Incident Number: nSAP0215477198

Release Assessment and Closure

Jackson Unit #003

Unit N, Section 15, Township 24 South, Range 33 East

API: 30-025-33238

County: Lea

Vertex File Number: 24E-03316

Prepared for:

Tap Rock Resources

Prepared by:

Vertex Resource Services Inc.

Date:

September 2024

Release Assessment and Closure
Jackson Unit #003
Unit N, Section 15, Township 24 South, Range 33 East
API: 30-025-33238
County: Lea

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Date

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1.0 Introduction

Tap Rock Resources (Tap Rock) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a release that involved crude oil discharged onto the pad from a leak in the tank bottom that was discovered on June 3, 2002, at Jackson State #003 (hereafter referred to as the "site"). On June 27, 2024, the New Mexico Oil Conservation Division (NMOCD) submitted a notice to Tap Rock to close out the incident after Murchison Oil and Gas, LLC. (Murchison) requested that it be transferred to Tap Rock. Incident ID nSAP0215477198 was assigned to the incident. Email correspondence between Tap Rock and NMOCD regarding the incident transfers is included in Appendix A.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for this release, with the understanding that restoration of the release of this site will complete the following remediation actions and guidelines, as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred on June 3, 2002, while the site was leased under Murchison. The release involved crude oil discharged onto the pad from a leak in the tank bottom. The release occurred inside and stayed within the earthen containment around the tank. Approximately 200 barrels of crude oil was released with no fluids recovered. The site has since been reclaimed. Areas of environmental concern identified and delineated include the former containment area on the south side of the reclaimed pad. The incident was discovered on June 3, 2002, but an initial C-141 was never filed.

3.0 Site Characteristics

The site is located approximately 24 miles northwest of Jal, New Mexico (Google Inc., 2024). The legal location for the site is Unit N, Section 15, Township 24 South and Range 33 East in Lea County, New Mexico. The release area is located on state property. An aerial photograph and site schematic are presented on Figure 1.

The location was typical of oil and gas exploration transportation in the Permian Basin and the site was used for oil and gas production before the well was plugged and abandoned on March 21, 2023, and decommissioned. The following sections specifically describe the release area on-site (Figure 1).

The surrounding landscape is associated with plains, fan piedmont, and alluvial fan with elevations ranging between 2,842 and 4,500 feet. The climate is semiarid with average annual precipitation ranging between 8 and 13 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be black grama. Primarily, grasses dominate the historical plant community, but shrubs (mesquite and creosote bush), and forbs populate the grassland (United States Department of Agriculture, Natural Resources Conservation Service, 2024).

The surface geology at the site primarily comprises Qp – Piedmont alluvial deposits from the Holocene to lower Pleistocene (New Mexico Bureau of Geology and Mineral Resources, 2024) and the soil at the site is characterized as Simona-Upton association (SR) and Berino-Cacique association, hummocky (BH; United States Department of Agriculture, Natural Resources Conservation Service, 2024). Additional soil characteristics include a drainage class of Well Drained with a runoff class of Very High. The karst geology potential for the site is Low (United States Department of the Interior, Bureau of Land Management, 2018).

4.0 Closure Criteria Determination

The depth to groundwater was determined by drilling a borehole permitted by the New Mexico Office of the State Engineer (NMOSE) within a 0.5-mile radius of the site. The borehole was drilled to a depth of 105 feet. The borehole was left to recharge as per requirements on the WR-07 Application for Permit to Drill a well with No Water Rights, and an interface probe was utilized to determine whether groundwater was present after the 72-hour recharge period. No water was found to be present at that time. The borehole was plugged and abandoned according to the WD-08 permit, Well Plugging Plan of operations, filed with NMOSE. Documentation related to the exploratory borehole is included in Appendix F.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is an intermittent stream (National Wetlands inventory) located approximately 1,896 feet south of the site (United States Fish and Wildlife Service, 2024).

At the site, there are no continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC. Closure criteria determination documentation is included in Appendix B.

Table 1. Closure Criteria Determination >100 feet bgs			
Site Name: Jackson Unit #003			
Spill Coordinates: 32.211801, -103.562214		**X: UTM easting**	**Y: UTM northing**
Site Specific Conditions		**Value**	**Unit**
1	Depth to Groundwater (nearest reference)	**>105**	feet
	Distance between release and nearest DTGW reference	**98**	feet
		0.01	miles
	Date of nearest DTGW reference measurement	**August 22nd 2024**	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	1,896	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	8,861	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	13,673	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, **or**	No	feet
	ii) Within 1000 feet of any fresh water well or spring	2,595	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	6,225	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	112,000	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest unstable area	**91,668**	feet
10	Within a 100-year Floodplain	Undertermined	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	**67,208**	feet
11	Soil Type	Fine sand, Sandy clay loam	
12	Ecological Classification	Shallow Sandy	
13	Geology	Piedmont alluvial deposits	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	<50' 51-100' >100'

The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

Table 1. Closure Criteria for Soils to Remediation & Reclamation Standards

Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
DTGW > 100 feet (19.15.29.12)	Chloride	20,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – Total dissolved solids
DTGW – Depth to groundwater
TPH – Total petroleum hydrocarbons = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO),
BTEX – Benzene, toluene, ethylbenzene, and xylenes

5.0 Remedial Actions Taken

Inspection and site characterization of the release areas were completed between July 4 and August 15, 2024, including vertical and horizontal delineation. The site included two impacted areas in exceedance to the closure criteria in Table 2, with the west impacted area at BH24-09, and the east impacted area at BH24-05 and BH24-07. Characterization field screening and laboratory results are summarized in Table 3.

Remediation efforts began on August 16, 2024, and were finalized on September 5, 2024. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 26 points (Figure 2) and consisted of analysis using Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and titration (chlorides). Field screening results were used to identify areas requiring further remediation. Soils were removed to a depth of 4 to 8 feet below ground surface. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. The DFRs documenting the final excavation before the backfill are presented in Appendix C.

Notifications that confirmatory samples were being collected were provided to NMOCD before each sampling day and are included in Appendix D. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. A total of 25 confirmation samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Envirotech under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Exceedances to the selected closure criteria with lab analysis were excavated accordingly. Confirmatory laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix E. All confirmatory samples collected and analyzed were below closure criteria for the site.

On September 11, 2024, Vertex collected six composite samples from the backfill source to confirm that the material did not exceed any applicable guidelines before being used to backfill the site. Laboratory results for the samples collected are presented in Table 3 as background samples (BG). The site was backfilled with approximately 580 cubic yards of topsoil and contoured to match the existing grade.

6.0 Closure Request

The release area was fully delineated, remediated, backfilled, and contoured with the landscape with local soils by September 17, 2024. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations “greater than 100 feet to groundwater”. Based on these findings, there are no anticipated risks to human, ecological or hydrological receptors associated with the release site. Vertex requests that this remediation be approved.

The site will be seeded when conditions are favorable with the New Mexico State Land Office loamy sites seed mixture. Seeds will include black and blue gramas, sideoats grama, sand dropseed, alkali sacaton, little bluestem, firewheel, fourwing saltbush, and common winterfat. The site will be monitored for success in the months following seeding. A full reclamation plan for the site will be submitted accompanying this closure report.

Vertex requests that the incident (nSAP0215477198) be closed as all closure requirements set forth in Subsection E of 19.25.12 NMAC have been met. Tap Rock certifies that all information in this report and the attachment is correct, and that they complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain approval on the release at the site.

Should you have any questions or concerns, please do not hesitate to contact Chance Dixon at 575.988.1472 or cdixon@vertexresource.com.

7.0 References

Google Inc. (2024). *Google Earth Pro (Version 7.3.3)* [Software]. Retrieved from https://earth.google.com

New Mexico Bureau of Geology and Mineral Resources. (2024). *Interactive Geologic Map*. Retrieved from https://maps.nmt.edu/

New Mexico Department of Surface Water Quality Bureau. (2024). *Assessed and Impaired Waters of New Mexico*. Retrieved from https://gis.web.env.nm.gov/oem/?map=swqb

New Mexico Energy, Minerals and Natural Resources Department. (2024). *OCD Permitting - Spill Search*. Retrieved from https://wwwapps.emnrd.nm.gov/ocd/ocdpermitting/Data/Spills/Spills.aspx

New Mexico Mining and Minerals Division. (2024). *Coal Mine Resources in New Mexico*. Retrieved from https://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=5f80f3b0faa545e58fe747cc7b037a93

New Mexico Office of the State Engineer. (2024a). *Point of Diversion Location Report - New Mexico Water Rights Reporting System*. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html

New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.

United States Department of Agriculture, Natural Resources Conservation Service. (2024). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

United States Department of Homeland Security, Federal Emergency Management Agency. (2024). *FEMA Flood Map Service: Search by Address*. Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor

United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karst*. Retrieved from https://www.nm.blm.gov/shapeFiles/cfo/carlsbad_spatial_data.html

United States Fish and Wildlife Service. (2024). *National Wetland Inventory - Surface Waters and Wetlands*. Retrieved from https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/

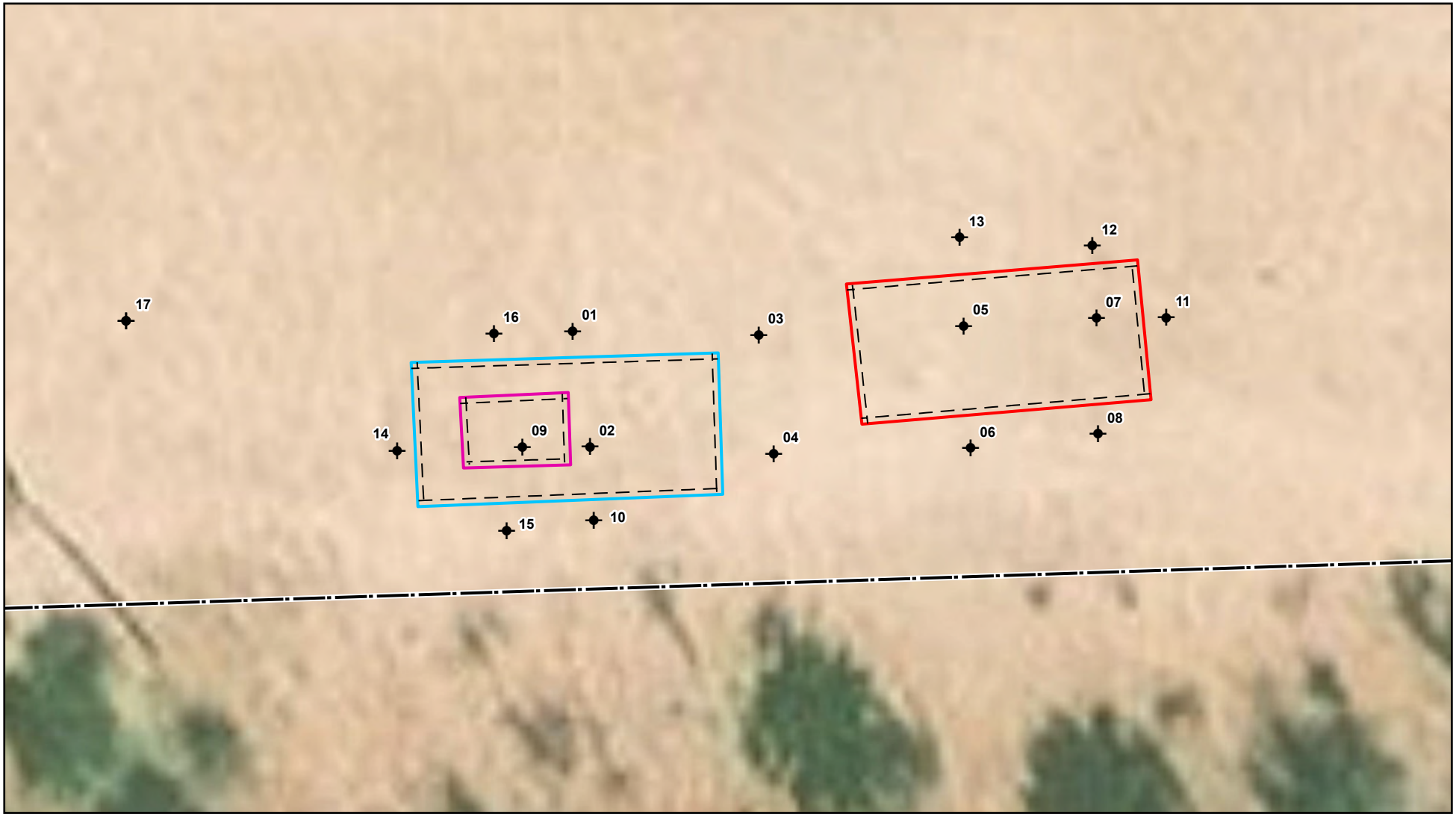
United States Geological Survey. (2024). *National Water Information System: Web Interface*. Retrieved from https://waterdata.usgs.gov/nwis

8.0 Limitations

This report has been prepared for the sole benefit of Tap Rock Resources. This document may not be used by any other person or entity, except for the New Mexico Oil Conservation Division and the New Mexico State Land Office, without the express written consent of Vertex Resource Services Inc. (Vertex) and Tap Rock Resources. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed while also following the guidelines of 19.15.29 NMAC. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

FIGURES



Borehole (Prefixed by "BH24-")

Approximate Site Boundary

East Proposed Excavation to 4' bgs (~554 sq.ft. | 101 ft.)

West Proposed Excavation to 4' bgs (~487 sq.ft. | 105 ft.)

West Proposed Excavation to 6' bgs (~104 sq.ft. | 42 ft.)

VERTEX

0 5 10 ft

NAD 1983 UTM Zone 13N

Date: Aug 01/24

Map Center:
Lat/Long
32.21177°,-103.562294°

N

Proposed Excavation Schematic
Jackson Unit #003

FIGURE:
1

TAP ROCK RESOURCES

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2023. Approximate site boundary from sketch by Vertex Professional Services Ltd. (Vertex), 2024. Site features from GPS, Vertex, 2024.

VERSATILITY. EXPERTISE.

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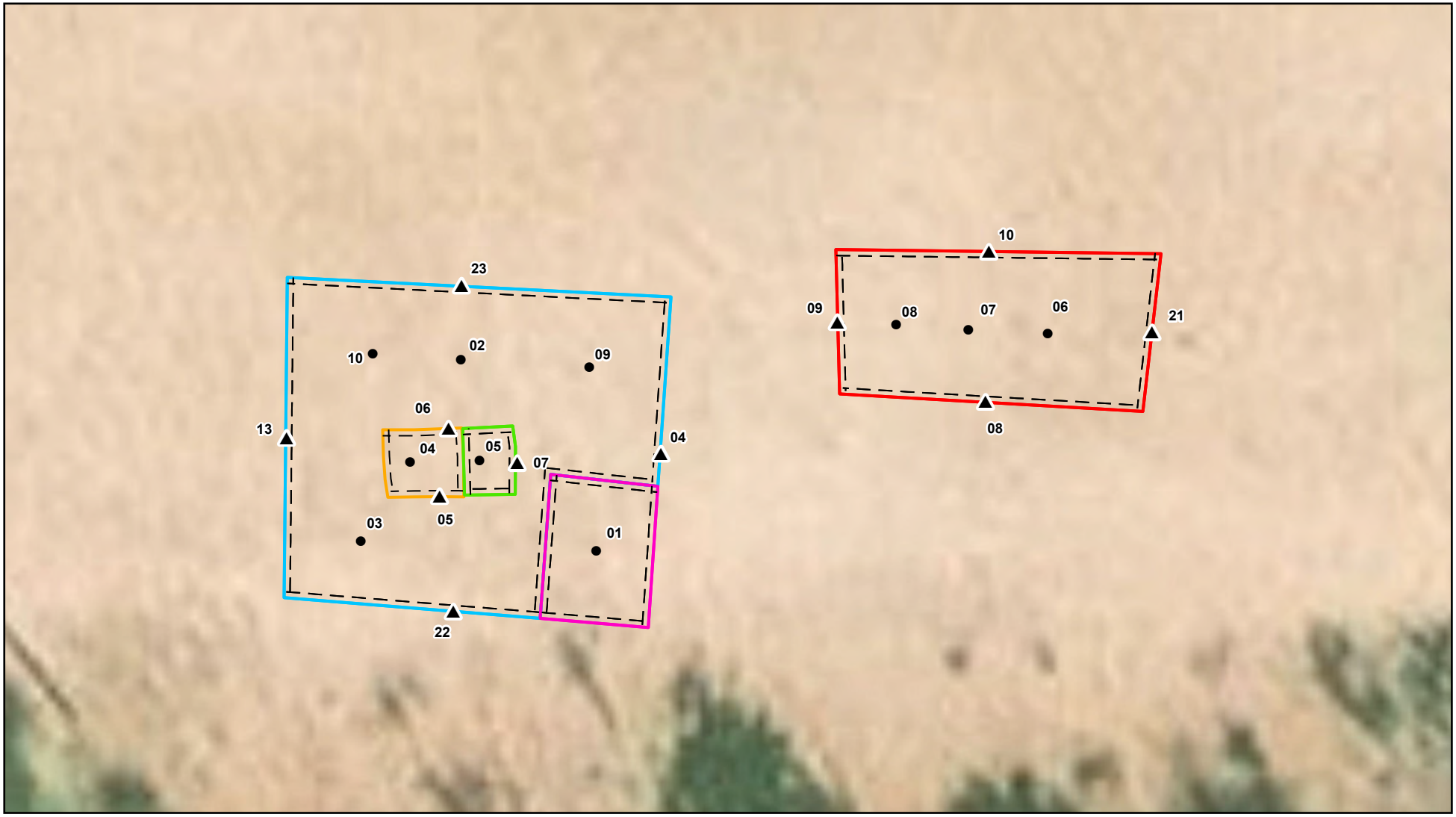

● Base Sample (Prefixed by "BES24-")

▲ Wall Sample (Prefixed by "WES24-")

East Excavation to 4' bgs (~642 sq. ft. | 108 ft.)

West Excavation to 4' bgs (~1,345 sq. ft. | 163 ft.)

Excavation to 5' bgs (~209 sq. ft. | 58 ft.)

Excavation to 6' bgs (~50 sq. ft. | 27 ft.)

Excavation to 8' bgs (~121 sq. ft. | 46 ft.)

VERTEX

0 5 10 ft

NAD 1983 UTM Zone 13N

Date: Sep 17/24

Map Center:
Lat/Long
32.21179°,-103.562263°

N

Confirmation Sampling Site Schematic
Jackson Unit #003

FIGURE:
2

TAP ROCK RESOURCES

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Note: Georeferenced image from Esri, 2023. Approximate site boundary from sketch by Vertex Professional Services Ltd. (Vertex), 2024. Site features from GPS, Vertex, 2024.

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TABLES

Client Name: Tap Rock Operating, LLC
Site Name: Jackson Unit #003
NMOCD Tracking #: nSAP0215477198
Project #: 24E-03316
Lab Reports: E407052, E407053, E407173, E408081, E408143, and E409131

Table 3. Initial Characterization Sample Field Screen and Laboratory Results DTGW >100 feet bgs (Reclamation)

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BG24-01	N/A	September 11, 2024	ND	18	198	ND	ND	ND	ND	ND	ND	ND	ND
BG24-02	N/A	September 11, 2024	ND	19	203	ND	ND	ND	ND	ND	ND	ND	ND
BG24-03	N/A	September 11, 2024	ND	20	275	ND	ND	ND	ND	ND	ND	ND	ND
BG24-04	N/A	September 11, 2024	ND	17	280	ND	ND	ND	ND	ND	ND	ND	ND
BG24-05	N/A	September 11, 2024	ND	16	283	ND	ND	ND	ND	ND	ND	ND	ND
BG24-06	N/A	September 11, 2024	ND	20	248	ND	ND	ND	ND	ND	ND	ND	ND
BH24-01	0	July 4, 2024	3	34	250	ND	ND	ND	ND	ND	ND	ND	42.2
	1	July 4, 2024	3	38	200	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 4, 2024	4	27	175	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 4, 2024	5	45	150	ND	ND	ND	ND	ND	ND	ND	ND
	4	July 4, 2024	4	50	165	ND	ND	ND	ND	ND	ND	ND	ND
BH24-02	0	July 4, 2024	6	45	250	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 4, 2024	3	136	275	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 4, 2024	4	35	175	ND	ND	ND	45.7	ND	45.7	45.7	ND
	3	July 4, 2024	7	209	225	ND	ND	ND	169	79.2	**169**	**248.2**	ND
	4	July 4, 2024	14	275	225	ND	ND	ND	321	116	321	437	ND
	5	July 5, 2024	8	185	375	ND	ND	ND	412	84.6	412	496.6	ND
	6	July 5, 2024	7	137	175	ND	ND	ND	237	67.7	237	304.7	ND
BH24-03	0	July 4, 2024	4	39	300	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 4, 2024	4	52	300	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 4, 2024	3	53	200	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 4, 2024	4	33	175	ND	ND	ND	ND	ND	ND	ND	ND
BH24-04	0	July 4, 2024	4	43	150	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 4, 2024	4	42	150	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 4, 2024	4	27	170	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 4, 2024	4	22	175	ND	ND	ND	ND	ND	ND	ND	ND
BH24-05	0	July 4, 2024	0	55	200	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 4, 2024	0	52	250	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 4, 2024	0	91	125	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 4, 2024	1	150	130	ND	ND	ND	68	54.7	68	**122.7**	ND
	4	July 4, 2024	2	182	125	ND	ND	ND	156	90.6	156	246.6	ND
	5	July 5, 2024	5	222	598	ND	ND	ND	334	88.4	334	422.4	22
BH24-06	0	July 4, 2024	1	54	125	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 4, 2024	1	40	165	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 4, 2024	6	41	150	ND	ND	ND	ND	ND	ND	ND	ND
	3	July 4, 2024	4	65	155	ND	ND	ND	ND	ND	ND	ND	44
	4	July 4, 2024	4	55	175	ND	ND	ND	ND	ND	ND	ND	49
BH24-07	0	July 5, 2024	0	41	200	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 5, 2024	0	54	155	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 5, 2024	0	57	190	ND	ND	ND	ND	ND	ND	ND	23
	3	July 5, 2024	0	74	250	ND	ND	ND	ND	ND	ND	ND	25
	4	July 5, 2024	5	225	270	ND	ND	ND	412	115	412	527	20
BH24-08	0	July 5, 2024	0	51	350	ND	ND	ND	ND	ND	ND	ND	ND
	1	July 5, 2024	0	42	225	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 5, 2024	0	40	425	ND	ND	ND	ND	ND	ND	ND	84
	3	July 5, 2024	0	62	575	ND	ND	ND	ND	ND	ND	ND	142
	4	July 5, 2024	0	60	598	ND	ND	ND	ND	ND	ND	ND	91
BH24-09	0	July 15, 2024	-	61	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 15, 2024	-	110	0	ND	ND	ND	45	ND	45	45	ND
	4	July 15, 2024	-	781	0	ND	ND	51.8	2880	331	**2931.8**	**3262.8**	54
	6	August 7, 2024	1,100	1,500	431	-	-	-	-	-	-	-	-
	7	August 7, 2024	1,084	1,149	377	1.17	17.9	434	**1220**	71.8	**1654**	1725.8	29.3
	8	August 15, 2024	-	597	235	ND	8.01	216	730	58.2	946	1004.2	55.2

VERTEX

Table 3. Initial Characterization Sample Field Screen and Laboratory Results DTGW >100 feet bgs (Reclamation)

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-10	0	July 15, 2024	-	53	0	ND	ND	ND	26	ND	26	26	ND
	2	July 15, 2024	-	42	0	ND	ND	ND	ND	ND	ND	ND	ND
BH24-11	0	July 15, 2024	-	42	132	ND	ND	ND	ND	ND	ND	ND	53.6
	2	July 15, 2024	-	23	0	ND	ND	ND	ND	ND	ND	ND	106
	4	July 15, 2024	-	72	0	ND	ND	ND	ND	ND	ND	ND	404
BH24-12	0	July 15, 2024	-	36	62	ND	ND	ND	ND	ND	ND	ND	48.5
	2	July 15, 2024	-	31	112	ND	ND	ND	ND	ND	ND	ND	76.5
BH24-13	0	July 15, 2024	-	32	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 15, 2024	-	28	0	ND	ND	ND	ND	ND	ND	ND	34.5
	4	July 15, 2024	-	34	0	ND	ND	ND	ND	ND	ND	ND	66.3
BH24-14	0	July 19, 2024	-	18	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 19, 2024	-	15	0	ND	ND	ND	ND	ND	ND	ND	35
	4	July 19, 2024	-	37	0	ND	ND	ND	ND	ND	ND	ND	72.6
BH24-15	0	July 19, 2024	-	55	0	ND	ND	ND	ND	ND	ND	ND	ND
	0	July 19, 2024	-	28	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 19, 2024	-	13	0	ND	ND	ND	ND	ND	ND	ND	109
BH24-16	0	July 19, 2024	-	44	98	ND	ND	ND	ND	ND	ND	ND	117
	2	July 19, 2024	-	20	217	ND	ND	ND	ND	ND	ND	ND	280
	4	July 19, 2024	-	37	0	ND	ND	ND	ND	ND	ND	ND	289
BH24-17	0	July 19, 2024	-	0	0	ND	ND	ND	ND	ND	ND	ND	ND
	0	July 19, 2024	-	14	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 19, 2024	-	13	0	ND	ND	ND	ND	ND	ND	ND	34

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed
Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria

VERTEX

Client Name: Tap Rock Resources
Site Name: Jackson Unit #003
NMOCD Tracking #: nSAP0215477198
Project #: 24E-03316
Lab Report: E408175,E409013

Table 4. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater >100 feet bgs (Reclamation)

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES24-01	4	08.19.24	-	677	205	ND	ND	ND	**1570**	225	**1570**	**1795**	29.7
BES24-01	5	09.04.24	-	197	320	ND	ND	ND	ND	ND	ND	ND	ND
BES24-02	4	08.19.24	-	270	113	ND	ND	ND	349	110	349	459	20
BES24-03	4	08.19.24	-	107	153	ND	ND	ND	81.8	ND	81.8	81.8	ND
BES24-04	8	08.19.24	-	410	143	ND	0.2693	ND	369	63.6	369	432.6	ND
BES24-05	6	08.19.24	-	805	108	ND	ND	ND	162	ND	162	162	ND
BES24-06	4	08.19.24	-	204	185	ND	ND	ND	232	62.1	232	294.1	32
BES24-07	4	08.19.24	-	182	198	ND	ND	ND	243	57.6	243	300.6	46.1
BES24-08	4	08.19.24	-	93	190	ND	ND	ND	54	ND	54	54	98
BES24-09	4	08.19.24	-	90	140	ND	ND	ND	81.8	ND	81.8	81.8	ND
BES24-10	4	08.19.24	-	415	195	ND	ND	ND	779	157	779	936	55.3
WES24-01	0-4	08.16.24	-	**308**	215	-	-	-	-	-	-	-	-
WES24-02	0-4	08.16.24	-	**824**	200	-	-	-	-	-	-	-	-
WES24-03	0-4	08.16.24	-	**329**	225	-	-	-	-	-	-	-	-
WES24-04	0-4	08.19.24	-	54	145	ND	ND	ND	26.4	ND	26.4	26.4	ND
WES24-05	4-8	08.19.24	-	329	130	ND	0.118	ND	329	55.1	329	384.1	ND
WES24-06	4-8	08.19.24	-	687	195	ND	0.2903	ND	832	103	832	935	52
WES24-07	4-6	08.19.24	-	356	120	ND	ND	ND	113	ND	113	113	ND
WES24-08	0-4	08.19.24	-	98	180	ND	ND	ND	51.3	ND	51.3	51.3	51
WES24-09	0-4	08.19.24	-	35	173	ND	ND	ND	ND	ND	ND	ND	50
WES24-10	0-4	08.19.24	-	**126**	225	ND	ND	ND	63.9	ND	63.9	63.9	95
WES24-11	0-4	08.19.24	-	**172**	235	ND	ND	ND	189	77	189	**266**	51
WES24-12	0-4	08.19.24	-	**241**	210	-	-	-	-	-	-	-	-
WES24-13	0-4	08.19.24	-	24	208	ND	ND	ND	ND	ND	ND	ND	90
WES24-14	0-4	08.19.24	-	**427**	215	-	-	-	-	-	-	-	-
WES24-15	0-4	08.19.24	-	**145**	223	ND	ND	ND	115	50	115	**165**	66
WES24-16	0-4	08.19.24	-	**141**	218	ND	ND	ND	128	ND	128	**128**	52
WES24-17	0-4	09.04.24	-	**218**	-	-	-	-	-	-	-	-	-
WES24-18	0-5	09.04.24	-	**187**	-	-	-	-	-	-	-	-	-
WES24-19	0-5	09.04.24	-	**239**	-	-	-	-	-	-	-	-	-
WES24-20	0-5	09.04.24	-	**190**	-	-	-	-	-	-	-	-	-
WES24-21	0-4	09.04.24	-	33	267	ND	ND	ND	ND	ND	ND	ND	52
WES24-22	0-4	09.04.24	-	51	372	ND	ND	ND	ND	ND	ND	ND	34
WES24-23	0-4	09.04.24	-	47	426	ND	ND	ND	ND	ND	ND	ND	129

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed
Bold and grey shaded indicates exceedance outside of NMOCD Reclamation Criteria (on-pad)

APPENDIX A – Email Correspondence Between Tap Rock and NMOCD

From: Bill Ramsey <Bramsey@taprk.com>
Sent: Thursday, June 27, 2024 10:37 AM
To: Chance Dixon <cdixon@vertexresource.com>; Michael Moffitt <MMoffitt@vertexresource.com>
Subject: FW: [EXTERNAL] Incident number transfers

Guys,

We have 90 days to get these projects closed out. How does getting a preliminary plan for these two sites sound? We can take that to Brittany and see how they feel about our approach. Any chance we can have something by tomorrow? Or Monday morning?

Want to get this handled ASAP with the goal to start delineation/sampling as soon as next week.

Regards,

Bill Ramsey
Sr. Environmental and Regulatory Specialist
Cell: (720) 238-2787

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Thursday, June 27, 2024 9:02 AM
To: Bill Ramsey <Bramsey@taprk.com>; Paul Weddle <pweddle@taprk.com>
Cc: Moander, Chris, EMNRD <Chris.Moander@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Dana Arnold <darnold@taprk.com>; Justin Britsch <JBritsch@taprk.com>
Subject: RE: [EXTERNAL] Incident number transfers

Mr. Ramsey,

The 90-day extension requests for NOY1703748127 and NSAP0215477198 are approved. A remediation plan/closure report is due for both incidents by 9/27/2024.

Please include a copy of this email in both reports.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Bill Ramsey <Bramsey@taprk.com>
Sent: Wednesday, June 26, 2024 4:25 PM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Paul Weddle <pweddle@taprk.com>
Cc: Moander, Chris, EMNRD <Chris.Moander@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Dana Arnold <darnold@taprk.com>; Justin Britsch <JBritsch@taprk.com>
Subject: RE: [EXTERNAL] Incident number transfers

Thanks for the time this afternoon Ms. Hall.

As discussed on the phone, Tap Rock was not aware of the Murchison's historic spills mentioned in your email during the sale in 2017-2018. Since these spills were never disclosed or transferred to Tap Rock during or after the sale, we have not had the opportunity to address these issues. Since Tap Rock is now in receipt of the information detailing the spills and in acknowledgment of the language in the C-145 and the email on June 11th, 2024, we will immediately undertake to remediate them in accordance with the NMAC rules. Tap Rock would like to request a 90-day extension for the following spills to allow for proper delineation/remediation efforts to be made:

- Incident number NOY1703748127, 30-025-41436 - Hyperion State Com #002H
- Incident number NSAP0215477198, 30-025-33238 - Jackson Unit #003

If you should have any questions or need more information about the remediation efforts, please feel free to contact me via cell phone or by email.

Thank you for your time and appreciate your patience as we get this issue resolved.

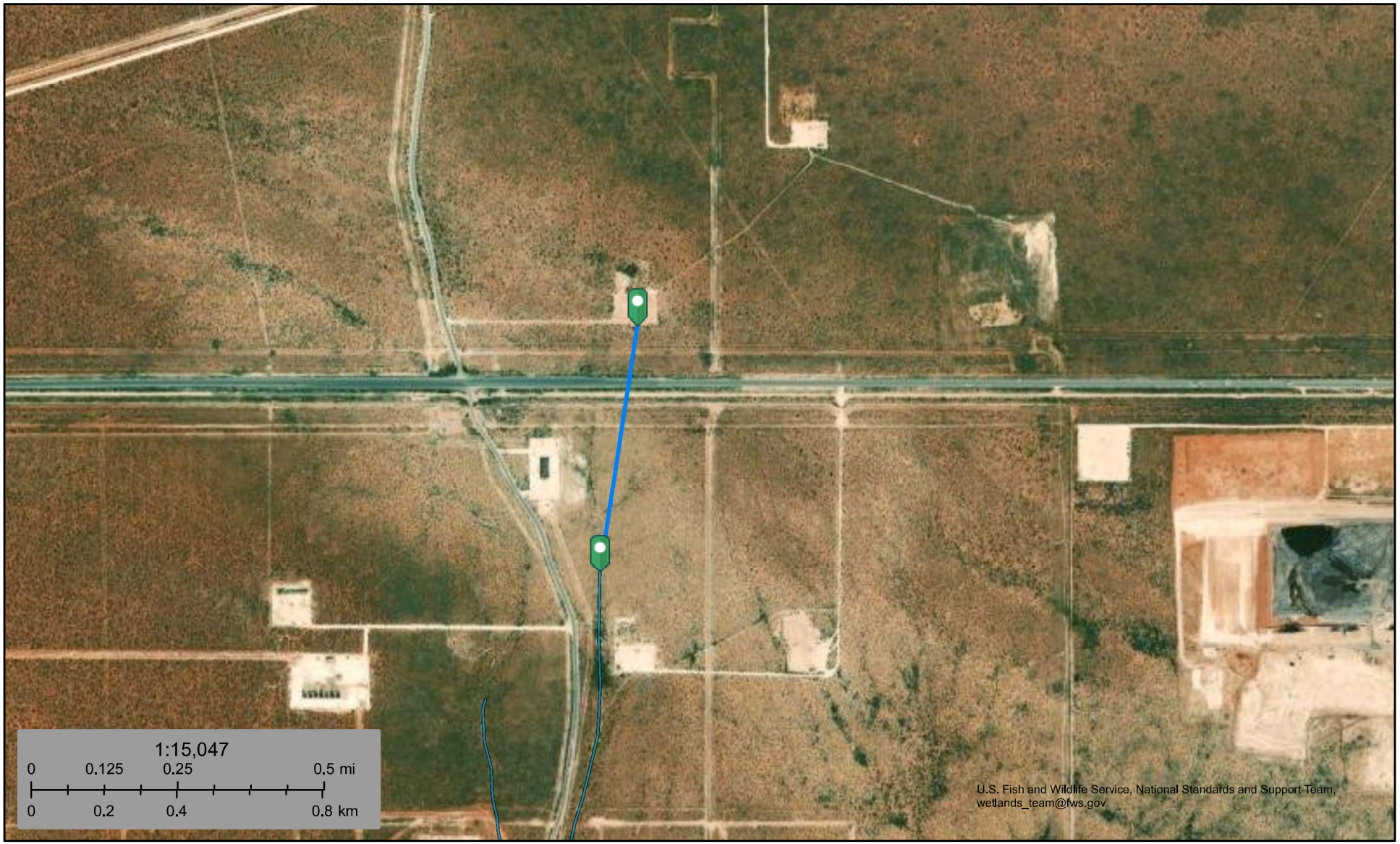
Bill Ramsey
Sr. Environmental and Regulatory Specialist
Cell: (720) 238-2787

APPENDIX B - Closure Criteria Research Documentation

U.S. Fish and Wildlife Service

National Wetlands Inventory

Intermittent 1896 feet



July 6, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

National Wetlands Inventory

Pond 8,861 feet

July 6, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

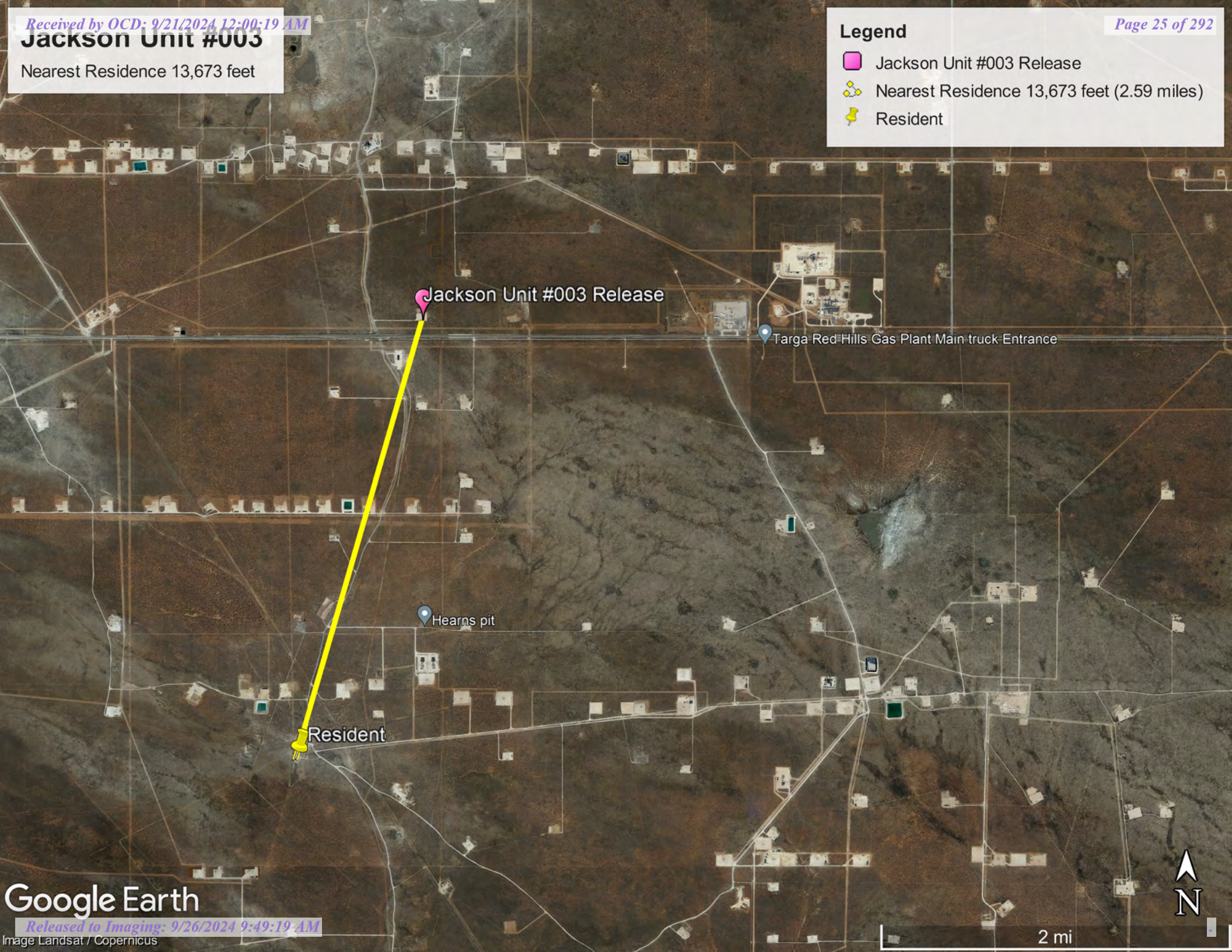
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Jackson Unit #003

Nearest Residence 13,673 feet

Legend

- Jackson Unit #003 Release
- Nearest Residence 13,673 feet (2.59 miles)
- Resident



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

(R=POD has been replaced and no longer serves this file, C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 64	q 16	q 4	Sec	Twn	Rng	X	Y	Distance
C 03585	CUB	EXP	0	INTERCONTINENTAL POTASH CORP	LE	C 03585 POD3					1	2	3	15	24S	33E	635393	3565270	464
					LE	C 03585 POD2					1	2	3	15	24S	33E	635418	3565363	550
					LE	C 03585 POD1					3	4	1	15	24S	33E	635368	3565544	737
C 03565	CUB	EXP	0	INTERCONTINENTAL POTASH CORP	LE	C 03565 POD8						4	1	15	24S	33E	635484	3565610	791
C 03585	CUB	EXP	0	INTERCONTINENTAL POTASH CORP	LE	C 03585 POD4					4	4	1	15	24S	33E	635485	3565610	792
					LE	C 03585 POD5					1	2	4	15	24S	33E	636245	3565387	937
C 03565	CUB	EXP	0	INTERCONTINENTAL POTASH CORP	LE	C 03565 POD9						4	4	15	24S	33E	636429	3565005	948
C 03585	CUB	EXP	0	INTERCONTINENTAL POTASH CORP	LE	C 03585 POD6					2	4	4	15	24S	33E	636431	3565007	950
C 04339	CUB	MON	0	OWL LANDFILL SERVICES LLC	LE	C 04339 POD7	NA				4	4	2	23	24S	33E	636473	3564011	1264
					LE	C 04339 POD8					1	1	3	23	24S	33E	636518	3563681	1527
C 03565	CUB	EXP	0	INTERCONTINENTAL POTASH CORP	LE	C 03565 POD6						3	3	10	24S	33E	635022	3566373	1626
C 04822	CUB	MON	0	TAP ROCK RESOURCES	LE	C 04822 POD1	NA				2	2	3	16	24S	33E	633904	3565271	1658
C 04339	CUB	MON	0	OWL LANDFILL SERVICES LLC	LE	C 04339 POD1	NA				1	3	3	23	24S	33E	636525	3563309	1825
C 03662	C	DOL	3	MARK MCCLOY (M&M RANCH)	LE	C 03662 POD1				Shallow	3	1	2	23	24S	33E	637342	3564428	1883
C 03727	C	PRO	0	EOG RESOURCES INC	LE	C 03662 POD1				Shallow	3	1	2	23	24S	33E	637342	3564428	1883
C 03728	C	PRO	0	EOG RESOURCES INC	LE	C 03662 POD1				Shallow	3	1	2	23	24S	33E	637342	3564428	1883
C 03729	C	PRO	0	EOG RESOURCES INC	LE	C 03662 POD1				Shallow	3	1	2	23	24S	33E	637342	3564428	1883
C 04339	CUB	MON	0	OWL LANDFILL SERVICES LLC	LE	C 04339 POD6	NA				3	1	2	23	24S	33E	637340	3564386	1890
C 04824	CUB	MON	0	TAP ROCK RESOURCES	LE	C 04824 POD1	NA				1	1	2	16	24S	33E	634112	3566203	1960
C 04339	CUB	MON	0	OWL LANDFILL SERVICES LLC	LE	C 04339 POD2	NA				2	3	3	23	24S	33E	636789	3563315	1980

Record Count: 20

UTMNAD83 Radius Search (in meters):

Easting (X): 635500 **Northing (Y):** 3564819 **Radius:** 2000

Sorted by: Distance

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: C 03565 **Subbasin:** CUB **Cross Reference:** -

Primary Purpose: EXP EXPLORATION

Primary Status:

Total Acres: **Subfile:** - **Header:** -

Total Diversion: 0 **Cause/Case:** -

Owner: INTERCONTINENTAL POTASH CORP

Contact: TOM COPE

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	509298	EXPL	2012-08-07	PMT	APR	C 03565	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 03565 POD1			1	4	06	24S	33E		630871	3568316	ICP-083
C 03565 POD2			3	4	07	24S	33E		631156	3566515	ICP-084
C 03565 POD3			3	4	08	24S	33E		632763	3566546	ICP-085
C 03565 POD4			4	1	09	24S	33E		633672	3567057	ICP-086
C 03565 POD5			3	4	09	24S	33E		634135	3566496	ICP-87
C 03565 POD6			3	3	10	24S	33E		635022	3566373	ICP-089
C 03565 POD7			2	2	06	24S	33E		631361	3569250	ICP-090
C 03565 POD8			4	1	15	24S	33E		635485	3565610	ICP-092
C 03565 POD9			4	4	15	24S	33E		636430	3565005	ICP-093

U.S. Fish and Wildlife Service
National Wetlands Inventory

6,225 ft. / 1.18 miles

June 29, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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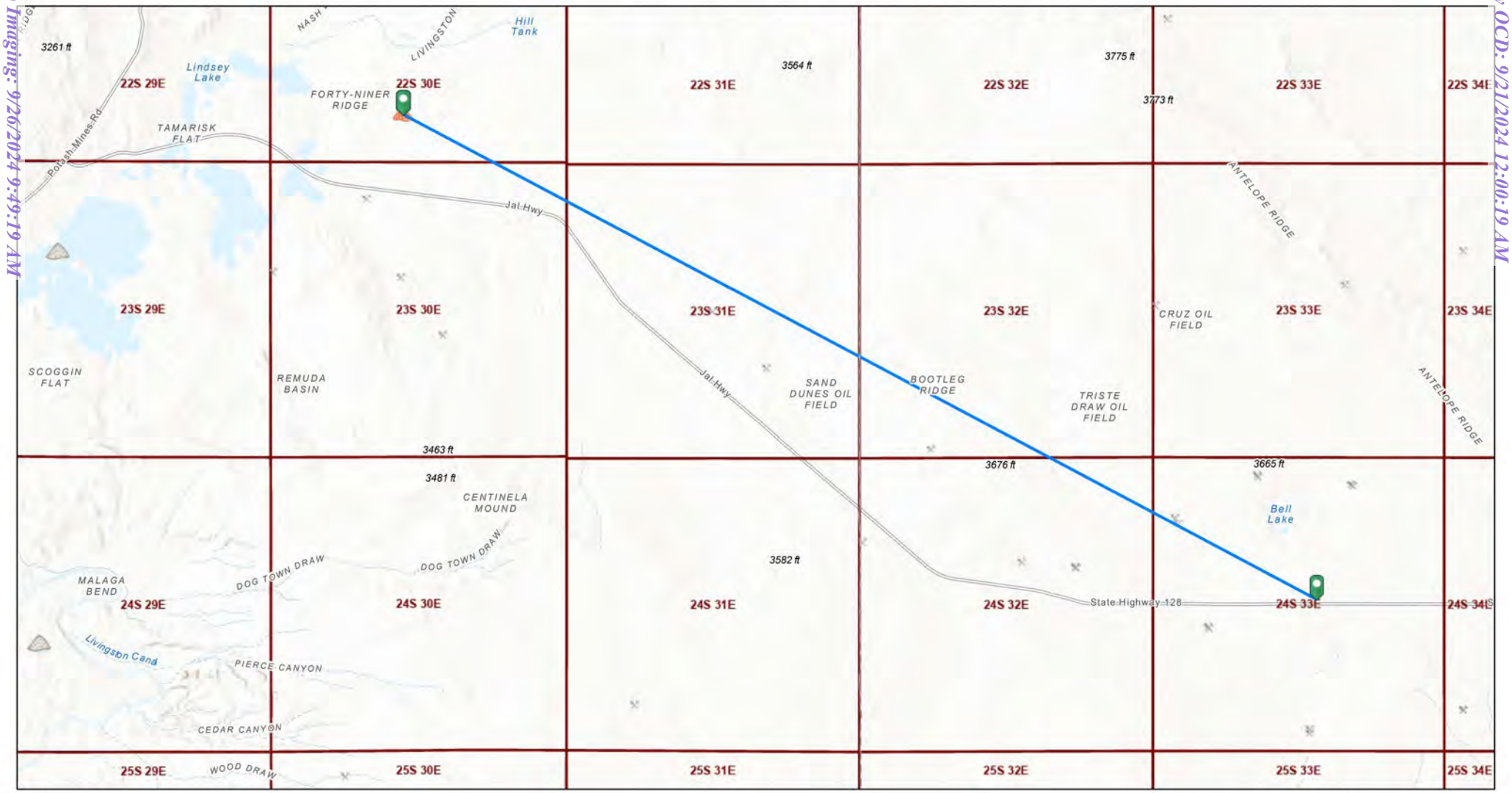
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Potash Mine 112,000 feet



7/6/2024, 11:06:59 AM

1:144,448

Registered Mines

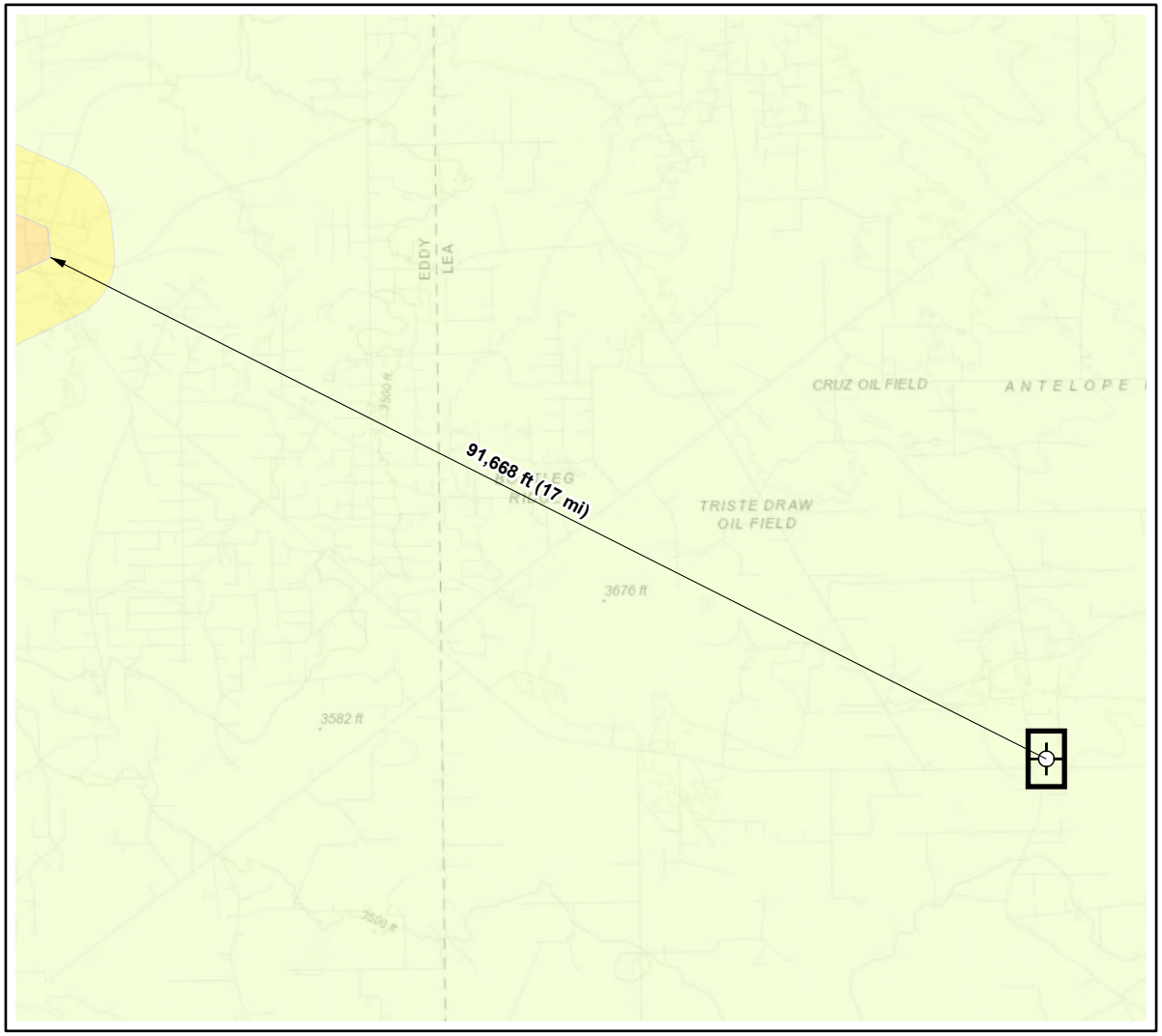
- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Potash
- Salt
- PLSS Townships

0 1.5 3 6 mi

0 2.5 5 10 km

U.S. BLM, Esri, NASA, NGA, USGS, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS, BLM

EMNRD MMD GIS Coordinator
NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)



Overview Map
0 0.5 1 2 mi

Detail Map
0 150 300 600 ft

Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1000 ft)

VERTEX

Map Center:
Lat/Long
32.212196°,-103.562317°

NAD 1983 UTM Zone 13N
Date: Jul 03/24

N

Karst Potential Map
Jackson Unit #003

Figure:
X

TAP ROCK RESOURCES

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Inset Map, Esri 2022; Overview Map: Esri World Topographic. Karst potential data sources from Roswell Field Office, Bureau of Land Management, 2020 or United States Department of the Interior, Bureau of Land Management, (2018). Karst Potential.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Tap Rock\2024\24E-03316\Project\24E-03316.aprx

National Flood Hazard Layer FIRMette

FEMA

103°34'3"W 32°12'59"N

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

1:6,000

103°33'26"W 32°12'29"N

Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

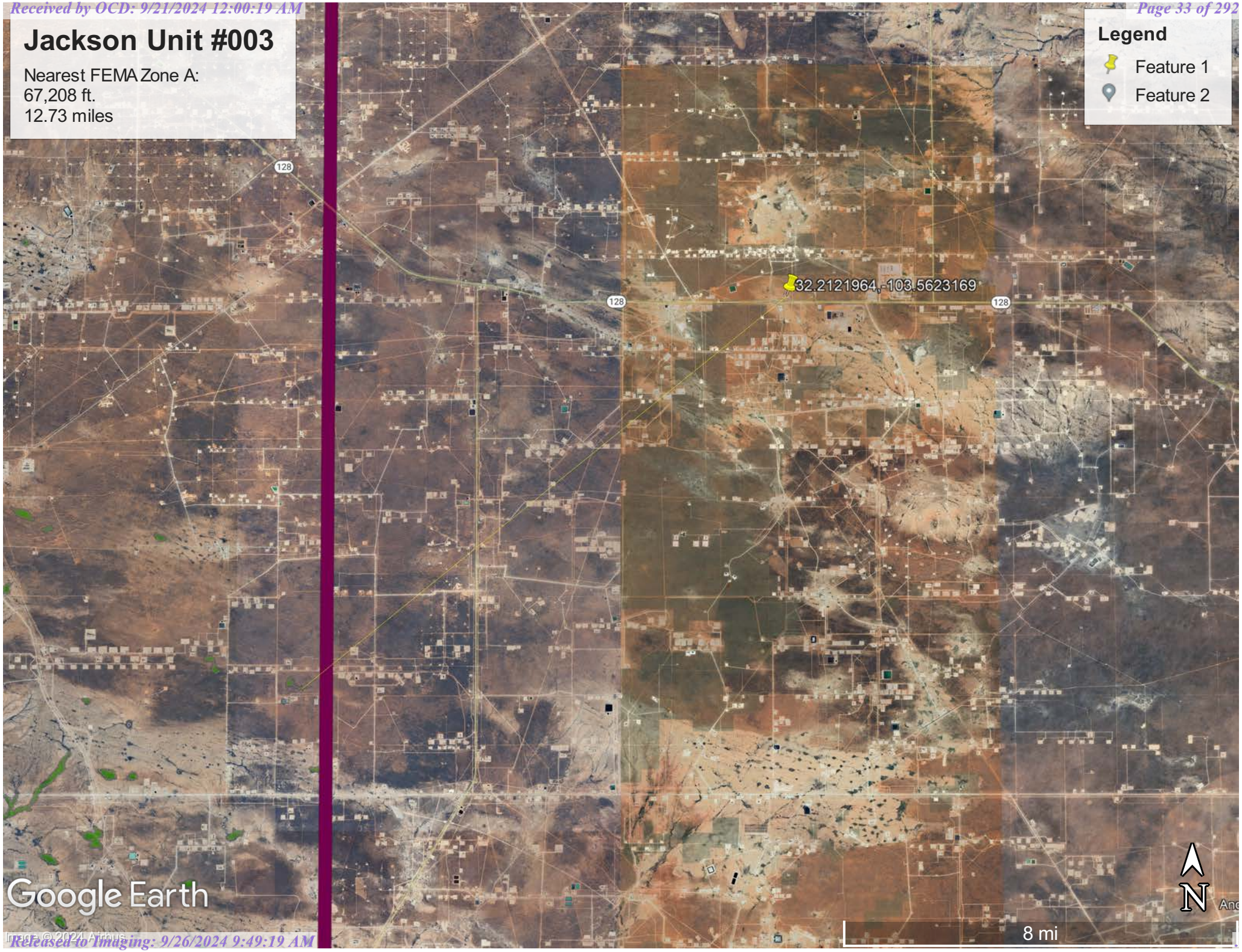
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/29/2024 at 1:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Jackson Unit #003

Nearest FEMA Zone A:
67,208 ft.
12.73 miles



United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Lea County, New Mexico

June 29, 2024

Preface

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

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

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

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

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

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

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Contents

How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

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

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BH	Berino-Cacique association, hummocky	0.1	4.4%
SR	Simona-Upton association	2.8	95.6%
Totals for Area of Interest		**2.9**	**100.0%**

Map Unit Descriptions

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

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

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

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

onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Lea County, New Mexico

BH—Berino-Cacique association, hummocky

Map Unit Setting

National map unit symbol: dmpg
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 60 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 50 percent
Cacique and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock over calcareous sandy alluvium derived from sedimentary rock

Typical profile

A - 0 to 10 inches: fine sand
Btk - 10 to 60 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Cacique

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 7 inches: fine sand
Bt - 7 to 28 inches: sandy clay loam
Bkm - 28 to 38 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to petrocalcic
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7c
Hydrologic Soil Group: C
Ecological site: R070BD004NM - Sandy
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 4 percent
Ecological site: R070BD005NM - Deep Sand
Hydric soil rating: No

Maljamar

Percent of map unit: 3 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Palomas

Percent of map unit: 2 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Dune land

Percent of map unit: 1 percent
Hydric soil rating: No

SR—Simona-Upton association

Map Unit Setting

National map unit symbol: dmr3
Elevation: 3,000 to 4,400 feet
Mean annual precipitation: 10 to 16 inches
Mean annual air temperature: 58 to 62 degrees F
Frost-free period: 190 to 205 days
Farmland classification: Not prime farmland

Map Unit Composition

Simona and similar soils: 50 percent
Upton and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Simona

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: gravelly fine sandy loam
Bk - 8 to 16 inches: fine sandy loam
Bkm - 16 to 26 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Description of Upton

Setting

Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: gravelly loam
Bkm - 8 to 18 inches: cemented material
BCk - 18 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 7 to 20 inches to petrocalcic
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 75 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Very low (about 0.9 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

Minor Components

Kimbrough

Percent of map unit: 6 percent
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Stegall

Percent of map unit: 5 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Slaughter

Percent of map unit: 4 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ

Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

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

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

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

USDA Natural Resources Conservation Service

Ecological site R070BD002NM
Shallow Sandy

Accessed: 06/29/2024

General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Associated sites

R070BD004NM	**Sandy** Sandy sites often occur in association or in a complex with Shallow Sandy Sites.

Similar sites

R070BD004NM	**Sandy** Sandy ecological sites are similar to Shallow Sandy sites in species composition and Transition pathways.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occures on plains, alluvial fans, uplands, or fan piedmonts. The parent material consists of mixed loamy alluvium or eolian material derived from igneous and sedimentory bedrock. The petrocalcic layer is at a depth of 10 to 25 inches and undulating.

Slopes are nearly level to undulating, usually less than 9 percent. Elevations range from 2,842 to 4,500 feet.

Table 2. Representative physiographic features

Landforms	(1) Plain (2) Fan piedmont (3) Alluvial fan
Elevation	2,842–4,500 ft
Slope	1–9%
Aspect	Aspect is not a significant factor

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common.

Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity – short duration thunderstorms.
Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.
The average frost-free season is from 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November.
Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of the site. The vegetation of this site can take advantage of the moisture and the time it falls. Because of the soil profile, little moisture can be stored in the soil for any length of time. Moisture is readily available to the plants from the time it falls. Strong winds from the southwest blow from January through June which rapidly dries out the soil profile during a critical period for plant growth.

Climate data was obtained from http://www.wrcc.sage.dri.edu/summary/climsmnm.html web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced from water from wetlands or streams.

Soil features

Soils are very shallow to shallow, less than 20 inches in depth. Surface and subsurface textures are gravelly loamy sand, gravelly fine sandy loam or fine sandy loam.

An indurated calache layer occurs at depths of 6 to 25 inches and is at an average of 15 inches from the surface. Underlying material textures are very gravelly fine sandy loam, very gravelly sandy loam, gravelly fine sandy loam. Gravels are calcium carbonate concretions, calcium carbonate content ranges from 30 to 65 percent.

The indurated caliche layer typically holds water up in the profile for short periods within the root zone of plants. These soils will blow if left unprotected by vegetation.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils are:
Simona
Jerag

Table 4. Representative soil features

Surface texture	(1) Fine sandy loam (2) Loamy fine sand (3) Gravelly fine sandy loam
Family particle size	(1) Loamy
Drainage class	Well drained to moderately well drained
Permeability class	Moderately slow to moderate

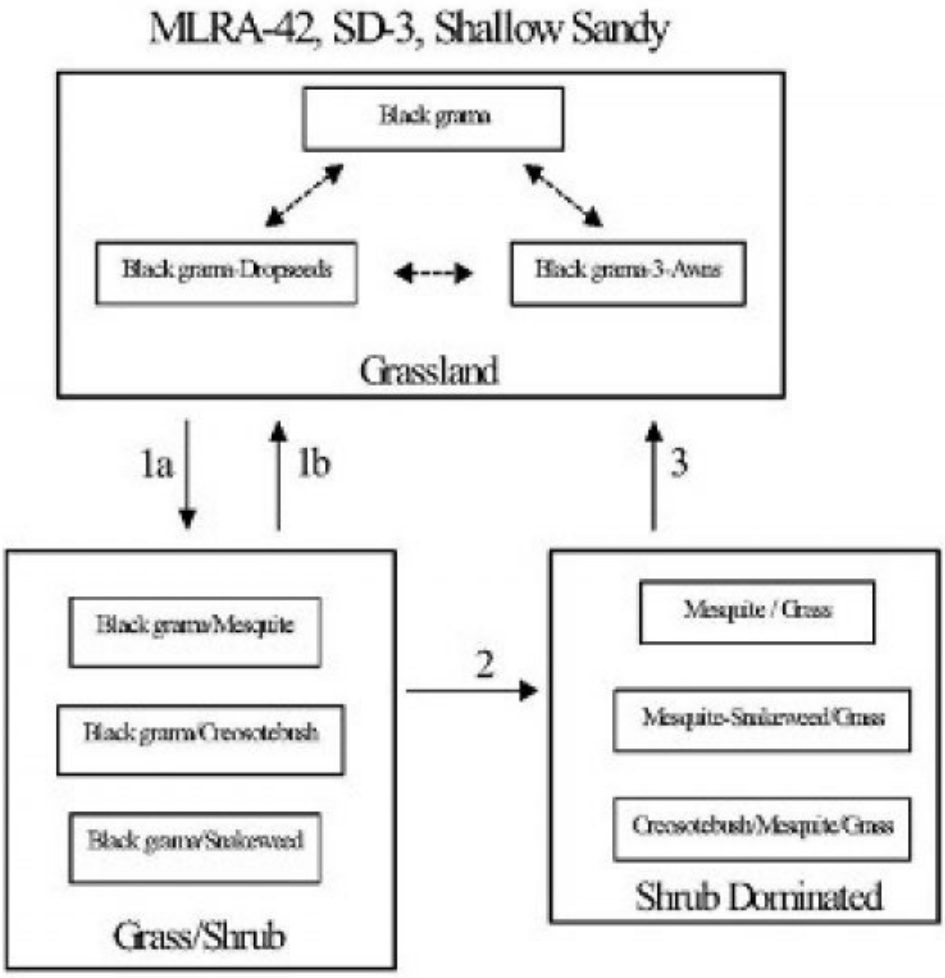
Soil depth	7–24 in
Surface fragment cover <=3"	5–25%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	1–2 in
Calcium carbonate equivalent (0-40in)	5–15%
Electrical conductivity (0-40in)	0–4 mmhos/cm
Sodium adsorption ratio (0-40in)	0
Soil reaction (1:1 water) (0-40in)	7.4–8
Subsurface fragment volume <=3" (Depth not specified)	5–25%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

Overview
The Shallow Sandy site occurs on upland plains, and tops of low ridges and mesas, associated with Sandy, Loamy Sand, and Shallow sites. Coarse to moderately coarse soil surface textures, shallow depth (<20 inches) to an indurated caliche layer (petrocalcic horizon), and an overwhelming dominance by black grama help to distinguish this site. The historic plant community of the Shallow Sandy site is a black grama dominated grassland sparsely dotted with shrubs. Shrubs, especially mesquite and creosotebush can increase or colonize due to the dispersal of shrub seeds by livestock or wildlife. This increase in mesquite and colonization of creosotebush may be enhanced by proximity to areas with existing high shrub densities. Fire suppression, and the loss of grass cover due to overgrazing or drought may facilitate the increase and encroachment of shrubs. Persistent loss of grass cover, competition for resources by shrubs, and periods of climate with increased winter precipitation and dry summers, may initiate the transition to a shrub-dominated state.

State and transition model

Plant Communities and Transitional Pathways (diagram)



1a. Seed dispersal, drought, overgrazing, fire suppression.
1b. Prescribed fire, brush control, prescribed grazing.

2. Persistent loss of grass cover, resource competition, increased winter precipitation.

3. Brush control, range seeding, prescribed grazing.

State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

Grassland: This site responds well to management and is resistant to state change, due to the shallow depth to petrocalcic horizon and sandy surface textures. The sandy surface textures allow rapid water infiltration and the petrocalcic horizon helps to keep water perched and available to shallow rooted grasses. Black grama is the dominant species in the historic plant community, averaging 50 to 60 percent of the total production for this site. Bush muhly, blue grama, and dropseeds are present as sub-dominants. Typically, yucca, javalinabush, range ratany, prickly pear, and mesquite are sparsely dotted across the landscape. Leatherweed croton, cutleaf

happlopappus, wooly groundsel, and threadleaf groundsel are common forbs. Continuous heavy grazing or extended periods of drought will cause a loss of grass cover characterized by a decrease in black grama, bush muhly, blue and sideoats grama, plains bristlegrass, and Arizona cottontop. Dropseeds and or threeawns may increase and become sub-dominant to black grama. Continued loss of grass cover in conjunction with dispersal of shrub seeds and fire suppression is believed to cause the transition to a state with increased amounts of shrubs (Grass/Shrub state). Diagnosis: Black grama is the dominant grass species. Grass cover uniformly distributed. Shrubs are a minor component averaging only two to five percent canopy cover. Litter cover is high (40-50 percent of area), and litter movement is limited to smaller size class litter and short distances (<. 5m). Other grasses that could appear on this site would include: six-weeks grama, fluffgrass, false-buffalograss, hairy grama, little bluestem, bristle panicum, cane bluestem, Indian ricegrass, tridens spp., and red lovegrass. Other woody plants include: pricklypear, cholla, fourwing saltbush, catclaw mimosa, winterfat, American tarbush and mesquite. Other forbs include: globemallow, verbena, desert holly, senna, plains blackfoot, trailing fleabane, fiddleneck, deerstongue, wooly Indianwheat, and locoweed.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	474	652	830
Forb	78	107	136
Shrub/Vine	48	66	84
Total	**600**	**825**	**1050**

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	30-35%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	40-50%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	15-25%

Figure 5. Plant community growth curve (percent production by month). NM2802, R042XC002NM-Shallow Sandy-HCPC. SD-3 Shallow Sandy - Warm season plant community.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	3	5	10	10	25	30	12	5	0	0

State 2
Grass/Shrub

Community 2.1
Grass/Shrub

Grass/Shrub: This state is characterized by the notable presence of shrubs, especially mesquite, broom snakeweed, and/or creosotebush, however grasses remain as the dominant species. Black grama is the dominant

grass species. Threeawns and or dropseeds are sub-dominant. The susceptibility of the Shallow Sandy site to shrub encroachment may be higher when located adjacent to other sites with high densities of mesquite or creosotebush. Retrogression within this site is characterized by decreases in grass cover and increasing densities of shrubs. Diagnosis: Black grama remains as the dominant grass species. Grass cover varies in response to the amount of shrub increase, ranging from uniform to patchy. Shrubs are found at increased densities relative to the grassland state, especially mesquite, creosotebush, or broom snakeweed. Transition to Grass/Shrub (1a) Historically fire may have kept mesquite and other shrubs in check by completely killing some species and disrupting seed production cycles and suppressing the establishment of shrub seedlings in others. Fire suppression combined with seed dispersal by livestock and wildlife is believed to be the factors responsible for the establishment and increase in shrubs.1, 3 Loss of grass cover due to overgrazing, prolonged periods of drought, or their combination, reduces fire fuel loads and increases the susceptibility of the site to shrub establishment. Key indicators of approach to transition: Increase in the relative abundance of dropseeds and threeawns Presence of shrub seedlings Loss of organic matter—evidenced by an increase in physical soil crusts 8 Transition back to Grassland (1b) Brush control is necessary to initiate the transition back to the grassland state. If adequate fuel loads remain, possibly the reintroduction of fire as a management tool will assist in the transition back, however, mixed results have been observed concerning the effects of fire on black grama grasslands.6 Prescribed grazing will help ensure adequate rest following brush control and will assist in the establishment and maintenance of grass cover capable of sustaining fire.

State 3
Shrub Dominated

Community 3.1
Shrub Dominated

Shrub-Dominated: Across the range of soil types included in the Shallow Sandy site, mesquite is typically the dominant shrub, but it does occur as a co-dominant or sub-dominant species with creosotebush or broom snakeweed. Mesquite tends to dominate when the Shallow Sandy site occurs as part of a complex or in association with Sandy or Loamy Sand sites. Creosotebush tends to dominate on Shallow Sandy sites that occur as part of, or adjacent to Shallow Sites. Broom snakeweed increases in response to heavy grazing, but tends to cycle in and out depending on timing of rainfall. However, once the site is dominated by shrubs and snakeweed becomes well established, it tends to remain as a major component in the shrub dominated state. Diagnosis: Mesquite, creosotebush, or snakeweed cover is high, exceeding that of grasses. Grass cover is patchy with large connected bare areas present. Black grama, threeawns, or dropseeds may be the dominant grass. Evidence of accelerated wind erosion in the form of pedestalling of plants, and soil deposition around shrub bases may be common. Transition to Shrub-Dominated (2) Persistent loss of grass cover and the resulting increased competition between shrubs and remaining grasses for dwindling resources (especially soil moisture) may drive this transition.5 Additionally periods of increased winter precipitation may facilitate periodic episodes of shrub expansion and establishment. 4 Key indicators of approach to transition: Increase in size and frequency of bare patches. Loss of grass cover in shrub interspaces. Increased signs of erosion, evidenced by pedestalling of plants, and soil and litter deposition on leeward side of plants. 7 Transition back to Grassland (3) Brush control is necessary to reduce competition from shrubs and reestablish grasses. Range seeding may be necessary if insufficient grasses remain, The benefits, and costs, will vary depending upon the degree of site degradation, and adequate precipitation following seeding.

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Grasslike					
1	**Warm Season**			413–495	
	black grama	BOER4	*Bouteloua eriopoda*	413–495	–
2	**Warm Season**			41–83	
	bush muhly	MUPO2	*Muhlenbergia porteri*	41–83	–
3	**Warm Season**			41–83	

	blue grama	BOGR2	*Bouteloua gracilis*	41–83	–
4	**Warm Season**			25–41	
	sideoats grama	BOCU	*Bouteloua curtipendula*	25–41	–
5	**Warm Season**			41–83	
	spike dropseed	SPCO4	*Sporobolus contractus*	41–83	–
	sand dropseed	SPCR	*Sporobolus cryptandrus*	41–83	–
	mesa dropseed	SPFL2	*Sporobolus flexuosus*	41–83	–
6	**Warm Season**			17–41	
	threeawn	ARIST	*Aristida*	17–41	–
7	**Warm Season**			41–83	
	Arizona cottontop	DICA8	*Digitaria californica*	41–83	–
	plains bristlegrass	SEVU2	*Setaria vulpiseta*	41–83	–
8	**Warm Season**			41–83	
	mat sandbur	CELO3	*Cenchrus longispinus*	41–83	–
	hooded windmill grass	CHCU2	*Chloris cucullata*	41–83	–
9	**Other Perennial Grasses**			25–41	
	Grass, perennial	2GP	*Grass, perennial*	25–41	–
Shrub/Vine					
10	**Shrub**			8–25	
	javelina bush	COER5	*Condalia ericoides*	8–25	–
11	**Shrub**			8–25	
	yucca	YUCCA	*Yucca*	8–25	–
12	**Shrub**			8–25	
	jointfir	EPHED	*Ephedra*	8–25	–
	littleleaf ratany	KRER	*Krameria erecta*	8–25	–
13	**Shrub**			8–25	
	featherplume	DAFO	*Dalea formosa*	8–25	–
14	**Shrub**			8–25	
	broom snakeweed	GUSA2	*Gutierrezia sarothrae*	8–25	–
15	**Other Shrubs**			25–41	
	Shrub (>.5m)	2SHRUB	*Shrub (>.5m)*	25–41	–
Forb					
16	**Forb**			17–41	
	leatherweed	CRPOP	*Croton pottsii var. pottsii*	17–41	–
	Goodding's tansyaster	MAPIG2	*Machaeranthera pinnatifida ssp. gooddingii var. gooddingii*	17–41	–
17	**Forb**			17–41	
	woolly groundsel	PACA15	*Packera cana*	17–41	–
	threadleaf ragwort	SEFLF	*Senecio flaccidus var. flaccidus*	17–41	–
18	**Forb**			8–25	
	whitest evening primrose	OEAL	*Oenothera albicaulis*	8–25	–
19	**Other Forbs**			8–25	
	Forb (herbaceous, not grass nor grass-like)	2FORB	*Forb (herbaceous, not grass nor grass-like)*	8–25	–

Animal community

This site provides habitats which support a resident animal community that is characterized by pronghorn antelope, swift fox, black-tailed jackrabbit, spotted ground squirrel, Ord's kangaroo rat, northern grasshopper mouse, coyote, horned lark, meadowlark, lark bunting, scaled quail, morning dove, side-blotched lizard, round-tailed horned lizard, marbled whiptail, prairie rattlesnake and ornate box turtle.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations
Soil Series Hydrologic Group
Jarag D
Simona D

Recreational uses

This site offers recreation for hiking, horseback riding, nature observation and photography, and quail and dove hunting. During years of abundant spring moisture, this site displays a riot of color from wildflowers during May and June. A few summer and fall flowers also occur.

Wood products

The natural potential plant community of this site affords little or no wood products. Where the site has been invaded by mesquite or cholla cactus the roots and stems of these plants provide attractive material for a variety of curiosities, such as lamps and small furniture.

Other products

This site is suitable for grazing by all kinds and classes of livestock during all seasons of the year. Because of the sandy textures and shallow profile, this site will respond rapidly to management. As this site deteriorates, plants such as black grama, bush muhly, blue and sideoats grama, plains bristlegrass and Arizona cottontop, will decrease and be replaced by plants such as threeawns, mesquite, creosote bush, and broom snakeweed. This also causes a decrease in ground cover, leaving the soil to blow. This site responds best to a system of management that rotates the season of use.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month
Similarity Index Ac/AUM
100 - 76 2.5 – 3.5
75 – 51 3.2 – 4.6
50 – 26 4.5 – 7.5
25 – 0 7.6 +

Inventory data references

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County, Lea County, and Chaves County.

Other references

Literature References:

1. Brooks, M.L. and D.A. Pyke. 2001. Invasive plants and fire in the deserts of North America. Pages 1–14 in K.E.M. Galley and T.P. Wilson (eds.). Proceedings of the Invasive Species Workshop: the Role of Fire in the Control and Spread of Invasive Species.

2. Hennessy, J.T., R.P. Gibbens, J.M. Tromble, and M. Cardenas. 1983. Water properties of caliche. J. Range Manage. 36: 723-726.

3. Humphrey, R.R. 1974. Fire in the deserts and desert grassland of North America. In: Kozlowski, T. T.; Ahlgren, C. E., eds. Fire and ecosystems. New York: Academic Press: 365-400.

4. Moir, W.H., and J. A. Ludwig. 1991. Plant succession and changing land features in desert grasslands. P. 15-18. In P.F. Ffolliott and W.T. Swank (eds.) People and the temperate region: a summary of research from the United States Man and the Biosphere Program 1991. U.S. Dept. State, Publ No. 9839, Nat. Tech. Info. Serv., U.S. Dept. Commerce, Springfield, Illinois. 63 p.

5. Tiedemann, A. R. and J. O. Klemmedson. 1977. Effect of mesquite trees on vegetation and soils in the desert grassland. J. Range Manage. 30: 361-367.

6. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory (2002, September). Fire Effects Information System, [Online]. Available: http://www.fs.fed.us/database/feis/ [accessed 2/10/03].

7. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheets. Rangeland Soil Quality—Wind Erosion. Rangeland Sheet 10 [Online]. Available: http://www.statlab.iastate.edu/survey/SQI/range.html

8. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheets. Rangeland Soil Quality—Physical and Biological Soil Crusts. Rangeland Sheet 7 [Online]. Available: http://www.statlab.iastate.edu/survey/SQI/range.html

Contributors

David Trujillo
Don Sylvester

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. **Number and extent of rills:**

2. **Presence of water flow patterns:**

3. **Number and height of erosional pedestals or terracettes:**

4. **Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):**

5. **Number of gullies and erosion associated with gullies:**

6. **Extent of wind scoured, blowouts and/or depositional areas:**

7. **Amount of litter movement (describe size and distance expected to travel):**

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**

12. **Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):**

    Dominant:

    Sub-dominant:

    Other:

    Additional:

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):**

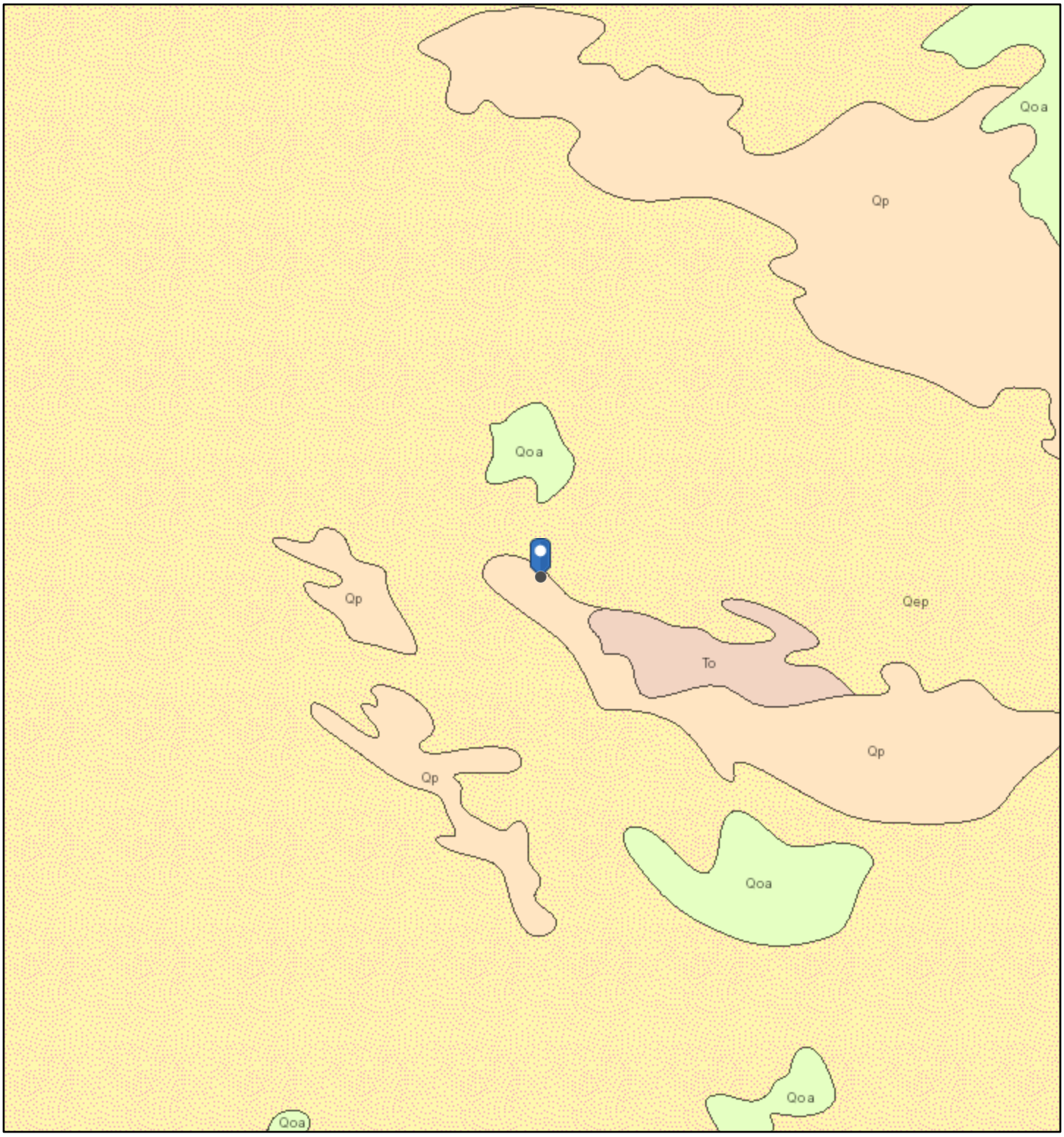
14. **Average percent litter cover (%) and depth (in):**

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):**

16. **Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:**

17. **Perennial plant reproductive capability:**

ArcGIS Web Map



6/29/2024, 11:53:16 AM

1:144,448

0 1 2 4 mi

0 1.5 3 6 km

Lithologic Units

- Playa——Alluvium and evaporite deposits (Holocene)
- Water——Perenial standing water
- Qa——Alluvium (Holocene to upper Pleistocene)

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

ArcGIS Web AppBuilder

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National

APPENDIX C – Daily Field Reports with Photographs

Daily Site Visit Report

Client:	Tap Rock	Inspection Date:	9/4/2024
Site Location Name:	Jackson Unit #003	Report Run Date:	9/4/2024 11:56 PM
Client Contact Name:	Bill Ramsey	API #:	
Client Contact Phone #:	720-238-2787		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	9/4/2024 7:22 AM
Departed Site	9/4/2024 1:00 PM

Field Notes

8:02 Arrived on site, completed JSA and held a saftey brief along with the scope of work that needed to be done with the crew from APECK.

8:03 On site today to continue the ongoing excavation.

15:42 BS24-01 was pushed to 5ft bgs. WS24-11 was pushed out approximately 2ft. WS24-15 was pushed out approximately 3-4ft. WS24-16 was pushed out approximately 3-4ft.

15:44 10 samples were collected during the excavation today. All samples were screened for TPH using a Dexsil Petroflag and the clean samples (4 samples) were screened for chlorides using silver nitrate titration.

15:45 4 samples were jarred in preparation to be sent to Envirotech laboratory for further analysis.

15:45 All walls and bases of the east and west excavation meet NMOCD closure criteria.

Next Steps & Recommendations

1 Proceed with confirmation sampling.

Daily Site Visit Report

Site Photos

Viewing Direction: Southeast

WES24-15 at 0-5ft bgs. Located on the south wall of the 5ft excavation.

Viewing Direction: Northeast

WES24-16 at 0-5ft bgs. Located on the north wall of the 5ft excavation.

Viewing Direction: East

BES24-01 at 5ft bgs.

Viewing Direction: Northwest

Overview of the 5ft excavation, viewed from the southeast corner.

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: East
	
Overview of the 5ft excavation viewed from the the western wall.	WES24-11 at 0-4ft bgs inside the 4ft excavation.
Viewing Direction: West	**Viewing Direction**: East
	
Overview of the 4ft bgs excavation viewed from the northeast corner.	Overview of the 4ft bgs excavation, viewed from the southwest corner.

Daily Site Visit Report

Viewing Direction: South

Soil pile sitting on top of a plastic liner. Approximately 80-120 cubic yards of soil.

Viewing Direction: South

The entire excavation has been fenced off for safety purposes after work was completed for the day.

Viewing Direction: South

Smaller soil pile next to the 4ft excavation.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: John Rewis

Signature:

APPENDIX D – Notifications

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

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

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 360592
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	3,000
What is the estimated number of samples that will be gathered	40
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/04/2024
Time sampling will commence	02:30 PM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	575-988-1472
Please provide any information necessary for navigation to sampling site	32.211771, -103.562296

District I
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Santa Fe, NM 87505

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 360592
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/2/2024

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

QUESTIONS

Action 360596

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 360596
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	3,000
What is the estimated number of samples that will be gathered	40
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/05/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	575-988-1472
Please provide any information necessary for navigation to sampling site	32.196144, -103.588770

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 360596
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/2/2024

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

QUESTIONS

Action 360598

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 360598
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	3,000
What is the estimated number of samples that will be gathered	40
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/06/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	575-988-1472
Please provide any information necessary for navigation to sampling site	32.196144, -103.588770

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Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 360598
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/2/2024

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

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

QUESTIONS

Action 364622

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 364622
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	1,500
What is the estimated number of samples that will be gathered	15
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/19/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Steph McCarty will be the field oversight of the sample operations. Her contact information is below: 575-263-3295
Please provide any information necessary for navigation to sampling site	Lat/Long: 32.2121964,-103.5623169 NAD83

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

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 364622
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
bramsey	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/16/2024

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

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

QUESTIONS

Action 374432

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 374432
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	1,200
What is the estimated number of samples that will be gathered	15
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/19/2024
Time sampling will commence	03:00 PM
Please provide any information necessary for observers to contact samplers	Vertex will be on site to collect confirmation samples. If you need directions or any other information, call 575-988-1472.
Please provide any information necessary for navigation to sampling site	32.21177, -103.562294

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

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 374432
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/15/2024

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

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

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 374433
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	1,200
What is the estimated number of samples that will be gathered	15
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/20/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Vertex will be on site to collect confirmation samples. If you need directions or any other information, call 575-988-1472.
Please provide any information necessary for navigation to sampling site	32.21177, -103.562294

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

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 374433
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/15/2024

District I
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District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 374436

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 374436
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	1,200
What is the estimated number of samples that will be gathered	15
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/21/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Vertex will be on site to collect confirmation samples. If you need directions or any other information, call 575-988-1472.
Please provide any information necessary for navigation to sampling site	32.21177, -103.562294

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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811 S. First St., Artesia, NM 88210
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1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 374436
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/15/2024

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

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

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 379792
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 2002 MAJOR A OS @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Closure Not Approved**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Site Name	*Unavailable.*
Date Release Discovered	**06/03/2002**
Surface Owner	**State**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	800
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/04/2024
Time sampling will commence	10:00 AM
Please provide any information necessary for observers to contact samplers	575-988-1472
Please provide any information necessary for navigation to sampling site	32.211788, -103.562285

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

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

CONDITIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 379792
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
vertex1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	9/2/2024

APPENDIX E – Laboratory Data Reports and Chain of Custody Forms

Report to:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E407052
Job Number:	24015-001
Received:	7/10/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/11/24

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: 7/11/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E407052
Date Received: 7/10/2024 8:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2024 8:30:00AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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)
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ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Table of Contents (continued)

Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/11/24 13:18

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24-01 0'	E407052-01A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-01 1'	E407052-02A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-01 2'	E407052-03A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-01 3'	E407052-04A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-01 4'	E407052-05A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-02 0'	E407052-06A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-02 1'	E407052-07A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-02 2'	E407052-08A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-02 3'	E407052-09A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-02 4'	E407052-10A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-03 0'	E407052-11A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-03 1'	E407052-12A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-03 2'	E407052-13A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-03 3'	E407052-14A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-04 0'	E407052-15A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-04 1'	E407052-16A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-04 2'	E407052-17A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-04 3'	E407052-18A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-05 0'	E407052-19A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-05 1'	E407052-20A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-01 0'

E407052-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.1 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.5 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*93.6 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	**42.2**	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-01 1'

E407052-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.3 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*93.4 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-01 2'

E407052-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.0 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*88.6 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-01 3'

E407052-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.5 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*95.6 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-01 4'

E407052-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*97.7 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-02 0'

E407052-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.3 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*96.2 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-02 1'

E407052-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.7 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*95.8 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-02 2'

E407052-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	**45.7**	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*93.3 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-02 3'

E407052-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.3 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.3 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	**169**	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	**79.2**	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*95.3 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-02 4'

E407052-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.4 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	**321**	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	**116**	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*99.7 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-03 0'

E407052-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.1 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-03 1'

E407052-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.7 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-03 2'

E407052-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*92.9 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-03 3'

E407052-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*87.6 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-04 0'

E407052-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.8 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.3 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*98.2 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-04 1'

E407052-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.1 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.9 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*94.5 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-04 2'

E407052-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.1 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*90.7 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-04 3'

E407052-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*91.7 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-05 0'

E407052-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.8 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.0 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*97.3 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

BH24-05 1'

E407052-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Benzene	ND	0.0250	1	07/10/24	07/11/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/11/24	
Toluene	ND	0.0250	1	07/10/24	07/11/24	
o-Xylene	ND	0.0250	1	07/10/24	07/11/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/11/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.6 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428053
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.5 %*	*70-130*	*07/10/24*	*07/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2428049
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*91.4 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428057
Chloride	ND	20.0	1	07/10/24	07/10/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2428053-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
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	*7.13*		*8.00*		*89.2*	*70-130*			
LCS (2428053-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Benzene	4.55	0.0250	5.00		91.0	70-130			
Ethylbenzene	4.38	0.0250	5.00		87.6	70-130			
Toluene	4.48	0.0250	5.00		89.7	70-130			
o-Xylene	4.39	0.0250	5.00		87.8	70-130			
p,m-Xylene	8.91	0.0500	10.0		89.1	70-130			
Total Xylenes	13.3	0.0250	15.0		88.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.22*		*8.00*		*90.3*	*70-130*			
Matrix Spike (2428053-MS1)				**Source: E407052-08**					Prepared: 07/10/24 Analyzed: 07/10/24
Benzene	4.83	0.0250	5.00	ND	96.6	54-133			
Ethylbenzene	4.64	0.0250	5.00	ND	92.8	61-133			
Toluene	4.75	0.0250	5.00	ND	95.1	61-130			
o-Xylene	4.63	0.0250	5.00	ND	92.6	63-131			
p,m-Xylene	9.41	0.0500	10.0	ND	94.1	63-131			
Total Xylenes	14.0	0.0250	15.0	ND	93.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.31*		*8.00*		*91.4*	*70-130*			
Matrix Spike Dup (2428053-MSD1)				**Source: E407052-08**					Prepared: 07/10/24 Analyzed: 07/11/24
Benzene	4.73	0.0250	5.00	ND	94.7	54-133	2.07	20	
Ethylbenzene	4.55	0.0250	5.00	ND	91.1	61-133	1.83	20	
Toluene	4.66	0.0250	5.00	ND	93.2	61-130	1.95	20	
o-Xylene	4.54	0.0250	5.00	ND	90.7	63-131	2.01	20	
p,m-Xylene	9.25	0.0500	10.0	ND	92.5	63-131	1.74	20	
Total Xylenes	13.8	0.0250	15.0	ND	91.9	63-131	1.83	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.33*		*8.00*		*91.6*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2428053-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.80*		*8.00*		*97.4*	*70-130*			
LCS (2428053-BS2)									Prepared: 07/10/24 Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	44.7	20.0	50.0		89.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.74*		*8.00*		*96.8*	*70-130*			
Matrix Spike (2428053-MS2)				**Source: E407052-08**					Prepared: 07/10/24 Analyzed: 07/11/24
Gasoline Range Organics (C6-C10)	44.6	20.0	50.0	ND	89.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.75*		*8.00*		*96.9*	*70-130*			
Matrix Spike Dup (2428053-MSD2)				**Source: E407052-08**					Prepared: 07/10/24 Analyzed: 07/11/24
Gasoline Range Organics (C6-C10)	44.5	20.0	50.0	ND	89.0	70-130	0.111	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.77*		*8.00*		*97.1*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2428049-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*52.0*		*50.0*		*104*	*50-200*			
LCS (2428049-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	261	25.0	250		104	38-132			
Surrogate: n-Nonane	*48.7*		*50.0*		*97.4*	*50-200*			
Matrix Spike (2428049-MS1)				**Source: E407052-07**					Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	273	25.0	250	ND	109	38-132			
Surrogate: n-Nonane	*50.7*		*50.0*		*101*	*50-200*			
Matrix Spike Dup (2428049-MSD1)				**Source: E407052-07**					Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	272	25.0	250	ND	109	38-132	0.240	20	
Surrogate: n-Nonane	*51.3*		*50.0*		*103*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 1:18:27PM

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 (2428057-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	ND	20.0							
LCS (2428057-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	256	20.0	250		103	90-110			
Matrix Spike (2428057-MS1)				**Source: E407052-04**					Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	263	20.0	250	ND	105	80-120			
Matrix Spike Dup (2428057-MSD1)				**Source: E407052-04**					Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	263	20.0	250	ND	105	80-120	0.0541	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/11/24 13:18

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

Client Information	Invoice Information	Lab Use Only		TAT				State					
Client: **Vertex (bill direct to Tap Rock)**	Company: **Tap Rock (Bill Ramsay)**	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX		
Project Name: **Jackson Unit #003**	Address:	E 407052	24015-0001		X								
Project Manager: **Chance Dixon**	City, State, Zip:												
Project Number: **24E-03316**	Phone:												
City, State, Zip:	Email:												
Phone:	Miscellaneous: **Direct bill to Tap Rock ATTN: Bill Ramsay.**												
Email: cdixon@vertexresource.com													

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				EPA Program: SDWA / CWA / RCRA; Compliance Y or N; PWSID #
14:30	07.04.2024	Soil	1	BH24-01 0'		1	X	X	X		X							
14:30	07.04.2024	Soil	1	BH24-01 1'		2	X	X	X		X							
14:35	07.04.2024	Soil	1	BH24-01 2'		3	X	X	X		X							
14:40	07.04.2024	Soil	1	BH24-01 3'		4	X	X	X		X							
14:45	07.04.2024	Soil	1	BH24-01 4'		5	X	X	X		X							
14:50	07.04.2024	Soil	1	BH24-02 0'		6	X	X	X		X							
14:50	07.04.2024	Soil	1	BH24-02 1'		7	X	X	X		X							
14:55	07.04.2024	Soil	1	BH24-02 2'		8	X	X	X		X							
15:00	07.04.2024	Soil	1	BH24-02 3'		9	X	X	X		X							
15:05	07.04.2024	Soil	1	BH24-02 4'		10	X	X	X		X							

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsay. Please email final report to cdixon@vertexresource.com, permain@vertexresource.com

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: **L. Pullman**

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
L. Pullman	7-9-2024	07:00	Michelle Gonzales	7-9-24	0700
Michelle Gonzales	7-9-24	1725		7.9.24	1725
	7.9.24	2345		7-10-24	0830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 days.

Lab Use Only

Received on ice: 0 / N

T1 _____ T2 _____ T3 _____

AVG Temp °C 4

Sample Matrix: **S** - Soil, **Sd** - Solid, **Sg** - Sludge, **A** - Aqueous, **O** - Other _____

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 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	Invoice Information	Lab Use Only		TAT				State				
Client: **Vertex (bill direct to Tap Rock)**	Company: **Tap Rock (Bill Ramsay)**	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: **Jackson Unit #003**	Address:	E 407052	24015-0001		X							
Project Manager: **Chance Dixon**	City, State, Zip:											
Project Number: **24E-03316**	Phone:											
City, State, Zip:	Email:											
Phone:	Miscellaneous: **Direct bill to Tap Rock ATTN: Bill Ramsay.**											
Email: cdixon@vertexresource.com												

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals			
15:10	07.04.2024	Soil	1	BH24-03 0'		11	X	X	X		X						
15:10	07.04.2024	Soil	1	BH24-03 1'		12	X	X	X		X						
15:15	07.04.2024	Soil	1	BH24-03 2'		13	X	X	X		X						
15:20	07.04.2024	Soil	1	BH24-03 3'		14	X	X	X		X						
15:25	07.04.2024	Soil	1	BH24-04 0'		15	X	X	X		X						
15:25	07.04.2024	Soil	1	BH24-04 1'		16	X	X	X		X						
15:30	07.04.2024	Soil	1	BH24-04 2'		17	X	X	X		X						
15:35	07.04.2024	Soil	1	BH24-04 3'		18	X	X	X		X						
15:40	07.04.2024	Soil	1	BH24-05 0'		19	X	X	X		X						
15:40	07.04.2024	Soil	1	BH24-05 1'		20	X	X	X		X						

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Remarks

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsay. Please email final report to cdixon@vertexresource.com, permain@vertexresource.com

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: **L. Pullman**

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
L. Pullman	7-9-2024	07:00	Michelle Gonzales	7-9-24	0700
Michelle Gonzales	7-9-24	1725	J.M.	7.9.24	1725
J.M.	7.9.24	2345		7-10-24	0830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 days.

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

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 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

Envirotech Analytical Laboratory

Printed: 7/10/2024 2:18:52PM

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:	Vertex Resource Services Inc.	Date Received:	07/10/24 08:30	Work Order ID:	E407052
Phone:	(575) 748-0176	Date Logged In:	07/09/24 17:47	Logged In By:	Alexa Michaels
Email:	cdixon@vertex.ca	Due Date:	07/11/24 17:00 (1 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

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 filteration 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

Comments/Resolution

Jackson Unit #003 has been separated into multiple WO due to high sample volume. WO are E407052 and E407053.

Client Instruction

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

Date

envirotech Inc.

Report to:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E407053
Job Number:	24015-001
Received:	7/10/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/11/24

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: 7/11/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E407053
Date Received: 7/10/2024 8:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/10/2024 8:30:00AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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

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

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Client Representative
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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

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Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/11/24 15:41

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24-05 2'	E407053-01A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-05 3'	E407053-02A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-05 4'	E407053-03A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-06 0'	E407053-04A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-06 1'	E407053-05A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-06 2'	E407053-06A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-06 3'	E407053-07A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-06 4'	E407053-08A	Soil	07/04/24	07/10/24	Glass Jar, 2 oz.
BH24-07 0'	E407053-09A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-07 1'	E407053-10A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-07 2'	E407053-11A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-07 3'	E407053-12A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-07 4'	E407053-13A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-08 0'	E407053-14A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-08 1'	E407053-15A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-08 2'	E407053-16A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-08 3'	E407053-17A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-08 4'	E407053-18A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-02 5'	E407053-19A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-02 6'	E407053-20A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.
BH24-05 5'	E407053-21A	Soil	07/05/24	07/10/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-05 2'

E407053-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.0 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.0 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-05 3'

E407053-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.7 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*101 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.7 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	**68.0**	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	**54.7**	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*105 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-05 4'

E407053-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	**156**	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	**90.6**	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*116 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-06 0'

E407053-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.2 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.2 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*117 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-06 1'

E407053-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*86.8 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*86.8 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*114 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-06 2'

E407053-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*119 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-06 3'

E407053-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.8 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.8 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*118 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**44.4**	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-06 4'

E407053-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.2 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.2 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*120 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**49.4**	20.0	1	07/10/24	07/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-07 0'

E407053-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.6 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.6 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*113 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-07 1'

E407053-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.4 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.4 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*113 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-07 2'

E407053-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.3 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**23.0**	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-07 3'

E407053-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.0 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.0 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*120 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**25.2**	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-07 4'

E407053-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.9 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.9 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	**412**	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	**115**	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*119 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**20.2**	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-08 0'

E407053-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*101 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*101 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-08 1'

E407053-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.9 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*91.9 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-08 2'

E407053-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.6 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.6 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**83.7**	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-08 3'

E407053-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.2 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*94.2 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**142**	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-08 4'

E407053-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.6 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*104 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.6 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	ND	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*108 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	**91.4**	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-02 5'

E407053-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*93.0 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*107 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*93.0 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	**412**	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	**84.6**	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-02 6'

E407053-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.1 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428054
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*105 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.1 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*103 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428050
Diesel Range Organics (C10-C28)	**237**	25.0	1	07/10/24	07/11/24	
Oil Range Organics (C28-C36)	**67.7**	50.0	1	07/10/24	07/11/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*07/10/24*	*07/11/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2428058
Chloride	ND	20.0	1	07/10/24	07/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

BH24-05 5'

E407053-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS			Batch: 2428055
Benzene	ND	0.0250	1	07/10/24	07/10/24	
Ethylbenzene	ND	0.0250	1	07/10/24	07/10/24	
Toluene	ND	0.0250	1	07/10/24	07/10/24	
o-Xylene	ND	0.0250	1	07/10/24	07/10/24	
p,m-Xylene	ND	0.0500	1	07/10/24	07/10/24	
Total Xylenes	ND	0.0250	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.5 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2428055
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/10/24	07/10/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.5 %*	*70-130*	*07/10/24*	*07/10/24*	
Surrogate: Toluene-d8		*102 %*	*70-130*	*07/10/24*	*07/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2428051
Diesel Range Organics (C10-C28)	**334**	25.0	1	07/10/24	07/10/24	
Oil Range Organics (C28-C36)	**88.4**	50.0	1	07/10/24	07/10/24	
Surrogate: n-Nonane		*99.4 %*	*50-200*	*07/10/24*	*07/10/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2428052
Chloride	**21.6**	20.0	1	07/10/24	07/10/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

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 (2428054-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
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	*0.540*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.446*		*0.500*		*89.2*	*70-130*			
Surrogate: Toluene-d8	*0.510*		*0.500*		*102*	*70-130*			
LCS (2428054-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Benzene	2.30	0.0250	2.50		92.2	70-130			
Ethylbenzene	2.49	0.0250	2.50		99.4	70-130			
Toluene	2.48	0.0250	2.50		99.3	70-130			
o-Xylene	2.60	0.0250	2.50		104	70-130			
p,m-Xylene	5.19	0.0500	5.00		104	70-130			
Total Xylenes	7.79	0.0250	7.50		104	70-130			
Surrogate: Bromofluorobenzene	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.458*		*0.500*		*91.5*	*70-130*			
Surrogate: Toluene-d8	*0.516*		*0.500*		*103*	*70-130*			
Matrix Spike (2428054-MS1)				**Source: E407053-10**					Prepared: 07/10/24 Analyzed: 07/10/24
Benzene	2.34	0.0250	2.50	ND	93.5	48-131			
Ethylbenzene	2.50	0.0250	2.50	ND	100	45-135			
Toluene	2.48	0.0250	2.50	ND	99.1	48-130			
o-Xylene	2.63	0.0250	2.50	ND	105	43-135			
p,m-Xylene	5.23	0.0500	5.00	ND	105	43-135			
Total Xylenes	7.85	0.0250	7.50	ND	105	43-135			
Surrogate: Bromofluorobenzene	*0.538*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.467*		*0.500*		*93.3*	*70-130*			
Surrogate: Toluene-d8	*0.516*		*0.500*		*103*	*70-130*			
Matrix Spike Dup (2428054-MSD1)				**Source: E407053-10**					Prepared: 07/10/24 Analyzed: 07/10/24
Benzene	2.38	0.0250	2.50	ND	95.2	48-131	1.80	23	
Ethylbenzene	2.54	0.0250	2.50	ND	102	45-135	1.71	27	
Toluene	2.52	0.0250	2.50	ND	101	48-130	1.82	24	
o-Xylene	2.64	0.0250	2.50	ND	106	43-135	0.608	27	
p,m-Xylene	5.26	0.0500	5.00	ND	105	43-135	0.563	27	
Total Xylenes	7.90	0.0250	7.50	ND	105	43-135	0.578	27	
Surrogate: Bromofluorobenzene	*0.532*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.461*		*0.500*		*92.2*	*70-130*			
Surrogate: Toluene-d8	*0.522*		*0.500*		*104*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

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 (2428055-BLK1)									Prepared: 07/10/24 Analyzed: 07/11/24
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	*0.529*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.457*		*0.500*		*91.3*	*70-130*			
Surrogate: Toluene-d8	*0.512*		*0.500*		*102*	*70-130*			
LCS (2428055-BS1)									Prepared: 07/10/24 Analyzed: 07/11/24
Benzene	2.25	0.0250	2.50		89.8	70-130			
Ethylbenzene	2.42	0.0250	2.50		96.9	70-130			
Toluene	2.39	0.0250	2.50		95.4	70-130			
o-Xylene	2.53	0.0250	2.50		101	70-130			
p,m-Xylene	5.06	0.0500	5.00		101	70-130			
Total Xylenes	7.58	0.0250	7.50		101	70-130			
Surrogate: Bromofluorobenzene	*0.533*		*0.500*		*107*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.478*		*0.500*		*95.5*	*70-130*			
Surrogate: Toluene-d8	*0.513*		*0.500*		*103*	*70-130*			
Matrix Spike (2428055-MS1)				**Source: E407057-03**					Prepared: 07/10/24 Analyzed: 07/11/24
Benzene	2.26	0.0250	2.50	ND	90.3	48-131			
Ethylbenzene	2.46	0.0250	2.50	ND	98.6	45-135			
Toluene	2.42	0.0250	2.50	ND	96.7	48-130			
o-Xylene	2.56	0.0250	2.50	ND	102	43-135			
p,m-Xylene	5.11	0.0500	5.00	ND	102	43-135			
Total Xylenes	7.67	0.0250	7.50	ND	102	43-135			
Surrogate: Bromofluorobenzene	*0.544*		*0.500*		*109*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.518*		*0.500*		*104*	*70-130*			
Matrix Spike Dup (2428055-MSD1)				**Source: E407057-03**					Prepared: 07/10/24 Analyzed: 07/11/24
Benzene	2.19	0.0250	2.50	ND	87.5	48-131	3.08	23	
Ethylbenzene	2.42	0.0250	2.50	ND	97.0	45-135	1.64	27	
Toluene	2.37	0.0250	2.50	ND	94.8	48-130	1.96	24	
o-Xylene	2.54	0.0250	2.50	ND	101	43-135	0.864	27	
p,m-Xylene	5.06	0.0500	5.00	ND	101	43-135	0.904	27	
Total Xylenes	7.60	0.0250	7.50	ND	101	43-135	0.891	27	
Surrogate: Bromofluorobenzene	*0.542*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.464*		*0.500*		*92.8*	*70-130*			
Surrogate: Toluene-d8	*0.513*		*0.500*		*103*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2428054-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.540*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.446*		*0.500*		*89.2*	*70-130*			
Surrogate: Toluene-d8	*0.510*		*0.500*		*102*	*70-130*			
LCS (2428054-BS2)									Prepared: 07/10/24 Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	57.4	20.0	50.0		115	70-130			
Surrogate: Bromofluorobenzene	*0.540*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.458*		*0.500*		*91.6*	*70-130*			
Surrogate: Toluene-d8	*0.516*		*0.500*		*103*	*70-130*			
Matrix Spike (2428054-MS2)				**Source: E407053-10**					Prepared: 07/10/24 Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	56.4	20.0	50.0	ND	113	70-130			
Surrogate: Bromofluorobenzene	*0.535*		*0.500*		*107*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.468*		*0.500*		*93.6*	*70-130*			
Surrogate: Toluene-d8	*0.522*		*0.500*		*104*	*70-130*			
Matrix Spike Dup (2428054-MSD2)				**Source: E407053-10**					Prepared: 07/10/24 Analyzed: 07/10/24
Gasoline Range Organics (C6-C10)	57.6	20.0	50.0	ND	115	70-130	2.08	20	
Surrogate: Bromofluorobenzene	*0.538*		*0.500*		*108*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.461*		*0.500*		*92.2*	*70-130*			
Surrogate: Toluene-d8	*0.520*		*0.500*		*104*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

Nonhalogenated Organics by EPA 8015D - GRO

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 (2428055-BLK1)									Prepared: 07/10/24 Analyzed: 07/11/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.529*		*0.500*		*106*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.457*		*0.500*		*91.3*	*70-130*			
Surrogate: Toluene-d8	*0.512*		*0.500*		*102*	*70-130*			
LCS (2428055-BS2)									Prepared: 07/10/24 Analyzed: 07/11/24
Gasoline Range Organics (C6-C10)	57.2	20.0	50.0		114	70-130			
Surrogate: Bromofluorobenzene	*0.549*		*0.500*		*110*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.455*		*0.500*		*91.0*	*70-130*			
Surrogate: Toluene-d8	*0.516*		*0.500*		*103*	*70-130*			
Matrix Spike (2428055-MS2)				**Source: E407057-03**					Prepared: 07/10/24 Analyzed: 07/11/24
Gasoline Range Organics (C6-C10)	55.5	20.0	50.0	ND	111	70-130			
Surrogate: Bromofluorobenzene	*0.537*		*0.500*		*107*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.445*		*0.500*		*88.9*	*70-130*			
Surrogate: Toluene-d8	*0.522*		*0.500*		*104*	*70-130*			
Matrix Spike Dup (2428055-MSD2)				**Source: E407057-03**					Prepared: 07/10/24 Analyzed: 07/11/24
Gasoline Range Organics (C6-C10)	56.9	20.0	50.0	ND	114	70-130	2.39	20	
Surrogate: Bromofluorobenzene	*0.561*		*0.500*		*112*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.465*		*0.500*		*93.0*	*70-130*			
Surrogate: Toluene-d8	*0.519*		*0.500*		*104*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2428050-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*59.7*		*50.0*		*119*	*50-200*			
LCS (2428050-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	318	25.0	250		127	38-132			
Surrogate: n-Nonane	*60.3*		*50.0*		*121*	*50-200*			
Matrix Spike (2428050-MS1)				**Source: E407053-08**					Prepared: 07/10/24 Analyzed: 07/11/24
Diesel Range Organics (C10-C28)	329	25.0	250	ND	131	38-132			
Surrogate: n-Nonane	*61.8*		*50.0*		*124*	*50-200*			
Matrix Spike Dup (2428050-MSD1)				**Source: E407053-08**					Prepared: 07/10/24 Analyzed: 07/11/24
Diesel Range Organics (C10-C28)	328	25.0	250	ND	131	38-132	0.155	20	
Surrogate: n-Nonane	*59.5*		*50.0*		*119*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2428051-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*54.3*		*50.0*		*109*	*50-200*			
LCS (2428051-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	273	25.0	250		109	38-132			
Surrogate: n-Nonane	*58.2*		*50.0*		*116*	*50-200*			
Matrix Spike (2428051-MS1)				**Source: E407054-04**					Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	274	25.0	250	ND	110	38-132			
Surrogate: n-Nonane	*53.1*		*50.0*		*106*	*50-200*			
Matrix Spike Dup (2428051-MSD1)				**Source: E407054-04**					Prepared: 07/10/24 Analyzed: 07/10/24
Diesel Range Organics (C10-C28)	278	25.0	250	ND	111	38-132	1.34	20	
Surrogate: n-Nonane	*54.1*		*50.0*		*108*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

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 (2428052-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	ND	20.0							
LCS (2428052-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2428052-MS1)				**Source: E407049-01**					Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	281	200	250	ND	112	80-120			
Matrix Spike Dup (2428052-MSD1)				**Source: E407049-01**					Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	275	200	250	ND	110	80-120	2.01	20	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/11/2024 3:41:06PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2428058-BLK1)									Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	ND	20.0							
LCS (2428058-BS1)									Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2428058-MS1)				**Source: E407053-03**					Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	264	20.0	250	ND	106	80-120			
Matrix Spike Dup (2428058-MSD1)				**Source: E407053-03**					Prepared: 07/10/24 Analyzed: 07/10/24
Chloride	263	20.0	250	ND	105	80-120	0.603	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/11/24 15:41

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: **Vertex (bill direct to Tap Rock)**	Company: **Tap Rock (Bill Ramsay)**	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: **Jackson Unit #003**	Address:	E407053	24015-0001		X							
Project Manager: **Chance Dixon**	City, State, Zip:											
Project Number: **24E-03316**	Phone:											
City, State, Zip:	Email:											
Phone:	Miscellaneous: **Direct bill to Tap Rock ATTN: Bill Ramsay.**											
Email: cdixon@vertexresource.com												

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals			
15:45	07.04.2024	Soil	1	BH24-05 2'		1	X	X	X		X						
15:50	07.04.2024	Soil	1	BH24-05 3'		2	X	X	X		X						
15:55	07.04.2024	Soil	1	BH24-05 4'		3	X	X	X		X						
16:00	07.04.2024	Soil	1	BH24-06 0'		4	X	X	X		X						
16:00	07.04.2024	Soil	1	BH24-06 1'		5	X	X	X		X						
16:05	07.04.2024	Soil	1	BH24-06 2'		6	X	X	X		X						
16:10	07.04.2024	Soil	1	BH24-06 3'		7	X	X	X		X						
16:15	07.04.2024	Soil	1	BH24-06 4'		8	X	X	X		X						
8:00	07.05.2024	Soil	1	BH24-07 0'		9	X	X	X		X						
8:05	07.05.2024	Soil	1	BH24-07 1'		10	X	X	X		X						

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Remarks

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsay. Please email final report to cdixon@vertexresource.com, permain@vertexresource.com

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: **L. Pullman**

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
L. Pullman	7-9-2024	07:00	Michelle Gonzales	7.9.24	0700
Michelle Gonzales	7.9.24	1725	A.M.	7.9.24	1725
A.M.	7.9.24	2345	St	7-10-24	0830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 days.

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 _____

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 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.

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Client Information	Invoice Information	Lab Use Only		TAT				State					
Client: **Vertex (bill direct to Tap Rock)**	Company: **Tap Rock (Bill Ramsay)**	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX		
Project Name: **Jackson Unit #003**	Address:	E407053	24015-0001		X								
Project Manager: **Chance Dixon**	City, State, Zip:												
Project Number: **24E-03316**	Phone:												
City, State, Zip:	Email:												
Phone:	Miscellaneous: **Direct bill to Tap Rock ATTN: Bill Ramsay.**												
Email: cdixon@vertexresource.com													

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals			
8:10	07.05.2024	Soil	1	BH24-07 2'		11	X	X	X		X						
8:15	07.05.2024	Soil	1	BH24-07 3'		12	X	X	X		X						
8:25	07.05.2024	Soil	1	BH24-07 4'		13	X	X	X		X						
8:35	07.05.2024	Soil	1	BH24-08 0'		14	X	X	X		X						
8:40	07.05.2024	Soil	1	BH24-08 1'		15	X	X	X		X						
8:45	07.05.2024	Soil	1	BH24-08 2'		16	X	X	X		X						
8:50	07.05.2024	Soil	1	BH24-08 3'		17	X	X	X		X						
9:00	07.05.2024	Soil	1	BH24-08 4'		18	X	X	X		X						
9:35	07.05.2024	Soil	1	BH24-02 5'		19	X	X	X		X						
9:40	07.05.2024	Soil	1	BH24-02 6'		20	X	X	X		X						

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

Remarks

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsay. Please email final report to cdixon@vertexresource.com, permain@vertexresource.com

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: **L. Pullman**

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
L. Pullman	7-9-2024	07:00	Michelle Gonzales	7-9-24	0700
Michelle Gonzales	7-9-24	1725	A.M.	7.9.24	1725
A.M.	7.9.24	2345		7-10-24	0830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 days.

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

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 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

Client Information	Invoice Information	Lab Use Only		TAT				State				
Client: **Vertex (bill direct to Tap Rock)**	Company: **Tap Rock (Bill Ramsay)**	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: **Jackson Unit #003**	Address:	E407053	24015-0001		X							
Project Manager: **Chance Dixon**	City, State, Zip:											
Project Number: **24E-03316**	Phone:											
City, State, Zip:	Email:											
Phone:	Miscellaneous: **Direct bill to Tap Rock ATTN: Bill Ramsay.**											
Email: cdixon@vertexresource.com												

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
10:00	07.05.2024	Soil	1	BH24-05 5'		21	X	X	X		X							

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Remarks

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsay. Please email final report to cdixon@vertexresource.com, permain@vertexresource.com

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: **L. Pullman**

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
L Pullman	7-9-2024	07:00	Michelle Gonzales	7-9-24	0700
Michelle Gonzales	7.9.24	1725	C.M.	7.9.24	1725
C.M.	7.9.24	2345		7-10-24	0830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 days.

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

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 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

Envirotech Analytical Laboratory

Printed: 7/10/2024 2:41:17PM

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:	Vertex Resource Services Inc.	Date Received:	07/10/24 08:30	Work Order ID:	E407053
Phone:	(575) 748-0176	Date Logged In:	07/09/24 18:05	Logged In By:	Alexa Michaels
Email:	cdixon@vertex.ca	Due Date:	07/11/24 17:00 (1 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

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 filteration 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

Comments/Resolution

Jackson Unit #003 has been separated into multiple WO due to high sample volume. WO are E407052 and WO E407053.

Client Instruction

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

Date

envirotech Inc.

Report to:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

NELAP ACCREDITED TNI LABORATORY

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E407173
Job Number:	24015-0001
Received:	7/23/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/29/24

Date Reported: 7/29/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E407173
Date Received: 7/23/2024 8:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/23/2024 8:30:00AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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,

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Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/29/24 05:41

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24 - 09 0'	E407173-01A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 09 2'	E407173-02A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 09 4'	E407173-03A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 10 0'	E407173-04A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 10 2'	E407173-05A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 11 0'	E407173-06A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 11 2'	E407173-07A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 11 4'	E407173-08A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 12 0'	E407173-09A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 12 2'	E407173-10A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 13 0'	E407173-11A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 13 2'	E407173-12A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 13 4'	E407173-13A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 14 0'	E407173-14A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 14 2'	E407173-15A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 14 4'	E407173-16A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 15 0'	E407173-17A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 15 2'	E407173-18A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 15 4'	E407173-19A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 16 0'	E407173-20A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 16 2'	E407173-21A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 16 4'	E407173-22A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 17 0'	E407173-23A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 17 2'	E407173-24A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.
BH24 - 17 4'	E407173-25A	Soil	07/19/24	07/23/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 09 0'

E407173-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: Bromofluorobenzene		*97.8 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.0 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: Bromofluorobenzene		*97.8 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.0 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*120 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/23/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 09 2'

E407173-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*98.7 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*98.7 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	**45.0**	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*64.6 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/23/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 09 4'

E407173-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	**51.8**	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	**2880**	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	**331**	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*125 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**53.7**	20.0	1	07/23/24	07/23/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 10 0'

E407173-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.9 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.9 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	**26.0**	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*125 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/23/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 10 2'

E407173-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*96.9 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*96.9 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/23/24	

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Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 11 0'

E407173-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: Bromofluorobenzene		*98.7 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: Bromofluorobenzene		*98.7 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*07/23/24*	*07/23/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*114 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**53.6**	20.0	1	07/23/24	07/23/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 11 2'

E407173-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*96.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*96.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*119 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**106**	20.0	1	07/23/24	07/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 11 4'

E407173-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.0 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.0 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*102 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/23/24	
Surrogate: n-Nonane		*121 %*	*50-200*	*07/23/24*	*07/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**404**	20.0	1	07/23/24	07/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 12 0'

E407173-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.5 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.7 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.5 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.7 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*116 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**48.5**	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 12 2'

E407173-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.1 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.5 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.1 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*99.5 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*117 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**76.5**	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 13 0'

E407173-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*97.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*104 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*121 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 13 2'

E407173-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*95.0 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.4 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*95.0 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.4 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*122 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**34.5**	20.0	1	07/23/24	07/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 13 4'

E407173-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.4 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.4 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*105 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*115 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**66.3**	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 14 0'

E407173-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*96.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.9 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*96.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.9 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*116 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 14 2'

E407173-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*96.8 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*117 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**35.0**	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 14 4'

E407173-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*98.6 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*120 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**72.6**	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 15 0'

E407173-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*95.7 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*120 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/24/24	

envirotech Inc.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 15 2'

E407173-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.2 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*99.2 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*98.2 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*126 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	ND	20.0	1	07/23/24	07/24/24	

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Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 15 4'

E407173-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.2 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*97.2 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*106 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*122 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**109**	20.0	1	07/23/24	07/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 16 0'

E407173-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Benzene	ND	0.0250	1	07/23/24	07/24/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/24/24	
Toluene	ND	0.0250	1	07/23/24	07/24/24	
o-Xylene	ND	0.0250	1	07/23/24	07/24/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/24/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*98.5 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2430047
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/24/24	
Surrogate: Bromofluorobenzene		*98.5 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*	*07/23/24*	*07/24/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/23/24*	*07/24/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2430041
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*126 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2430049
Chloride	**117**	20.0	1	07/23/24	07/24/24	

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Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 16 2'

E407173-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.3 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.7 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2430040
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*81.8 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2430048
Chloride	**280**	20.0	1	07/23/24	07/23/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 16 4'

E407173-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.7 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.7 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2430040
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*85.0 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2430048
Chloride	**289**	20.0	1	07/23/24	07/23/24	

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Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 17 0'

E407173-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.9 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.4 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2430040
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*77.9 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2430048
Chloride	ND	20.0	1	07/23/24	07/23/24	

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Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 17 2'

E407173-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.2 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2430040
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*73.8 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2430048
Chloride	ND	20.0	1	07/23/24	07/23/24	

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Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

BH24 - 17 4'

E407173-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Benzene	ND	0.0250	1	07/23/24	07/23/24	
Ethylbenzene	ND	0.0250	1	07/23/24	07/23/24	
Toluene	ND	0.0250	1	07/23/24	07/23/24	
o-Xylene	ND	0.0250	1	07/23/24	07/23/24	
p,m-Xylene	ND	0.0500	1	07/23/24	07/23/24	
Total Xylenes	ND	0.0250	1	07/23/24	07/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.1 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2430045
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/23/24	07/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.8 %*	*70-130*	*07/23/24*	*07/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2430040
Diesel Range Organics (C10-C28)	ND	25.0	1	07/23/24	07/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/23/24	07/24/24	
Surrogate: n-Nonane		*84.0 %*	*50-200*	*07/23/24*	*07/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2430048
Chloride	**34.0**	20.0	1	07/23/24	07/23/24	

envirotech Inc.

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430047-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
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	*0.480*		*0.500*		*96.0*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.478*		*0.500*		*95.5*	*70-130*			
Surrogate: Toluene-d8	*0.530*		*0.500*		*106*	*70-130*			
LCS (2430047-BS1)									Prepared: 07/23/24 Analyzed: 07/23/24
Benzene	2.17	0.0250	2.50		86.7	70-130			
Ethylbenzene	2.34	0.0250	2.50		93.7	70-130			
Toluene	2.33	0.0250	2.50		93.2	70-130			
o-Xylene	2.26	0.0250	2.50		90.4	70-130			
p,m-Xylene	4.57	0.0500	5.00		91.4	70-130			
Total Xylenes	6.83	0.0250	7.50		91.1	70-130			
Surrogate: Bromofluorobenzene	*0.487*		*0.500*		*97.4*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.498*		*0.500*		*99.5*	*70-130*			
Surrogate: Toluene-d8	*0.529*		*0.500*		*106*	*70-130*			
Matrix Spike (2430047-MS1)				**Source: E407173-06**					Prepared: 07/23/24 Analyzed: 07/23/24
Benzene	2.16	0.0250	2.50	ND	86.5	48-131			
Ethylbenzene	2.32	0.0250	2.50	ND	92.8	45-135			
Toluene	2.29	0.0250	2.50	ND	91.5	48-130			
o-Xylene	2.22	0.0250	2.50	ND	88.9	43-135			
p,m-Xylene	4.49	0.0500	5.00	ND	89.7	43-135			
Total Xylenes	6.71	0.0250	7.50	ND	89.5	43-135			
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*96.0*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.506*		*0.500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.518*		*0.500*		*104*	*70-130*			
Matrix Spike Dup (2430047-MSD1)				**Source: E407173-06**					Prepared: 07/23/24 Analyzed: 07/23/24
Benzene	2.20	0.0250	2.50	ND	87.9	48-131	1.58	23	
Ethylbenzene	2.37	0.0250	2.50	ND	94.9	45-135	2.28	27	
Toluene	2.35	0.0250	2.50	ND	94.1	48-130	2.89	24	
o-Xylene	2.28	0.0250	2.50	ND	91.3	43-135	2.62	27	
p,m-Xylene	4.57	0.0500	5.00	ND	91.4	43-135	1.79	27	
Total Xylenes	6.85	0.0250	7.50	ND	91.3	43-135	2.06	27	
Surrogate: Bromofluorobenzene	*0.494*		*0.500*		*98.8*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.510*		*0.500*		*102*	*70-130*			
Surrogate: Toluene-d8	*0.525*		*0.500*		*105*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430045-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
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	*7.14*		*8.00*		*89.2*	*70-130*			
LCS (2430045-BS1)									Prepared: 07/23/24 Analyzed: 07/23/24
Benzene	4.91	0.0250	5.00		98.2	70-130			
Ethylbenzene	4.73	0.0250	5.00		94.5	70-130			
Toluene	4.83	0.0250	5.00		96.7	70-130			
o-Xylene	4.70	0.0250	5.00		94.1	70-130			
p,m-Xylene	9.61	0.0500	10.0		96.1	70-130			
Total Xylenes	14.3	0.0250	15.0		95.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.30*		*8.00*		*91.2*	*70-130*			
Matrix Spike (2430045-MS1)				**Source: E407173-23**					Prepared: 07/23/24 Analyzed: 07/23/24
Benzene	4.96	0.0250	5.00	ND	99.2	54-133			
Ethylbenzene	4.78	0.0250	5.00	ND	95.5	61-133			
Toluene	4.88	0.0250	5.00	ND	97.6	61-130			
o-Xylene	4.76	0.0250	5.00	ND	95.2	63-131			
p,m-Xylene	9.71	0.0500	10.0	ND	97.1	63-131			
Total Xylenes	14.5	0.0250	15.0	ND	96.5	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.24*		*8.00*		*90.6*	*70-130*			
Matrix Spike Dup (2430045-MSD1)				**Source: E407173-23**					Prepared: 07/23/24 Analyzed: 07/23/24
Benzene	4.62	0.0250	5.00	ND	92.4	54-133	7.09	20	
Ethylbenzene	4.45	0.0250	5.00	ND	89.0	61-133	7.06	20	
Toluene	4.55	0.0250	5.00	ND	91.0	61-130	7.00	20	
o-Xylene	4.44	0.0250	5.00	ND	88.8	63-131	6.86	20	
p,m-Xylene	9.06	0.0500	10.0	ND	90.6	63-131	6.97	20	
Total Xylenes	13.5	0.0250	15.0	ND	90.0	63-131	6.94	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.25*		*8.00*		*90.7*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430045-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.64*		*8.00*		*95.5*	*70-130*			
LCS (2430045-BS2)									Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.79*		*8.00*		*97.3*	*70-130*			
Matrix Spike (2430045-MS2)				**Source: E407173-23**					Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	43.6	20.0	50.0	ND	87.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.80*		*8.00*		*97.5*	*70-130*			
Matrix Spike Dup (2430045-MSD2)				**Source: E407173-23**					Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	44.3	20.0	50.0	ND	88.7	70-130	1.71	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.83*		*8.00*		*97.9*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430047-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.480*		*0.500*		*96.0*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.478*		*0.500*		*95.5*	*70-130*			
Surrogate: Toluene-d8	*0.530*		*0.500*		*106*	*70-130*			
LCS (2430047-BS2)									Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	52.6	20.0	50.0		105	70-130			
Surrogate: Bromofluorobenzene	*0.501*		*0.500*		*100*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.494*		*0.500*		*98.8*	*70-130*			
Surrogate: Toluene-d8	*0.536*		*0.500*		*107*	*70-130*			
Matrix Spike (2430047-MS2)				**Source: E407173-06**					Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	54.6	20.0	50.0	ND	109	70-130			
Surrogate: Bromofluorobenzene	*0.496*		*0.500*		*99.2*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.489*		*0.500*		*97.7*	*70-130*			
Surrogate: Toluene-d8	*0.524*		*0.500*		*105*	*70-130*			
Matrix Spike Dup (2430047-MSD2)				**Source: E407173-06**					Prepared: 07/23/24 Analyzed: 07/23/24
Gasoline Range Organics (C6-C10)	54.2	20.0	50.0	ND	108	70-130	0.876	20	
Surrogate: Bromofluorobenzene	*0.500*		*0.500*		*99.9*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.498*		*0.500*		*99.6*	*70-130*			
Surrogate: Toluene-d8	*0.536*		*0.500*		*107*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430040-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*41.7*		*50.0*		*83.3*	*50-200*			
LCS (2430040-BS1)									Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	210	25.0	250		83.9	38-132			
Surrogate: n-Nonane	*45.0*		*50.0*		*90.0*	*50-200*			
Matrix Spike (2430040-MS1)				**Source: E407170-04**					Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	219	25.0	250	ND	87.7	38-132			
Surrogate: n-Nonane	*44.5*		*50.0*		*89.0*	*50-200*			
Matrix Spike Dup (2430040-MSD1)				**Source: E407170-04**					Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	215	25.0	250	ND	85.9	38-132	2.08	20	
Surrogate: n-Nonane	*44.5*		*50.0*		*89.0*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430041-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*58.4*		*50.0*		*117*	*50-200*			
LCS (2430041-BS1)									Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	226	25.0	250		90.4	38-132			
Surrogate: n-Nonane	*59.1*		*50.0*		*118*	*50-200*			
Matrix Spike (2430041-MS1)				**Source: E407173-08**					Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	253	25.0	250	ND	101	38-132			
Surrogate: n-Nonane	*59.0*		*50.0*		*118*	*50-200*			
Matrix Spike Dup (2430041-MSD1)				**Source: E407173-08**					Prepared: 07/23/24 Analyzed: 07/23/24
Diesel Range Organics (C10-C28)	274	25.0	250	ND	110	38-132	8.25	20	
Surrogate: n-Nonane	*61.3*		*50.0*		*123*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430048-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	ND	20.0							
LCS (2430048-BS1)									Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	248	20.0	250		99.4	90-110			
Matrix Spike (2430048-MS1)				**Source: E407170-04**					Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	309	20.0	250	53.3	102	80-120			
Matrix Spike Dup (2430048-MSD1)				**Source: E407170-04**					Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	310	20.0	250	53.3	103	80-120	0.280	20	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/29/2024 5:41:40AM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2430049-BLK1)									Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	ND	20.0							
LCS (2430049-BS1)									Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	248	20.0	250		99.4	90-110			
Matrix Spike (2430049-MS1)				**Source: E407173-02**					Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	269	20.0	250	ND	108	80-120			
Matrix Spike Dup (2430049-MSD1)				**Source: E407173-02**					Prepared: 07/23/24 Analyzed: 07/23/24
Chloride	273	20.0	250	ND	109	80-120	1.30	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/29/24 05:41

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

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex (Bill direct Tap Rock)	Company: Tap Rock (Bill Ramsey)	Lab WO# E407173	1D 2D 3D Std ✓	NM ✓ CO UT TX
Project Name: Jackson Unit #003	Address:	Job Number 24015-0001		
Project Manager: Chance Dixon	City, State, Zip:			
Address: project #: 24E-03316	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct bill to Tap Rock ATTN: Bill Ramsey			
Email: CDixon@VertexResource.com				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Remarks
9:45	7/19/24	Soil	1	BH24-09 0-'		1	✓	✓	✓		✓				
9:50				BH24-09 2-'		2									
9:55				BH24-09 4-'		3									
10:00				BH24-10 0-'		4									
10:05				BH24-10 2-'		5									
10:10				BH24-11 0-'		6									
10:15				BH24-11 2-'		7									
10:20				BH24-11 4-'		8									
1025				BH24-12 0-'		9									
10:30				BH24-12 2-'		10	✓	✓	✓		✓				

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

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: Stephanie McCarty

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Stephanie McCarty	7/21/24		Michelle Gonzales	7-22-24	1030
Michelle Gonzales	7-22-24	1620	A.M.	7.22.24	1730
A.M.	7-22-24	2345		7-23-24	0830
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 6C on subsequent days.

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 S

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

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.

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Project Information | Chain of Custody | Page 2 of 3

Client:	Vertex (Bill direct TopRock)
Project:	Jackson Unit #003
Project Manager:	Clarence Dixon
Address:	Project#: 24E-03316
City, State, Zip	
Phone:	
Email:	CDixon@VertexResources.com
Report due by:	

Bill To

Attention:	TopRock (Bill Ramsey)
Address:	
City, State, Zip	
Phone:	
Email:	Direct bill to TopRock ATTN: Bill Ramsey

Lab Use Only

Lab WO#	Job Number
E407173	24015-0001

TAT

1D	2D	3D	Standard
			✓

EPA Program

CWA	SDWA	RCRA

State

NM	CO	UT	AZ	TX	
✓					

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
10:35	7/19/24	Soil	1	BH24-13 0'	11	✓	✓			✓			
10:40				BH24-13 2'	12								
10:45				BH24-13 4'	13								
11:00				BH24-14 0'	14								
11:05				BH24-14 2'	15								
11:15				BH24-14 4'	16								
11:20				BH24-15 0'	17								
11:25				BH24-15 2'	18								
11:30				BH24-15 4'	19								
11:35	↓	↓	↓	BH24-16 0'	20	↓	↓			↓			

Analysis and Method

Additional Instructions:

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

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 days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	7/21/24		Michelle Gonzales	72224	1030
Michelle Gonzales	7.22.24	1620		7.22.24	1730
	7.22.24	2345		7-23-24	0830

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 _____

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

Note: Samples are discarded 30 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.

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Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex (Direct bill to TgRock)	Company: TgRock (Bill Ramsey)	Lab WO# E407173	1D 2D 3D Std ✓	NM ✓ CO UT TX
Project Name: Jackson Unit #003	Address:	Job Number 24015-0001		
Project Manager: Chance Dixon	City, State, Zip:			
Address: Project #: 24E-03316	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct bill to TgRock ATTN: Bill Ramsey			
Email: CDixon@VertexResource.com				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
11:40	7-19-24	Soil	1	BH24-16 2'		21	✓	✓	✓		✓							
11:45				BH24-16 4'		22												
12:00				BH24-17 0'		23												
12:05				BH24-17 2'		24												
12:10	↓	↓	↓	BH24-17 4'		25	↓	↓	↓		↓							

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

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: Stephanie McCarty

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	7/21/24		Michelle Gonzales	7-22-24	1030
[signature]	7-22-24	1620	[signature]	7.22.24	1730
Michelle Gonzales	[redacted]	[redacted]	Received by: (Signature)	Date	Time
[signature]	7.22.24	2345	[signature]	7/23/24	0830

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 6C on subsequent days.

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

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA 9

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.

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Envirotech Analytical Laboratory

Printed: 7/23/2024 3:02:32PM

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:	Vertex Resource Services Inc.	Date Received:	07/23/24 08:30	Work Order ID:	E407173
Phone:	(575) 748-0176	Date Logged In:	07/22/24 17:07	Logged In By:	Noe Soto
Email:	cdixon@vertex.ca	Due Date:	07/29/24 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	Carrier: Courrier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

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

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 filteration 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:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

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Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E408081
Job Number:	24015-0001
Received:	8/9/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/12/24

Date Reported: 8/12/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E408081
Date Received: 8/9/2024 6:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/9/2024 6:30:00AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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

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Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/12/24 14:23

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24-09 7'	E408081-01A	Soil	08/07/24	08/09/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/12/2024 2:23:14PM

BH24-09 7'

E408081-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2432116
Benzene	ND	0.0250	1	08/09/24	08/09/24	
Ethylbenzene	**1.17**	0.0250	1	08/09/24	08/09/24	
Toluene	**1.37**	0.0250	1	08/09/24	08/09/24	
o-Xylene	**1.46**	0.0250	1	08/09/24	08/09/24	
p,m-Xylene	**12.4**	0.0500	1	08/09/24	08/09/24	
Total Xylenes	**13.9**	0.0250	1	08/09/24	08/09/24	
Surrogate: 4-Bromochlorobenzene-PID		*115 %*	*70-130*	*08/09/24*	*08/09/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2432116
Gasoline Range Organics (C6-C10)	**434**	20.0	1	08/09/24	08/09/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*119 %*	*70-130*	*08/09/24*	*08/09/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2432114
Diesel Range Organics (C10-C28)	**1220**	25.0	1	08/09/24	08/09/24	
Oil Range Organics (C28-C36)	**71.8**	50.0	1	08/09/24	08/09/24	
Surrogate: n-Nonane		*126 %*	*50-200*	*08/09/24*	*08/09/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2432125
Chloride	**29.3**	20.0	1	08/09/24	08/09/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/12/2024 2:23:14PM

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2432116-BLK1)									Prepared: 08/09/24 Analyzed: 08/09/24
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	*7.21*		*8.00*		*90.1*	*70-130*			
LCS (2432116-BS1)									Prepared: 08/09/24 Analyzed: 08/09/24
Benzene	5.34	0.0250	5.00		107	70-130			
Ethylbenzene	5.11	0.0250	5.00		102	70-130			
Toluene	5.34	0.0250	5.00		107	70-130			
o-Xylene	5.22	0.0250	5.00		104	70-130			
p,m-Xylene	10.5	0.0500	10.0		105	70-130			
Total Xylenes	15.7	0.0250	15.0		105	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.31*		*8.00*		*91.4*	*70-130*			
Matrix Spike (2432116-MS1)				**Source: E408081-01**					Prepared: 08/09/24 Analyzed: 08/09/24
Benzene	4.82	0.0250	5.00	ND	96.4	54-133			
Ethylbenzene	5.94	0.0250	5.00	1.17	95.3	61-133			
Toluene	5.95	0.0250	5.00	1.37	91.7	61-130			
o-Xylene	7.04	0.0250	5.00	1.46	112	63-131			
p,m-Xylene	18.9	0.0500	10.0	12.4	64.3	63-131			
Total Xylenes	25.9	0.0250	15.0	13.9	80.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.91*		*8.00*		*111*	*70-130*			
Matrix Spike Dup (2432116-MSD1)				**Source: E408081-01**					Prepared: 08/09/24 Analyzed: 08/09/24
Benzene	4.96	0.0250	5.00	ND	99.2	54-133	2.89	20	
Ethylbenzene	6.08	0.0250	5.00	1.17	98.1	61-133	2.35	20	
Toluene	6.09	0.0250	5.00	1.37	94.4	61-130	2.25	20	
o-Xylene	7.17	0.0250	5.00	1.46	114	63-131	1.81	20	
p,m-Xylene	19.2	0.0500	10.0	12.4	67.3	63-131	1.59	20	
Total Xylenes	26.3	0.0250	15.0	13.9	83.0	63-131	1.65	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.87*		*8.00*		*111*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/12/2024 2:23:14PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2432116-BLK1)									Prepared: 08/09/24 Analyzed: 08/09/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.35*		*8.00*		*104*	*70-130*			
LCS (2432116-BS2)									Prepared: 08/09/24 Analyzed: 08/09/24
Gasoline Range Organics (C6-C10)	47.7	20.0	50.0		95.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.59*		*8.00*		*107*	*70-130*			
Matrix Spike (2432116-MS2)				**Source: E408081-01**					Prepared: 08/09/24 Analyzed: 08/09/24
Gasoline Range Organics (C6-C10)	356	20.0	50.0	434	NR	70-130			M4
Surrogate: 1-Chloro-4-fluorobenzene-FID	*9.46*		*8.00*		*118*	*70-130*			
Matrix Spike Dup (2432116-MSD2)				**Source: E408081-01**					Prepared: 08/09/24 Analyzed: 08/09/24
Gasoline Range Organics (C6-C10)	398	20.0	50.0	434	NR	70-130	11.1	20	M4
Surrogate: 1-Chloro-4-fluorobenzene-FID	*9.51*		*8.00*		*119*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/12/2024 2:23:14PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2432114-BLK1)									Prepared: 08/09/24 Analyzed: 08/09/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*53.4*		*50.0*		*107*	*50-200*			
LCS (2432114-BS1)									Prepared: 08/09/24 Analyzed: 08/09/24
Diesel Range Organics (C10-C28)	248	25.0	250		99.2	38-132			
Surrogate: n-Nonane	*53.5*		*50.0*		*107*	*50-200*			
Matrix Spike (2432114-MS1)				**Source: E408086-07**					Prepared: 08/09/24 Analyzed: 08/09/24
Diesel Range Organics (C10-C28)	242	25.0	250	ND	97.0	38-132			
Surrogate: n-Nonane	*54.3*		*50.0*		*109*	*50-200*			
Matrix Spike Dup (2432114-MSD1)				**Source: E408086-07**					Prepared: 08/09/24 Analyzed: 08/09/24
Diesel Range Organics (C10-C28)	255	25.0	250	ND	102	38-132	5.16	20	
Surrogate: n-Nonane	*53.3*		*50.0*		*107*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/12/2024 2:23:14PM

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 (2432125-BLK1)									Prepared: 08/09/24 Analyzed: 08/09/24
Chloride	ND	20.0							
LCS (2432125-BS1)									Prepared: 08/09/24 Analyzed: 08/09/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2432125-MS1)				**Source: E408081-01**					Prepared: 08/09/24 Analyzed: 08/09/24
Chloride	285	20.0	250	29.3	102	80-120			
Matrix Spike Dup (2432125-MSD1)				**Source: E408081-01**					Prepared: 08/09/24 Analyzed: 08/09/24
Chloride	285	20.0	250	29.3	102	80-120	0.0657	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/12/24 14:23

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

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex	Company: Tap Rock (Bill Ramsey)	Lab WO# E408081	Job Number 24015-0001	1D 2D 3D Std: X	NM CO UT TX: X
Project Name: Jackson Unit #003	Address:			
Project Manager: Chance Dixon	City, State, Zip:			
Address: 3101 Boyd	Phone:			
City, State, Zip: Carlsbad, NM, 88220	Email:			
Phone: 575-725-5001	Miscellaneous: Direct Bill to Tap Rock ATTN: Bill Ramsey			
Email:				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
11:30	8.7.24	Soil	1	BH24-09 7'		1	X	X	X		X							

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsey. Please email cdixon@vertexresource.com permian@vertexresource.com

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: John Rewis

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
			Michelle Gonzales	8.8.24	1015
Michelle Gonzales	8-8-24	1645		8.8.24	1745
Andrew M.	8.8.24	2400		8-9-24	0630

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 6C on subsequent days.

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

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 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

Envirotech Analytical Laboratory

Printed: 8/9/2024 8:07:42AM

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:	Vertex Resource Services Inc.	Date Received:	08/09/24 06:30	Work Order ID:	E408081
Phone:	(575) 748-0176	Date Logged In:	08/09/24 06:35	Logged In By:	Noe Soto
Email:	cdixon@vertex.ca	Due Date:	08/09/24 17:00 (0 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

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

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 filteration 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:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E408143
Job Number:	24015-0001
Received:	8/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/19/24

Date Reported: 8/19/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E408143
Date Received: 8/16/2024 8:00:56AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/16/2024 8:00:56AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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,

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Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/19/24 15:07

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24-09 8.0'	E408143-01A	Soil	08/15/24	08/16/24	Glass Jar, 4 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/19/2024 3:07:16PM

BH24-09 8.0'

E408143-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2433113
Benzene	ND	0.0250	1	08/16/24	08/16/24	
Ethylbenzene	**0.654**	0.0250	1	08/16/24	08/16/24	
Toluene	**0.488**	0.0250	1	08/16/24	08/16/24	
o-Xylene	**1.09**	0.0250	1	08/16/24	08/16/24	
p,m-Xylene	**4.64**	0.0500	1	08/16/24	08/16/24	
Total Xylenes	**5.73**	0.0250	1	08/16/24	08/16/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.8 %*	*70-130*	*08/16/24*	*08/16/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2433113
Gasoline Range Organics (C6-C10)	**216**	20.0	1	08/16/24	08/16/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*161 %*	*70-130*	*08/16/24*	*08/16/24*	*S3*
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2433105
Diesel Range Organics (C10-C28)	**730**	25.0	1	08/15/24	08/16/24	
Oil Range Organics (C28-C36)	**58.2**	50.0	1	08/15/24	08/16/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*08/15/24*	*08/16/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2433112
Chloride	**55.2**	20.0	1	08/16/24	08/16/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/19/2024 3:07:16PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2433113-BLK1)									Prepared: 08/16/24 Analyzed: 08/16/24
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	*7.16*		*8.00*		*89.4*	*70-130*			
LCS (2433113-BS1)									Prepared: 08/16/24 Analyzed: 08/16/24
Benzene	5.28	0.0250	5.00		106	70-130			
Ethylbenzene	5.10	0.0250	5.00		102	70-130			
Toluene	5.20	0.0250	5.00		104	70-130			
o-Xylene	5.07	0.0250	5.00		101	70-130			
p,m-Xylene	10.4	0.0500	10.0		104	70-130			
Total Xylenes	15.4	0.0250	15.0		103	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.15*		*8.00*		*89.4*	*70-130*			
Matrix Spike (2433113-MS1)				**Source: E408144-07**					Prepared: 08/16/24 Analyzed: 08/16/24
Benzene	5.10	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	61-133			
Toluene	5.01	0.0250	5.00	ND	100	61-130			
o-Xylene	4.89	0.0250	5.00	ND	97.8	63-131			
p,m-Xylene	9.98	0.0500	10.0	ND	99.8	63-131			
Total Xylenes	14.9	0.0250	15.0	ND	99.1	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.20*		*8.00*		*90.1*	*70-130*			
Matrix Spike Dup (2433113-MSD1)				**Source: E408144-07**					Prepared: 08/16/24 Analyzed: 08/16/24
Benzene	5.14	0.0250	5.00	ND	103	54-133	0.925	20	
Ethylbenzene	4.95	0.0250	5.00	ND	99.1	61-133	0.862	20	
Toluene	5.06	0.0250	5.00	ND	101	61-130	0.839	20	
o-Xylene	4.92	0.0250	5.00	ND	98.5	63-131	0.703	20	
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131	0.775	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.9	63-131	0.752	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.14*		*8.00*		*89.2*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/19/2024 3:07:16PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2433113-BLK1)									Prepared: 08/16/24 Analyzed: 08/16/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.55*		*8.00*		*94.3*	*70-130*			
LCS (2433113-BS2)									Prepared: 08/16/24 Analyzed: 08/16/24
Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.68*		*8.00*		*96.0*	*70-130*			
Matrix Spike (2433113-MS2)				**Source: E408144-07**					Prepared: 08/16/24 Analyzed: 08/16/24
Gasoline Range Organics (C6-C10)	45.5	20.0	50.0	ND	91.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.63*		*8.00*		*95.3*	*70-130*			
Matrix Spike Dup (2433113-MSD2)				**Source: E408144-07**					Prepared: 08/16/24 Analyzed: 08/16/24
Gasoline Range Organics (C6-C10)	45.6	20.0	50.0	ND	91.1	70-130	0.166	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.66*		*8.00*		*95.7*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/19/2024 3:07:16PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2433105-BLK1)									Prepared: 08/15/24 Analyzed: 08/16/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*57.0*		*50.0*		*114*	*50-200*			
LCS (2433105-BS1)									Prepared: 08/15/24 Analyzed: 08/16/24
Diesel Range Organics (C10-C28)	237	25.0	250		94.6	38-132			
Surrogate: n-Nonane	*56.5*		*50.0*		*113*	*50-200*			
Matrix Spike (2433105-MS1)				**Source: E408144-06**					Prepared: 08/15/24 Analyzed: 08/16/24
Diesel Range Organics (C10-C28)	225	25.0	250	ND	90.1	38-132			
Surrogate: n-Nonane	*48.1*		*50.0*		*96.2*	*50-200*			
Matrix Spike Dup (2433105-MSD1)				**Source: E408144-06**					Prepared: 08/15/24 Analyzed: 08/16/24
Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	38-132	10.4	20	
Surrogate: n-Nonane	*60.7*		*50.0*		*121*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/19/2024 3:07:16PM

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 (2433112-BLK1)									Prepared: 08/16/24 Analyzed: 08/16/24
Chloride	ND	20.0							
LCS (2433112-BS1)									Prepared: 08/16/24 Analyzed: 08/16/24
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2433112-MS1)				**Source: E408143-01**					Prepared: 08/16/24 Analyzed: 08/16/24
Chloride	311	20.0	250	55.2	102	80-120			
Matrix Spike Dup (2433112-MSD1)				**Source: E408143-01**					Prepared: 08/16/24 Analyzed: 08/16/24
Chloride	317	20.0	250	55.2	105	80-120	1.94	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/19/24 15:07

S3	Surrogate spike recovery was outside acceptance limits. 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

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex	Company: Tap Rock (Bill Ramsey)	Lab WO# E408143	Job Number 24015-0001	1D: X; 2D; 3D; Std	NM: X; CO; UT; TX
Project Name: Jackson Unit #003	Address:			
Project Manager: Chance Dixon	City, State, Zip:			
Address: 3101 Boyd Dr.	Phone:			
City, State, Zip: Carlsbad, NM, 88220	Email:			
Phone: 575-725-5001	Miscellaneous: Direct Bill to Tap Rock ATTN: Bill Ramsey			
Email:				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
0855	8.15.24	Soil	1	BH24-09 8.0'		1	X	X	X		X							

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance: Y or N

PWSID #

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsey. Please email cdixon@vertexresource.com cc: ALudvik@vertexresource.com Permian@Vertexresource.com

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: Andrew Ludvik

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.15.24	2:40	Michelle Guy	8-15-24	1440
Michelle Guy	8-15-24	2240		8-16-24	0800
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 6C on subsequent days.

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

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 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

Envirotech Analytical Laboratory

Printed: 8/16/2024 8:40:07AM

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:	Vertex Resource Services Inc.	Date Received:	08/16/24 08:00	Work Order ID:	E408143
Phone:	(575) 748-0176	Date Logged In:	08/15/24 15:10	Logged In By:	Noe Soto
Email:	cdixon@vertex.ca	Due Date:	08/16/24 17:00 (0 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

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

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 filteration 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

Comments/Resolution

Client Instruction

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

Date

envirotech Inc.

Report to:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E408175
Job Number:	19031-0001
Received:	8/21/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/27/24

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: 8/27/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E408175
Date Received: 8/21/2024 5:00:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/21/2024 5:00:00AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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

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Laboratory Administrator
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/27/24 07:55

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WES24-11 0-4'	E408175-01A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-01 4.0'	E408175-02A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-02 4.0'	E408175-03A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-03 4.0'	E408175-04A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-04 8.5'	E408175-05A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-05 6.0'	E408175-06A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-06 4.0'	E408175-07A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-07 4.0'	E408175-08A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-08 4.0'	E408175-09A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-09 4.0'	E408175-10A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-13 0-4'	E408175-11A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-15 0-4'	E408175-12A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-16 0-4'	E408175-13A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-04 0-4'	E408175-14A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-05 4-8'	E408175-15A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-06 4-8'	E408175-16A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-07 4-6'	E408175-17A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-08 0-4'	E408175-18A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-09 0-4'	E408175-19A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
WES24-10 0-4'	E408175-20A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.
BES24-10 4.0'	E408175-21A	soil	08/19/24	08/21/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-11 0-4'

E408175-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.3 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**189**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**77.0**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*89.7 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**50.5**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-01 4.0'

E408175-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.2 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**1570**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**225**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*86.8 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**29.7**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-02 4.0'

E408175-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**349**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**110**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*82.3 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-03 4.0'

E408175-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.4 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.5 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**81.8**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*84.3 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-04 8.5'

E408175-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	**0.0307**	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	**0.0780**	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	**0.161**	0.0500	1	08/21/24	08/22/24	
Total Xylenes	**0.239**	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.1 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*102 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**396**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**63.3**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*85.2 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	40.0	2	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-05 6.0'

E408175-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.8 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**162**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*83.1 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-06 4.0'

E408175-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.5 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.8 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**232**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**62.1**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*87.2 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**31.7**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-07 4.0'

E408175-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.1 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.4 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**243**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**57.6**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*85.2 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**46.1**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-08 4.0'

E408175-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.5 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.1 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**54.0**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*90.8 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**97.7**	40.0	2	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-09 4.0'

E408175-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.2 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.4 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**81.8**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*83.6 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-13 0-4'

E408175-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*88.3 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.8 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*95.4 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**90.4**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-15 0-4'

E408175-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.8 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.1 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**115**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	**50.0**	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*87.8 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**66.3**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-16 0-4'

E408175-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.0 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.4 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**128**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*90.8 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**52.1**	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-04 0-4'

E408175-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	ND	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/22/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.4 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.0 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**26.4**	25.0	1	08/21/24	08/24/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/24/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*08/21/24*	*08/24/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-05 4-8'

E408175-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/22/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/22/24	
Toluene	ND	0.0250	1	08/21/24	08/22/24	
o-Xylene	**0.0393**	0.0250	1	08/21/24	08/22/24	
p,m-Xylene	**0.0790**	0.0500	1	08/21/24	08/22/24	
Total Xylenes	**0.118**	0.0250	1	08/21/24	08/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.6 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*102 %*	*70-130*	*08/21/24*	*08/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**329**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	**55.1**	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*78.2 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-06 4-8'

E408175-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/23/24	
Ethylbenzene	**0.0313**	0.0250	1	08/21/24	08/23/24	
Toluene	ND	0.0250	1	08/21/24	08/23/24	
o-Xylene	**0.0709**	0.0250	1	08/21/24	08/23/24	
p,m-Xylene	**0.188**	0.0500	1	08/21/24	08/23/24	
Total Xylenes	**0.259**	0.0250	1	08/21/24	08/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.9 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*103 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**832**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	**103**	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*87.1 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**51.7**	40.0	2	08/21/24	08/21/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-07 4-6'

E408175-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/23/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/23/24	
Toluene	ND	0.0250	1	08/21/24	08/23/24	
o-Xylene	ND	0.0250	1	08/21/24	08/23/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/23/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.9 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.2 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**113**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*88.0 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	ND	20.0	1	08/21/24	08/22/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-08 0-4'

E408175-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/23/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/23/24	
Toluene	ND	0.0250	1	08/21/24	08/23/24	
o-Xylene	ND	0.0250	1	08/21/24	08/23/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/23/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.5 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.3 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**51.3**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*87.4 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**62.0**	20.0	1	08/21/24	08/22/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-09 0-4'

E408175-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/23/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/23/24	
Toluene	ND	0.0250	1	08/21/24	08/23/24	
o-Xylene	ND	0.0250	1	08/21/24	08/23/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/23/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.4 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.5 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	ND	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*89.3 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**50.3**	20.0	1	08/21/24	08/22/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

WES24-10 0-4'

E408175-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Benzene	ND	0.0250	1	08/21/24	08/23/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/23/24	
Toluene	ND	0.0250	1	08/21/24	08/23/24	
o-Xylene	ND	0.0250	1	08/21/24	08/23/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/23/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/23/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.4 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434046
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/23/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.9 %*	*70-130*	*08/21/24*	*08/23/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434049
Diesel Range Organics (C10-C28)	**63.9**	25.0	1	08/21/24	08/23/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/21/24	08/23/24	
Surrogate: n-Nonane		*89.7 %*	*50-200*	*08/21/24*	*08/23/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434050
Chloride	**95.4**	20.0	1	08/21/24	08/22/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

BES24-10 4.0'

E408175-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: CG			Batch: 2434044
Benzene	ND	0.0250	1	08/21/24	08/21/24	
Ethylbenzene	ND	0.0250	1	08/21/24	08/21/24	
Toluene	ND	0.0250	1	08/21/24	08/21/24	
o-Xylene	ND	0.0250	1	08/21/24	08/21/24	
p,m-Xylene	ND	0.0500	1	08/21/24	08/21/24	
Total Xylenes	ND	0.0250	1	08/21/24	08/21/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.5 %*	*70-130*	*08/21/24*	*08/21/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: CG			Batch: 2434044
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/21/24	08/21/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.6 %*	*70-130*	*08/21/24*	*08/21/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2434048
Diesel Range Organics (C10-C28)	**799**	25.0	1	08/21/24	08/22/24	
Oil Range Organics (C28-C36)	**157**	50.0	1	08/21/24	08/22/24	
Surrogate: n-Nonane		*96.7 %*	*50-200*	*08/21/24*	*08/22/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2434045
Chloride	**55.3**	20.0	1	08/21/24	08/21/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434044-BLK1)									Prepared: 08/21/24 Analyzed: 08/21/24
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	*7.10*		*8.00*		*88.7*	*70-130*			
LCS (2434044-BS1)									Prepared: 08/21/24 Analyzed: 08/21/24
Benzene	4.64	0.0250	5.00		92.7	70-130			
Ethylbenzene	4.50	0.0250	5.00		90.0	70-130			
Toluene	4.58	0.0250	5.00		91.7	70-130			
o-Xylene	4.48	0.0250	5.00		89.5	70-130			
p,m-Xylene	9.15	0.0500	10.0		91.5	70-130			
Total Xylenes	13.6	0.0250	15.0		90.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.26*		*8.00*		*90.8*	*70-130*			
Matrix Spike (2434044-MS1)				**Source: E408176-02**					Prepared: 08/21/24 Analyzed: 08/21/24
Benzene	4.71	0.0250	5.00	ND	94.3	54-133			
Ethylbenzene	4.56	0.0250	5.00	ND	91.1	61-133			
Toluene	4.65	0.0250	5.00	ND	92.9	61-130			
o-Xylene	4.54	0.0250	5.00	ND	90.8	63-131			
p,m-Xylene	9.27	0.0500	10.0	ND	92.7	63-131			
Total Xylenes	13.8	0.0250	15.0	ND	92.0	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.16*		*8.00*		*89.5*	*70-130*			
Matrix Spike Dup (2434044-MSD1)				**Source: E408176-02**					Prepared: 08/21/24 Analyzed: 08/21/24
Benzene	4.95	0.0250	5.00	ND	99.0	54-133	4.92	20	
Ethylbenzene	4.78	0.0250	5.00	ND	95.6	61-133	4.83	20	
Toluene	4.88	0.0250	5.00	ND	97.6	61-130	4.92	20	
o-Xylene	4.75	0.0250	5.00	ND	95.0	63-131	4.57	20	
p,m-Xylene	9.72	0.0500	10.0	ND	97.2	63-131	4.81	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.5	63-131	4.73	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.12*		*8.00*		*89.0*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434046-BLK1)									Prepared: 08/21/24 Analyzed: 08/22/24
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	*7.23*		*8.00*		*90.4*	*70-130*			
LCS (2434046-BS1)									Prepared: 08/21/24 Analyzed: 08/22/24
Benzene	4.31	0.0250	5.00		86.2	70-130			
Ethylbenzene	4.15	0.0250	5.00		82.9	70-130			
Toluene	4.24	0.0250	5.00		84.9	70-130			
o-Xylene	4.13	0.0250	5.00		82.6	70-130			
p,m-Xylene	8.44	0.0500	10.0		84.4	70-130			
Total Xylenes	12.6	0.0250	15.0		83.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.32*		*8.00*		*91.5*	*70-130*			
Matrix Spike (2434046-MS1)				**Source: E408175-05**					Prepared: 08/21/24 Analyzed: 08/22/24
Benzene	4.98	0.0250	5.00	ND	99.5	54-133			
Ethylbenzene	4.83	0.0250	5.00	0.0307	96.0	61-133			
Toluene	4.92	0.0250	5.00	ND	98.4	61-130			
o-Xylene	4.94	0.0250	5.00	0.0780	97.2	63-131			
p,m-Xylene	9.98	0.0500	10.0	0.161	98.2	63-131			
Total Xylenes	14.9	0.0250	15.0	0.239	97.9	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.23*		*8.00*		*90.4*	*70-130*			
Matrix Spike Dup (2434046-MSD1)				**Source: E408175-05**					Prepared: 08/21/24 Analyzed: 08/22/24
Benzene	5.02	0.0250	5.00	ND	100	54-133	0.905	20	
Ethylbenzene	4.88	0.0250	5.00	0.0307	97.0	61-133	1.02	20	
Toluene	4.96	0.0250	5.00	ND	99.2	61-130	0.810	20	
o-Xylene	4.99	0.0250	5.00	0.0780	98.3	63-131	1.17	20	
p,m-Xylene	10.0	0.0500	10.0	0.161	98.8	63-131	0.614	20	
Total Xylenes	15.0	0.0250	15.0	0.239	98.7	63-131	0.798	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.33*		*8.00*		*91.7*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434044-BLK1)									Prepared: 08/21/24 Analyzed: 08/21/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.67*		*8.00*		*95.8*	*70-130*			
LCS (2434044-BS2)									Prepared: 08/21/24 Analyzed: 08/21/24
Gasoline Range Organics (C6-C10)	40.1	20.0	50.0		80.2	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.79*		*8.00*		*97.4*	*70-130*			
Matrix Spike (2434044-MS2)				**Source: E408176-02**					Prepared: 08/21/24 Analyzed: 08/21/24
Gasoline Range Organics (C6-C10)	39.2	20.0	50.0	ND	78.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.76*		*8.00*		*97.0*	*70-130*			
Matrix Spike Dup (2434044-MSD2)				**Source: E408176-02**					Prepared: 08/21/24 Analyzed: 08/21/24
Gasoline Range Organics (C6-C10)	38.8	20.0	50.0	ND	77.6	70-130	1.10	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.72*		*8.00*		*96.6*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434046-BLK1)									Prepared: 08/21/24 Analyzed: 08/22/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.69*		*8.00*		*96.1*	*70-130*			
LCS (2434046-BS2)									Prepared: 08/21/24 Analyzed: 08/22/24
Gasoline Range Organics (C6-C10)	35.5	20.0	50.0		71.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.73*		*8.00*		*96.6*	*70-130*			
Matrix Spike (2434046-MS2)				**Source: E408175-05**					Prepared: 08/21/24 Analyzed: 08/22/24
Gasoline Range Organics (C6-C10)	50.8	20.0	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.22*		*8.00*		*103*	*70-130*			
Matrix Spike Dup (2434046-MSD2)				**Source: E408175-05**					Prepared: 08/21/24 Analyzed: 08/22/24
Gasoline Range Organics (C6-C10)	56.6	20.0	50.0	ND	113	70-130	10.8	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.36*		*8.00*		*104*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434048-BLK1)									Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.5*		*50.0*		*96.9*	*50-200*			
LCS (2434048-BS1)									Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	222	25.0	250		88.8	38-132			
Surrogate: n-Nonane	*45.4*		*50.0*		*90.8*	*50-200*			
Matrix Spike (2434048-MS1)				**Source: E408175-21**					Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	1070	25.0	250	799	109	38-132			
Surrogate: n-Nonane	*48.0*		*50.0*		*96.0*	*50-200*			
Matrix Spike Dup (2434048-MSD1)				**Source: E408175-21**					Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	1020	25.0	250	799	86.6	38-132	5.47	20	
Surrogate: n-Nonane	*50.0*		*50.0*		*100*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2434049-BLK1)									Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*45.1*		*50.0*		*90.3*	*50-200*			
LCS (2434049-BS1)									Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	231	25.0	250		92.5	38-132			
Surrogate: n-Nonane	*46.8*		*50.0*		*93.6*	*50-200*			
Matrix Spike (2434049-MS1)				**Source: E408175-02**					Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	2060	25.0	250	1570	198	38-132			M4
Surrogate: n-Nonane	*48.3*		*50.0*		*96.6*	*50-200*			
Matrix Spike Dup (2434049-MSD1)				**Source: E408175-02**					Prepared: 08/21/24 Analyzed: 08/22/24
Diesel Range Organics (C10-C28)	1930	25.0	250	1570	144	38-132	6.75	20	M4
Surrogate: n-Nonane	*46.9*		*50.0*		*93.8*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

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 (2434045-BLK1)									Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	ND	20.0							
LCS (2434045-BS1)									Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2434045-MS1)				**Source: E408176-01**					Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	384	200	250	ND	154	80-120			M5
Matrix Spike Dup (2434045-MSD1)				**Source: E408176-01**					Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	404	200	250	ND	161	80-120	4.86	20	M5

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	19031-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/27/2024 7:55:12AM

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 (2434050-BLK1)									Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	ND	20.0							
LCS (2434050-BS1)									Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2434050-MS1)				**Source: E408175-05**					Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	267	40.0	250	ND	107	80-120			
Matrix Spike Dup (2434050-MSD1)				**Source: E408175-05**					Prepared: 08/21/24 Analyzed: 08/21/24
Chloride	263	40.0	250	ND	105	80-120	1.52	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	19031-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/27/24 07:55

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.
M5	The analysis of the MS sample required a dilution such that the spike recovery calculation does not provide useful information. The accociated 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

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex	Company: Tap Rock (Bill Ramsey)	Lab WO# E408175	Job Number 19031-0001	1D 2D 3D Std: X	NM: X CO UT TX
Project Name: Jackson Unit #003	Address:			
Project Manager: Chance Dixon	City, State, Zip:			
Address: 3101 Boyd Dr.	Phone:			
City, State, Zip: Carlsbad, NM, 88220	Email:			
Phone: 575.725.5001	Miscellaneous: Direct bill to Tap Rock ATTN: Bill Ramsey			
Email:				

Analysis and Method

EPA Program: SDWA | CWA | RCRA; Compliance Y or N; PWSID #

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Remarks
1532	8.19.24	Soil	1	WES24-11 0-4'		1	X	X	X		X				
1535				BES24-01 4.0'		2									
1538				BES24-02 4.0'		3									
1540				BES24-03 4.0'		4									
1542				BES24-04 8.0'		5									
1545				BES24-05 6.0'		6									
1548				BES24-06 4.0'		7									
1550				BES24-07 4.0'		8									
1552				BES24-08 4.0'		9									
1555	↓	↓	↓	BES24-09 4.0'		10	↓	↓	↓		↓				

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsey, Please email: cdixon@vertexresource.com cc: ALudvik@vertexresource.com Permian@vertexresources.com

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: Andrew Ludvik

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.20.24	0920	Michelle Cruz	8-20-24	0920
Michelle Cruz	8-20-24	1620		8-20-24	1638
	8-20-24	2320	Kayleigh R Hall	8-21-24	0500

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 6C on subsequent days.

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

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 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.

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Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex	Company: Tap Rock (Bill Ramsey)	Lab WO# E408175	Job Number 19031-0001	1D 2D 3D Std: Std
Project Name: Jackson Unit #003	Address:			NM CO UT TX: NM
Project Manager: Chance Dixon	City, State, Zip:			
Address: 3101 Boyd Dr.	Phone:			
City, State, Zip: Carlsbad, NM, 88220	Email:			
Phone: 575.725.5001	Miscellaneous: Direct bill to Tap Rock ATTN: Bill Ramsey			
Email:				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
1505	8.19.24	Soil	1	WES24-13	0-4'		11	X	X	X		X							
1508				WES24-15	0-4'		12												
1512				WES24-16	0-4'		13												
1515				WES24-04	0-4'		14												
1518				WES24-05	4-8'		15												
1521				WES24-06	4-8'		16												
1523				WES24-07	4-6'		17												
1525				WES24-08	0-4'		18												
1528				WES24-09	0-4'		19												
1530				WES24-10	0-4'		20												

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance: Y or N

PWSID #

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsey please email: cdixon@vertexresource.com cc: ALudvik@vertexresource.com Permian@vertexresource.com

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: Andrew Ludvik

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.20.24	0920		8.20.24	0920
	8.20.24	1620		8-20-24	1638
	8-20-24	2320		8.21.24	0500

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 6C on subsequent days.

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

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 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	Invoice Information	Lab Use Only	TAT	State
Client: Vertex	Company: Tap Rock (Bill Ramsey)	Lab WO# E408175	1D 2D 3D Std	NM CO UT TX
Project Name: Jackson Unit #003	Address:	Job Number 19031-0001		NM
Project Manager: Chance Dixon	City, State, Zip:			
Address: 3101 Boyd Dr.	Phone:			
City, State, Zip: Carlsbad, NM, 88220	Email:			
Phone: 575. 725. 5001	Miscellaneous: Direct bill to Tap Rock ATTN: Bill Ramsey			
Email:				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
1558	8.19.24	Soil	1	BES 24-10 4.0'		21	X	X	X		X							

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsey Please email: cdixon@vertexresource.com cc: ALudvik@vertexresource.com Perrion@vertexresource.com

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: Andrew Ludvik

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	8.20.24	0930		8.2024	0920
	8.2024	1620		8-2024	1638
	8-20-24	2320	Kaylyn R Hall	8.21.24	0500

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 6C on subsequent days.

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

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 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.

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Envirotech Analytical Laboratory

Printed: 8/21/2024 9:26:20AM

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:	Vertex Resource Services Inc.	Date Received:	08/21/24 05:00	Work Order ID:	E408175
Phone:	(575) 748-0176	Date Logged In:	08/20/24 15:54	Logged In By:	Raina Schwanz
Email:	cdixon@vertex.ca	Due Date:	08/27/24 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

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

Client Instruction

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

Date

envirotech Inc.

Report to:

Chance Dixon

5796 U.S. Hwy 64
Farmington, NM 87401

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

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Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Jackson Unit #003
Work Order:	E409013
Job Number:	24015-0001
Received:	9/5/2024

Revision: 0

Report Reviewed By:

Draft
Walter Hinchman
Laboratory Director
9/5/24

Date Reported: 9/5/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Jackson Unit #003
Workorder: E409013
Date Received: 9/5/2024 6:00:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/5/2024 6:00:00AM, under the Project Name: Jackson Unit #003.

The analytical test results summarized in this report with the Project Name: Jackson Unit #003 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 reguarding 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:

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	09/05/24 16:13

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BES24-01 5'	E409013-01A	Soil	09/04/24	09/05/24	Glass Jar, 2 oz.
WES24-21 0'-4'	E409013-02A	Soil	09/04/24	09/05/24	Glass Jar, 2 oz.
WES24-22 0'-5'	E409013-03A	Soil	09/04/24	09/05/24	Glass Jar, 2 oz.
WES24-23 0'-5'	E409013-04A	Soil	09/04/24	09/05/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	9/5/2024 4:13:03PM

BES24-01 5'

E409013-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*105 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.3 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2436036
Diesel Range Organics (C10-C28)	**313**	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	**68.0**	50.0	1	09/05/24	09/05/24	
Surrogate: n-Nonane		*70.4 %*	*50-200*	*09/05/24*	*09/05/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2436037
Chloride	ND	20.0	1	09/05/24	09/05/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	9/5/2024 4:13:03PM

WES24-21 0'-4'

E409013-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.9 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2436036
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
Surrogate: n-Nonane		*70.8 %*	*50-200*	*09/05/24*	*09/05/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2436037
Chloride	**52.2**	20.0	1	09/05/24	09/05/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	9/5/2024 4:13:03PM

WES24-22 0'-5'

E409013-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.2 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2436036
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
Surrogate: n-Nonane		*70.7 %*	*50-200*	*09/05/24*	*09/05/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2436037
Chloride	**34.6**	20.0	1	09/05/24	09/05/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	9/5/2024 4:13:03PM

WES24-23 0'-5'

E409013-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Benzene	ND	0.0250	1	09/05/24	09/05/24	
Ethylbenzene	ND	0.0250	1	09/05/24	09/05/24	
Toluene	ND	0.0250	1	09/05/24	09/05/24	
o-Xylene	ND	0.0250	1	09/05/24	09/05/24	
p,m-Xylene	ND	0.0500	1	09/05/24	09/05/24	
Total Xylenes	ND	0.0250	1	09/05/24	09/05/24	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2436038
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/24	09/05/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.9 %*	*70-130*	*09/05/24*	*09/05/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KH			Batch: 2436036
Diesel Range Organics (C10-C28)	ND	25.0	1	09/05/24	09/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	09/05/24	09/05/24	
Surrogate: n-Nonane		*86.1 %*	*50-200*	*09/05/24*	*09/05/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2436037
Chloride	**129**	20.0	1	09/05/24	09/05/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	9/5/2024 4:13:03PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2436037-BLK1)									Prepared: 09/05/24 Analyzed: 09/05/24
Chloride	ND	20.0							
LCS (2436037-BS1)									Prepared: 09/05/24 Analyzed: 09/05/24
Chloride	250	20.0	250		99.9	90-110			
Matrix Spike (2436037-MS1)				**Source: E409013-04**					Prepared: 09/05/24 Analyzed: 09/05/24
Chloride	386	20.0	250	129	103	80-120			
Matrix Spike Dup (2436037-MSD1)				**Source: E409013-04**					Prepared: 09/05/24 Analyzed: 09/05/24
Chloride	382	20.0	250	129	101	80-120	0.980	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

Vertex Resource Services Inc.	Project Name:	Jackson Unit #003	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	09/05/24 16:13

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

Client Information	Invoice Information	Lab Use Only		TAT				State					
Client: **Vertex (bill direct to Tap Rock)**	Company: **Tap Rock (Bill Ramsay)**	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: **Jackson unit #003**	Address: **523 Park Point Drive, Suite 200**	E409013	24015-0001 ~~19031-0001~~ (AH)	X								
Project Manager: **Chance Dixon**	City, State, Zip: **Golden, CO, 80401**											
Project Number: **24E-03316**	Phone: **720-772-5090**											
City, State, Zip: **Carlsbad, NM, 88220**	Email: **Bramsay@Taprk.com**											
Phone: **575-725-5001**	Miscellaneous: **Direct bill to Tap Rock ATTN: Bill Ramsay.**											
Email: **cdixon@vertexresource.com**												

Sample Information							Analysis and Method										EPA Program		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO 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
8:00	09.04.2024	Soil	1	BES24-01 5'		1	X	X	X		X									
8:30	09.04.2024	Soil	1	WES24-21 0' - 4'		2	X	X	X		X							Compliance	Y	or N
11:00	09.04.2024	Soil	1	WES24-22 0' - 5'		3	X	X	X		X							PWSID #		
11:05	09.04.2024	Soil	1	WES24-23 0' -5'		4	X	X	X		X							Remarks		

Additional Instructions: Direct bill to Tap Rock ATTN: Bill Ramsay. Please email final report to cdixon@vertexresource.com, permain@vertexresource.com

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: John Rew.is

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	9.4.24	1645	Michelle Gonzales	9-4-24	1645
Michelle Gonzales	9.4.24	1830	John Hobbs	9.4.24	1830
John Hobbs	9.4.24	2400	Kaylyn R Hall	9.5.24	0600
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

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 days.

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 _____

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 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

Envirotech Analytical Laboratory

Printed: 9/5/2024 8:01:28AM

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:	Vertex Resource Services Inc.	Date Received:	09/05/24 06:00	Work Order ID:	E409013
Phone:	(575) 748-0176	Date Logged In:	09/04/24 17:07	Logged In By:	Noe Soto
Email:	cdixon@vertex.ca	Due Date:	09/05/24 17:00 (0 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	Carrier: Courier
4. Was the COC complete, i.e., signatures, dates/times, requested analyses?	Yes	
5. Were all samples received within holding time? Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this disucssion.	Yes	

Comments/Resolution

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

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 filteration 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 F – Depth to Groundwater Drilling

Jackson Unit #003

DTGW Borehole Location - 32.211769, -103.561897

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO	OSE FILE NO(S)
C 04867		C-4867

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Tap Rock Resources	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
523 Park Point DR. Suite 200	Golden	CO	80401

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	12	42.39	N
	LONGITUDE	-103	33	42.85	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1833	Jason Maley	Vision Resources

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
8-22-24	8-22-24	105'	105'	N/A

COMPLETED WELL IS: ☐ ARTESIAN *add Centralizer info below ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 0'

DATE STATIC MEASURED: 8-22-24

DRILLING FLUID: ☑ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☑ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	95	6"	PVC 2" SCH40	Thread	2"	SCH40	N/A
95	105	6"	PVC 2" SCH40	Thread	2"	SCH40	.02

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)	AMOUNT (cubic feet)	METHOD OF PLACEMENT
			None pulled and plugged		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES **(attach supplemental sheets to fully describe all units)**	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	20	20'	white caliche	Y ✓N	
20	90	70'	Red clay with small rock	Y ✓N	
90	105	15'	Red and Gray clay	Y ✓N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY: Dry hole

TOTAL ESTIMATED WELL YIELD (gpm): 0

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Jason Maley

6. SIGNATURE

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 HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jason Maley

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE: 08-27-2024

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

PLUGGING RECORD

NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-04867

Well owner: Taprock Resources Phone No.: _____

Mailing address: 523 Park Point Drive Suite 200

City: Golden State: CO Zip code: 80401

II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Vision Resources

2) New Mexico Well Driller License No.: 1833 Expiration Date: 10-7-25

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jason Maley

4) Date well plugging began: 8-26-24 Date well plugging concluded: 8-26-24

5) GPS Well Location: Latitude: 32 deg, 12 min, 42.39 sec
Longitude: -103 deg, 33 min, 42.85 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 105' ft below ground level (bgl), by the following manner: Tape

7) Static water level measured at initiation of plugging: N/A ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 8-1-24

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

Version: September 8, 2009
Page 1 of 2

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0		155	155	Tremie pipe Open Hole	
	Wyoming Bentonite				
105'					

MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jason Maley, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

JMaley

Signature of Well Driller

08-27-2024

Date

Version: September 8, 2009
Page 2 of 2

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

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

QUESTIONS

Action 385433

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nSAP0215477198**
Incident Name	**NSAP0215477198 JACKSON UNIT #003 @ 30-025-33238**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-33238] JACKSON UNIT #003**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Jackson Unit #003
Date Release Discovered	06/03/2002
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 | | Crude Oil | Released: 200 BBL | Recovered: 0 BBL | Lost: 200 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*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.*

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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: Chance Dixon Title: Project Manager Email: cdixon@vertex.ca Date: 09/03/2024

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (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	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 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	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	404
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	3262.8
GRO+DRO (EPA SW-846 Method 8015M)	2931.8
BTEX (EPA SW-846 Method 8021B or 8260B)	17.9
Benzene (EPA SW-846 Method 8021B or 8260B)	1.2
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	08/16/2024
On what date will (or did) the final sampling or liner inspection occur	08/16/2024
On what date will (or was) the remediation complete(d)	09/04/2024
What is the estimated surface area (in square feet) that will be reclaimed	1100
What is the estimated volume (in cubic yards) that will be reclaimed	360
What is the estimated surface area (in square feet) that will be remediated	1100
What is the estimated volume (in cubic yards) that will be remediated	360
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
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.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(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	LEA LAND LANDFILL [fEEM0112342028]
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
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 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: Chance Dixon Title: Project Manager Email: cdixon@vertex.ca Date: 09/03/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**379792**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**09/04/2024**
What was the (estimated) number of samples that were to be gathered	**4**
What was the sampling surface area in square feet	**800**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1987
What was the total volume (cubic yards) remediated	331
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1987
What was the total volume (in cubic yards) reclaimed	331
Summarize any additional remediation activities not included by answers (above)	Site was remediated to reclamation standards with the top four feet containing clean uncontaminated material. Everything below four feet met >100 DTGW standards.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Chance Dixon Title: Project Manager Email: cdixon@vertex.ca Date: 09/20/2024

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QUESTIONS (continued)

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	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 385433

CONDITIONS

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	Action Number: 385433
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation closure approved. Site is plugged and abandoned and must meet the requirements of 19.15.29.13 NMAC.	9/26/2024
bhall	A reclamation report will not be accepted until reclamation of the release area,is complete and meets the requirements of 19.15.29.13 NMAC.	9/26/2024
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. 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.	9/26/2024
bhall	A revegetation report will not be accepted until revegetation of the release area is complete and meets the requirements of 19.15.29.13 NMAC. This site is considered not reasonably needed for production or drilling activities must be reclaimed and revegetated as early as practicable.	9/26/2024
bhall	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	9/26/2024
bhall	Per 19.15.29.13 E. NMAC, if a reclamation and revegetation report has been submitted to the surface owner, it may be used if the requirements of the surface owner provide equal or better protection of freshwater, human health, and the environment. A copy of the approval of the reclamation and revegetation report from the surface owner and a copy of the approved reclamation and revegetation report will need to be submitted to the OCD via the Permitting website.	9/26/2024