Incident Number: nAPP2409146069

Release Assessment and Closure

Bettis State Com #3

Section 20, Township 24 South, Range 33 East

County: Lea

Vertex File Number: 24E-01276

Prepared for:
Tap Rock Operating, LLC.

Prepared by:
Vertex Resource Services Inc.

Date:
August 2024

Release Assessment and Closure
Bettis State Com #3
Section 20, Township 24 South, Range 33 East
County: Lea

Prepared for:
Tap Rock Operating, LLC.
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Golden, Colorado 80401

New Mexico Oil Conservation Division – District 1 Hobbs
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1.0 Introduction

Tap Rock Operating, LLC. (Tap Rock) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for a produced water release that occurred on March 30, 2024, at Bettis State Com #3 (hereafter referred to as the "site"). Tap Rock submitted an initial C-141 Release Notification to New Mexico Oil Conservation Division (NMOCD) District 1 on April 1, 2024. Incident ID number nAPP2409146069 was assigned to this incident. On June 26, 2024, Vertex filed for extension of the closure due date for the release on behalf of Tap Rock. The extension was approved and a new due date was established for September 26, 2024.

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 closure report to obtain approval from NMOCD for closure of this release, with the understanding that restoration activities of the release site will be completed following remediation activities as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred on March 30, 2024, due to a blown gasket within the check valve on the transfer line in a pasture adjacent to the lease road as stated in the C-141 form. The incident was reported on April 1, 2024. It involved the release of approximately 17 barrels (bbl.) of produced water into the pastureland. No free fluid was removed during the initial clean-up. Additional details relevant to the release are presented in the C-141 Report.

3.0 Site Characteristics

The site is located approximately 25 miles Southeast of Jal, New Mexico. The legal location for the site is Section 20, Township 24 South and Range 33 East in Lea County, New Mexico. The release area is located on State land. An aerial photograph and site schematic are presented on Figure 1.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2024) indicates the site's surface geology primarily comprises Qep - Eolian and Piedmont deposits (Holocene to middle Pleistocene) interlayed eolian sands and piedmont slope and deposits. The predominant soil texture on the site is Loamy fine sands Berino-Cacquie, Pyote and Maljamar fine sands (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Additional soil characteristics include a drainage class of well-drained soils with a low runoff class. The karst geology potential for the site is low (United States Department of the Interior, Bureau of Land Management, 2018).

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas transportation. The following sections specifically describe the release area on or in proximity to the pipeline right-of-way (Figure 1). The surrounding landscape is associated with plains with elevations ranging between 3,000 and 3,900 feet. The climate is semiarid with average annual precipitation ranging between 10 and 13 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasslands dominated by grama, bluestem and dropseed species, sand sage and shinnery oak are also evenly distributed in the grassland. Black grama

dominate the historical plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Limited to no vegetation is allowed to grow on the right-of-way and access road.

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 the 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 D.

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 1.5 miles east 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.

Table 1. Closure Criteria Determination			
Site Name: Bettis State Com #3			
Spill Coordinates: 32.195893, -103.594484		**X: UTM easting**	**Y: UTM northing**
Site Specific Conditions		**Value**	**Unit**
1	Depth to Groundwater (nearest reference)	>100	feet
	Distance between release and nearest DTGW reference	655	feet
		0.12	miles
	Date of nearest DTGW reference measurement	July 9, 2024	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	8,479	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	74,495	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	23,971	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**	774	feet
	ii) Within 1000 feet of any fresh water well or spring	774	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	12,119	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	104,763	feet
9	Within an unstable area (Karst Map)	Low	Critical High Medium Low
	Distance between release and nearest unstable area	86,169	feet
10	Within a 100-year Floodplain	500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	56,172	feet
11	Soil Type	BE and PU	
12	Ecological Classification	Loamy Sand	
13	Geology	Qep	
	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 2. Closure Criteria for Soils to Remediation & Reclamation Standards

	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

bgs – below ground surface
DTGW – depth to groundwater
TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics
BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

An initial site inspection of the release area was completed on April 3, 2024, which identified the area of the release. The perimeter of the impacted area was determined to be 220 feet; the total affected area was 1,684 square feet. The site was delineated to the requirements for releases where depth to groundwater is greater than 100 feet below ground surface (bgs) between April 8 and May 16, 2024 (Table 3). Daily field reports with photographs are included in Appendix B.

Remediation efforts began on June 19, 2024, and were finalized on July 12, 2024. Vertex personnel supervised the excavation of impacted soils. Field screening was completed to guide the excavation and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and Silver Nitrate Titration (chlorides). Field screening results were used to identify areas requiring further remediation. Soils were removed to a depth of 4 to 5 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility.

Notification that confirmatory samples were being collected was provided to the NMOCD before every sampling event and are included in the Incident Files for the release on OCD Permitting. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. 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). Confirmatory laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix C. All confirmatory samples collected and analyzed were below the closure criteria for the site.

On July 29, 2024, Vertex collected 10 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 1,380 cubic yards of topsoil.

6.0 Closure Request

The release area was fully delineated, remediated, and backfilled with local soils by August 7, 2024. Confirmatory samples and samples from backfill material were analyzed by the laboratory and found to be below reclamation closure criteria requirements for soils impacted by a release less than 50 feet depth to groundwater from surface to 4 feet bgs, and greater than 100 feet depth to groundwater greater than 4 feet bgs.

Vertex recommends no additional remedial actions to address the impacted area at the site. Laboratory analyses of confirmation samples collected show confirmatory values below NMOCD reclamation closure criteria for areas where depth to groundwater is greater than 100 feet bgs. There are no anticipated risks to human, ecological, or hydrological receptors at the site. The site has been reclaimed, contoured, and seeded with the appropriate New Mexico State Land Office (NMSLO) seed mix for loamy sand soils.

Vertex requests that this remediation closure report for the open incident be approved as all closure requirements outlined in Subsection E of 10.15.29.12 NMAC have been met. Tap Rock certifies that all information in this report and the appendices is correct, and that they have been compiled with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain Remediation Closure Approval.

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

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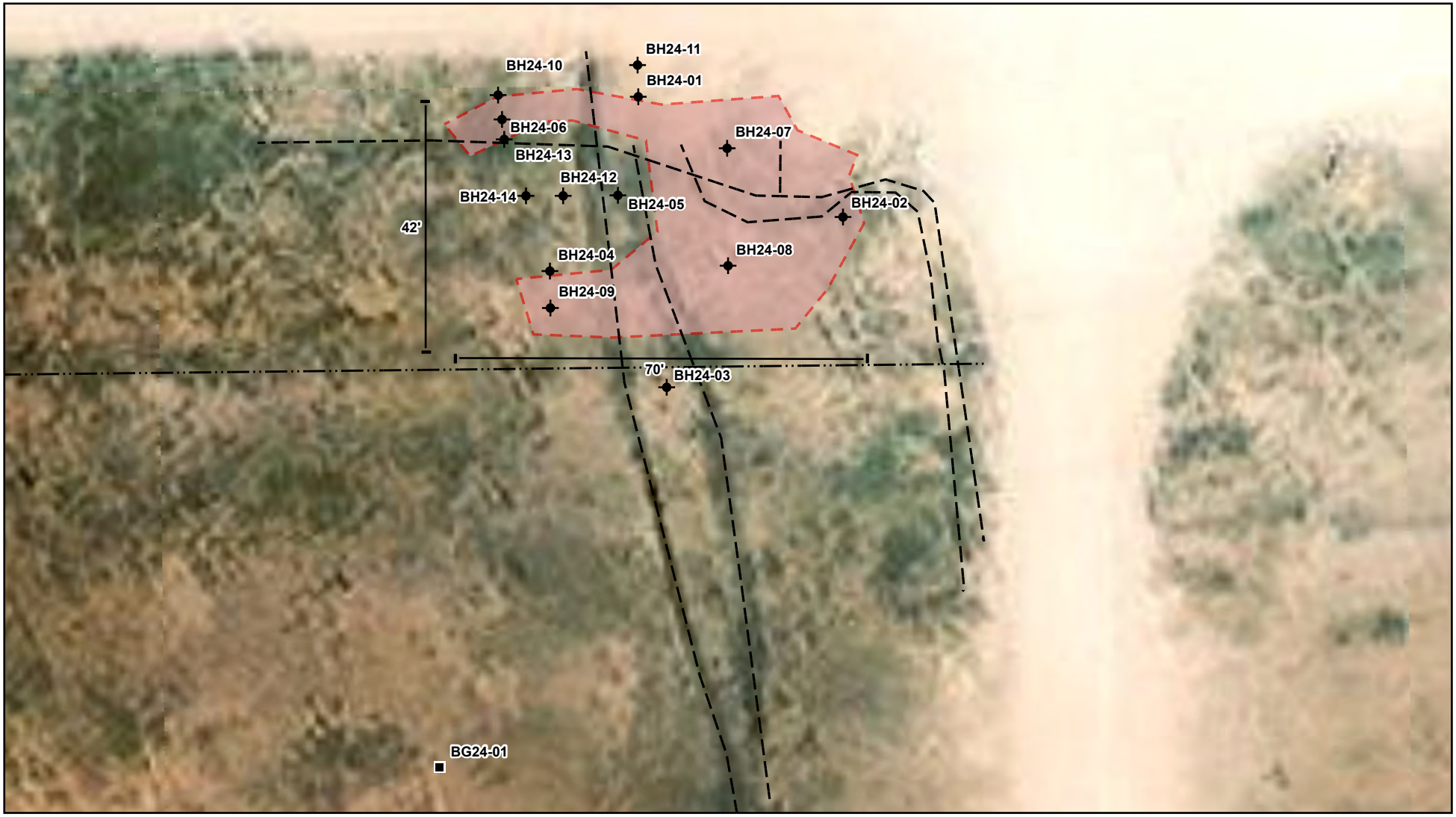
8.0 Limitations

This report has been prepared for the sole benefit of Tap Rock Operating, LLC. (Tap Rock). This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and New Mexico State Land Office, without the express written consent of Vertex Resource Services Inc. (Vertex) and Tap Rock. 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 following generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgment 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



■ Background Sample ✦ Borehole – – Pipeline (Aboveground) —·· Pipeline (Underground) ▭ Release Area (~ 1,684 sq. ft.)

VERTEX

0 10 20 ft

Map Center:
Lat/Long: 32.195795°N, 103.594572°W

NAD 1983 UTM Zone 13N
Date: Apr 19/24

N

Characterization Sampling Site Schematic
Bettis State Com #3

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, 2022. Site features from GPS by Vertex Professional Services Ltd. (Vertex), 2024.

VERSATILITY. EXPERTISE.

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● Base Sample ▲ Wall Sample Pipeline (Aboveground) Pipeline (Underground) Excavation to 4' bgs (~2,814 sq.ft. | ~220 ft.) Excavation to 4' bgs (~195 sq.ft. | ~57 ft.)

VERTEX

0 5 10 20 ft

Map Center:
Lat/Long: 32.195882, -103.594581

NAD 1983 UTM Zone 13N
Date: Jul 31/24

N

Confirmation Site Sampling Schematic
Bettis State Com #3

FIGURE:
2

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. Site features from GPS by Vertex Professional Services Ltd. (Vertex), 2024

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Tap Rock\2024\24E-01276\Figure 2 Confirmation Schematic (24E-01276)ID19061.mxd

TABLES

Client Name: Tap Rock Operating, LLC.
Site Name: Bettis State Com #3
NMOCD Tracking #: nAPP2409146069
Project #: 24E-01276
Lab Report(sX): E405274, E404059, E404121, E407245

Table 3. Initial Characterization 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)
BG24-01	0	July 29, 2024	-	20	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-02	0	July 29, 2024	-	31	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-03	0	July 29, 2024	-	25	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-04	0	July 29, 2024	-	33	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-05	0	July 29, 2024	-	21	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-06	0	July 29, 2024	-	19	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-07	0	July 29, 2024	-	29	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-08	0	July 29, 2024	-	40	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-09	0	July 29, 2024	-	38	ND	ND	ND	ND	ND	ND	ND	ND	ND
BG24-10	0	July 29, 2024	-	43	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH24-01	0	April 8,2024	ND	16	370	ND	ND	ND	ND	ND	ND	ND	121
BH24-01	2	April 8,2024	ND	-	**9,252**	ND	ND	ND	ND	ND	ND	ND	**12300**
BH24-02	0	April 8,2024	ND	6	281	ND	ND	ND	ND	ND	ND	ND	49
BH24-02	2	April 8,2024	ND	36	204	ND	ND	ND	ND	ND	ND	ND	27
BH24-03	0	April 8,2024	ND	18	93	ND	ND	ND	ND	ND	ND	ND	ND
BH24-03	2	April 8,2024	ND	0	148	ND	ND	ND	ND	ND	ND	ND	ND
BH24-04	0	April 8,2024	ND	0	69	ND	ND	ND	ND	ND	ND	ND	ND
BH24-04	2	April 8,2024	ND	14	125	ND	ND	ND	ND	ND	ND	ND	259
BH24-05	0	April 8,2024	ND	-	**5,802**	ND	ND	ND	ND	ND	ND	ND	**4600**
BH24-05	2	April 8,2024	ND	-	**6,570**	ND	ND	ND	ND	ND	ND	ND	**5950**
BH24-06	0	April 8,2024	ND	-	85	ND	ND	ND	ND	ND	ND	ND	ND
BH24-06	2	April 8,2024	ND	-	**6,863**	ND	ND	ND	ND	ND	ND	ND	**4880**
BH24-07	0	April 8,2024	ND	-	**15,025**	ND	ND	ND	ND	ND	ND	ND	**17800**
BH24-07	2	April 8,2024	ND	-	**16,155**	ND	ND	ND	ND	ND	ND	ND	**15600**
BH24-07	4	May 16,2025	ND	-	9,734	ND	ND	ND	ND	ND	ND	ND	18700
BH24-07	4.5	May 16,2025	ND	-	5,120	-	-	-	-	-	-	-	-
BH24-08	0	April 8, 2024	ND	-	**13,930**	ND	ND	ND	ND	ND	ND	ND	**14200**
BH24-08	2	April 8,2024	ND	-	**15,412**	ND	ND	ND	ND	ND	ND	ND	**16700**
BH24-08	4	May 16,2025	ND	-	12,141	-	-	-	-	-	-	-	-
BH24-08	5	May 16,2025	ND	-	11,520	-	-	-	-	-	-	-	-
BH24-08	6.75	May 16,2025	ND	-	7,277	-	-	-	-	-	-	-	-
BH24-08	8.25	May 16,2025	ND	-	4,967	ND	ND	ND	ND	ND	ND	ND	7560
BH24-08	9.25	May 16,2025	ND	-	6,478	-	-	-	-	-	-	-	-
BH24-08	11	May 16,2025	ND	-	6,497	ND	ND	ND	ND	ND	ND	ND	6010
BH24-09	0	April 9,2024	ND	-	**13,972**	ND	ND	ND	ND	ND	ND	ND	**1890**
BH24-09	2	April 9,2024	ND	-	**16,235**	ND	ND	ND	ND	ND	ND	ND	**16300**
BH24-09	4	May 16,2025	ND	-	9,564	ND	ND	ND	ND	ND	ND	ND	11100
BH24-09	5	May 16,2025	ND	-	3,116	-	-	-	-	-	-	-	-
BH24-09	5.5	May 16,2025	ND	-	585	ND	ND	ND	ND	ND	ND	ND	1370

Table 3. Initial Characterization 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)
BH24-10	0	April 9,2024	ND	-	**9,455**	ND	ND	ND	ND	ND	ND	ND	**10200**
BH24-10	2	April 9,2024	ND	-	**13,100**	ND	ND	ND	ND	ND	ND	ND	**12600**
BH24-10	5	May 16,2025	ND	-	200	ND	ND	ND	ND	ND	ND	ND	515
BH24-11	0	April 9,2024	ND	7	300	ND	ND	ND	ND	ND	ND	ND	62
BH24-11	2	April 9,2024	ND	59	**675**	ND	ND	ND	ND	ND	ND	ND	455
BH24-12	0	April 9,2024	ND	0	83	ND	ND	ND	ND	ND	ND	ND	ND
BH24-12	2	April 9,2024	ND	-	**13,405**	ND	ND	ND	ND	ND	ND	ND	**13400**
BH24-13	0	April 9,2024	ND	31	152	ND	ND	ND	ND	ND	ND	ND	20
BH24-13	2	April 9,2024	ND	23	232	ND	ND	ND	ND	ND	ND	ND	39
BH24-14	0	April 9,2024	ND	37	32	ND	ND	ND	ND	ND	ND	ND	ND
BH24-14	2	April 9,2024	ND	32	87	ND	ND	ND	ND	ND	ND	ND	27

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

Client Name: Tap Rock Resources
Site Name: Bettis State Com #3
NMOCD Tracking #: nAPP2409146069
Project #: 24E-01276
Lab Report(sX): E406256, E406221, E407028, E407117

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	06.21.24	-	-	4,145	ND	ND	ND	ND	ND	ND	ND	6080
BES24-02	4	06.24.24.	-	-	10,140	ND	ND	ND	ND	ND	ND	ND	16500
BES24-03	4	06.24.24.	-	-	9,586	ND	ND	ND	ND	ND	ND	ND	13100
BES24-04	4	06.24.24.	-	-	8,762	ND	ND	ND	ND	ND	ND	ND	8210
BES24-05	4	06.24.24.	-	-	6,445	ND	ND	ND	ND	ND	ND	ND	8210
BES24-06	4	06.24.24.	-	-	1,364	ND	ND	ND	ND	ND	ND	ND	9560
BES24-07	4	06.25.24	-	-	12,242	ND	ND	ND	ND	ND	ND	ND	**71800**
BES24-07	5	07.12.24	-	55	7,874	ND	ND	ND	ND	ND	ND	ND	8660
BES24-08	4	06.25.24	-	-	7,868	ND	ND	ND	ND	ND	ND	ND	9510
BES24-09	4	06.25.24	-	-	10,390	ND	ND	ND	ND	ND	ND	ND	11600
BES24-10	4	06.25.24	-	-	9,893	ND	ND	ND	ND	ND	ND	ND	10000
BES24-11	4	06.25.24	-	-	8,832	ND	ND	ND	ND	ND	ND	ND	12000
BES24-12	4	06.25.24	-	-	9,749	ND	ND	ND	ND	ND	ND	ND	1220
BES24-13	4	06.25.24	-	-	8,910	ND	ND	ND	ND	ND	ND	ND	5270
BES24-14	4	06.25.24	-	-	15,682	ND	ND	ND	ND	ND	ND	ND	17600
WES24-01	0-4	06.21.24	-	-	252	ND	ND	ND	ND	ND	ND	ND	49
WES24-07	0-4	06.24.24	-	-	276	ND	ND	ND	ND	ND	ND	ND	119
WES24-08	0-4	06.24.24	-	-	**1,365**	ND	ND	ND	ND	ND	ND	ND	119
WES24-09	0-4	06.24.24	-	-	302	ND	ND	ND	ND	ND	ND	ND	44
WES24-14	0-4	06.25.24	-	-	252	ND	ND	ND	ND	ND	ND	ND	121
WES24-15	0-4	06.25.24	-	-	187	ND	ND	ND	ND	ND	ND	ND	84
WES24-16	4-5	07.12.24	-	3	4,195	ND	ND	ND	ND	ND	ND	ND	7380
WES24-17	0-4	07.12.24	-	66	164	ND	ND	ND	ND	ND	ND	ND	35
WES24-18	0-4	07.12.24	-	64	195	ND	ND	ND	ND	ND	ND	ND	36

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed

Bold and green shaded indicates exceedance outside of NMOCD Reclamation Criteria (off-pad)

APPENDIX – Closure Criteria Research Documentation

Bettis State Com #3 C-04844 POD1

8/12/2024, 8:44:17 AM

GIS WATERS PODs

- Pending
- Inactive
- Plugged
-

OSE District Boundary

Water Right Regulations

- Closure Area
- Artesian Planning Area

New Mexico State Trust Lands

- Both Estates

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Esri, HERE, iPC, Esri, HERE, Garmin, iPC, Maxar

Online web user

This is an unofficial map from the OSE's online application.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Distance to nearest water course 8479 ft

April 1, 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

Distance to Nearest Lake 744951

April 2, 2024

Wetlands

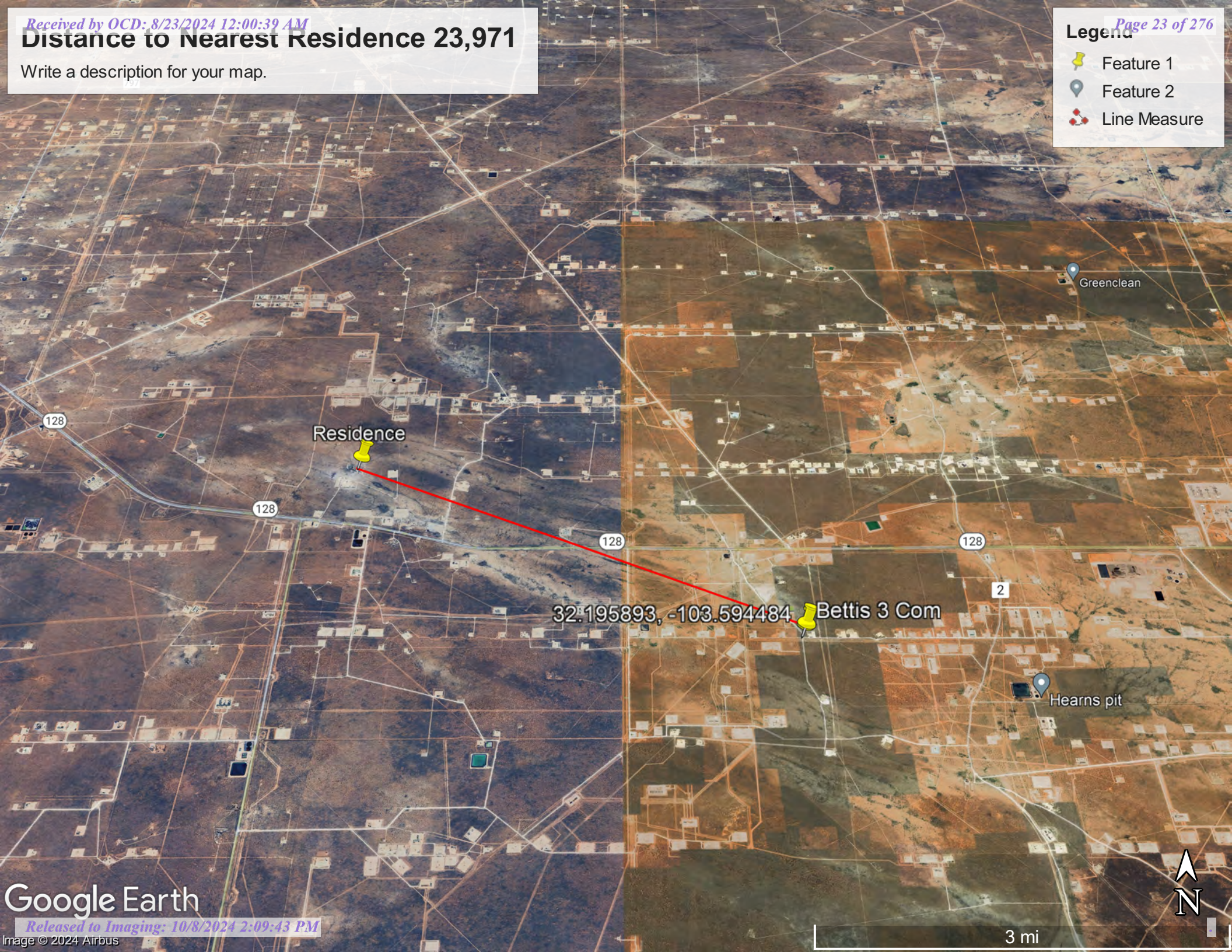
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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

Distance to Nearest Residence 23,971

Write a description for your map.



Distance to Nearest Spring Salt Lake 774

Write a description for your map.

U.S. Fish and Wildlife Service
National Wetlands Inventory

Distance to nearest Wetland 12119

April 2, 2024

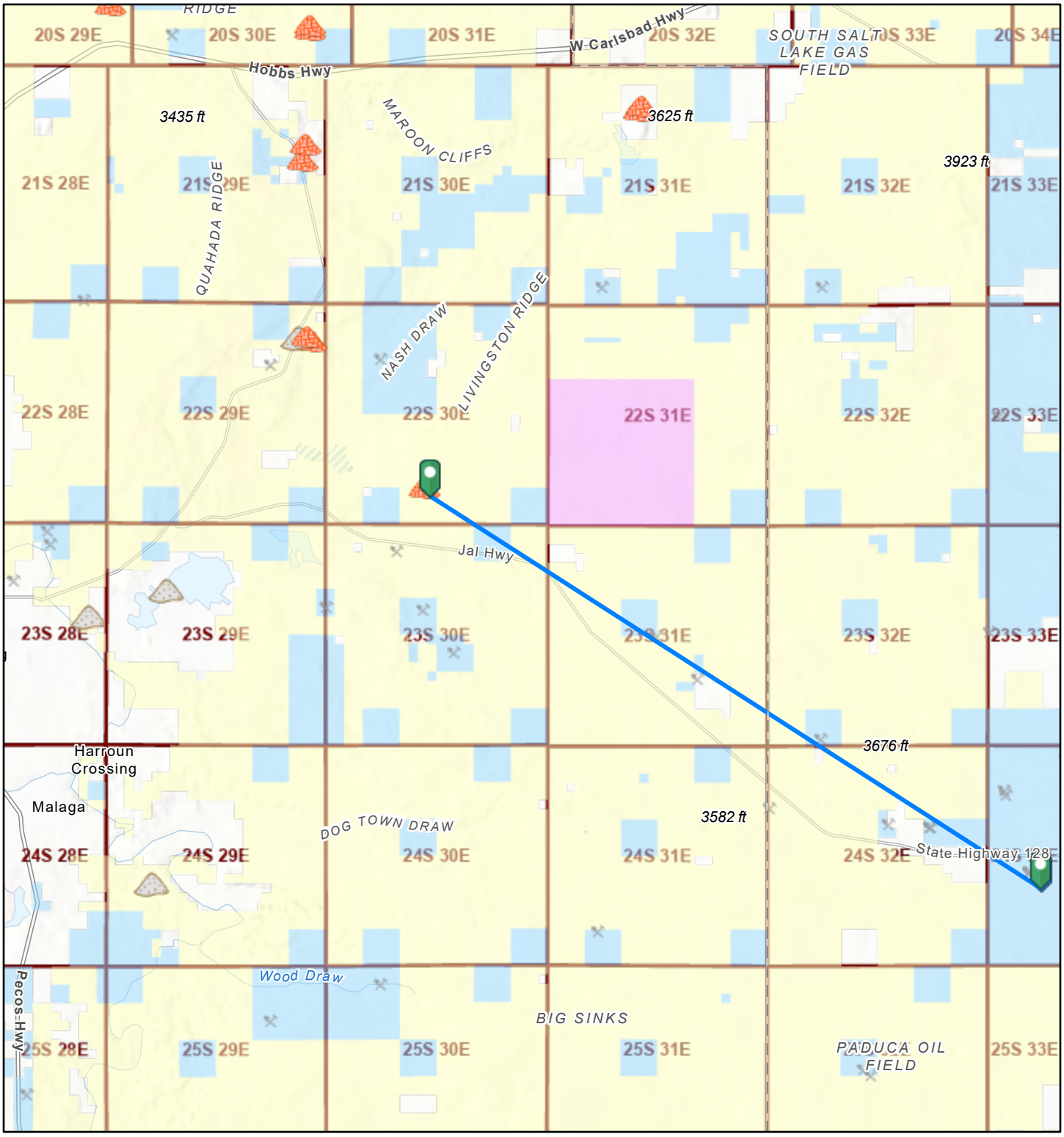
Wetlands

- 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

Distance to nearest Mine 104763



4/1/2024, 5:13:32 PM

1:288,895

0 2 4 8 mi

0 3.25 6.5 13 km

Registered Mines

- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Aggregate, Stone etc.
- Industrial Minerals (Other)
- Potash
- Salt

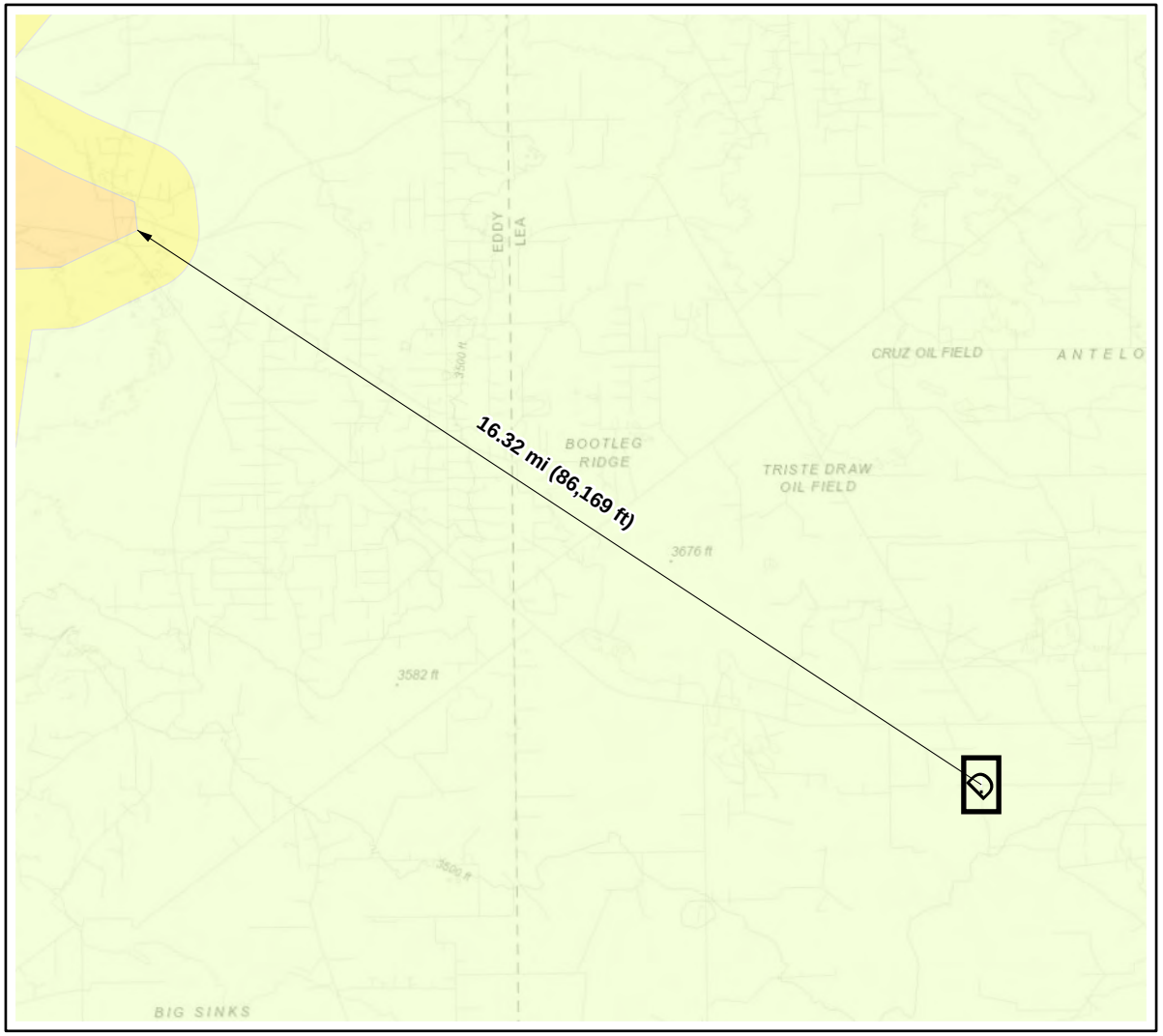
Land Ownership

- BLM
- DOE
- P
- S
- PLSS Townships

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

EMNRD MMD GIS Coordinator

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



Overview Map

0 0.75 1.5 3 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
32.259628°, -103.703993°

NAD 1983 UTM Zone 13N
Date: Apr 04/24

Karst Potential Map
Bettis State Com #3

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 2023; 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.

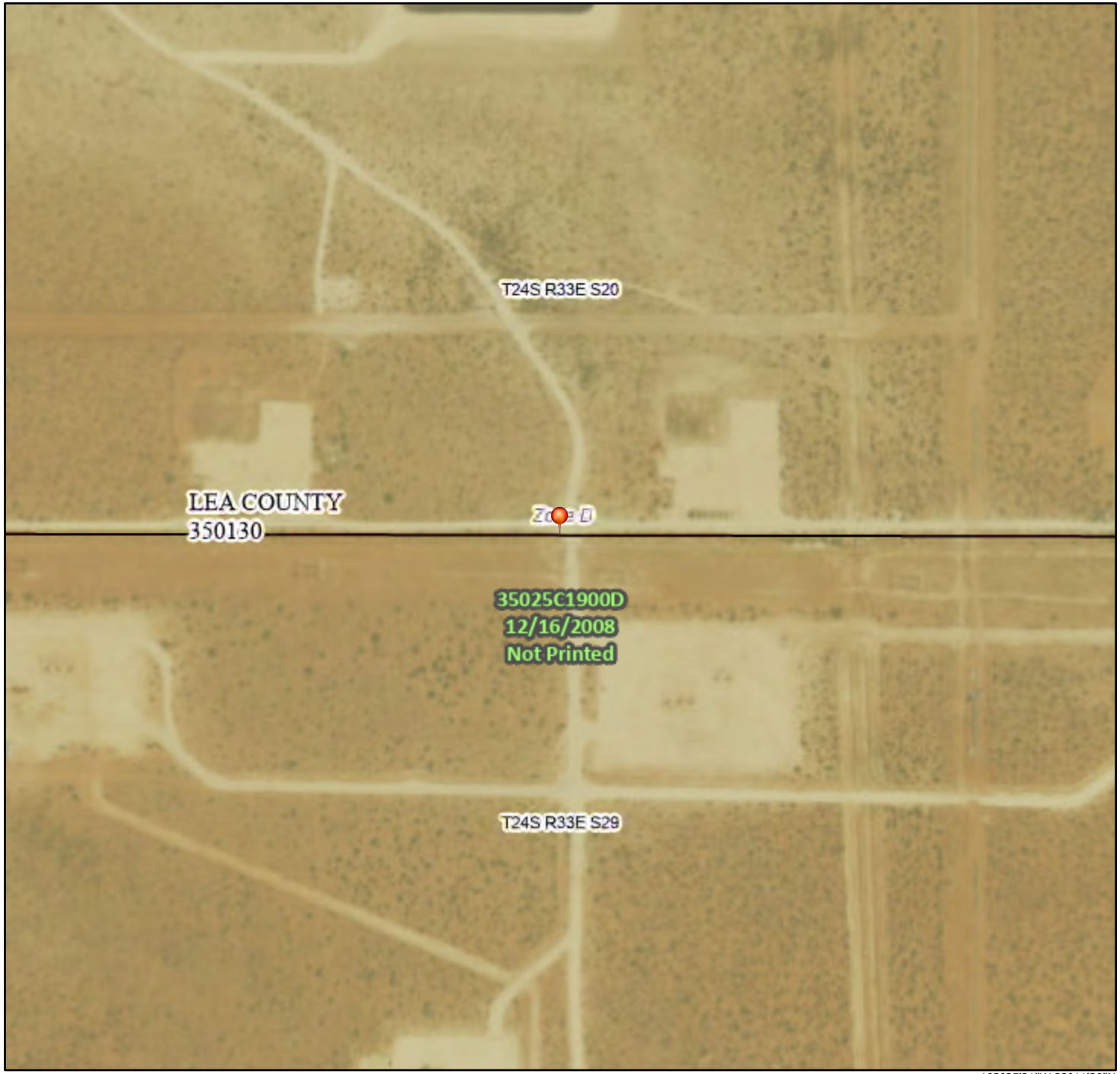
VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\Tap Rock\24E-01276\Project\24E-01276.aprx

National Flood Hazard Layer FIRMette

FEMA

103°35'59"W 32°12'N



103°35'21"W 32°11'30"N

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

1:6,000

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.

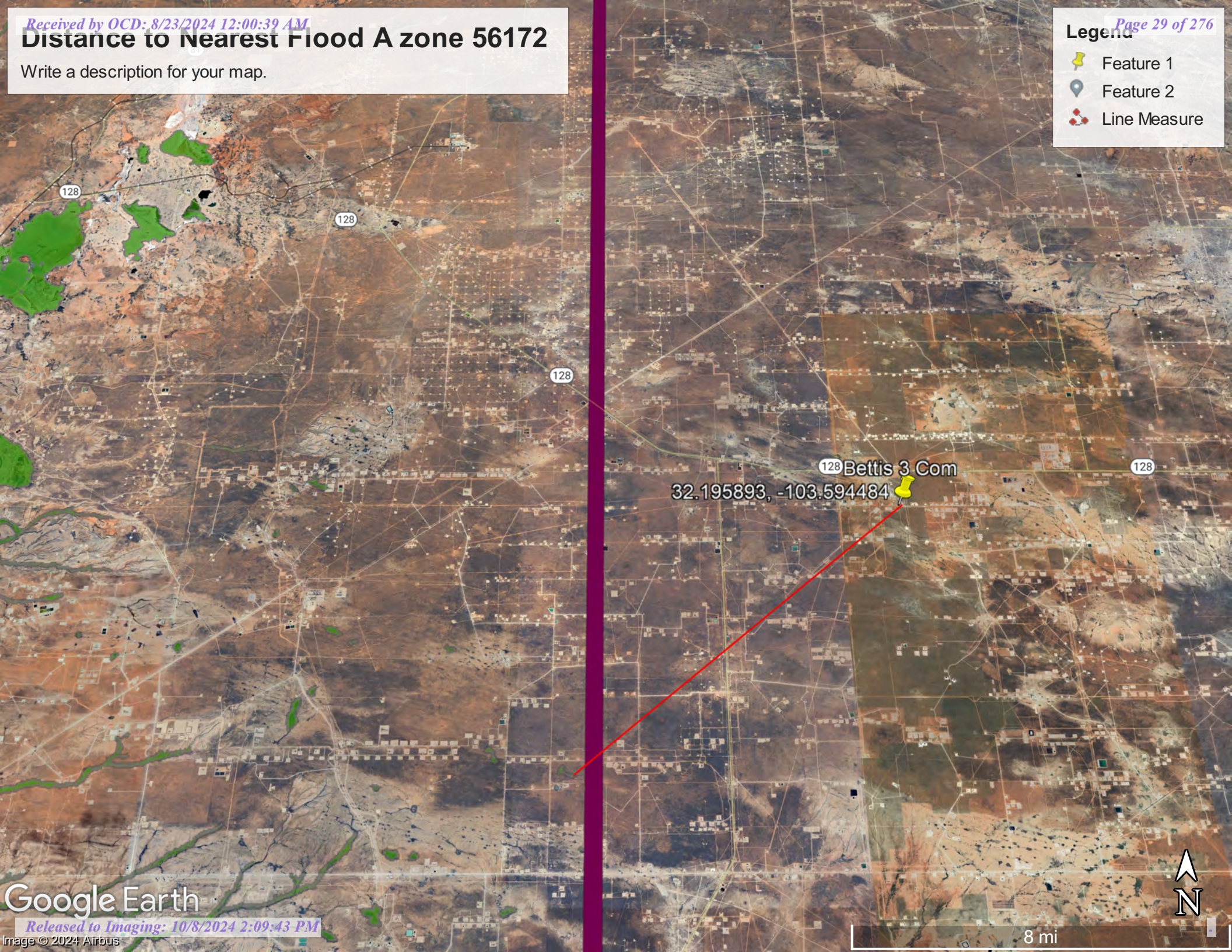
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/1/2024 at 8:18 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.

Distance to Nearest Flood A zone 56172

Write a description for your map.



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

April 1, 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
BE	Berino-Cacique loamy fine sands association	2.5	12.1%
PU	Pyote and Maljamar fine sands	18.0	87.9%
Totals for Area of Interest		**20.4**	**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

BE—Berino-Cacique loamy fine sands association

Map Unit Setting

National map unit symbol: dmpd
Elevation: 3,000 to 3,900 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 6 inches: loamy fine sand
Btk - 6 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 8.7 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 12 inches: loamy fine sand
Bt - 12 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: 5 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: 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

Maljamar

Percent of map unit: 6 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Palomas

Percent of map unit: 4 percent
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

PU—Pyote and Maljamar fine sands

Map Unit Setting

National map unit symbol: dmqq
Elevation: 3,000 to 3,900 feet
Mean annual precipitation: 10 to 12 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

Pyote and similar soils: 46 percent
Maljamar and similar soils: 44 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pyote

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

Typical profile

A - 0 to 30 inches: fine sand
Bt - 30 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 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: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A

Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Maljamar

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

Typical profile

A - 0 to 24 inches: fine sand
Bt - 24 to 50 inches: sandy clay loam
Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
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: 5 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: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 10 percent
Ecological site: R070BC022NM - Sandhills
Hydric soil rating: No

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USDA Natural Resources Conservation Service

Ecological site R070BD003NM
Loamy Sand

Accessed: 04/02/2024

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
R070BD005NM	**Deep Sand** Deep Sand

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site is on uplands, plains, dunes, fan piedmonts and in inter dunal areas. The parent material consists of mixed alluvium and or eolian sands derived from sedimentary rock. Slope range on this site range from 0 to 9 percent with the average of 5 percent.

Low stabilized dunes may occur occasionally on this site. Elevations range from 2,800 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Fan piedmont (2) Alluvial fan (3) Dune
Elevation	2,800–5,000 ft
Slope	0–9%
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 207 to 220 days. The last killing frost being late March or early April and the first killing frost being in later 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 this site. Strong winds blow from the southwest from January through June, which accelerates soil drying during a critical period for cool season 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 moderately deep or very deep. Surface textures are loamy fine sand, fine sandy loam, loamy very fine sand or gravelly sandy loam.

Subsurface is a loamy fine sand, coarse sandy loam, fine sandy loam or loam that averages less than 18 percent clay and less than 15 percent carbonates.

Substratum is a fine sandy loam or gravelly fine sandy loam with less than 15 percent gravel and with less than 40 percent calcium carbonate. Some layers high in lime or with caliche fragments may occur at depths of 20 to 30 inches.

These soils, if unprotected by plant cover and organic residue, become wind blown and low hummocks are formed.

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

Characteristic soils are:
Maljamar
Berino
Parjarito
Palomas
Wink
Pyote

Table 4. Representative soil features

Surface texture	(1) Fine sand (2) Fine sandy loam (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to moderately rapid

Soil depth	40–72 in
Surface fragment cover <=3"	0–10%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–7 in
Calcium carbonate equivalent (0-40in)	3–40%
Electrical conductivity (0-40in)	2–4 mmhos/cm
Sodium adsorption ratio (0-40in)	0–2
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	4–12%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

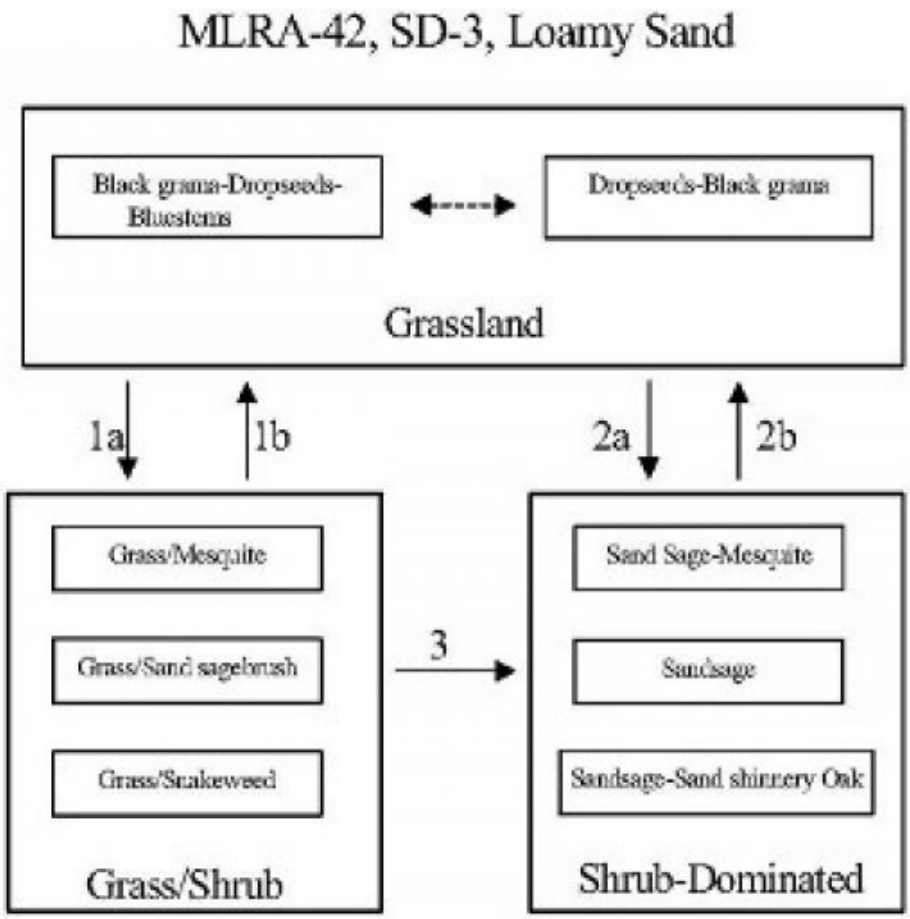
Overview

The Loamy Sand site intergrades with the Deep Sand and Sandy sites (SD-3). These sites can be differentiated by surface soil texture and depth to a textural change. Loamy Sand and Deep Sand sites have coarse textured (sands and loamy sand) surface soils while Sandy sites have moderately coarse textured (sandy loam and fine sandy loam) surfaces. Although Loamy Sand and Deep Sand sites have similar surface textures, the depth to a textural change is different—Loamy Sand sub-surface textures typically increase in clay at approximately 20 to 30 inches, and Deep Sand sites not until around 40 inches.

The historic plant community of Loamy Sand sites is dominated by black grama (*Bouteloua eriopoda*), dropseeds (*Sporobolus flexuosus*, *S. contractus*, *S. cryptandrus*), and bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), with scattered shinnery oak (*Quercus havardii*) and sand sage (*Artemisia filifolia*). Perennial and annual forb abundance and distribution are dependent on precipitation. Litter and to a lesser extent, bare ground, are a significant proportion of ground cover while grasses compose the remainder. Decreases in black grama indicate a transition to either a grass/shrub or shrub-dominated state. The grass/shrub state is composed of grasses/honey mesquite (*Prosopis glandulosa*), grasses/broom snakeweed (*Gutierrezia sarothrae*), or grasses/sand sage. The shrub-dominated state occurs after a severe loss of grass cover and a prevalence of sand sage with secondary shinnery oak and mesquite. Heavy grazing intensity and/or drought are influential drivers in decreasing black grama and bluestems and subsequently increasing shrub cover, erosion, and bare patches. Historical fire suppression also encourages shrub pervasiveness and a competitive advantage over grass species (McPherson 1995). Brush and grazing management, however, may reverse grass/shrub and shrub-dominated states toward the grassland-dominated historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram):



1a. Drought, over grazing, fire suppression.
1b. Brush control, prescribed grazing

2.a Severe loss of grass cover, fire suppression, erosion.
2b. Brush control, seeding, prescribed grazing.

3. Continued loss of grass cover, erosion.

State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

Grassland: The historic plant community is a uniformly distributed grassland dominated by black grama, dropseeds, and bluestems. Sand sage and shinnery oak are evenly dispersed throughout the grassland due to the coarse soil

surface texture. Perennial and annual forbs are common but their abundance and distribution are reflective of precipitation. Bluestems initially, followed by black grama, decrease with drought and heavy grazing intensity. Historical fire frequency is unknown but likely occurred enough to remove small shrubs to the competitive advantage of grass species. Fire suppression, drought conditions, and excessive grazing drive most grass species out of competition with shrub species. Diagnosis: Grassland dominated by black grama, dropseeds, and bluestems. Shrubs, such as sand sage, shinnery oak, and mesquite are dispersed throughout the grassland. Forbs are present and populations fluctuate with precipitation variability.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	442	833	1224
Forb	110	208	306
Shrub/Vine	98	184	270
Total	**650**	**1225**	**1800**

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	28%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	50%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	22%

Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - 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 State: The grass/shrub state is dominated by communities of grasses/mesquite, grasses/snakeweed, or grasses/sand sage. Decreases in black grama and bluestem species lead to an increase in bare patches and mesquite which further competes with grass species. An increase of dropseeds and threeawns occurs. Grass distribution becomes more patchy with an absence or severe decrease in black grama and bluestems. Mesquite provides nitrogen and soil organic matter to co-dominant grasses (Ansley and Jacoby 1998, Ansley et al. 1998). Mesquite mortality when exposed to fire is low due to aggressive resprouting abilities. Herbicide application combined with subsequent prescribed fire may be more effective in mesquite reduction (Britton and Wright 1971). Diagnosis: This state is dominated by an increased abundance of communities including grass/mesquite, grass/snakeweed, or grass/sand sage. Dropseeds and threeawns have a patchy distribution. Transition to Grass/Shrub State (1a): The historic plant community begins to shift toward the grass/shrub state as drivers such as drought, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by a decrease in black grama with a subsequent increase of dropseeds, threeawns, mesquite, and snakeweed. Snakeweed has been documented to outcompete black grama especially under conditions of fire suppression and drought (McDaniel et al. 1984). Key indicators of approach to transition: • Loss of black grama cover • Surface soil erosion • Bare patch expansion • Increased dropseed/threeawn and mesquite, snakeweed, or sand sage abundances Transition to Historic Plant Community (1b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community.

State 3
Shrub Dominated

Community 3.1
Shrub Dominated

Shrub-Dominated State: The shrub-dominated state results from a severe loss of grass cover. This state's primary species is sand sage. Shinnery oak and mesquite also occur; however, grass cover is limited to intershrub distribution. Sand sage stabilizes light sandy soils from wind erosion, which enhances protected grass/forb cover (Davis and Bonham 1979). However, shinnery oak also responds to the sandy soils with dense stands due to an

aggressive rhizome system. Shinnery oak's extensive root system promotes competitive exclusion of grasses and forbs. Sand sage, shinnery oak, and mesquite can be controlled with herbicide (Herbel et al. 1979, Pettit 1986). Transition to Shrub-Dominated (2a): Severe loss of grass species with increased erosion and fire suppression will result in a transition to a shrub-dominated state with sand sage, Shin oak, and honey mesquite directly from the grassland-dominated state. Key indicators of approach to transition: • Severe loss of grass species cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite abundance Transition to Historic Plant Community (2b): Brush and grazing management may restore the grassland component and reverse shrub or grass/shrub dominated states back toward the historic plant community. In addition, seeding with native grass species will augment the transition to a grassland-dominated state. Transition to Shrub-Dominated (3): If the grass/shrub site continues to lose grass cover with soil erosion, the site will transition to a shrub-dominated state with sand sage, shinnery oak, and honey mesquite. Key indicators of approach to transition: • Continual loss of dropseeds/threeawns cover • Surface soil erosion • Bare patch expansion • Increased sand sage, shinnery oak, and mesquite/dropseed/threeawn and mesquite/snakeweed abundance

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**			61–123	
	little bluestem	SCSC	*Schizachyrium scoparium*	61–123	–
2	**Warm Season**			37–61	
	sand bluestem	ANHA	*Andropogon hallii*	37–61	–
3	**Warm Season**			37–61	
	cane bluestem	BOBA3	*Bothriochloa barbinodis*	37–61	–
	silver bluestem	BOSA	*Bothriochloa saccharoides*	37–61	–
4	**Warm Season**			123–184	
	black grama	BOER4	*Bouteloua eriopoda*	123–184	–
	bush muhly	MUPO2	*Muhlenbergia porteri*	123–184	–
5	**Warm Season**			123–184	
	thin paspalum	PASE5	*Paspalum setaceum*	123–184	–
	plains bristlegrass	SEVU2	*Setaria vulpiseta*	123–184	–
	fringed signalgrass	URCI	*Urochloa ciliatissima*	123–184	–
6	**Warm Season**			123–184	
	spike dropseed	SPCO4	*Sporobolus contractus*	123–184	–
	sand dropseed	SPCR	*Sporobolus cryptandrus*	123–184	–
	mesa dropseed	SPFL2	*Sporobolus flexuosus*	123–184	–
7	**Warm Season**			61–123	
	hooded windmill grass	CHCU2	*Chloris cucullata*	61–123	–
	Arizona cottontop	DICA8	*Digitaria californica*	61–123	–
9	**Other Perennial Grasses**			37–61	
	Grass, perennial	2GP	*Grass, perennial*	37–61	–
Shrub/Vine					
8	**Warm Season**			37–61	
	New Mexico feathergrass	HENE5	*Hesperostipa neomexicana*	37–61	–
	giant dropseed	SPGI	*Sporobolus giganteus*	37–61	–
10	**Shrub**			61–123	

	sand sagebrush	ARFI2	*Artemisia filifolia*	61–123	–
	Havard oak	QUHA3	*Quercus havardii*	61–123	–
11	**Shrub**			34–61	
	fourwing saltbush	ATCA2	*Atriplex canescens*	37–61	–
	featherplume	DAFO	*Dalea formosa*	37–61	–
12	**Shrub**			37–61	
	jointfir	EPHED	*Ephedra*	37–61	–
	littleleaf ratany	KRER	*Krameria erecta*	37–61	–
13	**Other Shrubs**			37–61	
	Shrub (>.5m)	2SHRUB	*Shrub (>.5m)*	37–61	–
Forb					
14	**Forb**			61–123	
	leatherweed	CRPOP	*Croton pottsii var. pottsii*	61–123	–
	Indian blanket	GAPU	*Gaillardia pulchella*	61–123	–
	globemallow	SPHAE	*Sphaeralcea*	61–123	–
15	**Forb**			12–37	
	woolly groundsel	PACA15	*Packera cana*	12–37	–
16	**Forb**			61–123	
	touristplant	DIWI2	*Dimorphocarpa wislizeni*	61–123	–
	woolly plantain	PLPA2	*Plantago patagonica*	61–123	–
17	**Other Forbs**			37–61	
	Forb (herbaceous, not grass nor grass-like)	2FORB	*Forb (herbaceous, not grass nor grass-like)*	37–61	–

Animal community

This Ecological Site provides habitat which supports a resident animal community that is characterized by pronghorn antelope, desert cottontail, spotted ground squirrel, black-tailed prairie dog, yellow faced pocket gopher, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, roadrunner, meadowlark, burrowing owl, white necked raven, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake, dusty hognose snake and ornate box turtle.
Where mesquite has invaded, most resident birds and scissor-tailed flycatcher, morning dove and Swainson's hawk, nest. Vesper and grasshopper sparrows utilize the site during migration.

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
Berino B
Kinco A
Maljamar B
Pajarito B
Palomas B
Wink B
Pyote A

Recreational uses

This site offers recreation potential for hiking, borseback riding, nature observation, photography and hunting. During years of abundant spring moisture, this site displays a colorful array of wildflowers during May and June.

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock at any time of year. In cases where this site has been invaded by brush species it is especially suited for goats. Mismanagement of this site will cause a decrease in species such as the bluestems, blsck grama, bush muhly, plains bristlegrass, New Mexico feathergrass, Arizona cottontop and fourwing saltbush. A corresponding increase in the dropseeds, windmill grass, fall witchgrass, silver bluestem, sand sagebrush, shinery oak and ephedra will occur. This will also cause an increase in bare ground which will increase soil erodibility. This site will respond well 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 2.3 – 3.5
75 – 51 3.0 – 4.5
50 – 26 4.6 – 9.0
25 – 0 9.1 +

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.

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Contributors

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Quinn Hodgson

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:**

APPENDIX BB – Daily Field Reportsaily Field Reports

Daily Site Visit Report

Client:	Tap Rock	Inspection Date:	4/3/2024
Site Location Name:	Bettis State Com #3	Report Run Date:	4/3/2024 10:14 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	4/3/2024 8:30 AM
Departed Site	4/3/2024 2:00 PM

Daily Site Visit Report

Field Notes

9:56 Completed safety paperwork on site

9:56 On site to conduct EM31 survey on release area

9:57 Many poly lines and an 18” lay flat line in area

9:57 Release is very recent, staining still visible on ground.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: West	**Viewing Direction**: Southeast
	
POR	POR

Viewing Direction: South	**Viewing Direction**: East
	
North - south running 18” lay flat line. Runs under road inside steel culvert	Far west , north toe of release

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: Northeast
	
Far west, south toe of release	Release area from south side looking north

Viewing Direction: West	**Viewing Direction**: West
	
Underground crude oil pipeline immediately south of release. Also seen, high voltage transmission lines approximately 30’ South of survey area	Metal signage immediately northeast of POR

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: West
	
West end of 20’ metal pipe section	East end of 20’ metal pipe section

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Austin Harris

Signature: 

Signature

Daily Site Visit Report

Client	Tap Rock	Inspection Date	7/12/2024
Site Location Name	Bettis State Com #3	API #	
Client Contact Name	Bill Ramsey	Project Owner	
Client Contact Phone #	720-238-2787	Project Manager	
Project Reference #			
Unique Project ID			

Summary of Times

Arrived at Site	7/12/2024 7:30 AM
Departed Site	

Field Notes

8:10 On site safety meeting and walk through of scope of work.

8:11 Dirt crew was unable to get a truck so we laid down a liner west of the excavation

8:11 Began excavation

8:12 Samples at the time of this note that are to be collected are step outs from WS24-02,5 and excavating BES24-07 to 5ft bgs

10:23 All samples were collected between the time of 8:00 and 10:30

11:01 WES24-16 was collected from 4-5ft and was below criteria, BES24-07 was also sampled and field screened below loosest criteria. WES24-17,18 were both below strictest criteria.

11:01 All samples were jarred on site

Next Steps & Recommendations

1 Pending lab results dispose of contaminated soils on line and proceed to backfill

Daily Site Visit Report

Site Photos

Viewing Direction: West	**Viewing Direction**: North
	
South side of the excavation facing west	East side of the excavation facing north

Daily Site Visit Report

Viewing Direction: North	**Viewing Direction**: East
	
West side of excavation facing north	South side of excavation facing east
Viewing Direction: East	**Viewing Direction**: South
	
North side of excavation facing east	West side of excavation facing south

Daily Site Visit Report

Viewing Direction: South

East side of excavation facing south

Viewing Direction: West

North side of excavation facing west

Viewing Direction: Southwest

Overview of inside of excavation facing southwest

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature: 

APPENDIX – 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:	Bettis State Com # 3
Work Order:	E407245
Job Number:	24015-0001
Received:	7/31/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/1/24

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: 8/1/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com # 3
Workorder: E407245
Date Received: 7/31/2024 8:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/31/2024 8:30:00AM, under the Project Name: Bettis State Com # 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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

Table of Contents

Sample Summary

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/01/24 11:50

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BG 24 - 01 - 0'	E407245-01A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 02 - 0'	E407245-02A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 03 - 0'	E407245-03A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 04 - 0'	E407245-04A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 05 - 0'	E407245-05A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 06 - 0'	E407245-06A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 07 - 0'	E407245-07A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 08 - 0'	E407245-08A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 09 - 0'	E407245-09A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.
BG 24 - 10 - 0'	E407245-10A	Soil	07/29/24	07/31/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 01 - 0'

E407245-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.2 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.2 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*94.2 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 02 - 0'

E407245-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*117 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.5 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*117 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.5 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*107 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*81.1 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 03 - 0'

E407245-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*114 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.6 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*114 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.6 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*85.0 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 04 - 0'

E407245-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*113 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.3 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*113 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.3 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*100 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 05 - 0'

E407245-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.9 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.9 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*96.7 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 06 - 0'

E407245-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*114 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.2 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*114 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.2 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*90.5 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 07 - 0'

E407245-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*118 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*110 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*118 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*88.7 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*110 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*94.4 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 08 - 0'

E407245-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*117 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.5 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*117 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*89.5 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*89.2 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 09 - 0'

E407245-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*116 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*109 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*91.7 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

BG 24 - 10 - 0'

E407245-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Benzene	ND	0.0250	1	07/31/24	07/31/24	
Ethylbenzene	ND	0.0250	1	07/31/24	07/31/24	
Toluene	ND	0.0250	1	07/31/24	07/31/24	
o-Xylene	ND	0.0250	1	07/31/24	07/31/24	
p,m-Xylene	ND	0.0500	1	07/31/24	07/31/24	
Total Xylenes	ND	0.0250	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*115 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.8 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2431078
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/31/24	07/31/24	
Surrogate: Bromofluorobenzene		*115 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: 1,2-Dichloroethane-d4		*90.8 %*	*70-130*	*07/31/24*	*07/31/24*	
Surrogate: Toluene-d8		*108 %*	*70-130*	*07/31/24*	*07/31/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2431064
Diesel Range Organics (C10-C28)	ND	25.0	1	07/31/24	07/31/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/31/24	07/31/24	
Surrogate: n-Nonane		*93.8 %*	*50-200*	*07/31/24*	*07/31/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2431073
Chloride	ND	20.0	1	07/31/24	07/31/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

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 (2431078-BLK1)									Prepared: 07/31/24 Analyzed: 07/31/24
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	*0.582*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.451*		*0.500*		*90.2*	*70-130*			
Surrogate: Toluene-d8	*0.540*		*0.500*		*108*	*70-130*			
LCS (2431078-BS1)									Prepared: 07/31/24 Analyzed: 07/31/24
Benzene	2.23	0.0250	2.50		89.3	70-130			
Ethylbenzene	2.34	0.0250	2.50		93.4	70-130			
Toluene	2.41	0.0250	2.50		96.5	70-130			
o-Xylene	2.56	0.0250	2.50		102	70-130			
p,m-Xylene	5.12	0.0500	5.00		102	70-130			
Total Xylenes	7.68	0.0250	7.50		102	70-130			
Surrogate: Bromofluorobenzene	*0.587*		*0.500*		*117*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.461*		*0.500*		*92.1*	*70-130*			
Surrogate: Toluene-d8	*0.538*		*0.500*		*108*	*70-130*			
Matrix Spike (2431078-MS1)				**Source: E407245-06**					Prepared: 07/31/24 Analyzed: 07/31/24
Benzene	2.18	0.0250	2.50	ND	87.2	48-131			
Ethylbenzene	2.31	0.0250	2.50	ND	92.4	45-135			
Toluene	2.38	0.0250	2.50	ND	95.3	48-130			
o-Xylene	2.53	0.0250	2.50	ND	101	43-135			
p,m-Xylene	4.99	0.0500	5.00	ND	99.7	43-135			
Total Xylenes	7.52	0.0250	7.50	ND	100	43-135			
Surrogate: Bromofluorobenzene	*0.582*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.464*		*0.500*		*92.7*	*70-130*			
Surrogate: Toluene-d8	*0.537*		*0.500*		*107*	*70-130*			
Matrix Spike Dup (2431078-MSD1)				**Source: E407245-06**					Prepared: 07/31/24 Analyzed: 07/31/24
Benzene	2.38	0.0250	2.50	ND	95.4	48-131	8.91	23	
Ethylbenzene	2.52	0.0250	2.50	ND	101	45-135	8.72	27	
Toluene	2.59	0.0250	2.50	ND	104	48-130	8.48	24	
o-Xylene	2.77	0.0250	2.50	ND	111	43-135	9.10	27	
p,m-Xylene	5.47	0.0500	5.00	ND	109	43-135	9.16	27	
Total Xylenes	8.24	0.0250	7.50	ND	110	43-135	9.14	27	
Surrogate: Bromofluorobenzene	*0.586*		*0.500*		*117*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.472*		*0.500*		*94.4*	*70-130*			
Surrogate: Toluene-d8	*0.538*		*0.500*		*108*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

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 (2431078-BLK1)									Prepared: 07/31/24 Analyzed: 07/31/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	*0.582*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.451*		*0.500*		*90.2*	*70-130*			
Surrogate: Toluene-d8	*0.540*		*0.500*		*108*	*70-130*			
LCS (2431078-BS2)									Prepared: 07/31/24 Analyzed: 07/31/24
Gasoline Range Organics (C6-C10)	49.9	20.0	50.0		99.7	70-130			
Surrogate: Bromofluorobenzene	*0.579*		*0.500*		*116*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.442*		*0.500*		*88.4*	*70-130*			
Surrogate: Toluene-d8	*0.546*		*0.500*		*109*	*70-130*			
Matrix Spike (2431078-MS2)				**Source: E407245-06**					Prepared: 07/31/24 Analyzed: 07/31/24
Gasoline Range Organics (C6-C10)	51.7	20.0	50.0	ND	103	70-130			
Surrogate: Bromofluorobenzene	*0.587*		*0.500*		*117*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.456*		*0.500*		*91.2*	*70-130*			
Surrogate: Toluene-d8	*0.546*		*0.500*		*109*	*70-130*			
Matrix Spike Dup (2431078-MSD2)				**Source: E407245-06**					Prepared: 07/31/24 Analyzed: 07/31/24
Gasoline Range Organics (C6-C10)	51.5	20.0	50.0	ND	103	70-130	0.395	20	
Surrogate: Bromofluorobenzene	*0.595*		*0.500*		*119*	*70-130*			
Surrogate: 1,2-Dichloroethane-d4	*0.439*		*0.500*		*87.8*	*70-130*			
Surrogate: Toluene-d8	*0.560*		*0.500*		*112*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

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 (2431064-BLK1)									Prepared: 07/31/24 Analyzed: 07/31/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*47.1*		*50.0*		*94.3*	*50-200*			
LCS (2431064-BS1)									Prepared: 07/31/24 Analyzed: 07/31/24
Diesel Range Organics (C10-C28)	255	25.0	250		102	38-132			
Surrogate: n-Nonane	*48.8*		*50.0*		*97.7*	*50-200*			
Matrix Spike (2431064-MS1)				**Source: E407245-07**					Prepared: 07/31/24 Analyzed: 07/31/24
Diesel Range Organics (C10-C28)	259	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	*49.2*		*50.0*		*98.4*	*50-200*			
Matrix Spike Dup (2431064-MSD1)				**Source: E407245-07**					Prepared: 07/31/24 Analyzed: 07/31/24
Diesel Range Organics (C10-C28)	269	25.0	250	ND	108	38-132	3.88	20	
Surrogate: n-Nonane	*48.5*		*50.0*		*96.9*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	8/1/2024 11:50:51AM

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 (2431073-BLK1)									Prepared: 07/31/24 Analyzed: 07/31/24
Chloride	ND	20.0							
LCS (2431073-BS1)									Prepared: 07/31/24 Analyzed: 07/31/24
Chloride	248	20.0	250		99.3	90-110			
Matrix Spike (2431073-MS1)				**Source: E407245-04**					Prepared: 07/31/24 Analyzed: 07/31/24
Chloride	251	20.0	250	ND	100	80-120			
Matrix Spike Dup (2431073-MSD1)				**Source: E407245-04**					Prepared: 07/31/24 Analyzed: 07/31/24
Chloride	256	20.0	250	ND	102	80-120	2.10	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:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	08/01/24 11:50

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 TapRock)	Company: TapRock (Bill Ramsey)	Lab WO# E407245	Job Number 24015-0001	1D 2D 3D Std: 2D ✓	NM ✓ CO UT TX
Project Name: Bettis State Com #3	Address:			
Project Manager: Chance Dixon	City, State, Zip:			
Address: Project #: 24E-01276	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct bill to TapRock 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
10:00	7/29/24	Soil	1	BG 24-01 0'		1	✓	✓	✓		✓				
10:05				BG 24-02 0'		2									
10:08				BG 24-03 0'		3									
10:10				BG 24-04 0'		4									
10:13				BG 24-05 0'		5									
10:15				BG 24-06 0'		6									
10:18				BG 24-07 0'		7									
10:20				BG 24-08 0'		8									
10:22				BG 24-09 0'		9									
10:25	↓	↓	↓	BG 24-10 0'		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	7/29/24	11:00	Michelle Gonzales	7-30-24	1100
Michelle Gonzales	7-30-24	1630		7-30-24	1633
	7-30-24	2300		7-31-24	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

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: 7/31/2024 9:39:08AM

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:	07/31/24 08:30	Work Order ID:	E407245
Phone:	(575) 748-0176	Date Logged In:	07/30/24 16:17	Logged In By:	Noe Soto
Email:	cdixon@vertex.ca	Due Date:	08/01/24 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: 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

envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Vertex Resource Services Inc.

Project Name:	Bettis State Com#3
Work Order:	E404059
Job Number:	24015-0001
Received:	4/10/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/15/24

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: 4/15/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com#3
Workorder: E404059
Date Received: 4/10/2024 6:00:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/10/2024 6:00:00AM, under the Project Name: Bettis State Com#3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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:	Bettis State Com#3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	04/15/24 12:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24 -01 0'	E404059-01A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -01 2'	E404059-02A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -02 0'	E404059-03A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -02 2'	E404059-04A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -03 0'	E404059-05A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -03 2'	E404059-06A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -04 0'	E404059-07A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -04 2'	E404059-08A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -05 0'	E404059-09A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -05 2'	E404059-10A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -06 0'	E404059-11A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -06 2'	E404059-12A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -07 0'	E404059-13A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -07 2'	E404059-14A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -08 0'	E404059-15A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.
BH24 -08 2'	E404059-16A	Soil	04/08/24	04/10/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -01 0'

E404059-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/11/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/11/24	
Toluene	ND	0.0250	1	04/10/24	04/11/24	
o-Xylene	ND	0.0250	1	04/10/24	04/11/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/11/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/11/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.6 %*	*70-130*	*04/10/24*	*04/11/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/11/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*97.1 %*	*70-130*	*04/10/24*	*04/11/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**121**	20.0	1	04/10/24	04/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -01 2'

E404059-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.6 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.3 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**12300**	200	10	04/10/24	04/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -02 0'

E404059-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.5 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.7 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*109 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**48.6**	20.0	1	04/10/24	04/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -02 2'

E404059-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.7 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**27.4**	20.0	1	04/10/24	04/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -03 0'

E404059-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.1 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.6 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*108 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	ND	20.0	1	04/10/24	04/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -03 2'

E404059-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.0 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.1 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*110 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	ND	20.0	1	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -04 0'

E404059-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.7 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	ND	20.0	1	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -04 2'

E404059-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.9 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*107 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**259**	20.0	1	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -05 0'

E404059-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*96.9 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*105 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**4600**	40.0	2	04/10/24	04/10/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -05 2'

E404059-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/10/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/10/24	
Toluene	ND	0.0250	1	04/10/24	04/10/24	
o-Xylene	ND	0.0250	1	04/10/24	04/10/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/10/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/10/24	
Surrogate: 4-Bromochlorobenzene-PID		*96.1 %*	*70-130*	*04/10/24*	*04/10/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/10/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.2 %*	*70-130*	*04/10/24*	*04/10/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*101 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**5950**	40.0	2	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -06 0'

E404059-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.3 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*104 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	ND	20.0	1	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -06 2'

E404059-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.8 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.1 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*106 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**4880**	40.0	2	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -07 0'

E404059-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.2 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.1 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*102 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**17800**	200	10	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -07 2'

E404059-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.9 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**15600**	400	20	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -08 0'

E404059-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*95.1 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*105 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**14200**	200	10	04/10/24	04/11/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

BH24 -08 2'

E404059-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Benzene	ND	0.0250	1	04/10/24	04/12/24	
Ethylbenzene	ND	0.0250	1	04/10/24	04/12/24	
Toluene	ND	0.0250	1	04/10/24	04/12/24	
o-Xylene	ND	0.0250	1	04/10/24	04/12/24	
p,m-Xylene	ND	0.0500	1	04/10/24	04/12/24	
Total Xylenes	ND	0.0250	1	04/10/24	04/12/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.7 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2415033
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/10/24	04/12/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.7 %*	*70-130*	*04/10/24*	*04/12/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2415053
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/24	04/12/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/24	04/12/24	
Surrogate: n-Nonane		*116 %*	*50-200*	*04/11/24*	*04/12/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2415041
Chloride	**16700**	400	20	04/10/24	04/11/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2415033-BLK1)									Prepared: 04/10/24 Analyzed: 04/10/24
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	*7.70*		*8.00*		*96.3*	*70-130*			
LCS (2415033-BS1)									Prepared: 04/10/24 Analyzed: 04/10/24
Benzene	4.84	0.0250	5.00		96.8	70-130			
Ethylbenzene	4.97	0.0250	5.00		99.3	70-130			
Toluene	4.92	0.0250	5.00		98.4	70-130			
o-Xylene	4.95	0.0250	5.00		98.9	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.73*		*8.00*		*96.6*	*70-130*			
Matrix Spike (2415033-MS1)				**Source: E404059-10**					Prepared: 04/10/24 Analyzed: 04/11/24
Benzene	4.87	0.0250	5.00	ND	97.4	54-133			
Ethylbenzene	5.00	0.0250	5.00	ND	100	61-133			
Toluene	4.96	0.0250	5.00	ND	99.2	61-130			
o-Xylene	4.96	0.0250	5.00	ND	99.1	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	100	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.8*	*70-130*			
Matrix Spike Dup (2415033-MSD1)				**Source: E404059-10**					Prepared: 04/10/24 Analyzed: 04/11/24
Benzene	4.86	0.0250	5.00	ND	97.3	54-133	0.178	20	
Ethylbenzene	4.98	0.0250	5.00	ND	99.6	61-133	0.385	20	
Toluene	4.94	0.0250	5.00	ND	98.7	61-130	0.522	20	
o-Xylene	4.94	0.0250	5.00	ND	98.8	63-131	0.354	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	0.477	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.7	63-131	0.437	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.66*		*8.00*		*95.7*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2415033-BLK1)									Prepared: 04/10/24 Analyzed: 04/10/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.56*		*8.00*		*94.5*	*70-130*			
LCS (2415033-BS2)									Prepared: 04/10/24 Analyzed: 04/10/24
Gasoline Range Organics (C6-C10)	47.5	20.0	50.0		94.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.62*		*8.00*		*95.2*	*70-130*			
Matrix Spike (2415033-MS2)				**Source: E404059-10**					Prepared: 04/10/24 Analyzed: 04/11/24
Gasoline Range Organics (C6-C10)	48.9	20.0	50.0	ND	97.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.76*		*8.00*		*97.0*	*70-130*			
Matrix Spike Dup (2415033-MSD2)				**Source: E404059-10**					Prepared: 04/10/24 Analyzed: 04/11/24
Gasoline Range Organics (C6-C10)	49.4	20.0	50.0	ND	98.9	70-130	1.12	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.69*		*8.00*		*96.1*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

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 (2415053-BLK1)									Prepared: 04/11/24 Analyzed: 04/12/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*56.9*		*50.0*		*114*	*50-200*			
LCS (2415053-BS1)									Prepared: 04/11/24 Analyzed: 04/12/24
Diesel Range Organics (C10-C28)	321	25.0	250		128	38-132			
Surrogate: n-Nonane	*60.5*		*50.0*		*121*	*50-200*			
Matrix Spike (2415053-MS1)				**Source: E404059-05**					Prepared: 04/11/24 Analyzed: 04/12/24
Diesel Range Organics (C10-C28)	320	25.0	250	ND	128	38-132			
Surrogate: n-Nonane	*63.0*		*50.0*		*126*	*50-200*			
Matrix Spike Dup (2415053-MSD1)				**Source: E404059-05**					Prepared: 04/11/24 Analyzed: 04/12/24
Diesel Range Organics (C10-C28)	326	25.0	250	ND	131	38-132	1.83	20	
Surrogate: n-Nonane	*63.7*		*50.0*		*127*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/15/2024 12:10:59PM

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 (2415041-BLK1)									Prepared: 04/10/24 Analyzed: 04/10/24
Chloride	ND	20.0							
LCS (2415041-BS1)									Prepared: 04/10/24 Analyzed: 04/10/24
Chloride	249	20.0	250		99.4	90-110			
Matrix Spike (2415041-MS1)				**Source: E404059-09**					Prepared: 04/10/24 Analyzed: 04/10/24
Chloride	5370	40.0	250	4600	307	80-120			M4
Matrix Spike Dup (2415041-MSD1)				**Source: E404059-09**					Prepared: 04/10/24 Analyzed: 04/10/24
Chloride	4970	40.0	250	4600	144	80-120	7.87	20	M4

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

Definitions and Notes

Vertex Resource Services Inc.	Project Name:	Bettis State Com#3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	04/15/24 12:10

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: ~~Tap Rock~~ JR Vertex	Company: Tap Rock	Lab WO# E404059	Job Number 24015-0001	1D 2D 3D Std: X
Project Name: Bettis State com #3	Address:			NM CO UT TX
Project Manager: Chance Dixon	City, State, Zip: on file			
Address: on file	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct Bill			
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
1000	04-8-24	Soil	1	BH24-01 0'		1												
1010				BH24-01 2'		2												
1020				BH24-02 0'		3												
1030				BH24-02 2'		4												
1040				BH24-03 0'		5												
1050				BH24-03 2'		6												
11:00				BH24-04 0'		7												
11:10				BH24-04 2'		8												
11:20				BH24-05 0'		9												
11:30				BH24-05 2'		10												

Additional Instructions: Tap rock Direct Bill, cc: Jrewis@vertex.ca, cdixon@vertex.ca

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
	4/9/24	10:20	Michelle Gonzalez	4-9-24	1020
Michelle Gonzalez	4-9-24	1622		4.9.24	1715
	4.9.24	2330	Hugh E Hell	4/10/24	0600

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 E404059

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: vertex	Company: Tap Rock	Lab WO# E404059	Job Number 24015-0001	1D 2D 3D Std: X	NM CO UT TX
Project Name: Bettis State Com #3	Address:			
Project Manager: Chance Dixon	City, State, Zip:			
Address:	Phone:			
City, State, Zip: on file	Email:			
Phone:	Miscellaneous: Direct Bill			
Email:				

4/10/24

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	4/8/24	Soil	1	BHZ4-06 0'		11												
11:50				BHZ4-06 2'		12												
12:00				BHZ4-07 0'		13												
12:10				BHZ4-07 2'		14												
12:20				BH24-08 0'		15												
12:30				BHZ4-08 2'		16												

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Additional Instructions: Tap Rock Direct Bill, cc: jrewis@vertex.ca, cdixon@vertex.ca

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
	4/9/24	10:20	Michelle Gonzales	4-9-24	1020
Michelle Gonzales	4-9-24	1622	J.M.	4.9.24	1715
J.M.	4.9.24	2330	Hugh J Hill	4/10/24	0600

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: 4/10/2024 1:36:21PM

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:	04/10/24 06:00	Work Order ID:	E404059
Phone:	(575) 748-0176	Date Logged In:	04/09/24 17:16	Logged In By:	Angelina Pineda
Email:	cdixon@vertex.ca	Due Date:	04/16/24 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?	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:	Bettis State Com # 3
Work Order:	E404121
Job Number:	24015-0001
Received:	4/15/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/19/24

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: 4/19/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com # 3
Workorder: E404121
Date Received: 4/15/2024 9:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/15/2024 9:30:00AM, under the Project Name: Bettis State Com # 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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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labadmin@envirotech-inc.com

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Envirotech Web Address: www.envirotech-inc.com

Table of Contents

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Sample Summary

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	04/19/24 12:31

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24 -09 0'	E404121-01A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -09 2'	E404121-02A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -10 0'	E404121-03A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -10 2'	E404121-04A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -11 0'	E404121-05A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -11 2'	E404121-06A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -12 0'	E404121-07A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -12 2'	E404121-08A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -13 0'	E404121-09A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -13 2'	E404121-10A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -14 0'	E404121-11A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -14 2'	E404121-12A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -01 0'	E404121-13A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -01 2'	E404121-14A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.
BH24 -01 4'	E404121-15A	Soil	04/09/24	04/15/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -09 0'

E404121-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.4 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/18/24	
Surrogate: n-Nonane		*81.2 %*	*50-200*	*04/18/24*	*04/18/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**1890**	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -09 2'

E404121-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.7 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.5 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/18/24	
Surrogate: n-Nonane		*80.8 %*	*50-200*	*04/18/24*	*04/18/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**16300**	400	20	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -10 0'

E404121-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.5 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/18/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/18/24	
Surrogate: n-Nonane		*83.4 %*	*50-200*	*04/18/24*	*04/18/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**10200**	200	10	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -10 2'

E404121-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.9 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.7 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*83.5 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**12600**	200	10	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -11 0'

E404121-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.5 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*87.7 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**62.1**	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -11 2'

E404121-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.8 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*83.0 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**455**	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -12 0'

E404121-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.1 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*84.0 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	ND	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -12 2'

E404121-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.8 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*84.1 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**13400**	200	10	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -13 0'

E404121-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.1 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.7 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*84.4 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**20.1**	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -13 2'

E404121-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*90.9 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*82.4 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**39.1**	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -14 0'

E404121-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.1 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.8 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*80.6 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	ND	20.0	1	04/17/24	04/18/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -14 2'

E404121-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.0 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*86.7 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**26.8**	20.0	1	04/17/24	04/19/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -01 0'

E404121-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.2 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.2 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*83.6 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	**26.4**	20.0	1	04/17/24	04/19/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -01 2'

E404121-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.8 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.4 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*85.6 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	ND	20.0	1	04/17/24	04/19/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

BH24 -01 4'

E404121-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Benzene	ND	0.0250	1	04/15/24	04/17/24	
Ethylbenzene	ND	0.0250	1	04/15/24	04/17/24	
Toluene	ND	0.0250	1	04/15/24	04/17/24	
o-Xylene	ND	0.0250	1	04/15/24	04/17/24	
p,m-Xylene	ND	0.0500	1	04/15/24	04/17/24	
Total Xylenes	ND	0.0250	1	04/15/24	04/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: EG			Batch: 2416024
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/15/24	04/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*91.3 %*	*70-130*	*04/15/24*	*04/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2416090
Diesel Range Organics (C10-C28)	ND	25.0	1	04/18/24	04/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	04/18/24	04/19/24	
Surrogate: n-Nonane		*78.0 %*	*50-200*	*04/18/24*	*04/19/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2416083
Chloride	ND	20.0	1	04/17/24	04/19/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

Volatile Organics by EPA 8021B

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2416024-BLK1)									Prepared: 04/15/24 Analyzed: 04/17/24
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	*7.44*		*8.00*		*93.1*	*70-130*			
LCS (2416024-BS1)									Prepared: 04/15/24 Analyzed: 04/17/24
Benzene	4.91	0.0250	5.00		98.2	70-130			
Ethylbenzene	4.96	0.0250	5.00		99.1	70-130			
Toluene	4.93	0.0250	5.00		98.5	70-130			
o-Xylene	4.89	0.0250	5.00		97.7	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	14.9	0.0250	15.0		99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.46*		*8.00*		*93.2*	*70-130*			
Matrix Spike (2416024-MS1)				**Source: E404121-12**					Prepared: 04/15/24 Analyzed: 04/17/24
Benzene	4.94	0.0250	5.00	ND	98.8	54-133			
Ethylbenzene	4.99	0.0250	5.00	ND	99.8	61-133			
Toluene	4.96	0.0250	5.00	ND	99.2	61-130			
o-Xylene	4.91	0.0250	5.00	ND	98.3	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	99.8	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.41*		*8.00*		*92.6*	*70-130*			
Matrix Spike Dup (2416024-MSD1)				**Source: E404121-12**					Prepared: 04/15/24 Analyzed: 04/17/24
Benzene	4.93	0.0250	5.00	ND	98.6	54-133	0.168	20	
Ethylbenzene	4.99	0.0250	5.00	ND	99.7	61-133	0.0632	20	
Toluene	4.95	0.0250	5.00	ND	99.1	61-130	0.0949	20	
o-Xylene	4.92	0.0250	5.00	ND	98.4	63-131	0.0671	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	0.0791	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.7	63-131	0.0311	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.40*		*8.00*		*92.5*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2416024-BLK1)									Prepared: 04/15/24 Analyzed: 04/17/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.31*		*8.00*		*91.3*	*70-130*			
LCS (2416024-BS2)									Prepared: 04/15/24 Analyzed: 04/17/24
Gasoline Range Organics (C6-C10)	48.9	20.0	50.0		97.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.45*		*8.00*		*93.1*	*70-130*			
Matrix Spike (2416024-MS2)				**Source: E404121-12**					Prepared: 04/15/24 Analyzed: 04/17/24
Gasoline Range Organics (C6-C10)	48.9	20.0	50.0	ND	97.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.46*		*8.00*		*93.2*	*70-130*			
Matrix Spike Dup (2416024-MSD2)				**Source: E404121-12**					Prepared: 04/15/24 Analyzed: 04/17/24
Gasoline Range Organics (C6-C10)	49.2	20.0	50.0	ND	98.5	70-130	0.787	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.44*		*8.00*		*93.0*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

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 (2416090-BLK1)									Prepared: 04/18/24 Analyzed: 04/18/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*42.6*		*50.0*		*85.2*	*50-200*			
LCS (2416090-BS1)									Prepared: 04/18/24 Analyzed: 04/18/24
Diesel Range Organics (C10-C28)	248	25.0	250		99.3	38-132			
Surrogate: n-Nonane	*43.7*		*50.0*		*87.4*	*50-200*			
Matrix Spike (2416090-MS1)				**Source: E404121-04**					Prepared: 04/18/24 Analyzed: 04/18/24
Diesel Range Organics (C10-C28)	245	25.0	250	ND	98.1	38-132			
Surrogate: n-Nonane	*42.9*		*50.0*		*85.9*	*50-200*			
Matrix Spike Dup (2416090-MSD1)				**Source: E404121-04**					Prepared: 04/18/24 Analyzed: 04/18/24
Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132	2.34	20	
Surrogate: n-Nonane	*43.8*		*50.0*		*87.6*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	4/19/2024 12:31:02PM

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 (2416083-BLK1)							Prepared: 04/17/24 Analyzed: 04/18/24		
Chloride	ND	20.0							
LCS (2416083-BS1)							Prepared: 04/17/24 Analyzed: 04/18/24		
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2416083-MS1)				**Source: E404121-03**			Prepared: 04/17/24 Analyzed: 04/18/24		
Chloride	10000	200	250	10200	NR	80-120			M4
Matrix Spike Dup (2416083-MSD1)				**Source: E404121-03**			Prepared: 04/17/24 Analyzed: 04/18/24		
Chloride	10500	200	250	10200	119	80-120	4.92	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:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	04/19/24 12:31

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	Lab WO# E404121	Job Number 24015-0001	1D 2D 3D Std: Std ✓	NM CO UT TX
Project Name: Bettis State com #5	Address: on File			
Project Manager: Chance Dixon	City, State, Zip:			
Address: on File	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct Bill			
Email:				

Analysis and Method / **EPA Program**

EPA Program: SDWA | CWA | RCRA

Compliance: Y or N

PWSID #:

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
0900	04-09-24	Soil	1	BH24-09 0'		1									
0910			1	BH24-09 2'		2									
0920			1	BH24-10 0'		3									
0930			1	BH24-10 2'		4									
0940			1	BH24-11 0'		5									
0950			1	BH24-11 2'		6									
1000			1	BH24-12 0'		7									
10:10			1	BH24-12 2'		8									
10:20			1	BH24-13 0'		9									
10:30			1	BH24-13 2'		10									

Additional Instructions: Tap Rock Direct Bill, cc: cdixon@vertex.ca jrewis@vertex.ca

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
	4/12/24	9:45	Michelle Gonzales	4-12-24	0945
Michelle Gonzales	4-12-24	1615	Andrew Mojo	4-13-24	1800
Andrew Mojo	4-13-24	2400		4/15/24	930
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

Chain of Custody

Client Information	Invoice Information	Lab Use Only	TAT	State
Client: Vertex	Company: Tap Rock	Lab WO# E404121	Job Number 24015-0001	1D 2D 3D Std
Project Name: Bettis State Com #5	Address: on File			NM CO UT TX
Project Manager: Chance Dixon	City, State, Zip:			
Address: on File	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct Bill			
Email:				

Sample Information							Analysis and Method										EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	GRO/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	
1300	04/09/24	Soil	1	BH24-14 0'		11											Compliance	Y	or	N
1310			1	BH24-14 2'		12											PWSID #			
1320			1	BG24-01 0'		13											Remarks			
1330			1	BG 24-01 2'		14														
1340			1	BG 24-01 4'		15														

Additional Instructions:
Tap Rock Direct Bill cc: cdixon@vertex.ca Jlewis@vertex.ca

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 Lewis

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/12/24	9:45	Michelle Gonzales	4-12-24	0945
Michelle Gonzales	4-12-24	1615	Andrew Hobbs	4-13-24	1800
Andrew Hobbs	4-13-24	2400		4/15/24	930

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
Client: Vertex
Project Name: Bettis State com #5
Project Manager: Chance Dixon
Address: on file
City, State, Zip:
Phone:
Email:

Invoice Information
Company: Tap Rock
Address: on file
City, State, Zip:
Phone:
Email:
Miscellaneous: Direct Bill

Lab Use Only
Lab WO# E404121
Job Number 24015-0001

TAT: 1D | 2D | 3D | Std (Std)

State: NM | CO | UT | TX

Analysis and Method: GRO/DRO 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 #

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	Remarks
0900	04-09-24	Soil	1	BH24-09 0'		1	
0910			1	BH24-09 2'		2	
0920			1	BH24-10 0'		3	
0930			1	BH24-10 2'		4	
0940			1	BH24-11 0'		5	
0950			1	BH24-11 2'		6	
1000			1	BH24-12 0'		7	
10:00			1	BH24-12 2'		8	
10:20			1	BH24-13 0'		9	
10:30			1	BH24-13 2'		10	

Additional Instructions: Tap Rock Direct Bill, cc: cdixon@vertex.ca jrewis@vertex.ca

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
	4/12/24	9:45	Michelle Gonzales	4-12-24	0945
Michelle Gonzales	4-12-24	1615	Andrew Hobbs	4-13-24	1800
Andrew Hobbs	4-13-24	2400		4/15/24	930
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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

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	Lab WO# E404121	Job Number 24015-0001	1D 2D 3D Std: Std	NM CO UT TX
Project Name: Bettis State Com #3	Address: on file			
Project Manager: Chance Dixon	City, State, Zip:			
Address: on File	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous: Direct Bill			
Email:				

Sample Information

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	GRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals				Remarks
1300	04/09/24	Soil	1	BH24-14 0'		11												
1310			1	BH24-14 2'		12												
1320			1	BG24-01 0'		13												
1330			1	BG 24-01 2'		14												
1340			1	BG 24-01 4'		15												

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance: Y or N

PWSID #

Additional Instructions:

Tap Rock Direct Bill cc: cdixon@vertex.ca Jrewis@vertex.ca

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
	4/12/24	9:45	Michelle Gonzales	4-12-24	0945
Michelle Gonzales	4-12-24	1615	Andrew Mobbo	4-13-24	1800
Andrew Mobbo	4-13-24	2400		4/15/24	930
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.

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Envirotech Analytical Laboratory

Printed: 4/16/2024 11:08:16AM

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:	04/15/24 09:30	Work Order ID:	E404121
Phone:	(575) 748-0176	Date Logged In:	04/13/24 10:38	Logged In By:	Angelina Pineda
Email:	cdixon@vertex.ca	Due Date:	04/19/24 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?	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:	Bettis State Com # 3
Work Order:	E405274
Job Number:	24015-0001
Received:	5/20/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/28/24

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: 5/28/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com # 3
Workorder: E405274
Date Received: 5/20/2024 9:30:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/20/2024 9:30:00AM, under the Project Name: Bettis State Com # 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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

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

Field Offices:

Southern New Mexico Area

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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:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	05/28/24 16:13

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH24 - 09 4FT	E405274-01A	Soil	05/16/24	05/20/24	Glass Jar, 2 oz.
BH24 - 08 8.25FT	E405274-02A	Soil	05/16/24	05/20/24	Glass Jar, 2 oz.
BH24 - 08 11FT	E405274-03A	Soil	05/16/24	05/20/24	Glass Jar, 2 oz.
BH24 - 09 4FT	E405274-04A	Soil	05/16/24	05/20/24	Glass Jar, 2 oz.
BH24 - 09 5.5FT	E405274-05A	Soil	05/16/24	05/20/24	Glass Jar, 2 oz.
BH24 - 10 5FT	E405274-06A	Soil	05/16/24	05/20/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

BH24 - 09 4FT

E405274-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Benzene	ND	0.0250	1	05/21/24	05/22/24	
Ethylbenzene	ND	0.0250	1	05/21/24	05/22/24	
Toluene	ND	0.0250	1	05/21/24	05/22/24	
o-Xylene	ND	0.0250	1	05/21/24	05/22/24	
p,m-Xylene	ND	0.0500	1	05/21/24	05/22/24	
Total Xylenes	ND	0.0250	1	05/21/24	05/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.2 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/24	05/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*109 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2421108
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/24	05/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/24	05/26/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*05/23/24*	*05/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2421110
Chloride	**18700**	400	20	05/23/24	05/28/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

BH24 - 08 8.25FT

E405274-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Benzene	ND	0.0250	1	05/21/24	05/22/24	
Ethylbenzene	ND	0.0250	1	05/21/24	05/22/24	
Toluene	ND	0.0250	1	05/21/24	05/22/24	
o-Xylene	ND	0.0250	1	05/21/24	05/22/24	
p,m-Xylene	ND	0.0500	1	05/21/24	05/22/24	
Total Xylenes	ND	0.0250	1	05/21/24	05/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/24	05/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2421108
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/24	05/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/24	05/26/24	
Surrogate: n-Nonane		*122 %*	*50-200*	*05/23/24*	*05/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2421110
Chloride	**7560**	100	5	05/23/24	05/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

BH24 - 08 11FT

E405274-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Benzene	ND	0.0250	1	05/21/24	05/22/24	
Ethylbenzene	ND	0.0250	1	05/21/24	05/22/24	
Toluene	ND	0.0250	1	05/21/24	05/22/24	
o-Xylene	ND	0.0250	1	05/21/24	05/22/24	
p,m-Xylene	ND	0.0500	1	05/21/24	05/22/24	
Total Xylenes	ND	0.0250	1	05/21/24	05/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.4 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/24	05/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*109 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2421108
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/24	05/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/24	05/26/24	
Surrogate: n-Nonane		*108 %*	*50-200*	*05/23/24*	*05/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2421110
Chloride	**6010**	100	5	05/23/24	05/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

BH24 - 09 4FT

E405274-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Benzene	ND	0.0250	1	05/21/24	05/22/24	
Ethylbenzene	ND	0.0250	1	05/21/24	05/22/24	
Toluene	ND	0.0250	1	05/21/24	05/22/24	
o-Xylene	ND	0.0250	1	05/21/24	05/22/24	
p,m-Xylene	ND	0.0500	1	05/21/24	05/22/24	
Total Xylenes	ND	0.0250	1	05/21/24	05/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/24	05/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*109 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2421108
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/24	05/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/24	05/26/24	
Surrogate: n-Nonane		*111 %*	*50-200*	*05/23/24*	*05/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2421110
Chloride	**11100**	200	10	05/23/24	05/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

BH24 - 09 5.5FT

E405274-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Benzene	ND	0.0250	1	05/21/24	05/22/24	
Ethylbenzene	ND	0.0250	1	05/21/24	05/22/24	
Toluene	ND	0.0250	1	05/21/24	05/22/24	
o-Xylene	ND	0.0250	1	05/21/24	05/22/24	
p,m-Xylene	ND	0.0500	1	05/21/24	05/22/24	
Total Xylenes	ND	0.0250	1	05/21/24	05/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.2 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/24	05/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2421108
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/24	05/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/24	05/26/24	
Surrogate: n-Nonane		*118 %*	*50-200*	*05/23/24*	*05/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2421110
Chloride	**1370**	40.0	2	05/23/24	05/24/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

BH24 - 10 5FT

E405274-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Benzene	ND	0.0250	1	05/21/24	05/22/24	
Ethylbenzene	ND	0.0250	1	05/21/24	05/22/24	
Toluene	ND	0.0250	1	05/21/24	05/22/24	
o-Xylene	ND	0.0250	1	05/21/24	05/22/24	
p,m-Xylene	ND	0.0500	1	05/21/24	05/22/24	
Total Xylenes	ND	0.0250	1	05/21/24	05/22/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS			Batch: 2421055
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/21/24	05/22/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*108 %*	*70-130*	*05/21/24*	*05/22/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2421108
Diesel Range Organics (C10-C28)	ND	25.0	1	05/23/24	05/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/23/24	05/26/24	
Surrogate: n-Nonane		*114 %*	*50-200*	*05/23/24*	*05/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: IY			Batch: 2421110
Chloride	**515**	20.0	1	05/23/24	05/24/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

Volatile Organics by EPA 8021B

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 (2421055-BLK1)									Prepared: 05/21/24 Analyzed: 05/22/24
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	*7.38*		*8.00*		*92.3*	*70-130*			
LCS (2421055-BS1)									Prepared: 05/21/24 Analyzed: 05/24/24
Benzene	4.57	0.0250	5.00		91.4	70-130			
Ethylbenzene	4.33	0.0250	5.00		86.6	70-130			
Toluene	4.51	0.0250	5.00		90.2	70-130			
o-Xylene	4.40	0.0250	5.00		87.9	70-130			
p,m-Xylene	8.93	0.0500	10.0		89.3	70-130			
Total Xylenes	13.3	0.0250	15.0		88.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.45*		*8.00*		*93.1*	*70-130*			
LCS Dup (2421055-BSD1)									Prepared: 05/21/24 Analyzed: 05/24/24
Benzene	4.94	0.0250	5.00		98.8	70-130	7.82	20	
Ethylbenzene	4.68	0.0250	5.00		93.6	70-130	7.72	20	
Toluene	4.88	0.0250	5.00		97.6	70-130	7.84	20	
o-Xylene	4.76	0.0250	5.00		95.2	70-130	7.95	20	
p,m-Xylene	9.64	0.0500	10.0		96.4	70-130	7.68	20	
Total Xylenes	14.4	0.0250	15.0		96.0	70-130	7.77	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.45*		*8.00*		*93.1*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

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 (2421055-BLK1)									Prepared: 05/21/24 Analyzed: 05/22/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.60*		*8.00*		*108*	*70-130*			
LCS (2421055-BS2)									Prepared: 05/21/24 Analyzed: 05/24/24
Gasoline Range Organics (C6-C10)	58.8	20.0	50.0		118	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.74*		*8.00*		*109*	*70-130*			
LCS Dup (2421055-BSD2)									Prepared: 05/21/24 Analyzed: 05/24/24
Gasoline Range Organics (C6-C10)	55.5	20.0	50.0		111	70-130	5.69	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.83*		*8.00*		*110*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	
Blank (2421108-BLK1)									Prepared: 05/23/24 Analyzed: 05/26/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*56.3*		*50.0*		*113*	*50-200*			
LCS (2421108-BS1)									Prepared: 05/23/24 Analyzed: 05/26/24
Diesel Range Organics (C10-C28)	278	25.0	250		111	38-132			
Surrogate: n-Nonane	*58.4*		*50.0*		*117*	*50-200*			
LCS Dup (2421108-BSD1)									Prepared: 05/23/24 Analyzed: 05/26/24
Diesel Range Organics (C10-C28)	276	25.0	250		111	38-132	0.659	20	
Surrogate: n-Nonane	*56.0*		*50.0*		*112*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	5/28/2024 4:13:20PM

Anions by EPA 300.0/9056A

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 (2421110-BLK1)									Prepared: 05/23/24 Analyzed: 05/24/24
Chloride	ND	20.0							
LCS (2421110-BS1)									Prepared: 05/23/24 Analyzed: 05/24/24
Chloride	252	20.0	250		101	90-110			
LCS Dup (2421110-BSD1)									Prepared: 05/23/24 Analyzed: 05/24/24
Chloride	250	20.0	250		100	90-110	0.574	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:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	05/28/24 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 CTaprock?		Company: Taprock		Lab WO# E405274	Job Number 24015-0001	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: Bettis State Comm #3		Address: on file							✓	✓				
Project Manager: Chance Dixon		City, State, Zip:												
Address: on file		Phone:												
City, State, Zip:		Email:												
Phone: 575 988 1472		Miscellaneous:												
Email: CDixon@Vertex.ca														

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
10:00	05/16/24	S	1	BH24-07 4 FT		1	✓	✓	✓		✓							Compliance	Y	or N
11:00				BH24-08 8.25 FT		2	✓	✓	✓		✓							PWSID #		
11:30				BH24-08 11 FT		3	✓	✓	✓		✓							Remarks		
12:00				BH24-09 4 FT		4	✓	✓	✓		✓									
12:20				BH24-09 5.5 FT		5	✓	✓	✓		✓									
13:00				BH24-10 5 FT		6	✓	✓	✓		✓									

Additional Instructions: CCi wwadleigh@vertex.ca

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: Wyatt Wadleigh

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Wyatt W.	5.17.24	1530		5.17.24	1530
	5.17.24	1730		5/20/24	0930

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 5

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.

envirotech

Envirotech Analytical Laboratory

Printed: 5/23/2024 12:26:03PM

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:	05/20/24 09:30	Work Order ID:	E405274
Phone:	(575) 748-0176	Date Logged In:	05/20/24 11:53	Logged In By:	Angelina Pineda
Email:	cdixon@vertex.ca	Due Date:	05/24/24 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?	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

Tap Rock

Project Name:	Bettis State Com 3
Work Order:	E406256
Job Number:	24015-0001
Received:	6/27/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/2/24

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: 7/2/24

Chance Dixon
523 Park Point Drive suite 200
Golden, CO 80401

Project Name: Bettis State Com 3
Workorder: E406256
Date Received: 6/27/2024 12:00:00PM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/27/2024 12:00:00PM, under the Project Name: Bettis State Com 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	07/02/24 12:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WES 24-15 0-4 FT	E406256-01A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
WES 24-14 0-4 FT	E406256-02A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES 24-07 4FT	E406256-03A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES 24-08 4FT	E406256-04A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-09 4 FT	E406256-05A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-10 4 FT	E406256-06A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-11 4 FT	E406256-07A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-12 4 FT	E406256-08A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-13 4 FT	E406256-09A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-14 4 FT	E406256-10A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

WES 24-15 0-4 FT

E406256-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/28/24	
Surrogate: n-Nonane		*90.3 %*	*50-200*	*06/28/24*	*06/28/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**83.9**	20.0	1	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

WES 24-14 0-4 FT

E406256-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/28/24	
Surrogate: n-Nonane		*85.6 %*	*50-200*	*06/28/24*	*06/28/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**121**	20.0	1	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES 24-07 4FT

E406256-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.2 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/28/24	
Surrogate: n-Nonane		*89.8 %*	*50-200*	*06/28/24*	*06/28/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**71800**	400	20	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES 24-08 4FT

E406256-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*84.8 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**9510**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-09 4 FT

E406256-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*89.0 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**11600**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-10 4 FT

E406256-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.3 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*91.2 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**10000**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-11 4 FT

E406256-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*89.8 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**12000**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-12 4 FT

E406256-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.4 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*92.1 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**1220**	20.0	1	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-13 4 FT

E406256-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*88.1 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**5270**	40.0	2	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-14 4 FT

E406256-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.8 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*87.4 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**17600**	400	20	06/27/24	06/28/24	

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426085-BLK1)									Prepared: 06/28/24 Analyzed: 06/29/24
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	*7.39*		*8.00*		*92.4*	*70-130*			
LCS (2426085-BS1)									Prepared: 06/28/24 Analyzed: 07/01/24
Benzene	5.02	0.0250	5.00		100	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.7	70-130			
Toluene	5.06	0.0250	5.00		101	70-130			
o-Xylene	5.01	0.0250	5.00		100	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.44*		*8.00*		*93.0*	*70-130*			
Matrix Spike (2426085-MS1)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Benzene	5.25	0.0250	5.00	ND	105	54-133			
Ethylbenzene	4.90	0.0250	5.00	ND	98.0	61-133			
Toluene	5.16	0.0250	5.00	ND	103	61-130			
o-Xylene	5.03	0.0250	5.00	ND	101	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.43*		*8.00*		*92.8*	*70-130*			
Matrix Spike Dup (2426085-MSD1)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Benzene	4.85	0.0250	5.00	ND	97.1	54-133	7.91	20	
Ethylbenzene	4.52	0.0250	5.00	ND	90.4	61-133	8.06	20	
Toluene	4.76	0.0250	5.00	ND	95.1	61-130	8.06	20	
o-Xylene	4.64	0.0250	5.00	ND	92.8	63-131	8.16	20	
p,m-Xylene	9.28	0.0500	10.0	ND	92.8	63-131	7.83	20	
Total Xylenes	13.9	0.0250	15.0	ND	92.8	63-131	7.94	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.46*		*8.00*		*93.3*	*70-130*			

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426085-BLK1)									Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.38*		*8.00*		*105*	*70-130*			
LCS (2426085-BS2)									Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	54.9	20.0	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.56*		*8.00*		*107*	*70-130*			
Matrix Spike (2426085-MS2)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	50.8	20.0	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.53*		*8.00*		*107*	*70-130*			
Matrix Spike Dup (2426085-MSD2)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	53.3	20.0	50.0	ND	107	70-130	4.82	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.53*		*8.00*		*107*	*70-130*			

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426076-BLK1)									Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*53.1*		*50.0*		*106*	*50-200*			
LCS (2426076-BS1)									Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	292	25.0	250		117	38-132			
Surrogate: n-Nonane	*50.8*		*50.0*		*102*	*50-200*			
Matrix Spike (2426076-MS1)				**Source: E406253-06**					Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	312	25.0	250	ND	125	38-132			
Surrogate: n-Nonane	*54.3*		*50.0*		*109*	*50-200*			
Matrix Spike Dup (2426076-MSD1)				**Source: E406253-06**					Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	306	25.0	250	ND	122	38-132	1.80	20	
Surrogate: n-Nonane	*53.5*		*50.0*		*107*	*50-200*			

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426081-BLK1)									Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	ND	20.0							
LCS (2426081-BS1)									Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2426081-MS1)				**Source: E406253-06**					Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	1720	200	250	1560	62.7	80-120			M4
Matrix Spike Dup (2426081-MSD1)				**Source: E406253-06**					Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	1730	200	250	1560	67.6	80-120	0.717	20	M4

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

Definitions and Notes

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	07/02/24 12:58

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 (TaProck)	Company: TaProck	Lab WO# E406256	Job Number 24015-0001	1D 2D 3D Std: Std ✓
Project Name: Bettis State Com 3	Address: on file			NM ✓ CO UT TX
Project Manager: Chance Dixon	City, State, Zip:			
Address: on file	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous:			
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
9:30	06/25/24	Soil	1	WES 24-15 0-4 FT		1	✓	✓	✓		✓							
11:30	"	"	"	WES 24-14 0-4 FT		2	"	"	"		"							
12:00				BES 24-07 4 FT		3												
12:05				BES 24-08 4 FT		4												
12:10				BES 24-09 4 FT		5												
12:15				BES 24-10 4 FT		6												
12:20				BES 24-11 4 FT		7												
12:25				BES 24-12 4 FT		8												
12:30				BES 24-13 4 FT		9												
12:35				BES 24-14 4 FT		10												

Additional Instructions: CC: wwadleigh@vertex.ca

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: Wyatt Wadleigh

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Wyatt W.	06/26/24	1030	Michelle Gonzales	06/26/24	1030
Michelle Gonzales	6.26.24	1630	Andrew Hobbs	6.26.24	1645
Andrew Hobbs	6.26.24	2245	Hayley R Hall	6-27-24	1200
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: 6/28/2024 9:39:53AM

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:	Tap Rock	Date Received:	06/27/24 12:00	Work Order ID:	E406256
Phone:	(303) 862-3400	Date Logged In:	06/27/24 12:02	Logged In By:	Keyliegh Hall
Email:	cdixon@vertex.ca	Due Date:	07/03/24 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?	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: N/A

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:	Bettis State Com # 3
Work Order:	E406221
Job Number:	24015-0001
Received:	6/25/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/28/24

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: 6/28/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com # 3
Workorder: E406221
Date Received: 6/25/2024 5:15:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/25/2024 5:15:00AM, under the Project Name: Bettis State Com # 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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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Client Representative
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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:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	06/28/24 11:39

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BES24-01 4' CD	E406221-01A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
BES24-01 0-4' CD	E406221-02A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.
BES24-02 0-4' CD	E406221-03A	Soil	06/21/24	06/25/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

BES24-01 4' CD

E406221-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426016
Benzene	ND	0.0250	1	06/25/24	06/27/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/27/24	
Toluene	ND	0.0250	1	06/25/24	06/27/24	
o-Xylene	ND	0.0250	1	06/25/24	06/27/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/27/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/27/24	
Surrogate: 4-Bromochlorobenzene-PID		*88.5 %*	*70-130*	*06/25/24*	*06/27/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426016
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/27/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/25/24*	*06/27/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426019
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
Surrogate: n-Nonane		*98.1 %*	*50-200*	*06/25/24*	*06/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2426023
Chloride	**6080**	200	10	06/25/24	06/25/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

BES24-01 0-4' CD

E406221-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426016
Benzene	ND	0.0250	1	06/25/24	06/27/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/27/24	
Toluene	ND	0.0250	1	06/25/24	06/27/24	
o-Xylene	ND	0.0250	1	06/25/24	06/27/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/27/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/27/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.7 %*	*70-130*	*06/25/24*	*06/27/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426016
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/27/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*06/25/24*	*06/27/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426019
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*06/25/24*	*06/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2426023
Chloride	**48.9**	20.0	1	06/25/24	06/25/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

BES24-02 0-4' CD

E406221-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426016
Benzene	ND	0.0250	1	06/25/24	06/27/24	
Ethylbenzene	ND	0.0250	1	06/25/24	06/27/24	
Toluene	ND	0.0250	1	06/25/24	06/27/24	
o-Xylene	ND	0.0250	1	06/25/24	06/27/24	
p,m-Xylene	ND	0.0500	1	06/25/24	06/27/24	
Total Xylenes	ND	0.0250	1	06/25/24	06/27/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.5 %*	*70-130*	*06/25/24*	*06/27/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426016
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/25/24	06/27/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/25/24*	*06/27/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426019
Diesel Range Organics (C10-C28)	ND	25.0	1	06/25/24	06/26/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/25/24	06/26/24	
Surrogate: n-Nonane		*103 %*	*50-200*	*06/25/24*	*06/26/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2426023
Chloride	**1040**	20.0	1	06/25/24	06/25/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

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 (2426016-BLK1)									Prepared: 06/25/24 Analyzed: 06/27/24
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	*7.42*		*8.00*		*92.7*	*70-130*			
LCS (2426016-BS1)									Prepared: 06/25/24 Analyzed: 06/27/24
Benzene	5.07	0.0250	5.00		101	70-130			
Ethylbenzene	4.78	0.0250	5.00		95.6	70-130			
Toluene	5.00	0.0250	5.00		100	70-130			
o-Xylene	4.88	0.0250	5.00		97.5	70-130			
p,m-Xylene	9.82	0.0500	10.0		98.2	70-130			
Total Xylenes	14.7	0.0250	15.0		98.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.47*		*8.00*		*93.3*	*70-130*			
Matrix Spike (2426016-MS1)				**Source: E406219-02**					Prepared: 06/25/24 Analyzed: 06/27/24
Benzene	5.12	0.0250	5.00	ND	102	54-133			
Ethylbenzene	4.80	0.0250	5.00	ND	96.1	61-133			
Toluene	5.03	0.0250	5.00	ND	101	61-130			
o-Xylene	4.92	0.0250	5.00	ND	98.3	63-131			
p,m-Xylene	9.88	0.0500	10.0	ND	98.8	63-131			
Total Xylenes	14.8	0.0250	15.0	ND	98.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.46*		*8.00*		*93.2*	*70-130*			
Matrix Spike Dup (2426016-MSD1)				**Source: E406219-02**					Prepared: 06/25/24 Analyzed: 06/27/24
Benzene	5.04	0.0250	5.00	ND	101	54-133	1.61	20	
Ethylbenzene	4.74	0.0250	5.00	ND	94.7	61-133	1.43	20	
Toluene	4.96	0.0250	5.00	ND	99.1	61-130	1.51	20	
o-Xylene	4.85	0.0250	5.00	ND	96.9	63-131	1.45	20	
p,m-Xylene	9.75	0.0500	10.0	ND	97.5	63-131	1.40	20	
Total Xylenes	14.6	0.0250	15.0	ND	97.3	63-131	1.42	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.37*		*8.00*		*92.2*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

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 (2426016-BLK1)									Prepared: 06/25/24 Analyzed: 06/27/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.34*		*8.00*		*104*	*70-130*			
LCS (2426016-BS2)									Prepared: 06/25/24 Analyzed: 06/27/24
Gasoline Range Organics (C6-C10)	51.5	20.0	50.0		103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.49*		*8.00*		*106*	*70-130*			
Matrix Spike (2426016-MS2)				**Source: E406219-02**					Prepared: 06/25/24 Analyzed: 06/27/24
Gasoline Range Organics (C6-C10)	48.8	20.0	50.0	ND	97.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.52*		*8.00*		*106*	*70-130*			
Matrix Spike Dup (2426016-MSD2)				**Source: E406219-02**					Prepared: 06/25/24 Analyzed: 06/27/24
Gasoline Range Organics (C6-C10)	46.5	20.0	50.0	ND	93.0	70-130	4.77	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.50*		*8.00*		*106*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

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 (2426019-BLK1)									Prepared: 06/25/24 Analyzed: 06/25/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.0*		*50.0*		*95.9*	*50-200*			
LCS (2426019-BS1)									Prepared: 06/25/24 Analyzed: 06/25/24
Diesel Range Organics (C10-C28)	291	25.0	250		116	38-132			
Surrogate: n-Nonane	*50.7*		*50.0*		*101*	*50-200*			
Matrix Spike (2426019-MS1)				**Source: E406220-01**					Prepared: 06/25/24 Analyzed: 06/25/24
Diesel Range Organics (C10-C28)	321	25.0	250	ND	129	38-132			
Surrogate: n-Nonane	*55.3*		*50.0*		*111*	*50-200*			
Matrix Spike Dup (2426019-MSD1)				**Source: E406220-01**					Prepared: 06/25/24 Analyzed: 06/25/24
Diesel Range Organics (C10-C28)	309	25.0	250	ND	123	38-132	4.06	20	
Surrogate: n-Nonane	*53.1*		*50.0*		*106*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	6/28/2024 11:39:17AM

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 (2426023-BLK1)									Prepared: 06/25/24 Analyzed: 06/25/24
Chloride	ND	20.0							
LCS (2426023-BS1)									Prepared: 06/25/24 Analyzed: 06/25/24
Chloride	249	20.0	250		99.7	90-110			
Matrix Spike (2426023-MS1)				**Source: E406220-02**					Prepared: 06/25/24 Analyzed: 06/25/24
Chloride	298	200	250	ND	119	80-120			
Matrix Spike Dup (2426023-MSD1)				**Source: E406220-02**					Prepared: 06/25/24 Analyzed: 06/25/24
Chloride	306	200	250	ND	122	80-120	2.64	20	M6

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:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	06/28/24 11:39

M6	Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS recoveries.
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 (Tap Rock)	Company:	Tap Rock	Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX	
Project Name:	Betty's State Com 3	Address:	on file	E406221	24015-0001					✓				
Project Manager:	Chance Dixon	City, State, Zip:												
Address:	on file	Phone:												
City, State, Zip:		Email:												
Phone:		Miscellaneous:												
Email:	cdixon@vertex.ca													

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
12:00	06/21/24	Soil	1	BES 24-01 [redacted] 4'	CD	1	✓	✓	✓		✓							
12:15	↓	↓	↓	WES 24-01 [redacted] 0-4'	CD	2	↓	↓	↓		↓							
12:30	↓	↓	↓	WES 24-02 [redacted] 0-4'	CD	3	↓	↓	↓		↓							

Analysis and Method

EPA Program: SDWA | CWA | RCRA

Compliance Y or N

PWSID #

Additional Instructions: cc: wwadleigh@vertex.ca

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: Wyatt Wadleigh

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	6/24/24	10:00	Michelle Gonzales	6-24-24	1000
Michelle Gonzales	6-24-24	2300	Kayleigh R Hall	6-25-24	0515
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: 6/26/2024 8:30:20AM

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:	06/25/24 05:15	Work Order ID:	E406221
Phone:	(575) 748-0176	Date Logged In:	06/24/24 16:32	Logged In By:	Alexa Michaels
Email:	cdixon@vertex.ca	Due Date:	07/01/24 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?	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

Tap Rock

Project Name:	Bettis State Com 3
Work Order:	E406256
Job Number:	24015-0001
Received:	6/27/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/2/24

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: 7/2/24

Chance Dixon
523 Park Point Drive suite 200
Golden, CO 80401

Project Name: Bettis State Com 3
Workorder: E406256
Date Received: 6/27/2024 12:00:00PM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/27/2024 12:00:00PM, under the Project Name: Bettis State Com 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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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Cell: 505-320-4759
ljarboe@envirotech-inc.com

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mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	07/02/24 12:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WES 24-15 0-4 FT	E406256-01A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
WES 24-14 0-4 FT	E406256-02A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES 24-07 4FT	E406256-03A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES 24-08 4FT	E406256-04A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-09 4 FT	E406256-05A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-10 4 FT	E406256-06A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-11 4 FT	E406256-07A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-12 4 FT	E406256-08A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-13 4 FT	E406256-09A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.
BES24-14 4 FT	E406256-10A	Soil	06/25/24	06/27/24	Glass Jar, 4 oz.

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

WES 24-15 0-4 FT

E406256-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.7 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/28/24	
Surrogate: n-Nonane		*90.3 %*	*50-200*	*06/28/24*	*06/28/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**83.9**	20.0	1	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

WES 24-14 0-4 FT

E406256-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/28/24	
Surrogate: n-Nonane		*85.6 %*	*50-200*	*06/28/24*	*06/28/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**121**	20.0	1	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES 24-07 4FT

E406256-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.2 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/28/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/28/24	
Surrogate: n-Nonane		*89.8 %*	*50-200*	*06/28/24*	*06/28/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**71800**	400	20	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES 24-08 4FT

E406256-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.6 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*84.8 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**9510**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-09 4 FT

E406256-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.5 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*89.0 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**11600**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-10 4 FT

E406256-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.3 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*91.2 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**10000**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-11 4 FT

E406256-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.9 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*89.8 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**12000**	200	10	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-12 4 FT

E406256-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.4 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*104 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*92.1 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**1220**	20.0	1	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-13 4 FT

E406256-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.6 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*88.1 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**5270**	40.0	2	06/27/24	06/28/24	

Sample Data

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

BES24-14 4 FT

E406256-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Benzene	ND	0.0250	1	06/28/24	06/29/24	
Ethylbenzene	ND	0.0250	1	06/28/24	06/29/24	
Toluene	ND	0.0250	1	06/28/24	06/29/24	
o-Xylene	ND	0.0250	1	06/28/24	06/29/24	
p,m-Xylene	ND	0.0500	1	06/28/24	06/29/24	
Total Xylenes	ND	0.0250	1	06/28/24	06/29/24	
Surrogate: 4-Bromochlorobenzene-PID		*92.8 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2426085
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/28/24	06/29/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*06/28/24*	*06/29/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV			Batch: 2426076
Diesel Range Organics (C10-C28)	ND	25.0	1	06/28/24	06/29/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/28/24	06/29/24	
Surrogate: n-Nonane		*87.4 %*	*50-200*	*06/28/24*	*06/29/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: DT			Batch: 2426081
Chloride	**17600**	400	20	06/27/24	06/28/24	

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426085-BLK1)									Prepared: 06/28/24 Analyzed: 06/29/24
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	*7.39*		*8.00*		*92.4*	*70-130*			
LCS (2426085-BS1)									Prepared: 06/28/24 Analyzed: 07/01/24
Benzene	5.02	0.0250	5.00		100	70-130			
Ethylbenzene	4.89	0.0250	5.00		97.7	70-130			
Toluene	5.06	0.0250	5.00		101	70-130			
o-Xylene	5.01	0.0250	5.00		100	70-130			
p,m-Xylene	10.1	0.0500	10.0		101	70-130			
Total Xylenes	15.1	0.0250	15.0		101	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.44*		*8.00*		*93.0*	*70-130*			
Matrix Spike (2426085-MS1)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Benzene	5.25	0.0250	5.00	ND	105	54-133			
Ethylbenzene	4.90	0.0250	5.00	ND	98.0	61-133			
Toluene	5.16	0.0250	5.00	ND	103	61-130			
o-Xylene	5.03	0.0250	5.00	ND	101	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.43*		*8.00*		*92.8*	*70-130*			
Matrix Spike Dup (2426085-MSD1)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Benzene	4.85	0.0250	5.00	ND	97.1	54-133	7.91	20	
Ethylbenzene	4.52	0.0250	5.00	ND	90.4	61-133	8.06	20	
Toluene	4.76	0.0250	5.00	ND	95.1	61-130	8.06	20	
o-Xylene	4.64	0.0250	5.00	ND	92.8	63-131	8.16	20	
p,m-Xylene	9.28	0.0500	10.0	ND	92.8	63-131	7.83	20	
Total Xylenes	13.9	0.0250	15.0	ND	92.8	63-131	7.94	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.46*		*8.00*		*93.3*	*70-130*			

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426085-BLK1)									Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.38*		*8.00*		*105*	*70-130*			
LCS (2426085-BS2)									Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	54.9	20.0	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.56*		*8.00*		*107*	*70-130*			
Matrix Spike (2426085-MS2)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	50.8	20.0	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.53*		*8.00*		*107*	*70-130*			
Matrix Spike Dup (2426085-MSD2)				**Source: E406256-05**					Prepared: 06/28/24 Analyzed: 06/29/24
Gasoline Range Organics (C6-C10)	53.3	20.0	50.0	ND	107	70-130	4.82	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.53*		*8.00*		*107*	*70-130*			

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426076-BLK1)									Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*53.1*		*50.0*		*106*	*50-200*			
LCS (2426076-BS1)									Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	292	25.0	250		117	38-132			
Surrogate: n-Nonane	*50.8*		*50.0*		*102*	*50-200*			
Matrix Spike (2426076-MS1)				**Source: E406253-06**					Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	312	25.0	250	ND	125	38-132			
Surrogate: n-Nonane	*54.3*		*50.0*		*109*	*50-200*			
Matrix Spike Dup (2426076-MSD1)				**Source: E406253-06**					Prepared: 06/28/24 Analyzed: 06/28/24
Diesel Range Organics (C10-C28)	306	25.0	250	ND	122	38-132	1.80	20	
Surrogate: n-Nonane	*53.5*		*50.0*		*107*	*50-200*			

QC Summary Data

Tap Rock	Project Name:	Bettis State Com 3	**Reported:**
523 Park Point Drive suite 200	Project Number:	24015-0001	
Golden CO, 80401	Project Manager:	Chance Dixon	7/2/2024 12:58:01PM

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 (2426081-BLK1)									Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	ND	20.0							
LCS (2426081-BS1)									Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	252	20.0	250		101	90-110			
Matrix Spike (2426081-MS1)				**Source: E406253-06**					Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	1720	200	250	1560	62.7	80-120			M4
Matrix Spike Dup (2426081-MSD1)				**Source: E406253-06**					Prepared: 06/27/24 Analyzed: 06/28/24
Chloride	1730	200	250	1560	67.6	80-120	0.717	20	M4

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

Definitions and Notes

Tap Rock	Project Name:	Bettis State Com 3	
523 Park Point Drive suite 200	Project Number:	24015-0001	**Reported:**
Golden CO, 80401	Project Manager:	Chance Dixon	07/02/24 12:58

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 (TaProck)	Company: TaProck	Lab WO# E4062560	Job Number 24015-0001	1D 2D 3D Std: Std ✓
Project Name: Bettis State Com 3	Address: on file			NM ✓ CO UT TX
Project Manager: Chance Dixon	City, State, Zip:			
Address: on file	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous:			
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
9:30	06/25/24	Soil	1	WES 24-15 0-4 FT		1	✓	✓	✓		✓				
11:30	"	"	"	WES 24-14 0-4 FT		2	"	"	"		"				
12:00				BES 24-07 4 FT		3									
12:05				BES 24-08 4 FT		4									
12:10				BES 24-09 4 FT		5									
12:15				BES 24-10 4 FT		6									
12:20				BES 24-11 4 FT		7									
12:25				BES 24-12 4 FT		8									
12:30				BES 24-13 4 FT		9									
12:35				BES 24-14 4 FT		10									

Additional Instructions: CC: wwadleigh@vertex.ca

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: Wyatt Wadleigh

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Wyatt W.	06/26/24	1030	Michelle Gonzales	06/26/24	1030
Michelle Gonzales	6-26-24	1630	Andrew Hobbs	6.26.24	1645
Andrew Hobbs	6.26.24	2245	Hayley R Hall	6-27-24	1200
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: 6/28/2024 9:39:53AM

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:	Tap Rock	Date Received:	06/27/24 12:00	Work Order ID:	E406256
Phone:	(303) 862-3400	Date Logged In:	06/27/24 12:02	Logged In By:	Keyliegh Hall
Email:	cdixon@vertex.ca	Due Date:	07/03/24 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?	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: N/A

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:	Bettis State Com # 3
Work Order:	E407028
Job Number:	24015-0001
Received:	7/8/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/10/24

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: 7/10/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com # 3
Workorder: E407028
Date Received: 7/8/2024 10:00:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/8/2024 10:00:00AM, under the Project Name: Bettis State Com # 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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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ljarboe@envirotech-inc.com

Michelle Gonzales
Client Representative
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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:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/10/24 11:38

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WES24-05 0-4FT	E407028-01A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
WES24-07 0-4FT	E407028-02A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
BES24-02 4FT	E407028-03A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
BES24-03 4FT	E407028-04A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
BES24-04 4FT	E407028-05A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
BES24-05 4FT	E407028-06A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
BES24-06 4FT	E407028-07A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.
WES24-09 0-4FT	E407028-08A	Soil	06/24/24	07/08/24	Glass Jar, 2 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

WES24-05 0-4FT

E407028-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.5 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*105 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*87.9 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**1690**	20.0	1	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

WES24-07 0-4FT

E407028-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.9 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*107 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*92.5 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**119**	20.0	1	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

BES24-02 4FT

E407028-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.1 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*106 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*90.2 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**16500**	200	10	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

BES24-03 4FT

E407028-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*91.1 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*106 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*97.0 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**13100**	200	10	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

BES24-04 4FT

E407028-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*90.3 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.2 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*94.9 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**8210**	200	10	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

BES24-05 4FT

E407028-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*88.1 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.2 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*96.0 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**9560**	200	10	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

BES24-06 4FT

E407028-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.0 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.2 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*95.4 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**5530**	100	5	07/08/24	07/09/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

WES24-09 0-4FT

E407028-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Benzene	ND	0.0250	1	07/08/24	07/08/24	
Ethylbenzene	ND	0.0250	1	07/08/24	07/08/24	
Toluene	ND	0.0250	1	07/08/24	07/08/24	
o-Xylene	ND	0.0250	1	07/08/24	07/08/24	
p,m-Xylene	ND	0.0500	1	07/08/24	07/08/24	
Total Xylenes	ND	0.0250	1	07/08/24	07/08/24	
Surrogate: 4-Bromochlorobenzene-PID		*89.1 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2428001
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/08/24	07/08/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.0 %*	*70-130*	*07/08/24*	*07/08/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2427042
Diesel Range Organics (C10-C28)	ND	25.0	1	07/08/24	07/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/08/24	07/08/24	
Surrogate: n-Nonane		*96.8 %*	*50-200*	*07/08/24*	*07/08/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: JM			Batch: 2428012
Chloride	**43.5**	20.0	1	07/08/24	07/08/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

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 (2428001-BLK1)									Prepared: 07/08/24 Analyzed: 07/08/24
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*		*89.5*	*70-130*			
LCS (2428001-BS1)									Prepared: 07/08/24 Analyzed: 07/08/24
Benzene	4.65	0.0250	5.00		93.0	70-130			
Ethylbenzene	4.88	0.0250	5.00		97.5	70-130			
Toluene	4.95	0.0250	5.00		99.1	70-130			
o-Xylene	5.02	0.0250	5.00		100	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	15.1	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.37*		*8.00*		*92.1*	*70-130*			
LCS Dup (2428001-BSD1)									Prepared: 07/08/24 Analyzed: 07/08/24
Benzene	5.02	0.0250	5.00		100	70-130	7.64	20	
Ethylbenzene	4.71	0.0250	5.00		94.1	70-130	3.56	20	
Toluene	4.94	0.0250	5.00		98.7	70-130	0.368	20	
o-Xylene	4.81	0.0250	5.00		96.1	70-130	4.23	20	
p,m-Xylene	9.70	0.0500	10.0		97.0	70-130	3.40	20	
Total Xylenes	14.5	0.0250	15.0		96.7	70-130	3.67	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.38*		*8.00*		*92.3*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

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 (2428001-BLK1)									Prepared: 07/08/24 Analyzed: 07/08/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.43*		*8.00*		*105*	*70-130*			
LCS (2428001-BS2)									Prepared: 07/08/24 Analyzed: 07/08/24
Gasoline Range Organics (C6-C10)	52.2	20.0	50.0		104	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.64*		*8.00*		*108*	*70-130*			
LCS Dup (2428001-BSD2)									Prepared: 07/08/24 Analyzed: 07/08/24
Gasoline Range Organics (C6-C10)	48.9	20.0	50.0		97.9	70-130	6.47	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.67*		*8.00*		*108*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

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 (2427042-BLK1)									Prepared: 07/08/24 Analyzed: 07/08/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.3*		*50.0*		*96.5*	*50-200*			
LCS (2427042-BS1)									Prepared: 07/08/24 Analyzed: 07/08/24
Diesel Range Organics (C10-C28)	254	25.0	250		101	38-132			
Surrogate: n-Nonane	*50.4*		*50.0*		*101*	*50-200*			
Matrix Spike (2427042-MS1)				**Source: E407025-02**					Prepared: 07/08/24 Analyzed: 07/08/24
Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	*51.4*		*50.0*		*103*	*50-200*			
Matrix Spike Dup (2427042-MSD1)				**Source: E407025-02**					Prepared: 07/08/24 Analyzed: 07/08/24
Diesel Range Organics (C10-C28)	261	25.0	250	ND	104	38-132	0.869	20	
Surrogate: n-Nonane	*51.7*		*50.0*		*103*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/10/2024 11:38:48AM

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 (2428012-BLK1)									Prepared: 07/08/24 Analyzed: 07/08/24
Chloride	ND	20.0							
LCS (2428012-BS1)									Prepared: 07/08/24 Analyzed: 07/08/24
Chloride	249	20.0	250		99.6	90-110			
Matrix Spike (2428012-MS1)				**Source: E407028-08**					Prepared: 07/08/24 Analyzed: 07/08/24
Chloride	299	20.0	250	43.5	102	80-120			
Matrix Spike Dup (2428012-MSD1)				**Source: E407028-08**					Prepared: 07/08/24 Analyzed: 07/09/24
Chloride	298	20.0	250	43.5	102	80-120	0.311	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:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/10/24 11:38

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 (TarRock)	Company: TarRock	Lab WO# E407028	Job Number 24015-0001	1D 2D 3D Std: Std ✓
Project Name: Betti's State Com 3	Address: on file			NM ✓ CO UT TX
Project Manager: Chance Dixon	City, State, Zip:			
Address: on file	Phone:			
City, State, Zip:	Email:			
Phone:	Miscellaneous:			
Email:				

Analysis and Method

EPA Program

SDWA | CWA | RCRA

Compliance Y or N

PWSID #

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
12:00	06/24/24	Soil	1	WES 24-05 0-4 FT		1	✓	✓	✓		✓				
13:00				WES 24-07 0-4 FT		2									
12:15				BES 24-02 4 FT		3									
12:20				BES 24-03 4 FT		4									
12:25				BES 24-04 4 FT		5									
12:30				BES 24-05 4 FT		6									
12:35				BES 24-06 4 FT		7									
14:00				WES 24-09 0-4 FT		8									

Additional Instructions: cc: wwadleigh@vertex.ca Report due on 7/11/24 if possible.

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: Wyatt Waldleigh

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Wyatt W.	7.3.24	1151		7.3.24	1151
	7.3.24	1530	Andrew Hobbs	7.3.24	1800
Andrew Hobbs	7.3.24	2400	Alexa Michaels	7.8.24	1000

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 5

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.

envirotech

Envirotech Analytical Laboratory

Printed: 7/8/2024 1:26:27PM

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:	07/08/24 10:00	Work Order ID:	E407028
Phone:	(575) 748-0176	Date Logged In:	07/03/24 15:10	Logged In By:	Alexa Michaels
Email:	cdixon@vertex.ca	Due Date:	07/12/24 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?	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:	Bettis State Com # 3
Work Order:	E407117
Job Number:	24015-0001
Received:	7/16/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
7/19/24

Date Reported: 7/19/24

Chance Dixon
3101 Boyd Drive
Carlsbad, NM 88220

Project Name: Bettis State Com # 3
Workorder: E407117
Date Received: 7/16/2024 9:00:00AM

Chance Dixon,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 7/16/2024 9:00:00AM, under the Project Name: Bettis State Com # 3.

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

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues 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)
Cell: 505-320-4759
ljarboe@envirotech-inc.com

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

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Sample Summary

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/19/24 08:24

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BES24-07 5ft	E407117-01A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
WES24-16 4-5ft	E407117-02A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
WES24-17 0-4ft	E407117-03A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.
WES24-18 0-4ft	E407117-04A	Soil	07/12/24	07/16/24	Glass Jar, 4 oz.

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

BES24-07 5ft

E407117-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.1 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*106 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2429027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		*64.9 %*	*50-200*	*07/16/24*	*07/17/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2429031
Chloride	**8660**	200	10	07/16/24	07/16/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

WES24-16 4-5ft

E407117-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.8 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*106 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2429027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		*64.0 %*	*50-200*	*07/16/24*	*07/17/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2429031
Chloride	**7380**	200	10	07/16/24	07/16/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

WES24-17 0-4ft

E407117-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*93.9 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*106 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2429027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		*57.2 %*	*50-200*	*07/16/24*	*07/17/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2429031
Chloride	**35.3**	20.0	1	07/16/24	07/16/24	

Sample Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

WES24-18 0-4ft

E407117-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Benzene	ND	0.0250	1	07/16/24	07/17/24	
Ethylbenzene	ND	0.0250	1	07/16/24	07/17/24	
Toluene	ND	0.0250	1	07/16/24	07/17/24	
o-Xylene	ND	0.0250	1	07/16/24	07/17/24	
p,m-Xylene	ND	0.0500	1	07/16/24	07/17/24	
Total Xylenes	ND	0.0250	1	07/16/24	07/17/24	
Surrogate: 4-Bromochlorobenzene-PID		*94.9 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: BA			Batch: 2429029
Gasoline Range Organics (C6-C10)	ND	20.0	1	07/16/24	07/17/24	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*106 %*	*70-130*	*07/16/24*	*07/17/24*	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM			Batch: 2429027
Diesel Range Organics (C10-C28)	ND	25.0	1	07/16/24	07/17/24	
Oil Range Organics (C28-C36)	ND	50.0	1	07/16/24	07/17/24	
Surrogate: n-Nonane		*90.5 %*	*50-200*	*07/16/24*	*07/17/24*	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF			Batch: 2429031
Chloride	**36.4**	20.0	1	07/16/24	07/16/24	

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

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 (2429029-BLK1)									Prepared: 07/16/24 Analyzed: 07/17/24
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	*7.49*		*8.00*		*93.6*	*70-130*			
LCS (2429029-BS1)									Prepared: 07/16/24 Analyzed: 07/17/24
Benzene	5.06	0.0250	5.00		101	70-130			
Ethylbenzene	4.84	0.0250	5.00		96.7	70-130			
Toluene	5.05	0.0250	5.00		101	70-130			
o-Xylene	4.93	0.0250	5.00		98.6	70-130			
p,m-Xylene	9.94	0.0500	10.0		99.4	70-130			
Total Xylenes	14.9	0.0250	15.0		99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.35*		*8.00*		*91.9*	*70-130*			
Matrix Spike (2429029-MS1)				**Source: E407119-02**					Prepared: 07/16/24 Analyzed: 07/17/24
Benzene	4.79	0.0250	5.00	ND	95.7	54-133			
Ethylbenzene	4.46	0.0250	5.00	ND	89.2	61-133			
Toluene	4.71	0.0250	5.00	ND	94.1	61-130			
o-Xylene	4.57	0.0250	5.00	ND	91.4	63-131			
p,m-Xylene	9.19	0.0500	10.0	ND	91.9	63-131			
Total Xylenes	13.8	0.0250	15.0	ND	91.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	*7.58*		*8.00*		*94.8*	*70-130*			
Matrix Spike Dup (2429029-MSD1)				**Source: E407119-02**					Prepared: 07/16/24 Analyzed: 07/17/24
Benzene	5.03	0.0250	5.00	ND	101	54-133	4.99	20	
Ethylbenzene	4.69	0.0250	5.00	ND	93.8	61-133	4.95	20	
Toluene	4.94	0.0250	5.00	ND	98.9	61-130	4.92	20	
o-Xylene	4.82	0.0250	5.00	ND	96.5	63-131	5.43	20	
p,m-Xylene	9.64	0.0500	10.0	ND	96.4	63-131	4.80	20	
Total Xylenes	14.5	0.0250	15.0	ND	96.4	63-131	5.01	20	
Surrogate: 4-Bromochlorobenzene-PID	*7.58*		*8.00*		*94.7*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

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 (2429029-BLK1)									Prepared: 07/16/24 Analyzed: 07/17/24
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.49*		*8.00*		*106*	*70-130*			
LCS (2429029-BS2)									Prepared: 07/16/24 Analyzed: 07/17/24
Gasoline Range Organics (C6-C10)	51.6	20.0	50.0		103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.51*		*8.00*		*106*	*70-130*			
Matrix Spike (2429029-MS2)				**Source: E407119-02**					Prepared: 07/16/24 Analyzed: 07/17/24
Gasoline Range Organics (C6-C10)	44.8	20.0	50.0	ND	89.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.59*		*8.00*		*107*	*70-130*			
Matrix Spike Dup (2429029-MSD2)				**Source: E407119-02**					Prepared: 07/16/24 Analyzed: 07/17/24
Gasoline Range Organics (C6-C10)	51.5	20.0	50.0	ND	103	70-130	13.8	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*8.59*		*8.00*		*107*	*70-130*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

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 (2429027-BLK1)									Prepared: 07/16/24 Analyzed: 07/16/24
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	*48.9*		*50.0*		*97.9*	*50-200*			
LCS (2429027-BS1)									Prepared: 07/16/24 Analyzed: 07/17/24
Diesel Range Organics (C10-C28)	208	25.0	250		83.2	38-132			
Surrogate: n-Nonane	*40.5*		*50.0*		*81.0*	*50-200*			
Matrix Spike (2429027-MS1)				**Source: E407119-01**					Prepared: 07/16/24 Analyzed: 07/17/24
Diesel Range Organics (C10-C28)	220	25.0	250	ND	88.2	38-132			
Surrogate: n-Nonane	*40.9*		*50.0*		*81.8*	*50-200*			
Matrix Spike Dup (2429027-MSD1)				**Source: E407119-01**					Prepared: 07/16/24 Analyzed: 07/17/24
Diesel Range Organics (C10-C28)	218	25.0	250	ND	87.0	38-132	1.32	20	
Surrogate: n-Nonane	*28.1*		*50.0*		*56.1*	*50-200*			

QC Summary Data

Vertex Resource Services Inc.	Project Name:	Bettis State Com # 3	**Reported:**
3101 Boyd Drive	Project Number:	24015-0001	
Carlsbad NM, 88220	Project Manager:	Chance Dixon	7/19/2024 8:24:05AM

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 (2429031-BLK1)									Prepared: 07/16/24 Analyzed: 07/16/24
Chloride	ND	20.0							
LCS (2429031-BS1)									Prepared: 07/16/24 Analyzed: 07/16/24
Chloride	249	20.0	250		99.6	90-110			
Matrix Spike (2429031-MS1)				**Source: E407119-02**					Prepared: 07/16/24 Analyzed: 07/16/24
Chloride	259	20.0	250	ND	103	80-120			
Matrix Spike Dup (2429031-MSD1)				**Source: E407119-02**					Prepared: 07/16/24 Analyzed: 07/16/24
Chloride	256	20.0	250	ND	103	80-120	0.891	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:	Bettis State Com # 3	
3101 Boyd Drive	Project Number:	24015-0001	**Reported:**
Carlsbad NM, 88220	Project Manager:	Chance Dixon	07/19/24 08:24

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 (TaP Rock)	Company: TaP Rock	Lab WO# E407117	1D 2D 3D Std: Std ✓	NM ✓ CO UT TX
Project Name: ~~Reptile~~ Battis State Com 3	Address: on file	Job Number 24015-0001		
Project Manager: Chance Dixon	City, State, Zip:			
Address: on file	Phone:			
City, State, Zip:	Email: Bramsey@taPrk			
Phone: 575-988-1472	Miscellaneous:			
Email: CDixon@VertexResources.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			
8:30	07/12/24	Soil	1	BES24-07 5 FT		1	✓	✓	✓		✓						
8:45	↓	↓	↓	WES24-16 4-5 FT		2	↓	↓	↓		↓						
10:00				WES24-17 0-4 FT		3											
10:45				WES24-18 0-4 FT		4											

Analysis and Method

EPA Program

SDWA	CWA	RCRA

Compliance Y or N

PWSID #

Remarks

Additional Instructions: CC: wwadleigh@vertexresources.com Please bill to BillRamsey with TaPRock (BRamsey@taPrk.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: wbatt wadleigh

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
wbatt wadleigh	07/15/24	11:10	Michelle Gonzales	7-15-24	1110
Michelle Gonzales	7-15-24	1600	Andrew Hobbs	7.15.24	1715
Andrew Hobbs	7.15.24	2330		7-16-24	0900
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.

envirotech

Envirotech Analytical Laboratory

Printed: 7/16/2024 12:05:47PM

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:	07/16/24 09:00	Work Order ID:	E407117
Phone:	(575) 748-0176	Date Logged In:	07/15/24 17:15	Logged In By:	Noe Soto
Email:	cdixon@vertex.ca	Due Date:	07/22/24 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.

APPENDIX D – Depth to Groundwater Drilling

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

BETTIS #3

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO	OSE FILE NO(S).
C 04844 - POD1		C-4844

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	11'46	94	N
	LONGITUDE	-103	35'32	93	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)
7-3-24	7-3-24	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: 7-3-24

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'	Brown dirt with white caliche	Y ✓ N	
20	60	40'	Red and Brown clay with small rock	Y ✓ N	
60	110	50'	Gray Green Rock with Fine sand	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:

J Maley — Jason Maley

SIGNATURE OF DRILLER / PRINT SIGNEE NAME

7/31/24

DATE

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-04844

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: 7-9-24 Date well plugging concluded: 7-9-24

5) GPS Well Location: Latitude: 32 deg, 11'46 min, 94 sec
Longitude: -103 deg, 35'32 min, 93 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: 5-30-24

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):

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.

Signature of Well Driller

07-31-2024
Date

Version: September 8, 2009
Page 2 of 2

District I
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District IV
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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 376466

QUESTIONS

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 376466
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2409146069**
Incident Name	**NAPP2409146069 BETTIS STATE COM #3 @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	BETTIS STATE COM #3
Date Release Discovered	03/30/2024
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Flow Line - Production | Produced Water | Released: 17 BBL | Recovered: 0 BBL | Lost: 17 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Release resulted from a blown gasket within the check valve on the transfer line in pasture just off of the lease road.

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 376466
	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	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
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: 04/01/2024

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 376466
	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 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 500 and 1000 (ft.)
Any other fresh water well or spring	Between 500 and 1000 (ft.)
Incorporated municipal boundaries or a defined municipal fresh water well field	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	Yes

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)	17800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	06/19/2024
On what date will (or did) the final sampling or liner inspection occur	07/12/2024
On what date will (or was) the remediation complete(d)	07/12/2024
What is the estimated surface area (in square feet) that will be reclaimed	2814
What is the estimated volume (in cubic yards) that will be reclaimed	1380
What is the estimated surface area (in square feet) that will be remediated	2814
What is the estimated volume (in cubic yards) that will be remediated	1380
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: 376466
	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	OWL LANDFILL JAL [fJEG1635837366]
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	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
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: 08/22/2024
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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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 (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 376466
	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: 376466
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**362340**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**07/15/2024**
What was the (estimated) number of samples that were to be gathered	**1**
What was the sampling surface area in square feet	**200**

Remediation Closure Request	
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	2814
What was the total volume (cubic yards) remediated	1380
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	2814
What was the total volume (in cubic yards) reclaimed	1380
Summarize any additional remediation activities not included by answers (above)	The site was remediated to reclamation standards for areas where depth to groundwater is greater than 100 feet bgs.

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: 08/22/2024

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QUESTIONS (continued)

Operator: TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	OGRID: 372043
	Action Number: 376466
	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 376466

CONDITIONS

Operator:	OGRID:
TAP ROCK OPERATING, LLC 523 Park Point Drive Golden, CO 80401	372043
	Action Number: 376466
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation closure report approved, release resolved.	10/8/2024