneous: _____				Lab WO# <u>E411240</u> Job Number <u>200710001</u>				1D <u> </u> 2D <u> </u> 3D <u> </u> Std <u> </u>				NM <u> </u> CO <u> </u> UT <u> </u> TX <u> </u>							
Sample Information								Analysis and Method								EPA Program				Remarks			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Filter	Field	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA	Compliance	Y	or	N	PWSID #
15:23				SP15	1								X										
15:24				SP16	2								X										
15:25				SP17	3								X										
15:25				SP18	4								X										
15:25				SP19	5								X										
15:26				SP20	6								X										
15:26				SP21	7								X										
15:28				SP22	8								X										
15:31				SP23	9								X										
15:33				SP24	10								X										
Additional Instructions:																							
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.																							
Sampled by: <u>J. Austin Weyant</u> Relinquished by: (Signature) <u>J. Austin Weyant</u>				Date: <u>11/21/24</u> Time: <u>13:45</u>				Received by: (Signature) <u>Carla Mar</u> Date: <u>11/21/24</u> Time: <u>13:45</u>				Lab Use Only Received on ice: <u>Y</u> N T1 <u> </u> T2 <u> </u> T3 <u> </u>				AVG Temp °C <u>4</u> Container Type: <u>g - glass, p - poly/plastic, ag - amber glass, v - VOA</u>							
Relinquished by: (Signature) _____ Date: _____ Time: _____				Relinquished by: (Signature) _____ Date: _____ Time: _____				Relinquished by: (Signature) _____ Date: _____ Time: _____				Relinquished by: (Signature) _____ Date: _____ Time: _____				Relinquished by: (Signature) _____ Date: _____ Time: _____							
Sample Matrix: <u>S - Soil, sd - Solid, sg - Sludge, A - Aqueous, O - Other</u>																							
Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																							



envirotech

Chain of Custody

Client Information
 Client: Atkins Eng
 Project Name: SHL #3
 Project Manager: J. Austin Weyant
 Address: _____
 City, State, Zip: 2904 W 2nd, Roswell, 88201
 Phone: _____
 Email: austin@atkinseng.com

Invoice Information
 Company: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____
 Email: _____
 Miscellaneous: _____

Lab Use Only
 Lab WO# E411246 Job Number 2007110001
 1D 2D 3D Std

State
 NM CO UT TX

Analysis and Method
 EPA Program
 SDWA CWA RCRA
 Compliance Y or N
 PWSID # _____

Remarks

Sample Information
 Time Sampled 15:25 11/19 Matrix S No. of Containers 102 Sample ID SP 23 Lab Number 11

Additional Instructions:
 I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: [Signature] Date 11-22-14 Time 13:45
 Relinquished by: (Signature) Date Time
 Relinquished by: (Signature) Date Time
 Relinquished by: (Signature) Date Time
 Relinquished by: (Signature) Date Time

Received on ice: Y / N
 T1 T2 T3
 AVG Temp °C 4

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA
 Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above sample is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



envirote

Envirotech Analytical Laboratory

Printed: 11/22/2024 2:12:56PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Atkins Engineering Associates Inc.	Date Received:	11/22/24 13:45	Work Order ID:	E411246
Phone:	(575) 626-3993	Date Logged In:	11/22/24 14:03	Logged In By:	Caitlin Mars
Email:	austin@atkinseng.com	Due Date:	11/28/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: FedExComments/Resolution

Project Shell #3 has been separated into 2 reports due to sample volume. WO are E411245 & E411246. Sampled by not provided on COC.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date

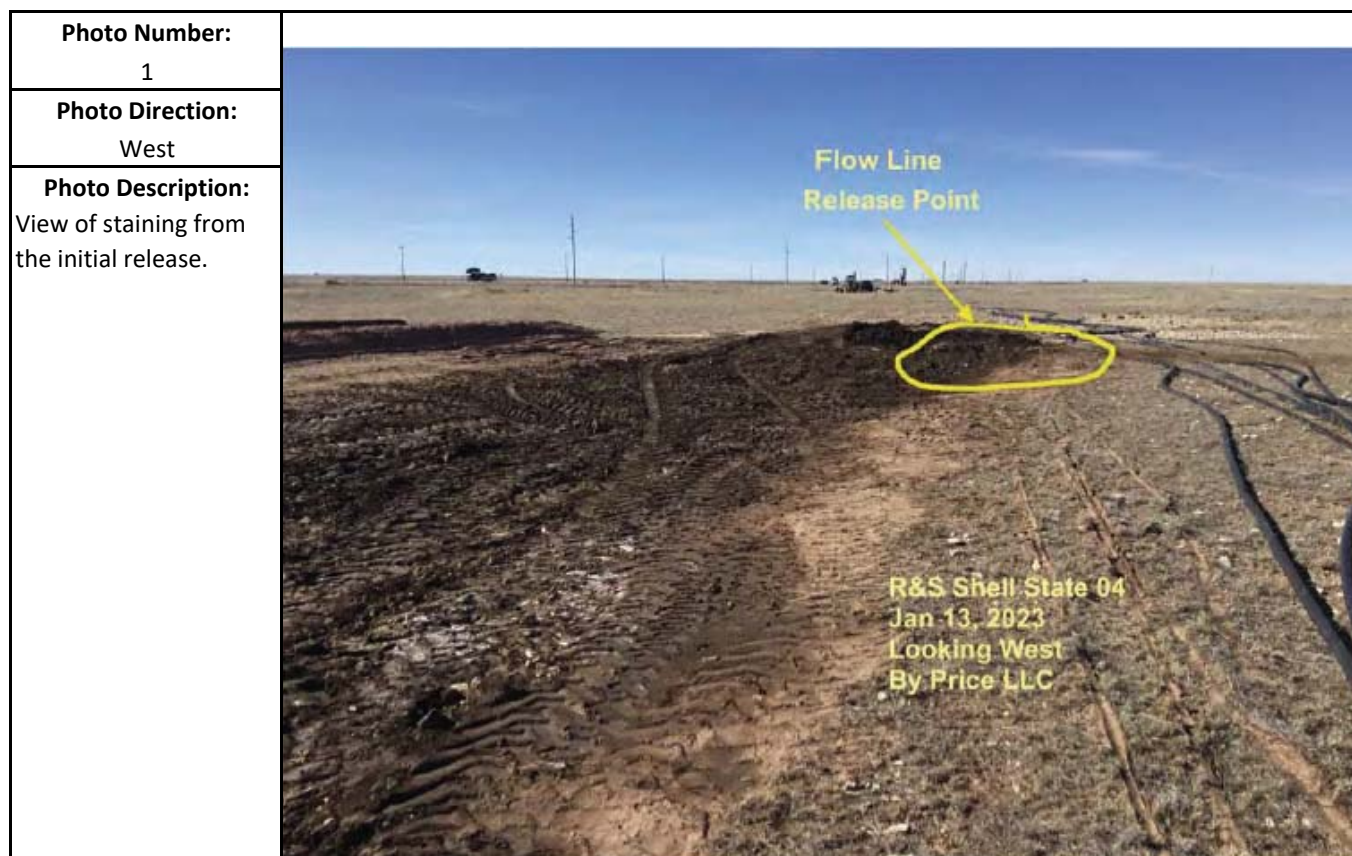


envirotech Inc.

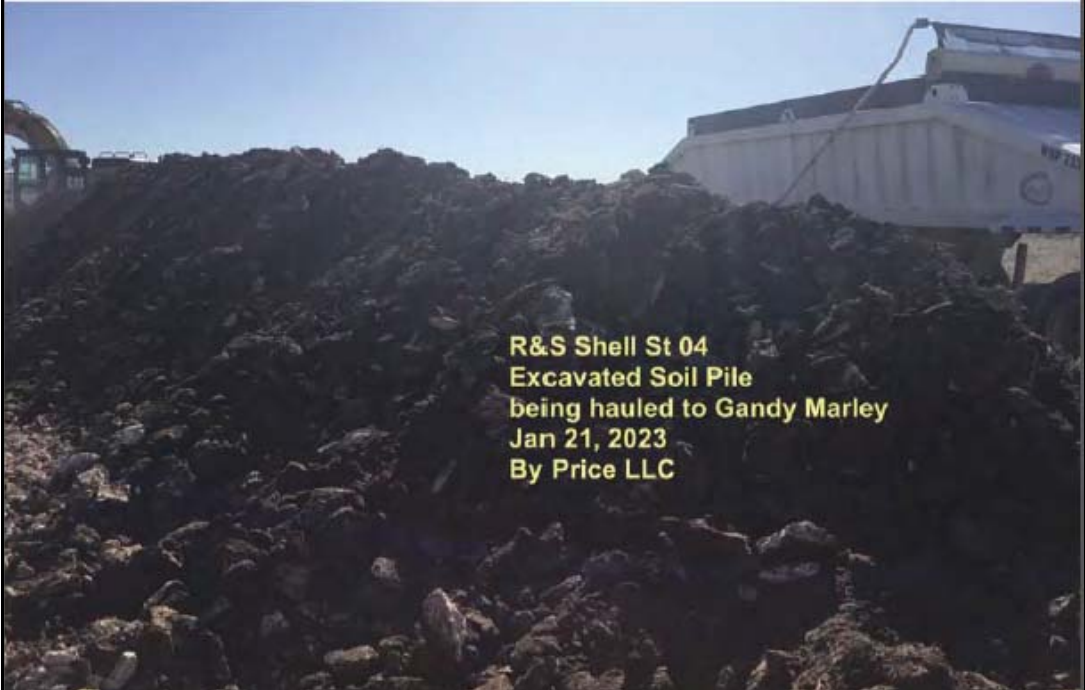
Appendix D

Photographic Log

Photographic Log



Photographic Log

Photo Number: 3	
Photo Direction: N/A	
Photo Description: View of soil disposition activities.	

R&S Shell St 04
Excavated Soil Pile
being hauled to Gandy Marley
Jan 21, 2023
By Price LLC

Appendix E

Regulatory Correspondence



2904 W 2nd St.
 Roswell, NM 88201
 voice: 575.624.2420
 fax: 575.624.2421
 www.atkinseng.com

December 19, 2024

#shell_env_23

NMOCD District 1
 1625 N. French Drive
 Hobbs, New Mexico 88210

SUBJECT: Remediation Work Plan for the Shell State #004 Release -NAPP2301367245, Lea County, New Mexico **Unsubmitted Workplan**

Dear NMOCD District 1,

On behalf of 3R Operating, LLC (3R), Atkins Engineering Associates INC. (AEA) has prepared this Remediation Work Plan that describes the remediation of a release of liquids related to oil and gas production activities at a pipeline near the Shell State #004. The site is in Unit F, Section 18, Township 11S, Range 33E, Lea County, New Mexico, on Federal land. Figure 1 illustrates the vicinity and site location on an USGS 7.5-minute quadrangle map.

Table 1 summarizes release information and Closure Criteria.

Table 1: Release Information and Closure Criteria			
Name	Shell State flowline	Company	3R Operating
API Number	30-025-23190	Location	F-18-11S-33E
Incident Number	NAPP2301367245		
Estimated Date of Release	01/12/2023	Date Reported to NMOCD	01/30/2023
Land Owner	NMSLO	Reported To	NMOCD District 1
Source of Release	Flowline-pipeline that was transporting produced water and crude oil to the battery ruptured. Spill is approximately 230'X 50'		
Released Volume	55 bbls	Released Material	Produced Water/Crude Oil
Recovered Volume	0 bbls	Net Release	55 bbls
NMOCD Closure Criteria	51-100 feet to groundwater		
AEA Response Dates	6/15/23		

1.0 Background

On January 12, 2023, a release was discovered at the Shell State area Caused by equipment failure in a pipeline. The release volume was estimated by operations staff by calculating the volume of the area and in the hose past the check valve. Initial response activities were conducted by the pervious operator, and included source elimination by means of repair and immediate site stabilization and release recovery. Figure 1 illustrates the vicinity and site location. The C-141 forms are included in Appendix A.

2.0 Site Information and Closure Criteria

The Shell State #004 is located approximately 20 miles West of Tatum Lea County, New Mexico on State land at an elevation of approximately 4317 feet above mean sea level (amsl).

Based upon the New Mexico Office of the State Engineers (NMOSE) online water well database, (Appendix B), depth to groundwater in the area is estimated to be 55 feet below grade surface (bgs). There as a known temporary monitoring well within ½-mile of the location, according to the NMOSE database and attached AEA log (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 1/21/2023). The nearest significant watercourse is unnamed drainage , located approximately 1500 feet southwest of the location. Figure 1 illustrates the site with 200 and 300-foot radii to indicate that it does not lie within a sensitive area as described in 19.15.29.12.C(4) NMAC.

The previous operator submitted a depth to groundwater determination on February 15th, 2023, in their NMOCD rejected Remediation Work Plan. Based on the NMOSE shothole and well data Read and Stevens determined a depth of 55 to 60 feet (bgl). In order to comply with NMOCD guidance of data less than 25 years old, AEA field personnel contacted the area rancher and pump contractor to get a current water level. During the pump replacement/repair operation conducted mid-this year by Mr. Pearce (2024), irrigation wells L12006, L12006 POP2, and L03765 were all gauged with a recorded depth to groundwater of 60ft. With the release area only 2,000 feet to the North, the recorded wells by Mr. Pearce are the nearest.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of between 51-100 feet bgs. The site has been restored to meet the standards of Table I of 19.15.29.12 NMAC.

Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

3.0 Release Characterization and Remediation Activities

On January 21, 2023, 8th Read and Stevens personnel arrived on site in response to the release associated Shell State #004. Read and Stevens excavated the location to approximately four feet across the 11,500-foot area. Phoenix Environmental sampled the excavation for Chloride content on August 11th, 2023. Five bottom-hole samples are labeled in Figure 3 as SP1-5Cl, and four sidewall samples were labeled in the cardinal direction. AEA responded after the initial response conducted by Read and Stevens contractors and collected samples to understand the TPH and BTEX concentrations present. Soil samples were collected from the floor and sidewalls of the excavation.

A total of 29 composite sidewall and bottom hole soil sample locations were investigated using an auger, to depths up to 4 Feet bgs. A total of 9 samples discrete soil samples were collected for laboratory analysis

Shell State #004 Remediation Work Plan NAPP2301367245
December 19, 2024

Page 3 of 4

for total chloride using EPA Method 300.0 and a total of 20 samples were analyzed for; benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel, and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

As summarized in Table 2, the results indicated that the initial action performed by Read and Stevens and its contractors successfully remediated most of the locations. The Samples collected on August 2, 2023, by Mr. Aves state 3ft as the depth, but AEA measured the excavation, and it was 3.54 to 4.25ft in depth

Phoenix Environmental returned to the location to further excavate sample locations SP1, SP6, and SP9 for high TPH. AEA returned to the backfilled location with a Geoprobe DPT rig, to collect discrete soil bores at the 4-5 foot interval to confirm the excavation of the SP1, SP6, and SP9 locations. After a 48-hour sampling notice to NMOCD, AEA field staff arrived on November 19th, 2024. All sample locations from the November 19th, 2024 event are shown in Figure 4 and sample data in Table 3.

Samples show further excavation is needed in the SP3 and SP8 areas, and the flowlines to the North will need to be moved to allow excavation of the Northern sidewall further north also, areas under ad to the north of the flowline repair shown as SP24 need further excavation as well.

In addition to meeting the Closure Criteria, the release area is pasture and subject to the Reclamation requirement of 19.15.29.13(D)(1). All Contaminated soils will be removed and hauled to an NMOCD-approved landfill. Waste manifest can be supplied if requested.

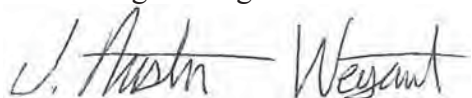
4.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation; and preparing this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Austin Weyant at 575-626-3993

Submitted by:

Atkins Engineering Associates INC



Austin Weyant
Geoscientist

ATTACHMENTS:

Figures:

Figure 1: Surface Water Radius Map

Figure 2: Vicinity and Well Head Protection Map

Figure 3: Site and Sample Location Map

Figure 4: Closure Sample Location Map

Shell State #004 Remediation Work Plan NAPP2301367245
December 19, 2024

Page 4 of 4

Tables:

Table 2: NMOCD Closure Criteria Justification

Table 3a: Summary of Initial Sample Results

Table 3b: Summary of Closure Sample Results

Appendices:

Appendix A: Form C141

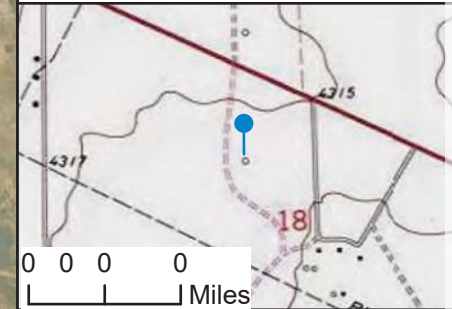
Appendix B: NMOSE Wells Report

Appendix D: Laboratory Analytical Reports

Appendix E: Open Excavation Photo Log

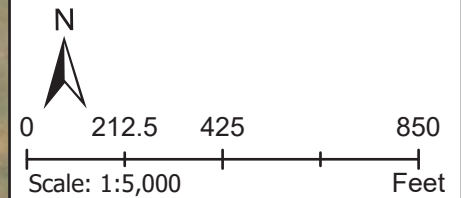
FIGURES

FIGURE 1
Setback Map
Shell State #004



LEGEND

- Release Point
- Lakes_Playas
- Springs_Seeps
- Streams_Canals
- FEMA_Flood_Zones_2011
- NMOCD Wells
- △ OSE_PODs

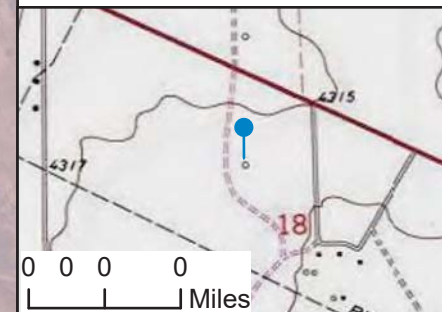


Shell State #004

DRAWN LCM

DATE DRAWN: 12/18/2024 REVIEW JAV

FIGURE 2
Setback Map
Shell State #004



LEGEND

● Release Point

Potential

High

Low

Medium

<all other values>

● NMOCD Wells



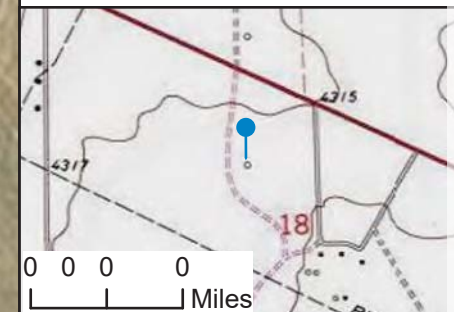
0 212.5 425 850
Scale: 1:5,000 Feet

Shell State #004

DRAWN LCM

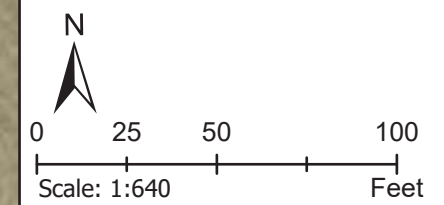
DATE DRAWN: 12/18/2024 REVIEW JAV

FIGURE 3
Samples
Shell State #004



LEGEND

- Release Point
- NMOCD Wells
- Sample Location
- △ OSE_PODs
- Excavation Area
- Pipeline

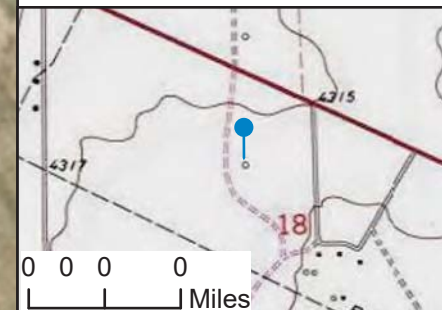


Shell State #004

DRAWN LCM

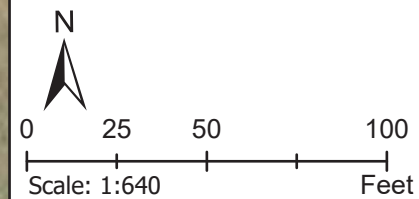
DATE DRAWN: 12/18/2024 REVIEW JAV

FIGURE 3
Samples
Shell State #004



LEGEND

- Release Point
- NMOCD Wells
- △ OSE_PODs
- Closure Sample Location
- Pipeline



Shell State #004

DRAWN LCM

DATE DRAWN: 12/18/2024 REVIEW JAV

TABLES

Table 2:
Summary of Sample Results

3R Operating
Shell State 4

Sample ID	Sample Date	Depth feet bgs	Proposed Action Taken	GRO mg/g	DRO mg/g	MRO mg/g	Total TPH mg/g	CI mg/g
NMOCD 19 15 29 Guidance							100 1000	600
SP1	2 2023	4						0 0
SP2	2 2023	4						32 0
SP3	2 2023	4						32 0
SP4	2 2023	4						576 0
SP5	2 2023	4						656 0
North Side all	2 2023	2						464 0
East Side all	2 2023	2						240 0
West Side all	2 2023	2						144 0
South Side all	2 2023	2						96 0
SP1	11 15 2023	0 5	excavate	20 0	96 5	66 9	163 4	
SP2	11 15 2023	4		20 0	261	154	415	
SP3	11 15 2023	4		20 0	425	21	643	
SP4	11 15 2023	0 5		20 0	30 3	50 0	30 3	
SP5	11 15 2023	4		20 0	315	171	4 6	
SP6	11 15 2023	4	excavate	20 0	2940	1090	4030	
SP7	11 15 2023	4		20 0	23	154	392	
SP	11 15 2023	4		20 0	2	57	139	
SP9	11 15 2023	4	excavate	20 0	1040	572	1612	
SP10	11 15 2023	4		20 0	567	314	1	
SP11	11 15 2023	4		20 0	129	107	236	
SP12	11 15 2023	4		20 0	25 0	50 0	95 0	
SP13	11 15 2023	4		20 0	405	219	624	
SP14	11 15 2023	4		20 0	176	127	303	
SP15	11 15 2023	0 5		20 0	25 0	50 0	95 0	
SP16	11 15 2023	4		20 0	25 0	50 0	95 0	
SP17	11 15 2023	4		20 0	111	66 4	177 4	
SP1	11 15 2023	4		20 0	25 0	50 0	95 0	
SP19	11 15 2023	4		20 0	320	164	4 4	
SP20	11 15 2023	0 5		20 0	25 0	50 0	95 0	

Shellst_env_23

Table 3:
Summary of Sample Results

3R Operating
Shell State 4

Sample ID	Sample Date	Depth feet bgs	Proposed Action Action Taken	GRO mg/g	DRO mg/g	MRO mg/g	Total TPH mg/g	CI mg/g
NMOCD 19 15 29 Guidance							100 1000	600
SW1	11 19 2024	0 5	Underflow line e cavate	20 0	25 0	50 0	95 0	20 0
SW2	11 19 2024	0 5	Underflow line e cavate	20 0	25 0	50 0	95 0	1030
SW3	11 19 2024	0 5	Underflow line e cavate	20 0	7 4	71 3	15 7	2430
SW4	11 19 2024	0 5	Underflow line e cavate	20 0	291	277	56	3400
SW5	11 19 2024	0 5	Underflow line e cavate	20 0	463	255	71	1710
SP1	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP2	11 19 2024	5		20 0	25 0	50 0	95 0	17
SP3	11 19 2024	5	e cavate	20 0	565	372	937	32 0
SP4	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP5	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP6	11 19 2024	5		20 0	25 0	50 0	95 0	12
SP7	11 19 2024	5		20 0	25 0	50 0	95 0	16
SP	11 19 2024	5	e cavate	20 0	615	396	1011	3470
SP9	11 19 2024	5		20 0	25 0	50 0	95 0	12
SP10	11 19 2024	5		20 0	25 0	50 0	95 0	72 6
SP11	11 19 2024	5		20 0	25 0	50 0	95 0	61 5
SP12	11 19 2024	5		20 0	25 0	50 0	95 0	213
SP13	11 19 2024	5		20 0	25 0	50 0	95 0	4 2
SP14	11 19 2024	5		20 0	25 0	50 0	95 0	133
SP15	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP16	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP17	11 19 2024	5		20 0	25 0	50 0	95 0	444
SP1	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP19	11 19 2024	5		20 0	25 0	50 0	95 0	20
SP20	11 19 2024	5		20 0	25 0	50 0	95 0	129
SP21	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP22	11 19 2024	5		20 0	25 0	50 0	95 0	20 0
SP23	11 19 2024	0 5		20 0	25 0	50 0	95 0	23
SP24	11 19 2024	0 5	e cavate	20 0	60 1	112	95 0	13700
SP25	11 19 2024	0 5		20 0	25 0	50 0	95 0	516

Shellst_env_23

APPENDIX A FORMS C141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2301367245
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Read & Stevens Inc	OGRID 10917
Contact Name Wayne Price	Contact Telephone 505-715-2809
Contact email waynepricecq.com@gmail.com	Incident # (assigned by OCD) nAPP2301367245
Contact mailing address: 400 N Perinsylvania Ave, Roswell, NM 88201	

Location of Release Source

Latitude N33.37083 Longitude W-103.65138

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Shell ST04 flow line	Site Flow line
Date Release Discovered 1/12/23	API# (if applicable) na

Unit Letter	Section	Township	Range	County
B	18	11s	33e	lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 20	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 20-25 bbls	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No undetermined at this time
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Break In Poly Flow Line-see attached photos


Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2301367245
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? A good faith estimate by field supervisor.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Mike Bratcher-OCD Email Jan 14, 2023 File NOR Jan 13, 2023 cc Mike Bratcher	

Initial Response*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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.	
Printed Name: Wayne Price Title: Consultant for Read & Stevens	
Signature: 	Date: Jan 26, 2023
email: waynepriceq.com@gmail.com	Telephone: 505-715-2809
OCD Only	
Received by: Jocelyn Harimon	Date: 01/30/2023

Incident ID	NAPP2301367245
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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? *See Attached GW Plats*

55 (ft
bgs)

Did this release impact groundwater or surface water?

☐ Yes ☒ No

Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?

☐ Yes ☒ No

Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?

☐ Yes ☒ No

Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?

☐ Yes ☒ No

Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?

☐ Yes ☒ No

Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?

☐ Yes ☒ No

Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?

☐ Yes ☒ No

Are the lateral extents of the release within 300 feet of a wetland?

☐ Yes ☒ No

Are the lateral extents of the release overlying a subsurface mine?

☐ Yes ☒ No

Are the lateral extents of the release overlying an unstable area such as karst geology?

☐ Yes ☒ No

Are the lateral extents of the release within a 100-year floodplain?

☐ Yes ☒ No

Did the release impact areas not on an exploration, development, production, or storage site?

☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

Characterization Plan, Remediation Plan and Closure Plan anticipated to be completed with the 90 days allowance.

- ☐ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☐ Data table of soil contaminant concentration data
- ☒ Depth to water determination *Included in attachment*
- ☐ Determination of water sources and significant watercourses within 1/4-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☐ Photographs including date and GIS information
- ☐ Topographic/Aerial maps
- ☐ Laboratory data including chain of custody

WP

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2301367245
District RP	
Facility ID	
Application ID	

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.

Printed Name: Wayne Price -Price LLC

Title: Consultant for Read & Stevens

Signature: 

Date: Jan 26, 2023

email: waynepricec.com@gmail.com

Telephone: 505-715-2809

OCD Only

Received by: Jocelyn Harimon

Date: 01/30/2023

Incident ID	NAPP2301367245
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: Each of the following items must be included in the plan.

Emergency response actions have removed approximately 840 yards disposed of at Gandy-Marley. -See attached Photos **NP**

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Characterization Plan, Remediation Plan and Closure Plan anticipated to be completed with the 90 days allowance to meet Table I And vertical extent will be defined. Manifest to be provided in Closure report. **NP**

Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation.

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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.

Printed Name: Wayne Price LLC

Title: Consultant for R&S

Signature: **NP**

Date: Jan 26, 2023

email: waynepricec.com@gmail.com

Telephone: 505-715-2809

OCD Only

Received by: Jocelyn Harimon

Date: 01/30/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☒ Denied ☐ Deferral Approved

Signature: **Jennifer Nobui**

Date: 02/15/2023

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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 (electronic submittals in .pdf format are referred) 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.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate OCD District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

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.

Printed Name: _____ Title: _____
Signature: _____ Date: _____
Email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Flow Line
Release Point

R&S Shell State 04
Jan 13, 2023
Looking West
By Price LLC



R&S Shell St 04
After One Call
Jan 21, 2023
Looking NW
By Price LLC

**R&S Shell St 04
Excavated Soil Pile
being hauled to Gandy Marley
Jan 21, 2023
By Price LLC**

APPENDIX B

NMOSE WELLS REPORT

9/3/08

OSE FILE NUMBER

For OSE Use Only

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD and DRILLING LOG

1. PERMIT HOLDER(S)

Name: PEARCE TRUST

Name: _____

Address: 1717 JACKSON

Address: _____

City: PECOS

City: _____

State: TX Zip: 79772

State: _____ Zip: _____

Phone: _____

Phone: _____

Contact: _____

Contact Phone: _____

2. STATE ENGINEER REFERENCE NUMBERS:

File # L-12006, Well # 1

3. LOCATION OF WELL (The Datum Is Assumed To Be WGS 84 Unless Otherwise Specified)

Latitude: N 33° Deg 21 Min 53.16 SecLongitude: W 103° Deg 39 Min 8.05 Sec(Enter Lat/Long To At Least 1/10th Of A Second)Datum If Not WGS 84: SE 1/4 NW 1/4 NW 1/4 SEC. 18, T11-S, R33-EAST

4. DRILLING CONTRACTOR

License Number: WD 421Name: GLENN'S WATER WELL SERVICE, Work Phone: 505-398-2424Drill Rig Serial Number: 0582

List The Name Of Each Drill Rig Supervisor That Managed On-Site Operations During The Drilling Process:

CORKY GLENN

5. DRILLING RECORD

Drilling Began: 8/27/08; Completed: 8/27/08; Drilling Method ROTARY MUD

Diameter Of Bore Hole: _____ (in);

Total Depth Of Well: 155 (ft);Completed Well Is (Circle One) Shallow Artesian;Depth To Water First Encountered: 60' (ft);Depth To Water Upon Completion Of Well: 60' (ft).

Do Not Write Below This Line

TRN Number: _____

File Number: L-12006

Form: wr-20 May 07

page 1 of 4

11.33.18.114

STATE ENGINEER OFFICE
ROSSELL, NEW MEXICO
2008 SEP -4 P 12: 01

OSE FILE NUMBER _____

For OSE Use Only

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD and DRILLING LOG

6. RECORD OF CASING

Diameter (inches)	Pounds (per ft.)	Threads (per inch)	Depth (feet)	Length Top to Bottom (feet)	Type of Shoe	Perforations (from to)
10 3/4	1/4 WELL	PE		21	NONE	NONE
6 5/8	.188	PE		152	NONE	60-152

7. RECORD OF MUDDING AND CEMENTING

Depth (feet)	Hole (diameter)	Mud Used (# of sacks)	Cement (cubic feet)	Method of Placement
0-21	14 3/4		14 SACKS	POUR

Do Not Write Below This Line

Trn Number: _____

File Number: _____

Form: wr-20 May 07

page 2 of 4

Form WR-23

FIELD ENGR. LOG

STATE ENGINEER OFFICE

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

(Plat of 640 acres)

(A) Owner of well Hugh H. GRAHAM & SONS
 Street and Number Don Del.
 City CAPROCK State IN
 Well was drilled under Permit No. _____ and is located in the
N 1/4 SE 1/4 1/4 of Section 18 Twp. 11 S Rge. 33 E
 (B) Drilling Contractor W. L. FULFORD License No. W0124
 Street and Number 317 N. FOWLER
 City Hebbes State IN
 Drilling was commenced 8-23 1959
 Drilling was completed 8-29 1959

Elevation at top of casing in feet above sea level _____ Total depth of well 120 ft
 State whether well is shallow or artesian SHALLOW Depth to water upon completion 50 ft

Section 2

PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation
	From	To		
1	50	72	22	1st water sand
2	77	119	42	2nd water sand
3				
4				
5				

Section 3

RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth		Feet	Type Shoe	Perforations	
			Top	Bottom			From	To
1 1/2 in		welded	0	120	120	no shoe	50	120

Section 4

RECORD OF MUDDING AND CEMENTING

Depth in Feet		Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used
From	To				

Section 5

PLUGGING RECORD

Name of Plugging Contractor _____ License No. _____
 Street and Number _____ City _____ State _____
 Tons of Clay used _____ Tons of Roughage used _____ Type of roughage _____
 Plugging method used _____ Date Plugged _____ 19 _____
 Plugging approved by: _____ Cement Plugs were placed as follows:

No.	Depth of Plug		No. of Sacks Used
	From	To	

Basin Supervisor _____

FOR USE OF STATE ENGINEER ONLY

Date Received _____

1960 APR 11 AM 9:05

File No. L-3765 Use See Location No. 11.33 18 420

LOG OF WELL

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

M. L. Fullington
Well Driller

L-3765

11.33.18.420

Depth to Water Determination and Groundwater Flow.

Read & Stevens (R&S) had a release from their Shell State 04 flow line, located in UL B-Sec 18-Ts11s-R34E at Lat: N 33 22 15 Long: W-103 39 5W. The site is located in the Northwest part of Lea Co. NM, and the underlying groundwater is considered to be part of the Ogallala Aquifer.

R&S reported the release with NOR nAPP2301367245.

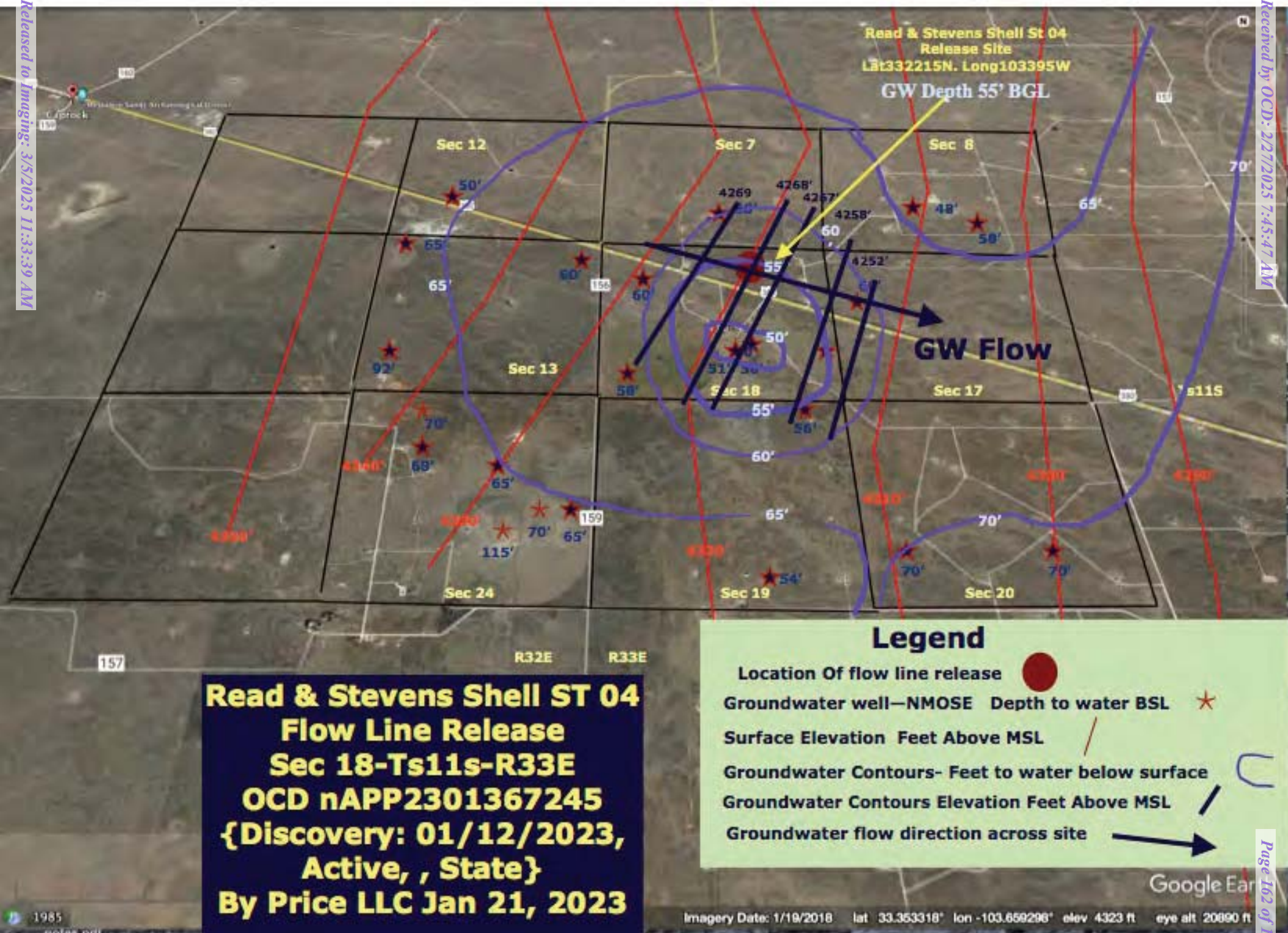
Pursuant to OCD release rule 19.15.29 all releases require a characterization investigation and in part, requires a determination to the depth of groundwater under the site.

The depth of groundwater has been determined to be approximately **55 feet below ground level**. This was determined by downloading nine sections, around the release site, from the NMOSE groundwater data base.

Several points were logged and noted with depth to groundwater on a contour map. Depth to water contours and groundwater flow gradients were developed using standard engineering/hydrology practices. **See attached Aerial Contour map** with NMOSE data sheets.

Special Note: In 2017 R&S experienced a similar release in close proximity to the current release, Shell State #3 1RP-4582, API #30-025-23014 Unit C, Sec.18, Township 11 South, Range 33 East.

The depth to groundwater was determined to be **56 feet below the ground surface**, and after remediation, a closure was submitted to OCD.





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)

(In feet)

POD Number	POD Sub-basin	Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	Water Column	Water
<u>L 00659</u>	L		LE				19	11S	33E	625271	3691044*	133	61	72
<u>L 02043</u>	L		LE	1	1	2	19	11S	33E	625346	3691755*	140	60	80
<u>L 03762</u>	L	R	LE	3	3	3	18	11S	33E	624546	3691950*	120	58	62
<u>L 03762 POD2</u>	L		LE	3	3	3	18	11S	33E	624546	3691950*	122	58	64
<u>L 03765</u>	L		LE	3	2	4	18	11S	33E	625737	3692363	120	50	70
<u>L 03765</u>	L	R	LE	3	2	4	18	11S	33E	625737	3692363	120	50	70
<u>L 03765 POD3</u>	L		LE	3	2	4	18	11S	33E	625737	3692363	160	83	77
<u>L 03765 S</u>	L		LE	3	1	4	18	11S	33E	625334	3692360*	120	51	69
<u>L 03989</u>	L		LE	2	1	4	19	11S	33E	625558	3690950*	124	65	59
<u>L 03990</u>	L		LE	1	2	2	19	11S	33E	625748	3691758*	136	56	80
<u>L 04220</u>	L		LE	3	4	19	11S	33E	33E	625465	3690449*	100	54	46
<u>L 09080</u>	L		LE	3	3	4	19	11S	33E	625364	3690348*	119	69	50
<u>L 09506</u>	L		LE	1	4	18	11S	33E	33E	625435	3692461*	120	50	70
<u>L 10817</u>	L		LE	3	4	07	11S	33E	33E	625418	3693669*	125	60	65
<u>L 12006 POD2</u>	L		LE	4	1	1	18	11S	33E	625386	3692537	155	60	95

Average Depth to Water:

59 feet

Minimum Depth:

50 feet

Maximum Depth:

83 feet



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.)

(RealPOD 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	POD Sub-basin	Code	County	Q 64	Q 16	Q 4	Q 1	Q 2	Q 3	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
L_002115 POD4	L	LE	LE	4	4	4	4	4	4	4	24	11S	32E	624065	3690633*	153	70	83
L_002115 POD6	L	LE	LE	4	4	4	4	4	4	4	24	11S	32E	623958	3690733*	128	115	13
L_016440 POD1	L	LE	LE								13	11S	32E	623643	3692636*	120		
L_016442 POD1	L	LE	LE	3	3	3	3	3	3	3	12	11S	32E	622918	3693541*	132		
L_01934	L	LE	LE	3	3	3	3	3	3	3	24	11S	32E	623753	3691136*	115	65	50
L_02174	L	LE	LE	3	3	3	3	3	3	3	13	11S	32E	623040	3692033*	102	92	10
L_05741	L	LE	LE	4	4	4	4	4	4	4	12	11S	32E	624024	3693853*	152		
L_06273	L	LE	LE	2	2	2	2	2	2	2	13	11S	32E	624230	3693254*	150	60	90
L_06588	L	LE	LE	1	1	1	1	1	1	1	13	11S	32E	622924	3693339*	120	65	55
L_08642	L	LE	LE	4	4	4	4	4	4	4	24	11S	32E	623144	3691529*	110	64	46
L_09615	L	LE	LE	2	2	2	2	2	2	2	24	11S	32E	623447	3691635*	125	70	55
L_09615 S	L	LE	LE	4	4	4	4	4	4	4	24	11S	32E	623452	3691232*	124	68	56
L_09615 S2	L	LE	LE	2	2	2	2	2	2	2	24	11S	32E	623958	3690933*	141	65	76
L_09615 S3	L	LE	LE	1	1	1	1	1	1	1	24	11S	32E	623758	3690933*	150	70	80
L_09754	L	LE	LE	4	4	4	4	4	4	4	24	11S	32E	624065	3690633*	122		
L_10794	L	LE	LE	3	3	3	3	3	3	3	12	11S	32E	623711	3694356*	60	50	10

Average Depth to Water:

71 feet

Minimum Depth:

50 feet

Maximum Depth:

115 feet

Record Count: 16

PLSS Search:

Section(s): 12, 13, 24 Township: 11S Range: 32E

*UTM location was derived from PLSS - see Help

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

(quarters are 1=NW 2=NE 3=SW 4=SE) (N)

(In feet)

Average Depth to Water:	61 feet
Minimum Depth:	48 feet
Maximum Depth:	70 feet

PLSS Search:

Section(s): 8, 17, 20 **Township:** 11S **Range:** 33E

UTM location was derived from PLSS - see Help

1/21/23 12:14 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Appendix F

Cultural Properties Protection Rule Documenation



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

NMSLO Cultural Resources Cover Sheet Exhibit E

NMCRIS Activity Number: 157576

(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: J.T. Rein Archaeology, LLC

Project Proponent (Applicant): 3B Surface & Regulatory, LLC

Project Title/Description: A Class III Cultural Resource Survey for the 3B Surface & Regulatory, LLC - 3R Shell State 004 Flowline in Lea Co., NM

Project Location:

County(ies): Lea County

PLSS/Section/Township/Range): Sec. 18 / T 11 S / R 33 E

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

Appendix G

Special Species or Critical Habitat Report

IPaC**U.S. Fish & Wildlife Service**

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

Lea 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 species¹ 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 Fisheries²).

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
Lesser Prairie-chicken <i>Tympanuchus pallidicinctus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1924	Endangered
Northern Aplomado Falcon <i>Falco femoralis septentrionalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1923	EXPN

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	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 ² and the Migratory Bird Treaty Act (MBTA) ¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, 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](#), 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 bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles 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
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

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 (|)

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.

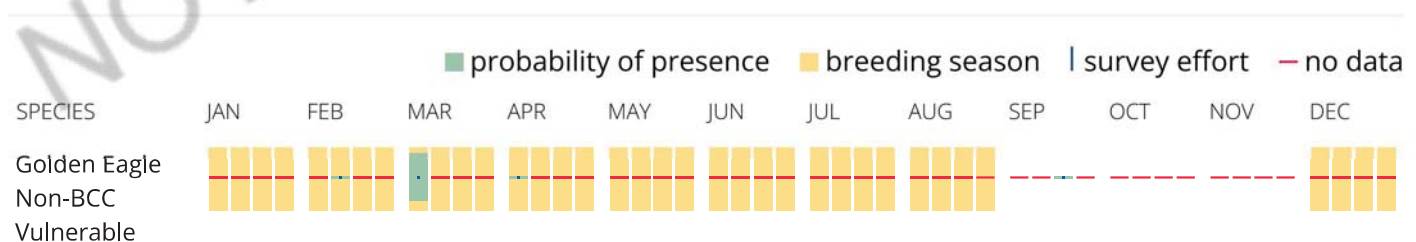
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.



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) ¹ 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). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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
Ferruginous Hawk <i>Buteo regalis</i> 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/6038	Breeds Mar 15 to Aug 15
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Long-billed Curlew <i>Numenius americanus</i> 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/5511	Breeds Apr 1 to Jul 31
Northern Harrier <i>Circus hudsonius</i> 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/8350	Breeds Apr 1 to Sep 15

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 (|)

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.

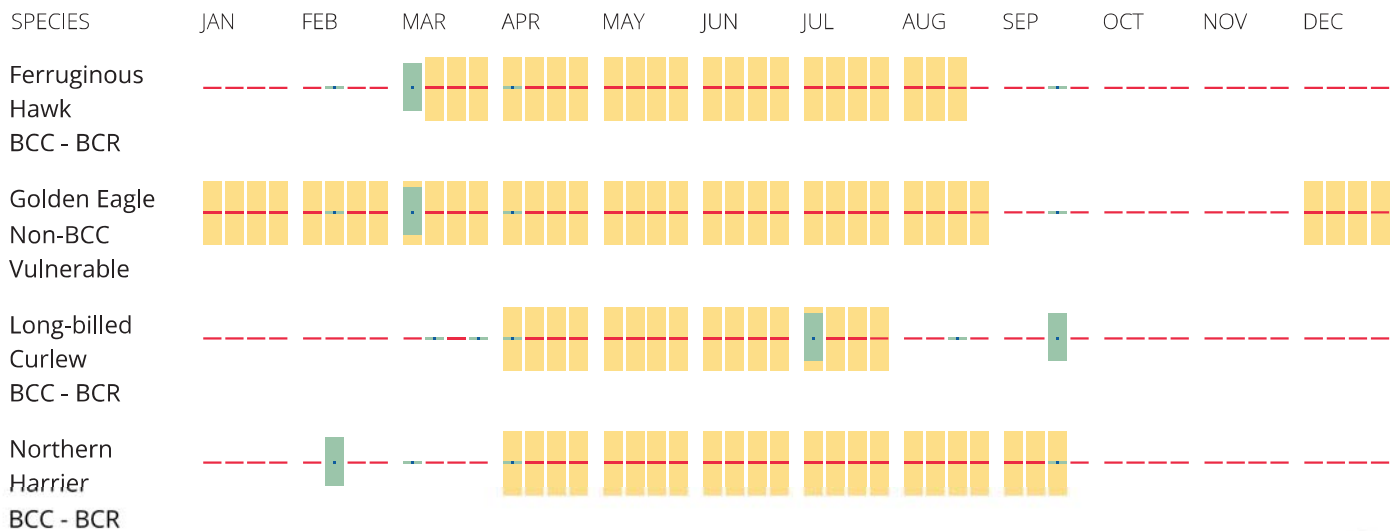
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.

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 436180

QUESTIONS

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2301367245
Incident Name	NAPP2301367245 STATE 4 FLOW LINE @ 30-025-23190
Incident Type	Oil Release
Incident Status	Remediation Plan Received
Incident Well	[30-025-23190] SHELL STATE #004

Location of Release Source

Please answer all the questions in this group.

Site Name	STATE 4 FLOW LINE
Date Release Discovered	01/12/2023
Surface Owner	State

Incident Details

Please answer all the questions in this group.

Incident Type	Oil 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	Cause: Equipment Failure Flow Line - Production Crude Oil Released: 20 BBL Recovered: 0 BBL Lost: 20 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Produced Water Released: 25 BBL Recovered: 0 BBL Lost: 25 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)	Not answered.

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 436180

QUESTIONS (continued)

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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: Lauren Franco Email: lfranco@3roperating.com Date: 02/27/2025
--	---

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 436180

QUESTIONS (continued)

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
<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 51 and 75 (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 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 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 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	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
<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
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	13700
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	4030
GRO+DRO (EPA SW-846 Method 8015M)	2940
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	01/21/2023
On what date will (or did) the final sampling or liner inspection occur	04/25/2025
On what date will (or was) the remediation complete(d)	05/25/2025
What is the estimated surface area (in square feet) that will be reclaimed	22340
What is the estimated volume (in cubic yards) that will be reclaimed	3300
What is the estimated surface area (in square feet) that will be remediated	22340
What is the estimated volume (in cubic yards) that will be remediated	3320
<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 436180

QUESTIONS (continued)

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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	GANDY MARLEY LANDFARM/LANDFILL [FEEM0112338393]
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: Lauren Franco Email: lfranco@3roperating.com Date: 02/27/2025
<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 436180

QUESTIONS (continued)

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 436180

QUESTIONS (continued)

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	403593
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/19/2024
What was the (estimated) number of samples that were to be gathered	16
What was the sampling surface area in square feet	1600

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	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

CONDITIONS

Action 436180

CONDITIONS

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 436180
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation plan conditionally approved.	3/5/2025
bhall	OCD approves proposed the "dig and haul" remediation technique. The upper four feet of the excavation must meet the most stringent closure criteria as this release is located in an area not reasonably needed for production or subsequent drilling operations and must be reclaimed at the time of remediation.	3/5/2025
bhall	OCD will not accept the use of any of the past soil laboratory analytical results as remediation confirmation/closure results. OCD will accept the laboratory analytical results in Table 1, Concentrations of BTEX, TPH, and Chloride in Soil and the attached laboratory analytical results as delineation results only. OCD also does not approve the sampling locations illustrated on Figure 4, Anticipated Excavation & Proposed Sample Location Map as conditions of the excavation may be subject to change when remediation commences.	3/5/2025
bhall	The alternative confirmation sampling plan collecting confirmation samples of no more than 400 square feet is approved. The acceptance of this alternative sampling plan 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; or if the location fails to revegetate properly. In addition, OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations. If the applicable land managing agency does not agree and requires a more stringent sampling plan, the more stringent requirements must be met regardless of OCD's approval.	3/5/2025
bhall	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	3/5/2025
bhall	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. The OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the 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; and a revegetation plan.	3/5/2025
bhall	Submit a complete and accurate report through the OCD Permitting website by 6/6/2025.	3/5/2025