



Incident Number: nAPP2335435491

Release Assessment and Deferral

Big Eddy Unit DI 9 35H

Unit P, Section 21, Township 21 South, Range 30 East

API: 30-015-42007

County: Eddy

Vertex File Number: 24E-01314

Prepared for:

XTO Energy, Inc.

Prepared by:

Vertex Resource Services Inc.

Date:

October 2024

XTO Energy, Inc.
Big Eddy Unit DI 9 35H

Release Assessment and Deferral
October 2024

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Big Eddy Unit DI 9 35H
Unit P, Section 21, Township 21 South, Range 30 East
API: 30-015-42007
County: Eddy

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October 2, 2024

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XTO Energy, Inc.
Big Eddy Unit DI 9 35H

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1.0 Introduction

XTO Energy, Inc. (XTO) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment for a produced water and crude oil release that occurred on December 16, 2023, at Big Eddy Unit DI 9 35H API 30-015-42007 (hereafter referred to as the "site"). XTO submitted an initial C-141 Release Notification (Appendix A) to New Mexico Oil Conservation Division (NMOCD) District 2 on December 20, 2023. Incident ID number nAPP2335435491 was assigned to this incident.

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 report to obtain approval from NMOCD for deferral of this release, with the understanding that final remediation and closure of the release site will be deferred until such time as all equipment in the deferral area is removed. Reclamation will be completed following remediation, once oil and gas activities are terminated as per NMAC 19.15.29.13.

2.0 Incident Description

The release occurred on December 16, 2023, due to equipment failure. The incident was reported on December 20, 2023, and involved the release of approximately 5 barrels (bbl) of produced water and 2 bbl of crude oil on the pad around the wellhead. Approximately 7 bbl of free fluid was removed during 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 16.6 miles northeast of Loving, New Mexico. The legal location for the site is Unit P, Section 21, Township 21 South, Range 30 East in Eddy County, New Mexico. The release area is located on State property. An aerial photograph and site schematic are presented on Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas production. The following sections specifically describe the release area around the wellhead on or in proximity to the constructed pad (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 Qa - Alluvium (New Mexico Bureau of Geology and Mineral Resources, 2024). The karst geology potential for the site is high (United States Department of the Interior, Bureau of Land Management, 2018). The surrounding landscape is associated with plains, interdunes, and dunes with elevations ranging between 3,000 and 5,000 feet. The climate is semiarid with average annual precipitation ranging between 10 and 15 inches. Predominant soil textures around the site are well-drained fine sandy loams and sandy loams with very low runoff potential (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Using information from the United States Department of Agriculture, the dominant vegetation was determined to be grasses interspersed with shrubs (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Limited to no vegetation is allowed to grow on the compacted production pad.

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4.0 Closure Criteria Determination

The nearest active well to the site is a United States Department of Energy monitoring well 1.06 miles to the northwest (New Mexico Office of the State Engineer, 2024). 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 located approximately 904 feet west 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

The nearest depth to groundwater reference to the site is a United States Geological Survey monitoring well located approximately 1.12 miles northwest of the location (United States Geological Survey, 2023). Data from 1978 shows the USGS borehole recorded a depth to groundwater of 109 feet below ground surface (bgs). The site is in a region of High Karst Potential (United States Department of the Interior, Bureau of Land Management, 2018). Information pertaining to the depth to ground water determination is included in Appendix B.

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Table 1. Closure Criteria Determination			
Site Name: Big Eddy Unit DI 9 35H			
Spill Coordinates: 32.457752,-103.879543		X: 605307	Y: 3591728
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	109	feet
	Distance between release and nearest DTGW reference	5,915	feet
		1.12	miles
	Date of nearest DTGW reference measurement	September 18, 1978	
	Depth to Groundwater (secondary reference)	125	feet
	Distance between release and secondary DTGW reference	6,103	feet
		1.16	miles
	Date of secondary DTGW reference measurement	January 1, 1998	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	904	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	5,934	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	18,697	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		feet
	ii) Within 1000 feet of any fresh water well or spring	5,620	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	4,459	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	21,100	feet
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
	Distance between release and nearest High Karst	0	feet
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	5,162	feet
11	Soil Type	Fine sandy loam, sandy loam	
12	Ecological Classification	Loamy sand	
13	Geology	Alluvium	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

The site is within a region of high karst potential; therefore, the closure criteria for remediation and reclamation of the site was determined to be associated with the strictest constituent concentration limits as presented in Table 2.

Table 2. Closure Criteria for Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
< 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids
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

Inspection and site characterization of the release around the infrastructure was completed by Vertex between April 8 and 26, 2024, including vertical and horizontal delineation. The total impacted area was determined to be 5,006 square feet. The Daily Field Reports (DFRs) associated with the site visits are included in Appendix C. Characterization sample locations and approximate release area are presented on Figure 1. Characterization field screening and laboratory results are summarized in Table 3.

Remediation efforts began on August 12, 2024, and were finalized on August 29, 2024. A Remediation Closure Report Extension was approved by NMOCD for the incident, which is included in Appendix D. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 61 sample points and consisted of analysis with a Dextsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and Silver Nitrate Titration (chloride). Field screening results were used to identify areas requiring further remediation. Soils were removed to depths of 1 to 10 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. The DFRs documenting various phases of the remediation are presented in Appendix C.

Notifications that confirmatory samples were being collected was provided to NMOCD before each sampling event and are included in Appendix D. Confirmatory composite samples were collected from the base and walls of the excavation in increments no greater than 200 square feet. A total of 54 base and wall samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Cardinal Laboratories in Hobbs, NM, 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). Laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix E.

An unmarked cellar was discovered during excavation in the base of the 1 foot excavation south of the wellhead at the approximate location of base sample BS24-07. Excavation of that area did not proceed beyond the originally planned 1 foot depth to avoid disturbance of unknown equipment inside and around the cellar. Photographs of the cellar are

included in the August 13, 2024, DFR labeled "Drill casing" (Appendix C). The deferral area was extended west, south, and east, to encompass the wellhead antenna and control box, the cellar, and a recently installed chemical tank, respectively. The deferral area covers the pumpjack, wellhead, chemical tanks, antenna, and associated infrastructure, as presented on Figure 2. All confirmatory samples collected outside the deferral area were below closure criteria. Laboratory results for confirmation base sample BS24-07 exceeded NMOCD strictest criteria for chloride and TPH. Laboratory results for confirmation wall excavation samples WS24-11 and WS24-13 exceeded NMOCD strictest criteria for chloride and TPH, respectively. Confirmation samples BS24-07, WS24-11, and WS24-13 and the area they cover will be deferred until the reclamation of the pad.

6.0 Deferral Request

Vertex recommends no additional remediation action at this time to address the release at Big Eddy Unit DI 9 35H until the equipment on-site is decommissioned and removed. Laboratory analyses of the final confirmatory samples collected outside the deferral area showed constituent of concern concentration levels below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs as shown in Table 2. Areas of release were remediated and backfilled with local soils. There are no anticipated or imminent risks to human, ecological, or hydrological receptors associated with the release site including the deferral area.

On behalf of XTO Energy, Inc., Vertex requests deferral of the portions of the release that are designated in proximity to equipment, specifically confirmation sample areas BS24-07, WS24-11, and WS24-13. The release and deferral area have been fully delineated with the understanding that should the deferral request be accepted, restoration of this portion of the release will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed following remediation and reclamation activities as per NMAC 19.15.29.12 and 19.15.29.13. The proposed deferral area consists of approximately 764 square feet immediately surrounding the wellhead and associated equipment, as presented on Figure 2. Based on the results of delineation sampling, this area will be excavated to a depth of 4 feet bgs, requiring the removal of approximately 155 cubic yards of soil following equipment removal. The release volume was 7 bbl and was localized to the pad in immediate proximity of production equipment and infrastructure. Well shutdown and partial deconstruction will be required to complete remediation of the release.

Vertex respectfully requests that the incident (nAPP2335435491) be deferred until the production equipment is retired and removed prior to reclamation. XTO certifies that all information in this report and the attachments is correct, and that they have complied with all applicable requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain deferral on the December 16, 2023, release at Big Eddy Unit DI 9 35H.

Should you have any questions or concerns, please do not hesitate to contact Sally Carttar at 575.361.3561 or SCarttar@vertexresource.com.

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Big Eddy Unit DI 9 35H

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7.0 References

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

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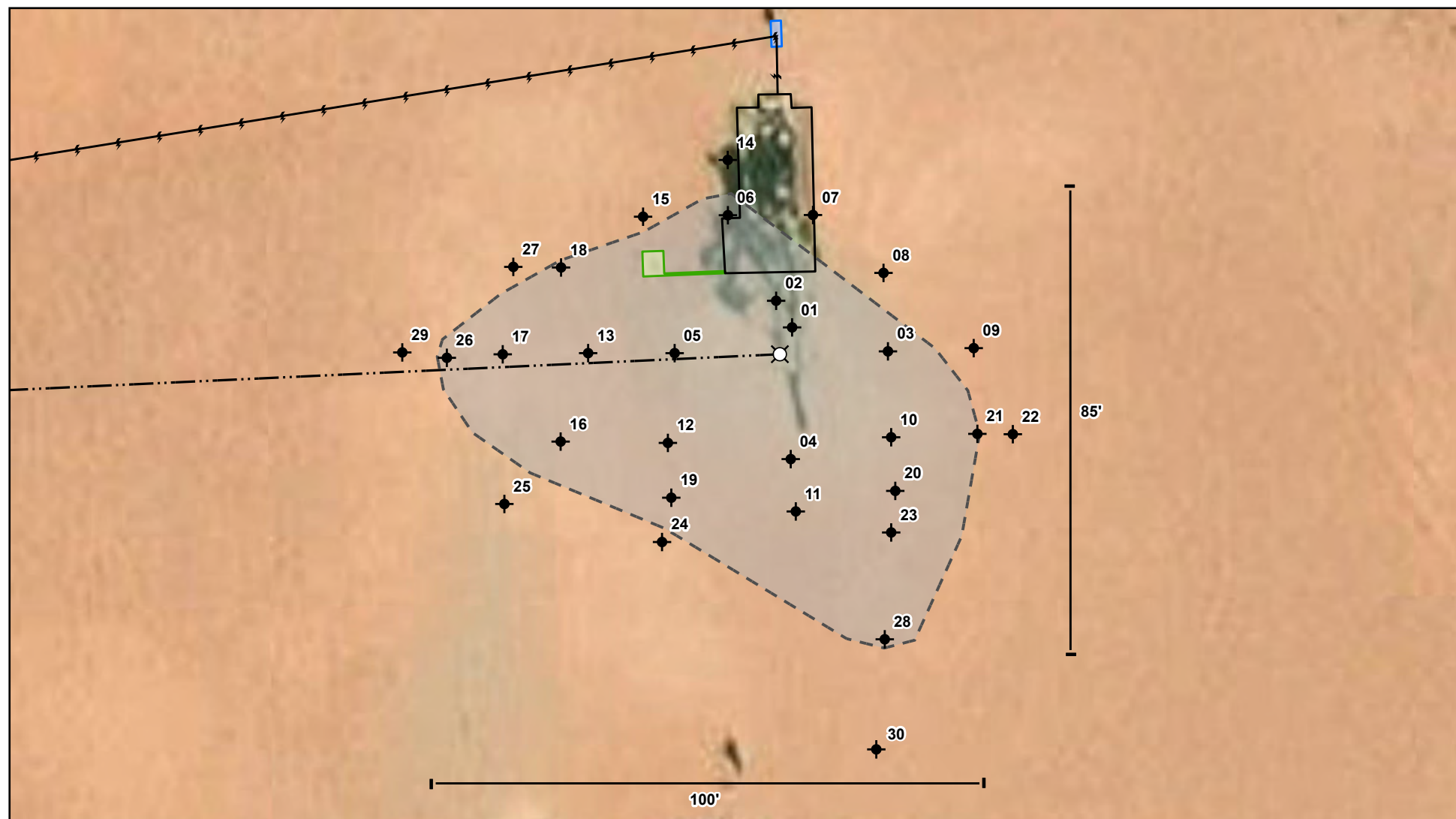
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8.0 Limitations

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

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

FIGURES



- | | | | |
|----------------------------------|--------------------------|---------------------------------|--------------------|
| ◆ Borehole (Prefixed by "BH24-") | — Buried Electrical Line | Area of Impact (~5,006 sq. ft.) | Electrical Boxes |
| ⊗ Wellhead | — · · Buried Pipeline | Control Box and Infrastructure | Pumpjack Equipment |



0 5 10 20 ft
NAD 1983 UTM Zone 13N
Date: May 29/24

Map Center:
Lat/Long
32.457723°, -103.879562°



Characterization Sampling Site Schematic Big Eddy Unit DI 9 35H

FIGURE:

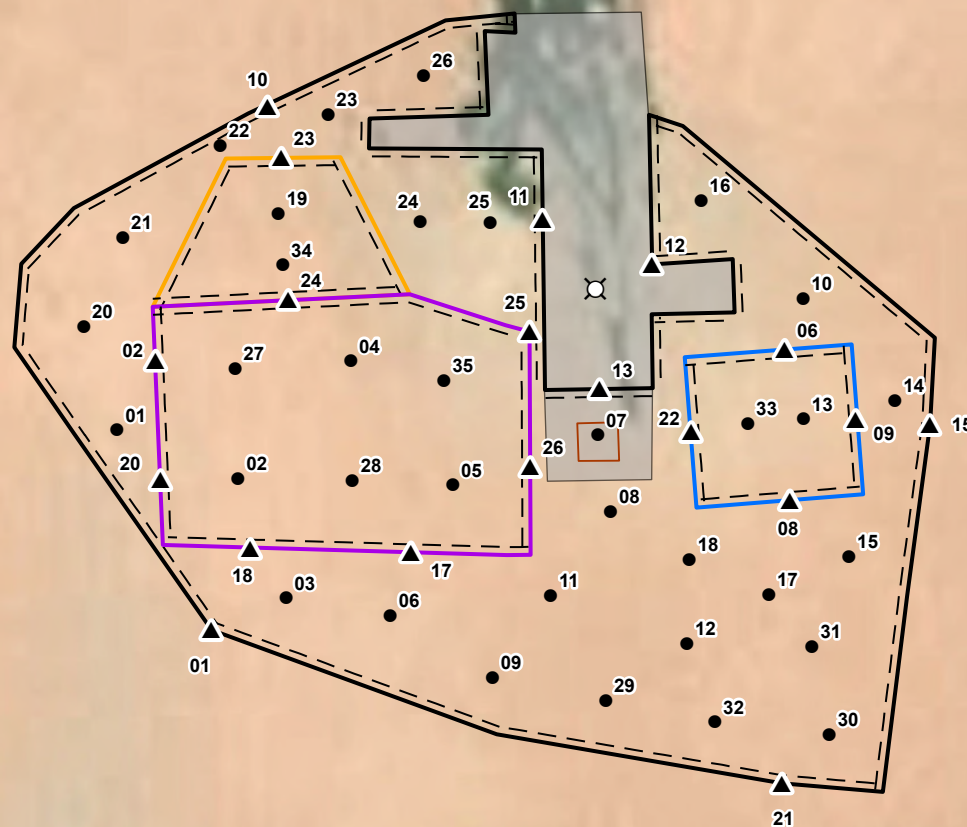
1



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, Vertex Professional Services Ltd., 2024.

VERSATILITY. EXPERTISE.



● Base Sample (Prefixed by "BS24-")

Cellar

⊗ Former Wellhead

Deferral Area (~764 sq.ft. | 179 ft.)

▲ Wall Sample (Prefixed by "WS24-")

Excavation to 1' bgs (~3,506 sq.ft | 407 ft.)

Excavation to 3' bgs (~297 sq.ft. | 69 ft.)

Excavation to 5' bgs (~312 sq.ft. | 75 ft.)

Excavation to 10' bgs (~1,077 sq.ft. | 132 ft.)

Note:

Area of Excavation Walls to 1' bgs (~408 sq.ft.)

Area of Excavation Walls to 3' bgs (~207 sq.ft.)

Area of Excavation Walls to 5' bgs (~192 sq.ft.)

Area of Excavation Walls to 10' bgs (~1053 sq.ft.)



0 5 10 20 ft
NAD 1983 UTM Zone 13N
Date: Sep 06/24

Map Center:
Lat/Long
32.457716°, -103.879549°



Confirmation Sampling Site Schematic Big Eddy Unit DI 9 35H

FIGURE:

2



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, Vertex Professional Services Ltd., 2024.

VERSATILITY. EXPERTISE.

TABLES

Client Name: XTO Energy, Inc

Site Name: Big Eddy Unit DI 9 35H

NMOCD Tracking #: nAPP2335435491

Project #: 24E-01314

Lab Reports: 885-2895-1, 885-2902-1, and 885-3596-1

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-01	0	April 13, 2024	1,500	-	2,472	ND	0.81	51	4,900	2,600	4,951	7,551	1,900
	2	April 13, 2024	420	444	487	ND	ND	ND	240	150	240	390	550
	3.5	April 13, 2024	73	130	219	ND	ND	ND	35	ND	35	35	90
BH24-02	0	April 13, 2024	94	-	3,703	ND	ND	13	5,100	2,000	5,113	7,113	2,100
	2	April 13, 2024	5	22	72	ND	ND	ND	ND	ND	ND	ND	8.4
	4	April 13, 2024	4	48	163	ND	ND	ND	ND	ND	ND	ND	11
BH24-03	0	April 13, 2024	5	-	4,478	-	-	-	-	-	-	-	-
	2	April 13, 2024	5	35	808	ND	ND	ND	ND	ND	ND	ND	460
	4	April 13, 2024	4	50	360	ND	ND	ND	ND	ND	ND	ND	270
BH24-04	0	April 13, 2024	6	9,430	740	-	-	-	-	-	-	-	-
	2	April 13, 2024	3	40	663	ND	ND	ND	ND	ND	ND	ND	290
	3	April 13, 2024	2	91	754	ND	ND	ND	13	ND	13	13	320
BH24-05	0	April 13, 2024	2	97	173	ND	ND	ND	ND	ND	ND	ND	75
	2	April 13, 2024	1	22	926	ND	ND	ND	ND	ND	ND	ND	310
	4	April 13, 2024	1	42	1,001	ND	ND	ND	ND	ND	ND	ND	430
	6	April 13, 2024	0	22	170	ND	ND	ND	ND	ND	ND	ND	68
BH24-06	0	April 13, 2024	1	1,090	1,096	ND	ND	ND	89	220	89	309	100
	2	April 13, 2024	1	25	ND	ND	ND	ND	ND	ND	ND	ND	7.9
	4	April 13, 2024	1	26	ND	ND	ND	ND	ND	ND	ND	ND	7.7
BH24-07	0	April 13, 2024	1	45	155	ND	ND	ND	ND	ND	ND	ND	28
	2	April 13, 2024	1	21	ND	ND	ND	ND	ND	ND	ND	ND	5.2
	4	April 13, 2024	1	25	11	ND	ND	ND	ND	ND	ND	ND	7.9
BH24-08	0	April 14, 2024	0	37	369	ND	ND	ND	ND	ND	ND	ND	92
	2	April 14, 2024	0	21	450	ND	ND	ND	ND	ND	ND	ND	120
BH24-09	0	April 14, 2024	0	35	549	ND	ND	ND	ND	ND	ND	ND	280
	2	April 14, 2024	0	44	243	ND	ND	ND	ND	ND	ND	ND	210
BH24-10	0	April 14, 2024	0	-	1,649	-	-	-	-	-	-	-	-
	2	April 14, 2024	0	-	972	ND	ND	ND	ND	ND	ND	ND	650
	4	April 14, 2024	0	32	474	ND	ND	ND	ND	ND	ND	ND	360
BH24-11	0	April 14, 2024	0	44	496	ND	ND	ND	ND	ND	ND	ND	230
	2	April 14, 2024	0	51	252	ND	ND	ND	ND	ND	ND	ND	170
BH24-12	0	April 14, 2024	0	-	2,823	-	-	-	-	-	-	-	-
	2	April 14, 2024	0	-	988	ND	ND	ND	ND	ND	ND	ND	620
	4	April 14, 2024	0	65	627	ND	ND	ND	ND	ND	ND	ND	460
BH24-13	0	April 14, 2024	0	-	4,240	-	-	-	-	-	-	-	-
	2	April 14, 2024	0	-	2,131	ND	ND	ND	ND	ND	ND	ND	1,200
	4	April 14, 2024	0	71	642	ND	ND	ND	ND	ND	ND	ND	470
BH24-14	0	April 14, 2024	0	25	395	ND	ND	ND	ND	ND	ND	ND	120
	2	April 14, 2024	0	52	300	ND	ND	ND	ND	ND	ND	ND	260
BH24-15	0	April 14, 2024	0	27	333	ND	ND	ND	ND	ND	ND	ND	120
	2	April 14, 2024	0	37	471	ND	ND	ND	ND	ND	ND	ND	200
BH24-16	0	April 25, 2024	-	877	205	-	-	-	-	-	-	-	-
	2	April 25, 2024	-	71	115	-	-	-	-	-	-	-	-
BH24-17	0	April 25, 2024	-	246	485	-	-	-	-	-	-	-	-
	2	April 25, 2024	-	57	105	-	-	-	-	-	-	-	-
BH24-18	0	April 25, 2024	-	249	205	-	-	-	-	-	-	-	-
	2	April 25, 2024	-	104	130	-	-	-	-	-	-	-	-
BH24-19	0	April 25, 2024	-	189	310	-	-	-	-	-	-	-	-
	2	April 25, 2024	-	72	138	-	-	-	-	-	-	-	-
BH24-20	0	April 25, 2024	-	180	463	-	-	-	-	-	-	-	-
	2	April 25, 2024	-	58	98	-	-	-	-	-	-	-	-
BH24-21	0	April 25, 2024	-	135	198	-	-	-	-	-	-	-	-
	2	April 25, 2024	-	52	135	-	-	-	-	-	-	-	-

Client Name: XTO Energy, Inc

Site Name: Big Eddy Unit DI 9 35H

NMOCD Tracking #: nAPP2335435491

Project #: 24E-01314

Lab Reports: 885-2895-1, 885-2902-1, and 885-3596-1

Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic Chloride Concentration (mg/kg)
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration (ppm)	Volatile		Extractable					
						Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
BH24-22	0	April 26, 2024	-	95	205	ND	ND	ND	13	ND	13	13	130
	2	April 26, 2024	-	32	100	ND	ND	ND	ND	ND	ND	ND	65
BH24-23	0	April 26, 2024	-	374	-	-	-	-	-	-	-	-	-
BH24-24	0	April 26, 2024	-	33	165	ND	ND	ND	ND	ND	ND	ND	570
	2	April 26, 2024	-	43	50	ND	ND	ND	ND	ND	ND	ND	410
BH24-25	0	April 26, 2024	-	96	154	ND	ND	ND	20	ND	20	20	330
	2	April 26, 2024	-	33	70	ND	ND	ND	ND	ND	ND	ND	320
BH24-26	0	April 26, 2024	-	197	-	-	-	-	-	-	-	-	-
BH24-27	0	April 26, 2024	-	68	99	ND	ND	ND	ND	ND	ND	ND	150
	2	April 26, 2024	-	42	42	ND	ND	ND	ND	ND	ND	ND	310
BH24-28	0	April 26, 2024	-	277	-	-	-	-	-	-	-	-	-
BH24-29	0	April 26, 2024	-	48	125	ND	ND	ND	ND	ND	ND	ND	320
	2	April 26, 2024	-	50	70	ND	ND	ND	ND	ND	ND	ND	25
BH24-30	0	April 26, 2024	-	56	140	ND	ND	ND	ND	ND	ND	ND	470
	2	April 26, 2024	-	20	135	ND	ND	ND	ND	ND	ND	ND	540

"ND" Not Detected at the Reporting Limit

"- " indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria

Client Name: XTO Energy
Site Name: Big Eddy Unit DI 9 35H
NMOCD Tracking #: nAPP2335435491
Project #: 24E-01314
Lab Reports: H244947, H245199, and H245302

Table 4. Confirmation Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs												
Sample Description			Field Screening		Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BS24-01	1	August 13, 2024	60	225	ND	ND	ND	ND	ND	ND	ND	320
BS24-02	10	August 29, 2024	28	250	ND	ND	ND	ND	ND	ND	ND	96
BS24-03	1	August 13, 2024	55	402	ND	ND	ND	ND	ND	ND	ND	528
BS24-04	10	August 23, 2024	40	370	ND	ND	ND	ND	ND	ND	ND	240
BS24-05	10	August 29, 2024	38	338	ND	ND	ND	ND	ND	ND	ND	96
BS24-06	1	August 13, 2024	62	343	ND	ND	ND	ND	ND	ND	ND	464
BS24-07	1	August 13, 2024	47	398	ND	ND	ND	221	68.8	221	289.8	800
BS24-08	1	August 13, 2024	54	62	ND	ND	ND	ND	ND	ND	ND	176
BS24-09	1	August 13, 2024	73	199	ND	ND	ND	ND	ND	ND	ND	464
BS24-10	1	August 13, 2024	40	218	ND	ND	ND	ND	ND	ND	ND	352
BS24-11	1	August 13, 2024	28	146	ND	ND	ND	ND	ND	ND	ND	320
BS24-12	1	August 13, 2024	61	110	ND	ND	ND	ND	ND	ND	ND	416
BS24-13	3	August 13, 2024	88	363	ND	ND	ND	ND	ND	ND	ND	448
BS24-14	1	August 13, 2024	60	205	ND	ND	ND	ND	ND	ND	ND	272
BS24-15	1	August 13, 2024	53	224	ND	ND	ND	ND	ND	ND	ND	416
BS24-16	1	August 13, 2024	40	306	ND	ND	ND	ND	ND	ND	ND	272
BS24-17	1	August 13, 2024	62	208	ND	ND	ND	ND	ND	ND	ND	272
BS24-18	1	August 13, 2024	65	236	ND	ND	ND	ND	ND	ND	ND	256
BS24-19	5	August 23, 2024	43	485	ND	ND	ND	ND	ND	ND	ND	48
BS24-20	1	August 14, 2024	37	345	ND	ND	ND	ND	ND	ND	ND	176
BS24-21	1	August 14, 2024	42	214	ND	ND	ND	ND	ND	ND	ND	560
BS24-22	1	August 14, 2024	47	412	ND	ND	ND	ND	ND	ND	ND	320
BS24-23	1	August 14, 2024	57	281	ND	ND	ND	ND	ND	ND	ND	368
BS24-24	1	August 14, 2024	39	318	ND	ND	ND	ND	ND	ND	ND	304
BS24-25	1	August 23, 2024	92	468	ND	ND	ND	ND	ND	ND	ND	80
BS24-26	1	August 14, 2024	38	286	ND	ND	ND	45.6	21.3	45.6	66.9	192
BS24-27	10	August 23, 2024	45	193	ND	ND	ND	ND	ND	ND	ND	96
BS24-28	10	August 23, 2024	81	480	ND	ND	ND	ND	ND	ND	ND	32
BS24-29	1	August 29, 2024	43	175	ND	ND	ND	ND	ND	ND	ND	128
BS24-30	1	August 29, 2024	35	200	ND	ND	ND	ND	ND	ND	ND	80
BS24-31	1	August 29, 2024	22	200	ND	ND	ND	ND	ND	ND	ND	64
BS24-32	1	August 29, 2024	29	250	ND	ND	ND	ND	ND	ND	ND	160
BS24-33	3	August 29, 2024	38	225	ND	ND	ND	ND	ND	ND	ND	96
BS24-34	5	August 29, 2024	40	300	ND	ND	ND	ND	ND	ND	ND	176
BS24-35	10	August 29, 2024	50	350	ND	ND	ND	ND	ND	ND	ND	96



Client Name: XTO Energy
Site Name: Big Eddy Unit DI 9 35H
NMOCD Tracking #: nAPP2335435491
Project #: 24E-01314
Lab Reports: H244947, H245199, and H245302

Table 4. Confirmation Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs												
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Sample ID	Depth (ft)	Sample Date	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
					Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
WS24-01	0-1	August 13, 2024	38	139	ND	ND	ND	ND	ND	ND	ND	128
WS24-02	1-10	August 23, 2024	28	185	ND	ND	ND	ND	ND	ND	ND	48
WS24-06	1-3	August 14, 2024	46	222	ND	ND	ND	ND	ND	ND	ND	368
WS24-08	1-3	August 14, 2024	55	239	ND	ND	ND	ND	ND	ND	ND	176
WS24-09	1-3	August 14, 2024	57	315	ND	ND	ND	ND	ND	ND	ND	112
WS24-10	0-1	August 14, 2024	66	315	ND	ND	ND	ND	ND	ND	ND	432
WS24-11	0-1	August 14, 2024	548	870	ND	ND	ND	61.3	11.4	61.3	72.7	1,640
WS24-12	0-1	August 14, 2024	59	650	ND	ND	ND	ND	ND	ND	ND	48
WS24-13	0-1	August 14, 2024	348	382	ND	ND	ND	171	87	171	258	336
WS24-15	0-1	August 14, 2024	45	438	ND	ND	ND	ND	ND	ND	ND	432
WS24-17	1-10	August 23, 2024	61	405	ND	ND	ND	ND	ND	ND	ND	320
WS24-18	1-10	August 23, 2024	44	455	ND	ND	ND	ND	ND	ND	ND	272
WS24-20	1-10	August 23, 2024	38	373	ND	ND	ND	ND	ND	ND	ND	96
WS24-21	0-1	August 29, 2024	29	250	ND	ND	ND	ND	ND	ND	ND	80
WS24-22	1-3	August 29, 2024	40	300	ND	ND	ND	ND	ND	ND	ND	128
WS24-23	1-5	August 29, 2024	54	300	ND	ND	ND	ND	ND	ND	ND	80
WS24-24	5-10	August 29, 2024	32	375	ND	ND	ND	ND	ND	ND	ND	160
WS24-25	1-10	August 29, 2024	45	425	ND	ND	ND	ND	ND	ND	ND	128
WS24-26	1-10	August 29, 2024	47	413	ND	ND	ND	ND	ND	ND	ND	96

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

Bold and grey shaded indicates exceedance outside of NMOCD Remediation Closure Criteria
Bold and purple shaded indicates exceedance outside of NMOCD Closure Criteria and in Deferral Area



APPENDIX A - NMOCD C-141 Report

Location:	Big Eddy Unit DI 9 35H	
Spill Date:	12/16/2023	
Area 1		
Approximate Area =	3611.80	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	2.34	bbls
Total Produced Water =	5.46	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	2.34	bbls
Total Produced Water =	5.46	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	2.10	bbls
Total Produced Water =	4.90	bbls

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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 296618

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 296618
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Initial C-141 Received

Location of Release Source

Please answer all the questions in this group.

Site Name	Big Eddy Unit DI 9 35H
Date Release Discovered	12/16/2023
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	Cause: Equipment Failure Well Crude Oil Released: 2 BBL Recovered: 2 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure Well Produced Water Released: 5 BBL Recovered: 5 BBL Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 296618

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 296618
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

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: Melanie Collins Title: Regulatory Analyst Email: Melanie.Collins@exxonmobil.com Date: 12/20/2023
--	---

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QUESTIONS, Page 3

Action 296618

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 296618
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

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)	Not answered.
What method was used to determine the depth to ground water	Not answered.
Did this release impact groundwater or surface water	Not answered.
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	Not answered.
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Not answered.
An occupied permanent residence, school, hospital, institution, or church	Not answered.
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Not answered.
Any other fresh water well or spring	Not answered.
Incorporated municipal boundaries or a defined municipal fresh water well field	Not answered.
A wetland	Not answered.
A subsurface mine	Not answered.
An (non-karst) unstable area	Not answered.
Categorize the risk of this well / site being in a karst geology	Not answered.
A 100-year floodplain	Not answered.
Did the release impact areas not on an exploration, development, production, or storage site	Not answered.

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	No
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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CONDITIONS

Action 296618

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 296618
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	12/20/2023

APPENDIX B – Closure Criteria Research Documentation

APPENDIX C – Daily Field Reports



Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	4/14/2024
Site Location Name:	Big Eddy Unit DI 9 35H	Report Run Date:	4/15/2024 2:06 AM
Client Contact Name:	Amy Ruth	API #:	
Client Contact Phone #:	432-661-0571		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	4/14/2024 7:16 AM
Departed Site	4/14/2024 5:05 PM

Field Notes

- 7:51** Completed JSA on arrival. On site to continue delineation.
- 9:31** Mapped infrastructure and proposed deferral request area on collector. Identified additional sampling points, mapped points in Arc Collector, and swept sampling areas with magnetic locator prior to ground disturbance.
- 19:42** Advanced boreholes BH24-08 through BH24-15 to attempt horizontal delineation. Samples were collected at 0 and 2 feet bgs.
- 19:46** Field screening results for samples from BH24-08, BH24-09, BH24-11, BH24-14, and BH24-15 were below strictest criteria for chloride and TPH. Horizontal delineation completed to north pending laboratory results.
- 19:49** Field screening results from BH24-10, BH24-12, and BH24-13 exceeded threshold for chloride. Borehole depths were increased and samples collected at 4 feet bgs to confirm vertical delineation in high karst area.

Next Steps & Recommendations

- 1 Continue delineation.

Daily Site Visit Report



Site Photos

Viewing Direction: Southwest



Descriptive Photo - 1
Viewing Direction: Southwest
Scene: Northeast of wellhead facing southwest. Advanced BH24-08 north of BH24-03.
Created: 4/16/2024 1:22:07 PM
Lat:32.457782, Long:-103.579415

Northeast of wellhead facing southwest.
Advanced BH24-08 north of BH24-03.

Viewing Direction: West



Descriptive Photo - 2
Viewing Direction: West
Scene: East of wellhead facing west. Advanced BH24-09 east of BH24-03.
Created: 4/16/2024 1:22:07 PM
Lat:32.457782, Long:-103.579415

East of wellhead facing west. Advanced BH24-09 east of BH24-03.

Viewing Direction: Northwest



Descriptive Photo - 3
Viewing Direction: Northwest
Scene: Southeast of wellhead facing northwest. Advanced BH24-10 south of BH24-03.
Created: 4/16/2024 1:27:07 PM
Lat:32.457782, Long:-103.579415

Southeast of wellhead facing northwest.
Advanced BH24-10 southeast of BH24-03.

Viewing Direction: North



Descriptive Photo - 4
Viewing Direction: North
Scene: South of wellhead facing north. Advanced BH24-11 south of BH24-04.
Created: 4/16/2024 1:28:22 PM
Lat:32.457782, Long:-103.579415

South of wellhead facing north. Advanced BH24-11 south of BH24-04.



Daily Site Visit Report

Viewing Direction: Northeast



Southwest of wellhead facing northeast.
Advanced BH24-12 west of BH24-04.

Viewing Direction: East



West of wellhead facing east. Advanced BH24-13 west of BH24-05.

Viewing Direction: South



Northwest of pump jack facing south.
Advanced BH24-14 north of BH24-06.

Viewing Direction: East



West of pump jack facing east. Advanced BH24-15 west of BH24-06.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

A handwritten signature in black ink, appearing to be 'LP', written over a horizontal line.

Signature

Daily Site Visit Report



Client	XTO Energy Inc. (US)	Inspection Date	8/14/2024
Site Location Name	Big Eddy Unit DI 9 35H	API #	
Client Contact Name	Amy Ruth	Project Owner	
Client Contact Phone #	432-661-0571	Project Manager	
Project Reference #			
Unique Project ID			

Summary of Times

Arrived at Site 8/14/2024 7:10 AM

Departed Site

Field Notes

7:10 On site safety meeting and daily walk through.

7:10 Complete excavation via hand digging under lines that run east to west in the western 3ft excavation area

13:25 Excavation is complete

13:25 Confirmation sampling is complete and was done so between 8:00 and 11:00

13:40 All samples aside from WS24-11-13 (which were deferred walls) are below criteria and all samples were jarred on site.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: South



West side of excavation facing south

Viewing Direction: South



BS24-04 was excavated to 8ft bgs on accident by operator while cleaning out the area

Viewing Direction: North



West side of excavation facing north

Viewing Direction: North



3-8 ft excavation area facing north

Daily Site Visit Report



Viewing Direction: Northeast



NW of deferral area

Viewing Direction: East



West side of deferral area facing east

Viewing Direction: North



South deferral area with drill casing

Viewing Direction: North



East side of excavation facing north

Daily Site Visit Report



Viewing Direction: North



East 3ft excavation area

Viewing Direction: West



East side federal area facing west

Viewing Direction: South



East excavation area facing south

Viewing Direction: West



South side of excavation facing west

Daily Site Visit Report



Viewing Direction: East



South side of excavation facing east

Viewing Direction: Northwest



SE corner facing NW

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature:



Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	8/29/2024
Site Location Name:	Big Eddy Unit DI 9 35H	Report Run Date:	8/30/2024 10:54 AM
Client Contact Name:	Amy Ruth	API #:	
Client Contact Phone #:	432-661-0571		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	8/29/2024 5:56 AM
Departed Site	8/29/2024 5:47 PM

Field Notes

- 6:45** Completed JSA and conducted safety meeting with Standard Safety work crew on arrival. Swept work areas with magnetic locator prior to ground disturbance. Planned to slope south and west walls of 10 feet bgs excavation back 15 feet for stability. Planned to connect 5 and 10 feet bgs excavations with hand tools because a pipeline divided them.
- 7:46** Contacted Kent at XTO and received approval to proceed with work.
- 9:53** Work crew sloped south and west walls of excavation to 10 feet bgs as planned, allowing access for sampling.
- 9:56** Collected confirmation samples from excavation surfaces as the became safely accessible. All confirmation samples were 5-point composites representing areas no greater than 200 square feet. Confirmation samples were collected as needed to supplement original sampling events to address changes of excavation.
- 10:02** Collected confirmation base and wall samples BS24-33 and WS24-22 from excavation to 3 feet bgs southeast of wellhead. Collected confirmation base and wall samples BS24-02, BS24-05, BS24-35, WS24-25, and WS24-26 from excavation to 10 feet bgs.
- 10:04** Collected confirmation base and wall samples BS24-29, BS24-30, BS24-31, BS24-32, and WS24-21 from expanded excavation to 1 feet bgs southeast of wellhead.
- 14:42** Work crew connected 5 and 10 feet excavations. Confirmation base and wall samples BS24-34 and WS24-23 were collected from excavation to 5 feet bgs. Confirmation wall sample WS24-24 was collected between 5 and 10 feet excavation depths.
- 17:33** Standard Safety crew cleaned up excavation, installed cribbing under flow lines for support, and replaced fences.



Daily Site Visit Report

17:35 Field screening was completed using silver nitrate titration. Both standard and diluted tests were completed for each sample. Field screening results for all confirmation base and wall samples were below strictest criteria for chloride and TPH. Excavation and confirmation sampling completed pending laboratory results.

Next Steps & Recommendations

- 1 Send samples to lab.

Daily Site Visit Report



Site Photos

Viewing Direction: West



Descriptive Photo - 1
Viewing Direction: West
Camera Northward at wellhead facing west.
Created: 8/29/2024 8:48:28 AM
Lat:32.467708, Long:-103.875492

Northeast of wellhead facing west.

Viewing Direction: North



Descriptive Photo - 2
Viewing Direction: North
Camera Southeast of wellhead facing north. Collected wellhead samples BS24-33 and WS24-22 from excavation to 3 feet bgs.
Created: 8/29/2024 8:28:28 AM
Lat:32.467708, Long:-103.875492

Southeast of wellhead facing north. Collected confirmation samples BS24-33 and WS24-22 from excavation to 3 feet bgs.



Daily Site Visit Report

Viewing Direction: East



West-southwest of wellhead facing east. Sloped south and west walls of excavation to 10 feet bgs.

Viewing Direction: Northeast



West-southwest of wellhead facing northeast. Sloped south and west walls of excavation to 10 feet bgs.

Viewing Direction: North



Southwest of wellhead facing north. Collected confirmation samples BS24-05, BS24-35, WS24-25, and WS24-26 from base/walls of excavation to 10 feet bgs.

Viewing Direction: Northwest



South-southwest of wellhead facing northwest. Collected confirmation samples BS24-02, BS24-05, and BS24-35 from base of excavation to 10 feet bgs.



Daily Site Visit Report

Viewing Direction: East



South-southwest of wellhead facing east. Collected confirmation samples BS24-29, BS24-30, BS24-32, and WS24-21 from base/wall of excavation to 1 feet bgs.

Viewing Direction: Northeast



Southeast of wellhead facing northeast. Collected confirmation samples BS24-29, BS24-30, BS24-31, BS24-32, and WS24-21 from base/wall of excavation to 1 feet bgs.



Daily Site Visit Report

Viewing Direction: South



East-southeast lip of wellhead facing northeast. Collected confirmation samples BS24-30, BS24-31, BS24-32, and WS24-21 from base/wall of excavation to 1 feet bgs.

Viewing Direction: Southwest



West of pump jack facing southwest. Collected BS24-34 and WS24-23 from excavation to 5 feet bgs.

Viewing Direction: North



Southwest of pump jack facing north. Collected WS24-24 from 5-10 feet bgs wall between excavation depths.

Viewing Direction: West



Southeast corner of excavation to 1 feet bgs facing west. Excavation completed.



Daily Site Visit Report

Viewing Direction: Northwest



Southeast corner of excavation to 1 feet bgs facing northwest. Excavation completed.

Viewing Direction: North



Southeast corner of excavation to 1 feet bgs facing north. Excavation completed.

Viewing Direction: Northwest



Southeast corner of excavation to 3 feet bgs facing northwest. Excavation completed.

Viewing Direction: North



South of excavation to 3 feet bgs facing north. Excavation completed.



Daily Site Visit Report

Viewing Direction: Northwest



Immediately southwest of wellhead facing northwest over 1 foot bgs excavation. Excavation completed.

Viewing Direction: East



Southwest of pump jack facing east over 1 foot bgs excavation. Excavation completed.

Viewing Direction: Southwest



Northeast corner of excavation to 5 feet bgs facing southwest. Excavation completed.

Viewing Direction: Southeast



Northeast corner of excavation to 5 feet bgs facing southeast. Excavation completed.



Daily Site Visit Report

Viewing Direction: East



West edge of excavation to 10 feet bgs facing east. Excavation completed.

Viewing Direction: Southeast



West edge of excavation to 10 feet bgs facing southeast. Excavation completed.

Viewing Direction: Northwest



South edge of excavation to 10 feet bgs facing northwest. Excavation completed.

Viewing Direction: North



South edge of excavation to 10 feet bgs facing north. Excavation completed.



Daily Site Visit Report

Viewing Direction: Northeast



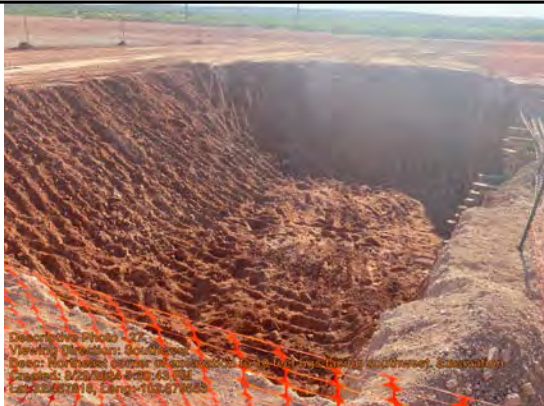
South edge of excavation to 10 feet bgs facing northeast. Excavation completed.

Viewing Direction: Northwest



Southeast corner of excavation to 10 feet bgs facing northwest. Excavation completed.

Viewing Direction: Southwest



Northeast corner of excavation to 10 feet bgs facing southwest. Excavation completed.

Viewing Direction: West



East edge of excavation to 10 feet bgs facing west. Excavation completed.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

A handwritten signature in black ink, appearing to be 'Lakin Pullman', written over a horizontal line.

Signature

APPENDIX D – Notifications

XTO Extension Request - Big Eddy Unit DI 9 35H NAPP2335435491

Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>

Fri 4/5/2024 8:19 AM

To: Romero, Alan <alan.romero1@exxonmobil.com>

Cc: Ruth, Amy <amy.ruth@exxonmobil.com>; Garcia, Amanda <amanda.garcia@exxonmobil.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

RE: Incident #NAPP2335435491

Alan,

Your request for a 90-day extension to **July 4th, 2024**, is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. | Artesia, NM 88210

575.909.0302 | robert.hamlet@state.nm.us

<http://www.emnrd.state.nm.us/OCD/>



From: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>

Sent: Thursday, April 4, 2024 3:39 PM

To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: FW: [EXTERNAL] XTO Extension Request - Big Eddy Unit DI 9 35H

Scott Rodgers • Environmental Specialist – Adv.

Environmental Bureau

EMNRD - Oil Conservation Division

8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113

505.469.1830 | scott.rodgers@emnrd.nm.gov

<http://www.emnrd.nm.gov/ocd>



From: Romero, Alan <alan.romero1@exxonmobil.com>

Sent: Thursday, April 4, 2024 3:30 PM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Ruth, Amy <amy.ruth@exxonmobil.com>; Garcia, Amanda <amanda.garcia@exxonmobil.com>
Subject: [EXTERNAL] XTO Extension Request - Big Eddy Unit DI 9 35H

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good afternoon,

XTO is requesting an extension for the current deadline to complete remedial activities and submitting a report required in 19.15.29.12.B.(1) NMAC at the Big Eddy Unit DI 9 35H, incident number NAPP2335435491. The closure deadline was March 15, 2024, however, we had some recent staffing changes involving a couple of departures and while delegating certain tasks, this incident became an oversight and was missed on our end. In order to complete all remedial activities and submit a report, XTO requests an extension until July 5, 2024.

Please contact me with any questions or concerns.

Alan Romero

Environmental Advisor
Permian BU – New Mexico-Delaware
ExxonMobil Upstream Oil & Gas Unconventional
Direct: (575) 988-3383
alan.romero1@exxonmobil.com

XTO ENERGY, INC. – An ExxonMobil Subsidiary

3104 E. Greene Street | Carlsbad, New Mexico 88220



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Phone:(505) 334-6178 Fax:(505) 334-6170

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

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

QUESTIONS

Action 372221

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372221
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/13/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Wyatt Wadleigh (832) 392-4807
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 miles. Turn left onto Wipp rd, and drive north and northeast for 5.7 miles. Turn left on Louis Whitlock rd, and drive north for 0.8 miles. Turn left on lease rd and drive 3.5 miles west. Turn right on lease rd and drive 1.5 miles north. Turn left on lease rd and drive 2.6 miles west and northwest to facility and well pad.

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CONDITIONS

Action 372221

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372221
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
cbrown1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/9/2024

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QUESTIONS

Action 372223

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372223
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/14/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Wyatt Wadleigh (832) 392-4807
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 miles. Turn left onto Wipp rd, and drive north and northeast for 5.7 miles. Turn left on Louis Whitlock rd, and drive north for 0.8 miles. Turn left on lease rd and drive 3.5 miles west. Turn right on lease rd and drive 1.5 miles north. Turn left on lease rd and drive 2.6 miles west and northwest to facility and well pad.

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CONDITIONS

Action 372223

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372223
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
cbrown1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/9/2024

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Santa Fe, NM 87505

QUESTIONS

Action 372224

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372224
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/15/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Wyatt Wadleigh (832) 392-4807
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 miles. Turn left onto Wipp rd, and drive north and northeast for 5.7 miles. Turn left on Louis Whitlock rd, and drive north for 0.8 miles. Turn left on lease rd and drive 3.5 miles west. Turn right on lease rd and drive 1.5 miles north. Turn left on lease rd and drive 2.6 miles west and northwest to facility and well pad.

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CONDITIONS

Action 372224

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372224
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
cbrown1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/9/2024

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QUESTIONS

Action 372225

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372225
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/16/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Wyatt Wadleigh (832) 392-4807
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 miles. Turn left onto Wipp rd, and drive north and northeast for 5.7 miles. Turn left on Louis Whitlock rd, and drive north for 0.8 miles. Turn left on lease rd and drive 3.5 miles west. Turn right on lease rd and drive 1.5 miles north. Turn left on lease rd and drive 2.6 miles west and northwest to facility and well pad.

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CONDITIONS

Action 372225

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 372225
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
cbrown1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/9/2024

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QUESTIONS

Action 374303

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 374303
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/22/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 miles. Turn left onto Wipp rd, and drive north and northeast for 5.7 miles. Turn left on Louis Whitlock rd, and drive north for 0.8 miles. Turn left on lease rd and drive 3.5 miles west. Turn right on lease rd and drive 1.5 miles north. Turn left on lease rd and drive 2.6 miles west and northwest to facility and well pad.

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Santa Fe, NM 87505

CONDITIONS

Action 374303

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 374303
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/20/2024

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Santa Fe, NM 87505

QUESTIONS

Action 375869

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 375869
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/23/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Sally Carttar 575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 miles. Turn left onto Wipp rd, and drive north and northeast for 5.7 miles. Turn left on Louis Whitlock rd, and drive north for 0.8 miles. Turn left on lease rd and drive 3.5 miles west. Turn right on lease rd and drive 1.5 miles north. Turn left on lease rd and drive 2.6 miles west and northwest to facility and well pad.

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CONDITIONS

Action 375869

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 375869
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/20/2024

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Santa Fe, NM 87505

QUESTIONS

Action 377404

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 377404
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/28/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 m

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

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

CONDITIONS

Action 377404

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 377404
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/26/2024

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

QUESTIONS

Action 377412

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 377412
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/29/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 m

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Santa Fe, NM 87505

CONDITIONS

Action 377412

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 377412
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aromero	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/26/2024

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State of New Mexico
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1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 378464

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 378464
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/30/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Sally Carttar 575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 m

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CONDITIONS

Action 378464

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 378464
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
cbrown1	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/27/2024

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Santa Fe, NM 87505

QUESTIONS

Action 379092

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 379092
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/03/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Sally Carttar 575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 m

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CONDITIONS

Action 379092

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 379092
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
kasmith	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/29/2024

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1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 379093

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 379093
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved

Location of Release Source	
Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
Surface Owner	State

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	5,000
What is the estimated number of samples that will be gathered	25
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/04/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Sally Carttar 575.361.3561
Please provide any information necessary for navigation to sampling site	From intersection of US-285 and NM-31, drive east on NM-31 for 7.7 miles. Turn right onto NM-128 E, and continue on NM-128 E east and southeast for 11 m

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CONDITIONS

Action 379093

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 379093
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
kasmith	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/29/2024

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State of New Mexico
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1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 379094

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 379094
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
kasmith	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	8/29/2024

APPENDIX E – Laboratory Data Reports and Chain of Custody Forms



5/11/2024, 6:14:19 PM

GIS WATERS PODs

NHD Flowlines

1:18,056

● Active

— Artificial Path

●

— Connector

□ OSE District Boundary

— Stream River

Water Right Regulations

□ Artesian Planning Area

0 0.17 0.35 0.7 mi
0 0.28 0.55 1.1 km

Esri, HERE, IPC, Esri, HERE, Garmin, IPC, Maxar



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
C 02722		CUB	ED	1	2	1	21	21S	30E	604435	3593203*	1713	592		
C 03726 POD3		CUB	ED	4	3	2	20	21S	30E	603463	3592652	2062	166		
C 03773 POD1	C	CUB	ED	4	2	2	32	21S	30E	604039	3589799	2308	55		
C 03774 POD1	C	CUB	ED	2	4	2	32	21S	30E	604039	3589799	2308	32		
C 03772 POD1	C	CUB	ED	2	4	2	32	21S	30E	603859	3589714	2479	30		
C 03772 POD2	C	CUB	ED	4	2	2	32	21S	30E	603850	3589707	2491	30		
C 03772 POD3	C	CUB	ED	4	2	2	32	21S	30E	603840	3589699	2502	30		
C 03772 POD4	C	CUB	ED	4	2	2	32	21S	30E	603824	3589692	2518	30		
C 03772 POD5	C	CUB	ED	4	2	2	32	21S	30E	603823	3589681	2528	30		
C 03772 POD6	C	CUB	ED	4	2	2	32	21S	30E	603814	3589666	2545	30		
C 03772 POD7	C	CUB	ED	4	2	2	32	21S	30E	603805	3589655	2559	30		
C 03772 POD8	C	CUB	ED	4	2	2	32	21S	30E	603797	3589636	2579	30		
C 03726 POD1		CUB	ED	3	2	4	19	21S	30E	602039	3592182	3299			220
C 03234 EXPLORE		CUB	ED	1	2	3	35	21S	30E	607695	3589207*	3472	410		
C 03625 POD1		CUB	ED	1	4	4	18	21S	30E	602108	3593530	3671	310	118	192
C 03726 POD2		CUB	ED	3	4	3	18	21S	30E	601214	3593389	4417	210		
C 03624 POD1		CUB	ED	3	2	3	18	21S	30E	601286	3593689	4473	370	110	260
C 04504 POD1		CUB	ED	2	4	1	18	21S	30E	601436	3594476	4747	32		
C 04504 POD3		CUB	ED	4	2	1	18	21S	30E	601377	3594598	4866	62		
C 04504 POD4		CUB	ED	2	2	1	18	21S	30E	601362	3594709	4944	32		

Average Depth to Water: 149 feet

Minimum Depth: 110 feet

Maximum Depth: 220 feet

Record Count: 20

UTM NAD83 Radius Search (in meters):

Easting (X): 605307

Northing (Y): 3591728

Radius: 5000

*UTM location was derived from PLSS - see Help

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

6/10/24 1:46 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



(with Ownership Information)

(NAD83 UTM in met)

UTMNAD83 Radius Search (in meters):

Radius: 5000

Sorted by: Distance

*UTM location was derived from PLSS - see Help

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

6/10/24 1:46 PM

ACTIVE & INACTIVE POINTS OF DI




New Mexico Office of the State Engineer

Water Right Summary



WR File Number: C 03773 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: CLS CLOSED FILE
Primary Status: CLS CLOSED FILE
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: SCHLUMBERGER TECHNOLOGY CORP
Contact: VIRGILIO COCIANNI

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
583076	CLOSE	2016-02-18	CLS	CLS	RENUMBERED TO: RA-12368POD1	T	0	0	0
 get images	552040	EXPL 2014-08-05	PMT	LOG	C 03773 POD1	T	0	0	

Place of Use

Q	Q														
256	64	Q16	Q4	Sec	Tw	Rng	Acres	Diversion	CU	Use	Priority	Status	Other	Location	Desc
4	2	2	32	21	S	30E	0	0		CLS		CLS			

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

6/10/24 1:52 PM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer



Transaction Summary

EXPL Permit To Explore


Transaction Number: 552040 **Transaction Desc:** C 03773 POD1 **File Date:** 08/04/2014

Primary Status: PMT Permit
Secondary Status: LOG Well Log Received
Person Assigned: *****
Applicant: SCHLUMBERGER TECHNOLOGY CORP
Contact: VIRILIO COCIANNI

Events

	Date	Type	Description	Comment	Processed By
	08/04/2014	APP	Application Received	*	*****
	08/05/2014	FTN	Finalize non-published Trans.		*****
	08/06/2014	CN5	Meter Installation Request		*****
	08/28/2014	QAT	Quality Assurance Completed	SQ2	*****
	09/12/2014	LOG	Well Log Received	*C-3773 POD1	*****
	02/06/2015	QAT	Quality Assurance Completed	DATA	*****
	04/21/2015	QAT	Quality Assurance Completed	IMAGE	*****

Water Right Information

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 03773	0	0		POL POLLUTION CONTROL WELL
**Point of Diversion				
C 03773 POD1		604039	3589799	

Remarks

"FORMER DOWELL SCHLUMBER FACILITY, 507 EAST RICHEY AVENUE, ARTESIA, NM 88210"

Conditions

- 5B A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water; pumping records shall be submitted to the District Supervisor on or before the 10th of Jan., April, July, and Oct. of each year for the 3 preceding calendar months.
- 7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.
- C2 No water shall be diverted from this well except for testing purposes which shall not exceed twenty (20) cumulative days, and well shall be plugged or capped on

- or before , unless a permit to use water from this well is acquired from the Office
- C Driller/State Engineer must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.
- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.
- P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.

x

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 08/05/2014

Log Due Date: 08/31/2015

State Engineer: Scott A. Verhines, P.

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

6/10/24 1:52 PM

TRANSACTION
SUMMARY



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File Cabinet : WR [Show Full Index]

WR_ID	DB_File_Number	TRN_NBR	Event	Comment
C 03773 552040 2491225	C 03773	552040 2014-08-04 EXPL	2491225 2014-09-12 LOG	



showdoc.do

1 / 5

100%



1. GENERAL AND WELL LOCATION	WELL OWNER NAME(S) Schlumberger Technology Corporation				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 105 Industrial Boulevard Sugar Land				CITY Sugar Land	STATE TX	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32.	MINUTES 43 26	SECONDS 42826 25.69	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103.	894 53	5949 35.69	* 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 NUMBER WD-1210		NAME OF LICENSED DRILLER Bryan Nydoske			NAME OF WELL DRILLING COMPANY National EWP	
	DRILLING STARTED 8-22-14	DRILLING ENDED 8-22-14	DEPTH OF COMPLETED WELL (FT) 55	BORE HOLE DEPTH (FT) 61	DEPTH WATER FIRST ENCOUNTER NA		
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETION NA	
	DRILLING FLUID: <input type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY: none						
	DRILLING METHOD: <input type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input checked="" type="radio"/> OTHER - SPECIFY: Auger						
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING THICKNESS (inches)
	0 15		12 1/4	PVC	Flush	4	40
	15 55		12 1/4	PVC	Flush	4	40
	55 60		12 1/4	PVC	Flush	4	40
3. ANNULAR SEAL MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)		
				See Attached			

Big Eddy Unit DI 9 35H

USGS 322814103531501

DTGW = 109 feet bgs, measured September 18, 1978

USGS 322736103513401

DTGW = 125 feet bgs, measured January 1, 1998

Legend

- 0.5 miles Radius
- Big Eddy Unit DI 9 35H Release
- USGS 322736103513401 6,103 feet (1.16 miles)
- USGS 322814103531501 5,915 feet (1.12 miles)

322814103531501

Big Eddy Unit DI 9 35H Release

322736103513401





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National Water Information System: Web Interface


USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

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Groundwater levels for the Nation

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Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322814103531501

Minimum number of levels = 1

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USGS 322814103531501 21S.30E.21.1211 WIPP-27

Eddy County, New Mexico

Latitude 32°28'18.87", Longitude 103°53'20.58" NAD83

Land-surface elevation 3,200 feet above NGVD29

The depth of the hole is 588 feet below land surface.

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

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1978-09-18			D	62610	3401.00	NGVD29	1	S	USGS	S	A
1978-09-18			D	62611	3402.58	NAVD88	1	S	USGS	S	A
1978-09-18			D	72019	109.00		1	S	USGS	S	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?site=322814103531501&agency_cd=USGS&format=html

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0.3 0.26 nadww02



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National Water Information System: Web Interface


USGS Water Resources

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Groundwater levels for the Nation

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Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 322736103513401

Minimum number of levels = 1

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

USGS 322736103513401 21S.30E.22.42430

Eddy County, New Mexico

Latitude 32°27'36", Longitude 103°51'34" NAD27

Land-surface elevation 3,189 feet above NAVD88

The depth of the well is 220 feet below land surface.

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

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

Output formats

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

Date	Time	? Water-level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water- level approval status
1959-04-15			D 62610		3083.27	NGVD29	1	Z			A
1959-04-15			D 62611		3084.85	NAVD88	1	Z			A
1959-04-15			D 72019	104.15			1	Z			A
1972-09-25			D 62610		3075.92	NGVD29	1	Z			A
1972-09-25			D 62611		3077.50	NAVD88	1	Z			A
1972-09-25			D 72019	111.50			1	Z			A
1976-03-17			D 62610		3066.10	NGVD29	1	Z			A
1976-03-17			D 62611		3067.68	NAVD88	1	Z			A
1976-03-17			D 72019	121.32			1	Z			A
1976-12-08			D 62610		3070.74	NGVD29	1	Z			A
1976-12-08			D 62611		3072.32	NAVD88	1	Z			A
1976-12-08			D 72019	116.68			1	Z			A
1983-01-18			D 62610		3068.67	NGVD29	1	Z			A
1983-01-18			D 62611		3070.25	NAVD88	1	Z			A
1983-01-18			D 72019	118.75			1	Z			A
1987-10-15			D 62610		3063.29	NGVD29	1	Z			A
1987-10-15			D 62611		3064.87	NAVD88	1	Z			A
1987-10-15			D 72019	124.13			1	Z			A
1988-03-18			D 62610		3062.66	NGVD29	1	Z			A
1988-03-18			D 62611		3064.24	NAVD88	1	Z			A
1988-03-18			D 72019	124.76			1	Z			A
1992-12-09			D 62610		3063.18	NGVD29	1	S			A
1992-12-09			D 62611		3064.76	NAVD88	1	S			A
1992-12-09			D 72019	124.24			1	S			A
1998-01-28			D 62610		3062.02	NGVD29	1	S			A
1998-01-28			D 62611		3063.60	NAVD88	1	S			A
1998-01-28			D 72019	125.40			1	S			A

Explanation

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

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URL: [https://nwis.waterdata.usgs.gov/nwis/gwlevels?](https://nwis.waterdata.usgs.gov/nwis/gwlevels?site=322736103513401&agency_cd=USGS&format=html)

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0.28 0.24 nadww02





New Mexico Office of the State Engineer

Water Right Summary


[get image list](#)

WR File Number: C 03726

Subbasin: CUB

Cross Reference: -

Primary Purpose: MON MONITORING WELL

Primary Status:

Total Acres:

Subfile: -

Header: -

Total Diversion: 0

Cause/Case: -

Agent: FOTH INFRASTRUCTURE & ENVIROMT

Contact: RICHARD SCHOWENGERDT




Owner: INTREPID POTASH-NEW MEXICO LLC

Contact: KATIE KELLER

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/		Acres	Diversion	Consumptive
			1	2		To				
get images	542145	EXPL 2014-02-27	PMT	LOG	C 03726 POD1-3	T		0	0	

Current Points of Diversion

POD Number	Well Tag	Source	Q					(NAD83 UTM in meters)		Other Location Desc	
			64	Q16	Q4	Sec	Tws	Rng	X		Y
C 03726 POD1		Shallow	3	2	4	19	21S	30E	602039	3592182	 IP-WW-12
C 03726 POD2		Shallow	3	4	3	18	21S	30E	601214	3593389	 IP-WW-13
C 03726 POD3		Shallow	4	3	2	20	21S	30E	603463	3592652	 IP-WW-14

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5/29/24 2:53 PM

WATER RIGHT SUMMARY



Big Eddy Unit DI 9 35 H

Intermittent Stream 904 feet



May 11, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

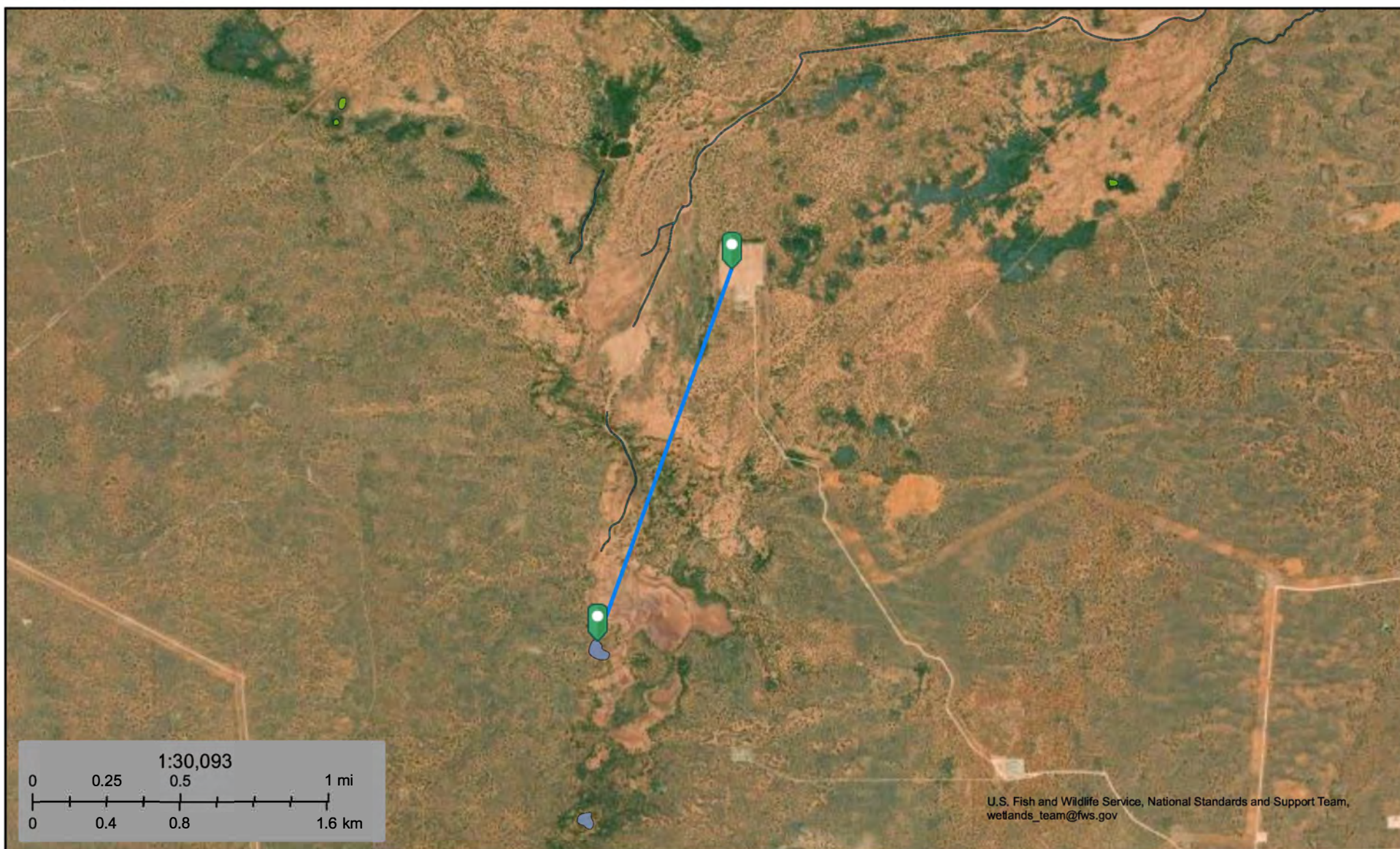
- Lake
- Other
- Riverine

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Big Eddy Unit DI 9 35 H

Pond 5,934 feet



May 11, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

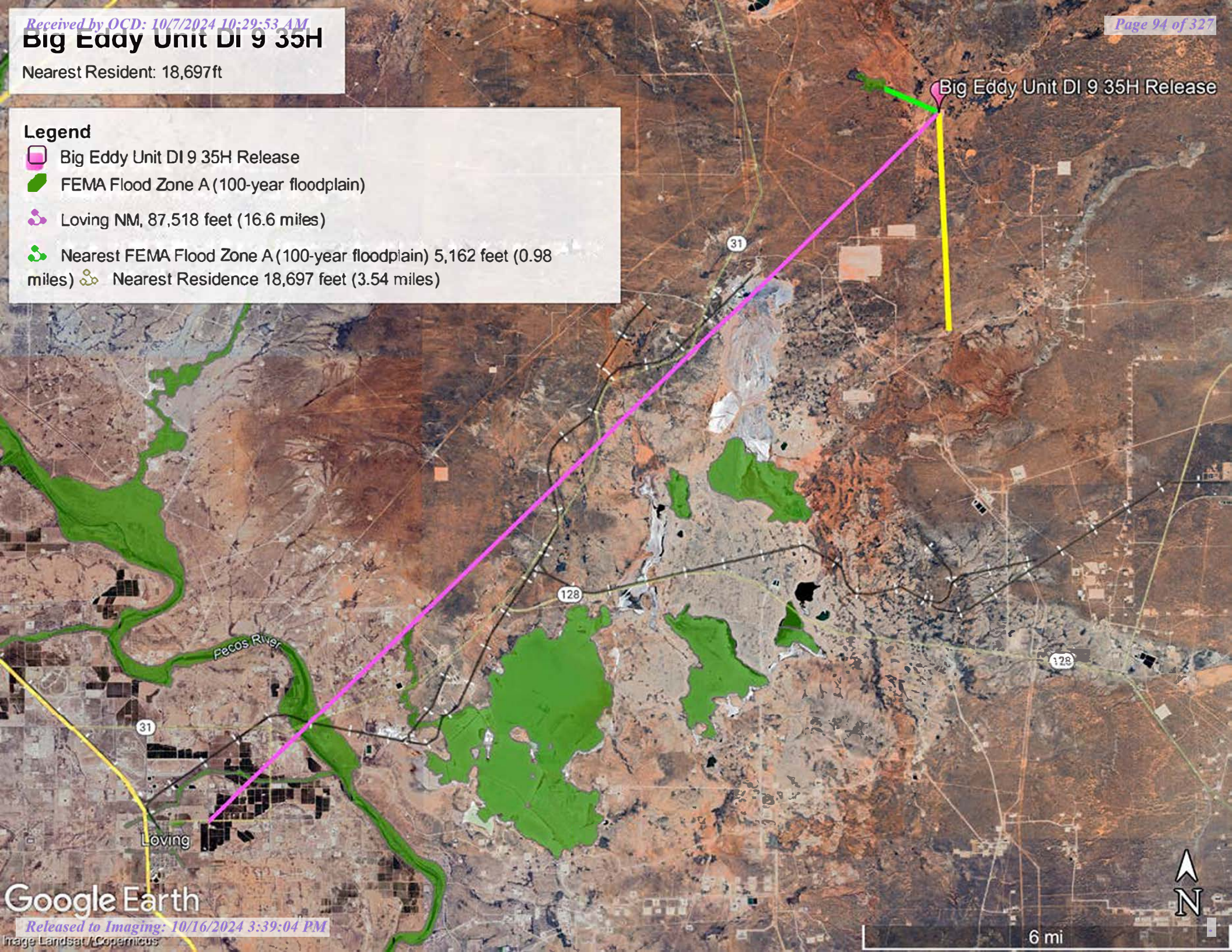
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Big Eddy Unit DI 9 35H

Nearest Resident: 18,697ft

Legend

- Big Eddy Unit DI 9 35H Release
- FEMA Flood Zone A (100-year floodplain)
- Loving NM, 87,518 feet (16.6 miles)
- Nearest FEMA Flood Zone A (100-year floodplain) 5,162 feet (0.98 miles)
- Nearest Residence 18,697 feet (3.54 miles)



Google Earth



New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
 (with Ownership Information)

										(R=POD has been replaced and no longer serves this file, C=the file is closed)										(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)										(NAD83 UTM in meters)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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6/10/24, 1:46 PM

nmwirs.ose.state.nm.u

s/nmwrrs/ReportProxy?queryData=%7B'report'%3A'podByLocOwner'%2C%0A'PodNbrDiv'%3A'false'%2C%0A'WellTagDiv'%3A'false'%2C%0A'PodOwner'

Record Count: 26

UTMNAD83 Radius Search (in meters):

Easting (X): 605307

Northing (Y): 3591728

Radius: 5000

Sorted by: Distance

*UTM location was derived from PLSS - see Help

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

6/10/24 1:46 PM

ACTIVE & INACTIVE POINTS OF DIVERSION



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)						(NAD83 UTM in meters)	
		(quarters are smallest to largest)							
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02722	1	2	1	21	21S	30E	604435	3593203*

Driller License:	1292	Driller Company:	BENTLE WATER WELL SERVICE		
Driller Name:					
Drill Start Date:		Drill Finish Date:	12/31/1978	Plug Date:	
Log File Date:		PCW Rcv Date:		Source:	
Pump Type:		Pipe Discharge Size:		Estimated Yield:	
Casing Size:	5.50	Depth Well:	592 feet	Depth Water:	

*UTM location was derived from PLSS - see Help

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New Mexico Office of the State Engineer


Water Right Summary

WR File Number: C 02722 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: MON MONITORING WELL
Primary Status: PMT PERMIT
Total Acres: 0 **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Owner: U.S. DEPT. OF ENERGY, WIPP
Contact: DOUGLAS C. LYNN

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
186747	REPAR	2000-07-26	CAN	CAN	C 02722	T	0	0	
186744	DCL	2000-07-26	DCL	PRC	C 02722	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)											
POD Number	Well Tag	Source	Q					X	Y	Other Location Desc	
			64	Q	16	Q	4				Sec
C 02722			1	2	1	21	21	S	30	E	604435 3593203* 

An () after northing value indicates UTM location was derived from PLSS - see Help

Source

Acres	Diversion	CU	Use	Priority	Source Description
0	0		MON		GW

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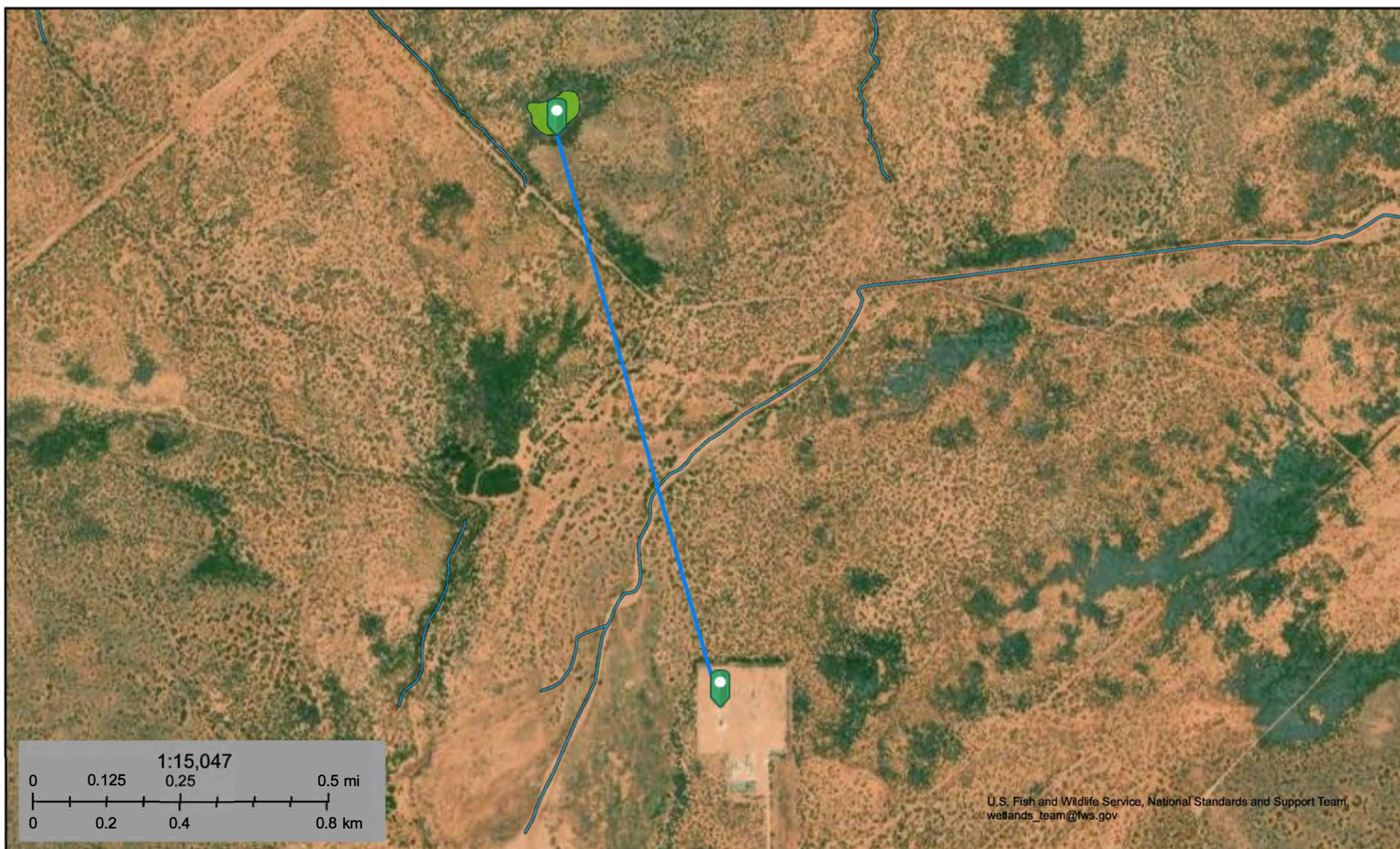
6/10/24 1:59 PM

WATER RIGHT SUMMARY



Big Eddy Unit DI 9 35 H

Wetland 4,459 feet



May 11, 2024

Wetlands

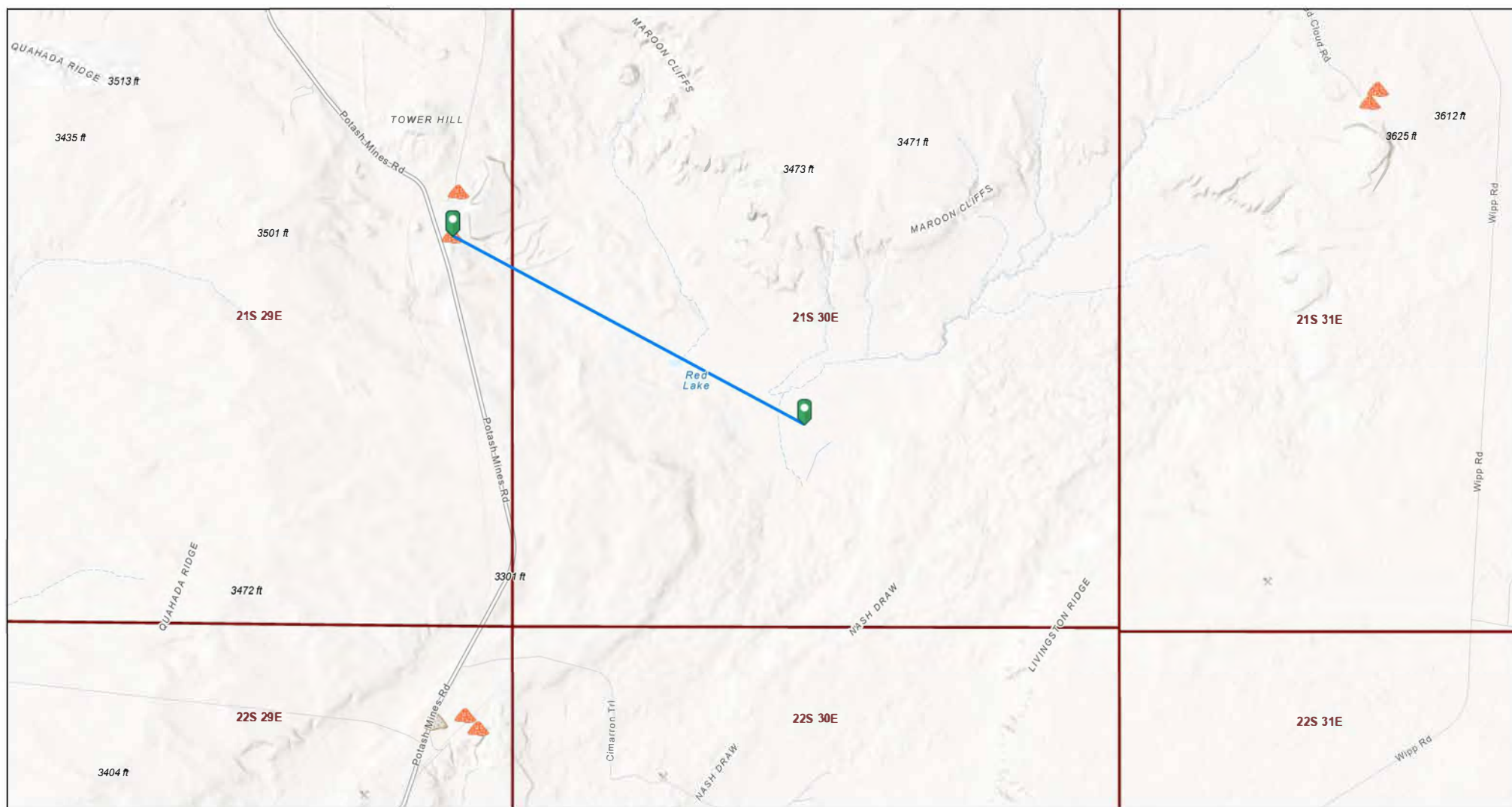
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- 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.

Big Eddy Unit DI 9 35 H Nearest Mine 21,100 feet



5/11/2024, 5:26:04 PM

Registered Mines

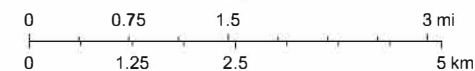
Aggregate, Stone etc.

Potash

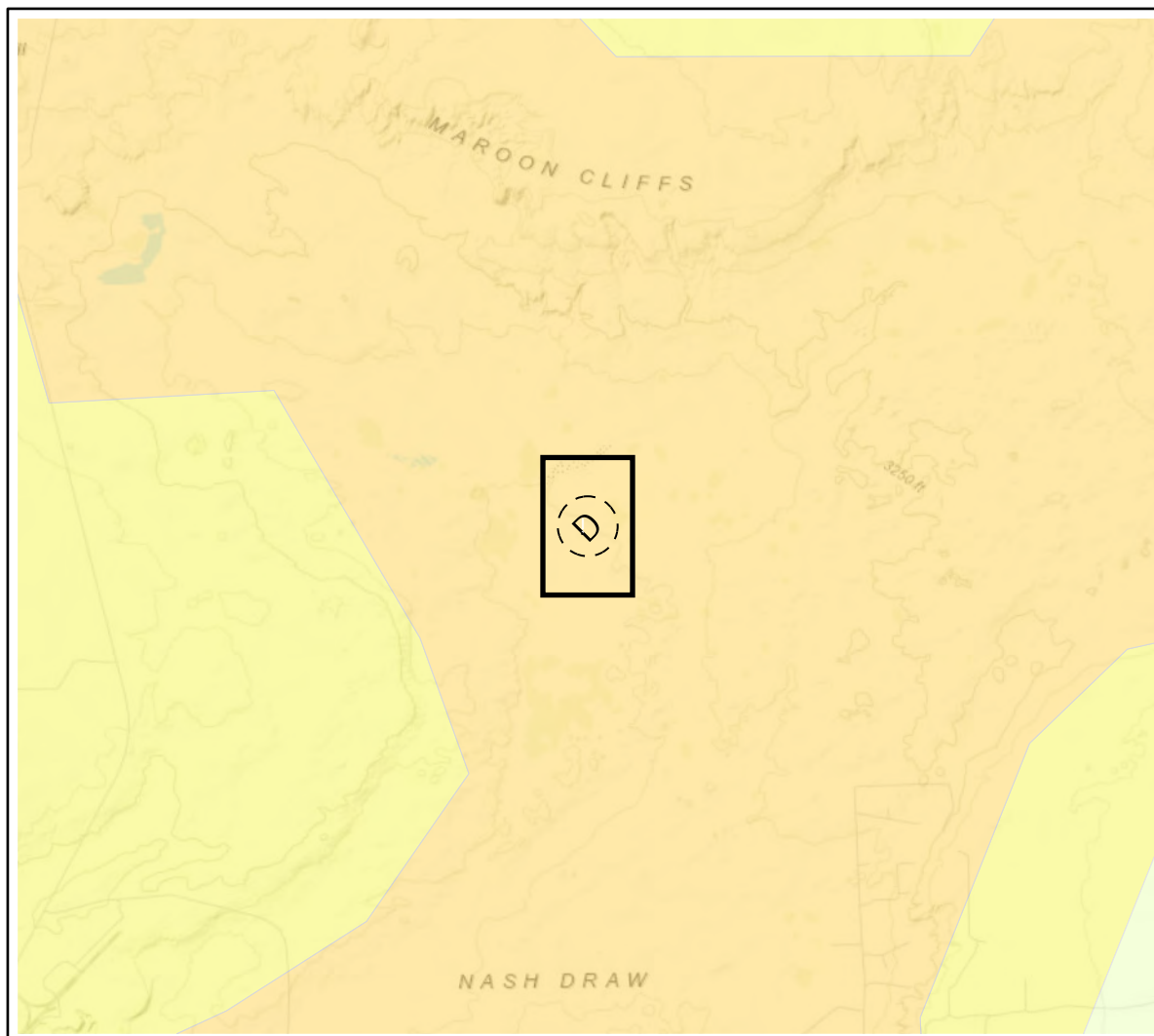
Salt

PLSS Townships

1:72,224



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



Karst Potential

- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1000 ft.)

Overview Map

0 0.25 0.5 1 mi



Detail Map

0 150 300 600 ft



Map Center:
Lat/Long
32.45761°,-103.87952°

NAD 1983 UTM Zone 13N
Date: May 15/24



Karst Potential Map Big Eddy Unit DI 9 35H

Figure:
X



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

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

VERSATILITY. EXPERTISE.

National Flood Hazard Layer FIRMette



103°53'5"W 32°27'43"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
		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 X
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/11/2024 at 7:33 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Received by OCD: 10/16/2024 10:29:53 AM

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United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for Eddy Area, New Mexico



September 2, 2024

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Preface..... 2

Soil Map..... 5

 Soil Map.....6

 Legend.....7

 Map Unit Legend..... 8

 Map Unit Descriptions..... 8

 Eddy Area, New Mexico.....10

 PD—Pajarito-Dune land complex, 0 to 3 percent slopes..... 10


Custom Soil Resource Report
Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 19, Sep 7, 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.

Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	23.8	100.0%
Totals for Area of Interest		23.8	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.

Custom Soil Resource Report

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

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

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

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

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

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

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

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

Custom Soil Resource Report

Eddy Area, New Mexico**PD—Pajarito-Dune land complex, 0 to 3 percent slopes****Map Unit Setting***National map unit symbol:* 1w55*Elevation:* 3,000 to 5,000 feet*Mean annual precipitation:* 10 to 15 inches*Mean annual air temperature:* 60 to 64 degrees F*Frost-free period:* 190 to 220 days*Farmland classification:* Not prime farmland**Map Unit Composition***Pajarito and similar soils:* 46 percent*Dune land:* 45 percent*Minor components:* 9 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Pajarito****Setting***Landform:* Plains, interdunes, dunes*Landform position (three-dimensional):* Side slope*Down-slope shape:* Convex, linear*Across-slope shape:* Linear, convex*Parent material:* Mixed alluvium and/or eolian sands**Typical profile***H1 - 0 to 9 inches:* fine sandy loam*H2 - 9 to 36 inches:* fine sandy loam*H3 - 36 to 72 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:* Very low*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:* 15 percent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 1.0*Available water supply, 0 to 60 inches:* Moderate (about 8.4 inches)**Interpretive groups***Land capability classification (irrigated):* 2e*Land capability classification (nonirrigated):* 7e*Hydrologic Soil Group:* A*Ecological site:* R070BD003NM - Loamy Sand*Hydric soil rating:* No

Custom Soil Resource Report

Description of Dune Land

Setting

Landform: Dune fields

Landform position (two-dimensional): Shoulder, backslope, footslope

Landform position (three-dimensional): Talf

Down-slope shape: Convex, linear

Across-slope shape: Convex, linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 6 inches: sandy loam

H2 - 6 to 60 inches: sandy loam

Interpretive groups

Land capability classification (irrigated): None specified

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

Minor Components

Rock outcrop

Percent of map unit: 5 percent

Hydric soil rating: No

Largo

Percent of map unit: 4 percent

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No



Ecological site R070BD003NM

Loamy Sand

Accessed: 09/02/2024

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

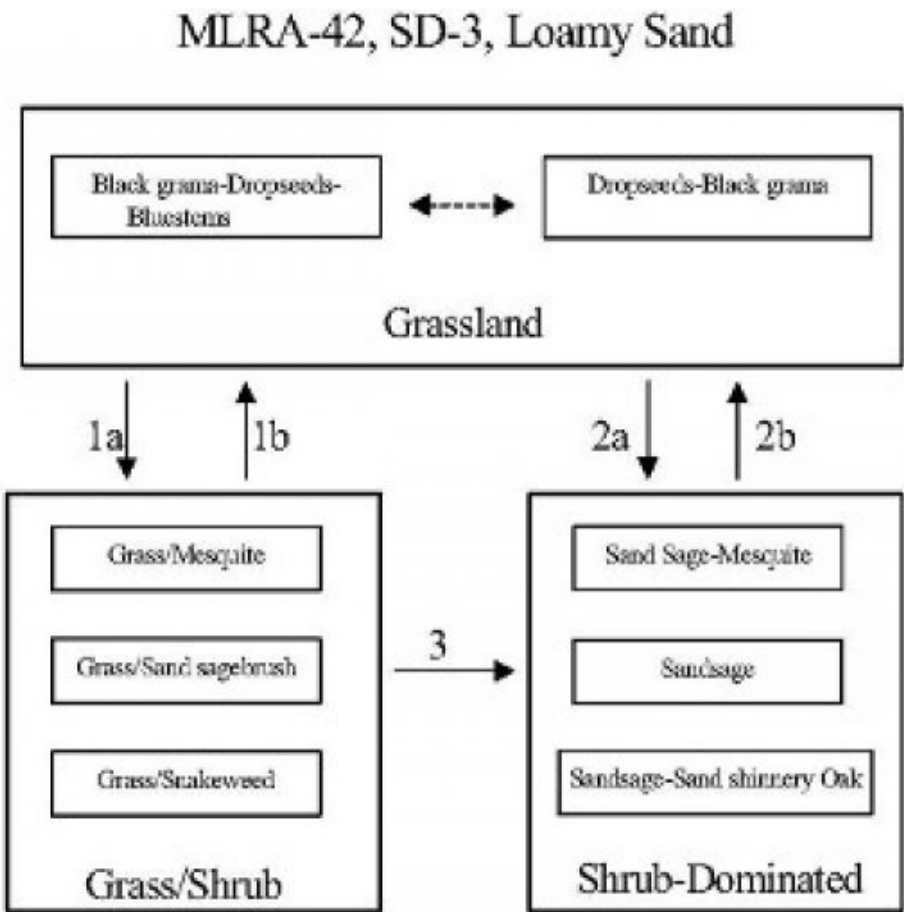
Overview

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

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

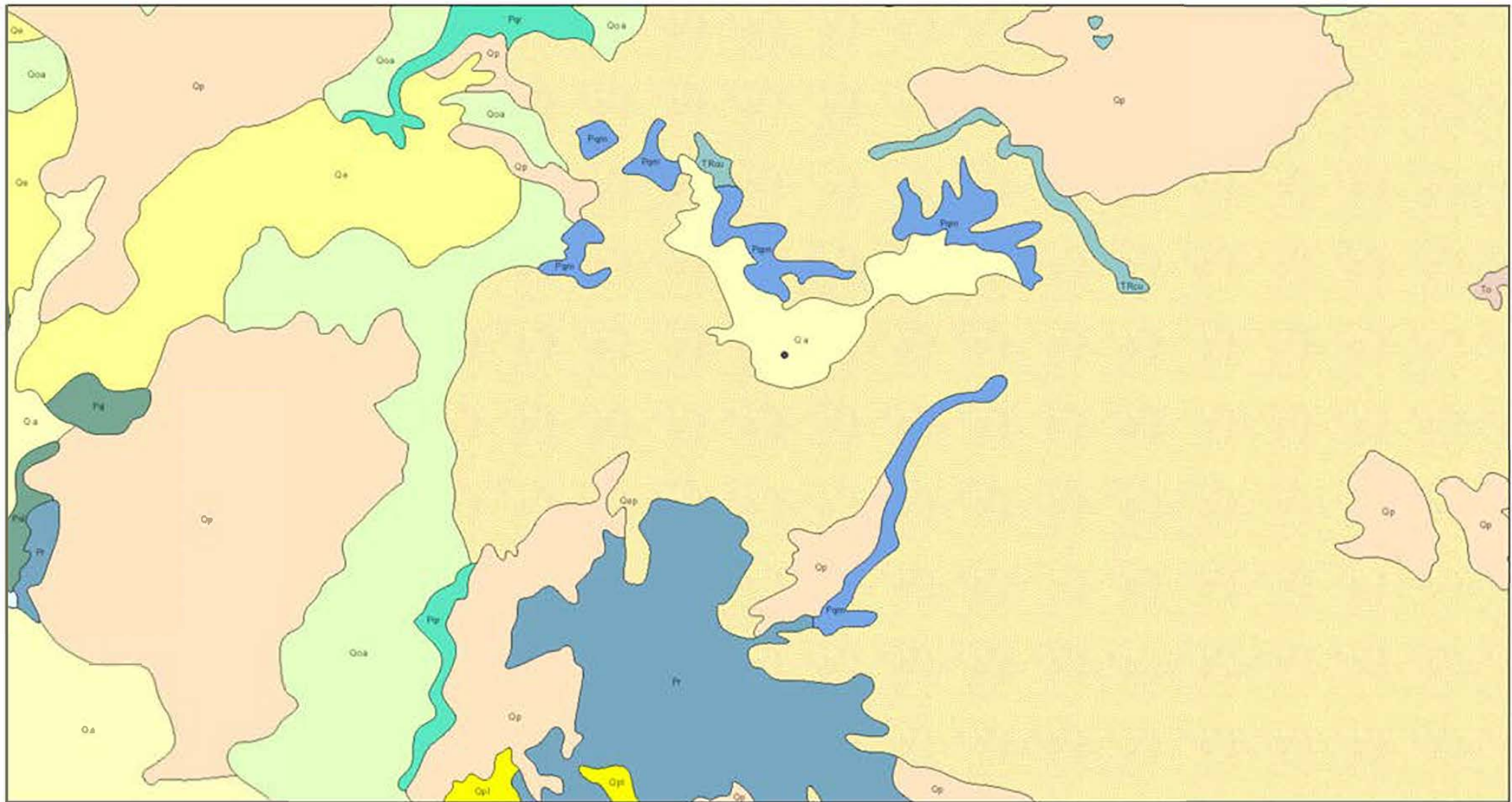
Palomas B

Wink B

Pyote A

Recreational uses

Big Eddy Unit DI 9 35 H Geology

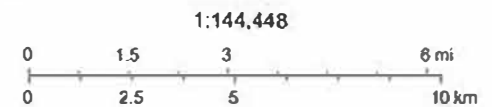


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Urbicologic Units

- Playa—Alluvium and evaporite deposits (Holocene)
- Water—Perennial standing water
- Qa—Alluvium (Holocene to upper Pleistocene)
- Ql—Landslide deposits and colluvium (Holocene to Pleistocene) — Landslide deposits on western flanks of Socorro Mountains not shown for clarity
- Qpl—Lacustrine and playa deposits (Holocene) — Includes associated alluvial and eolian deposits of major lake basins
- Qp—Piedmont alluvial deposits (Holocene to lower Pleistocene)
- Qe—Eolian deposits (Holocene to middle Pleistocene)

Qeg—Gypsiferous eolian deposits (Holocene to middle Pleistocene)



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

USGS The National Map, National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGERLine

ArcGIS Web AppBuilder



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/23/2024 7:52:53 AM

JOB DESCRIPTION

Big Eddy Unit DI 9 35H

JOB NUMBER

885-2895-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Andy Freeman, Business Unit Manager
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Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Laboratory Job ID: 885-2895-1



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Definitions/Glossary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Job ID: 885-2895-1**Eurofins Albuquerque****Job Narrative
885-2895-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/16/2024 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

Gasoline Range Organics

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following samples: BH24-01 0' (885-2895-1), (885-2895-A-1-B MS ^2) and (885-2895-A-1-C MSD ^2). The sample(s) shows evidence of matrix interference.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015D_DRO: The following samples were diluted due to the nature of the sample matrix: BH24-01 0' (885-2895-1) and BH24-02 0' (885-2895-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-01 0'

Lab Sample ID: 885-2895-1

Date Collected: 04/13/24 09:00

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	51		9.7	mg/Kg		04/17/24 12:10	04/19/24 00:03	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	332	S1+	15 - 244			04/17/24 12:10	04/19/24 00:03	2	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.048	mg/Kg		04/17/24 12:10	04/19/24 00:03	2	
Ethylbenzene	ND		0.097	mg/Kg		04/17/24 12:10	04/19/24 00:03	2	
Toluene	ND		0.097	mg/Kg		04/17/24 12:10	04/19/24 00:03	2	
Xylenes, Total	0.81		0.19	mg/Kg		04/17/24 12:10	04/19/24 00:03	2	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		39 - 146			04/17/24 12:10	04/19/24 00:03	2	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	4900		170	mg/Kg		04/17/24 14:47	04/18/24 16:01	20	
Motor Oil Range Organics [C28-C40]	2600		870	mg/Kg		04/17/24 14:47	04/18/24 16:01	20	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	0	S1- D	62 - 134			04/17/24 14:47	04/18/24 16:01	20	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1900		25	mg/Kg			04/20/24 02:48	5	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-01 2'

Lab Sample ID: 885-2895-2

Date Collected: 04/13/24 09:10

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/17/24 12:10	04/18/24 15:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	116		15 - 244			04/17/24 12:10	04/18/24 15:27		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 15:27		1
Ethylbenzene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 15:27		1
Toluene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 15:27		1
Xylenes, Total	ND		0.094	mg/Kg		04/17/24 12:10	04/18/24 15:27		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/17/24 12:10	04/18/24 15:27		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	240		9.6	mg/Kg		04/17/24 14:47	04/18/24 16:25		1
Motor Oil Range Organics [C28-C40]	150		48	mg/Kg		04/17/24 14:47	04/18/24 16:25		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	98		62 - 134			04/17/24 14:47	04/18/24 16:25		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	550		5.0	mg/Kg			04/20/24 03:02		1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-01 3.5'
Date Collected: 04/13/24 09:20
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-3
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/17/24 12:10	04/18/24 15:50		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/17/24 12:10	04/18/24 15:50		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 15:50		1
Ethylbenzene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 15:50		1
Toluene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 15:50		1
Xylenes, Total	ND		0.10	mg/Kg		04/17/24 12:10	04/18/24 15:50		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	83		39 - 146			04/17/24 12:10	04/18/24 15:50		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	35		9.4	mg/Kg		04/17/24 14:47	04/18/24 16:38		1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 14:47	04/18/24 16:38		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	100		62 - 134			04/17/24 14:47	04/18/24 16:38		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	90		5.0	mg/Kg			04/20/24 03:07		1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-02 0'

Lab Sample ID: 885-2895-4

Date Collected: 04/13/24 09:25

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	13		9.2	mg/Kg		04/17/24 12:10	04/18/24 16:14	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	156		15 - 244			04/17/24 12:10	04/18/24 16:14	2

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.046	mg/Kg		04/17/24 12:10	04/18/24 16:14	2
Ethylbenzene	ND		0.092	mg/Kg		04/17/24 12:10	04/18/24 16:14	2
Toluene	ND		0.092	mg/Kg		04/17/24 12:10	04/18/24 16:14	2
Xylenes, Total	ND		0.18	mg/Kg		04/17/24 12:10	04/18/24 16:14	2
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/17/24 12:10	04/18/24 16:14	2

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	5100		180	mg/Kg		04/17/24 14:47	04/18/24 16:13	20
Motor Oil Range Organics [C28-C40]	2000		880	mg/Kg		04/17/24 14:47	04/18/24 16:13	20
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	0	S1 - D	62 - 134			04/17/24 14:47	04/18/24 16:13	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2100		25	mg/Kg			04/20/24 03:12	5

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-02 2'

Lab Sample ID: 885-2895-5

Date Collected: 04/13/24 09:30

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 16:37	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		15 - 244			04/17/24 12:10	04/18/24 16:37	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 16:37	1	
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 16:37	1	
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 16:37	1	
Xylenes, Total	ND		0.098	mg/Kg		04/17/24 12:10	04/18/24 16:37	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	83		39 - 146			04/17/24 12:10	04/18/24 16:37	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/17/24 14:47	04/18/24 16:50	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/17/24 14:47	04/18/24 16:50	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	99		62 - 134			04/17/24 14:47	04/18/24 16:50	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	8.4		5.0	mg/Kg			04/20/24 03:16	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-02 4' Lab Sample ID: 885-2895-6
Date Collected: 04/13/24 09:35 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/17/24 12:10	04/18/24 17:00		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/17/24 12:10	04/18/24 17:00		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 17:00		1
Ethylbenzene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 17:00		1
Toluene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 17:00		1
Xylenes, Total	ND		0.10	mg/Kg		04/17/24 12:10	04/18/24 17:00		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	83		39 - 146			04/17/24 12:10	04/18/24 17:00		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/17/24 14:47	04/18/24 17:02		1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 14:47	04/18/24 17:02		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	99		62 - 134			04/17/24 14:47	04/18/24 17:02		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	11		5.0	mg/Kg			04/20/24 03:31		1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-03 2' Lab Sample ID: 885-2895-7
Date Collected: 04/13/24 11:35 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/17/24 12:10	04/18/24 17:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/17/24 12:10	04/18/24 17:24	1
Method: SW846 8021B - Volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 17:24	1
Ethylbenzene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 17:24	1
Toluene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 17:24	1
Xylenes, Total	ND		0.10	mg/Kg		04/17/24 12:10	04/18/24 17:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146			04/17/24 12:10	04/18/24 17:24	1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/17/24 14:47	04/18/24 17:14	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/17/24 14:47	04/18/24 17:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	116		62 - 134			04/17/24 14:47	04/18/24 17:14	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	460		5.1	mg/Kg			04/20/24 03:36	1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-03 4' Lab Sample ID: 885-2895-8
Date Collected: 04/13/24 11:40 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 17:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/17/24 12:10	04/18/24 17:47	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 17:47	1	
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 17:47	1	
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 17:47	1	
Xylenes, Total	ND		0.098	mg/Kg		04/17/24 12:10	04/18/24 17:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	83		39 - 146			04/17/24 12:10	04/18/24 17:47	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		04/17/24 14:47	04/18/24 17:26	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 14:47	04/18/24 17:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	107		62 - 134			04/17/24 14:47	04/18/24 17:26	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	270		5.0	mg/Kg			04/20/24 03:41	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-04 2' Lab Sample ID: 885-2895-9
Date Collected: 04/13/24 12:05 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/17/24 12:10	04/18/24 18:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244			04/17/24 12:10	04/18/24 18:34	1
Method: SW846 8021B - Volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 18:34	1
Ethylbenzene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 18:34	1
Toluene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 18:34	1
Xylenes, Total	ND		0.094	mg/Kg		04/17/24 12:10	04/18/24 18:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/17/24 12:10	04/18/24 18:34	1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/17/24 14:47	04/18/24 17:39	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 14:47	04/18/24 17:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	99		62 - 134			04/17/24 14:47	04/18/24 17:39	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	290		5.0	mg/Kg			04/19/24 15:54	1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-04 3' Lab Sample ID: 885-2895-10
Date Collected: 04/13/24 12:10 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/17/24 12:10	04/18/24 18:58	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/17/24 12:10	04/18/24 18:58	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 18:58	1	
Ethylbenzene	ND		0.048	mg/Kg		04/17/24 12:10	04/18/24 18:58	1	
Toluene	ND		0.048	mg/Kg		04/17/24 12:10	04/18/24 18:58	1	
Xylenes, Total	ND		0.096	mg/Kg		04/17/24 12:10	04/18/24 18:58	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	82		39 - 146			04/17/24 12:10	04/18/24 18:58	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	13		9.0	mg/Kg		04/17/24 14:47	04/18/24 17:51	1	
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/17/24 14:47	04/18/24 17:51	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	102		62 - 134			04/17/24 14:47	04/18/24 17:51	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	320		5.1	mg/Kg			04/19/24 16:08	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-05 0' Lab Sample ID: 885-2895-11
Date Collected: 04/13/24 12:40 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/17/24 12:10	04/18/24 19:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/17/24 12:10	04/18/24 19:21	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/17/24 12:10	04/18/24 19:21	1	
Ethylbenzene	ND		0.046	mg/Kg		04/17/24 12:10	04/18/24 19:21	1	
Toluene	ND		0.046	mg/Kg		04/17/24 12:10	04/18/24 19:21	1	
Xylenes, Total	ND		0.092	mg/Kg		04/17/24 12:10	04/18/24 19:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	84		39 - 146			04/17/24 12:10	04/18/24 19:21	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		04/17/24 14:47	04/18/24 18:03	1	
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		04/17/24 14:47	04/18/24 18:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	105		62 - 134			04/17/24 14:47	04/18/24 18:03	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	75		5.0	mg/Kg			04/19/24 16:13	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-05 2' Lab Sample ID: 885-2895-12
Date Collected: 04/13/24 12:45 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/17/24 12:10	04/18/24 19:45		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/17/24 12:10	04/18/24 19:45		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/17/24 12:10	04/18/24 19:45		1
Ethylbenzene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 19:45		1
Toluene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 19:45		1
Xylenes, Total	ND		0.093	mg/Kg		04/17/24 12:10	04/18/24 19:45		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	82		39 - 146			04/17/24 12:10	04/18/24 19:45		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		04/17/24 14:47	04/18/24 18:15		1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/17/24 14:47	04/18/24 18:15		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			04/17/24 14:47	04/18/24 18:15		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	310		5.0	mg/Kg			04/19/24 16:18		1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-05 4'

Lab Sample ID: 885-2895-13

Date Collected: 04/13/24 12:50

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 20:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/17/24 12:10	04/18/24 20:08	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 20:08	1
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 20:08	1
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 20:08	1
Xylenes, Total	ND		0.099	mg/Kg		04/17/24 12:10	04/18/24 20:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		39 - 146			04/17/24 12:10	04/18/24 20:08	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.8	mg/Kg		04/17/24 14:47	04/18/24 18:28	1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/17/24 14:47	04/18/24 18:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			04/17/24 14:47	04/18/24 18:28	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	430		5.0	mg/Kg			04/19/24 16:23	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-05 6' Lab Sample ID: 885-2895-14
Date Collected: 04/13/24 15:30 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 20:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	105		15 - 244			04/17/24 12:10	04/18/24 20:31	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 20:31	1	
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 20:31	1	
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 20:31	1	
Xylenes, Total	ND		0.099	mg/Kg		04/17/24 12:10	04/18/24 20:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/17/24 12:10	04/18/24 20:31	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/17/24 14:47	04/18/24 18:40	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 14:47	04/18/24 18:40	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	103		62 - 134			04/17/24 14:47	04/18/24 18:40	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	68		5.0	mg/Kg			04/19/24 16:37	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-06 0'
Date Collected: 04/13/24 12:55
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-15
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg	-	04/17/24 12:10	04/18/24 20:55	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/17/24 12:10	04/18/24 20:55	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg	-	04/17/24 12:10	04/18/24 20:55	1	
Ethylbenzene	ND		0.047	mg/Kg	-	04/17/24 12:10	04/18/24 20:55	1	
Toluene	ND		0.047	mg/Kg	-	04/17/24 12:10	04/18/24 20:55	1	
Xylenes, Total	ND		0.095	mg/Kg	-	04/17/24 12:10	04/18/24 20:55	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	82		39 - 146			04/17/24 12:10	04/18/24 20:55	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	89		8.8	mg/Kg	-	04/17/24 14:47	04/18/24 18:52	1	
Motor Oil Range Organics [C28-C40]	220		44	mg/Kg	-	04/17/24 14:47	04/18/24 18:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	82		62 - 134			04/17/24 14:47	04/18/24 18:52	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	100		5.0	mg/Kg	-		04/19/24 16:42	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-06 2'

Lab Sample ID: 885-2895-16

Date Collected: 04/13/24 13:05

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/17/24 12:10	04/18/24 21:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/17/24 12:10	04/18/24 21:42	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 21:42	1
Ethylbenzene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 21:42	1
Toluene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 21:42	1
Xylenes, Total	ND		0.094	mg/Kg		04/17/24 12:10	04/18/24 21:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/17/24 12:10	04/18/24 21:42	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.4	mg/Kg		04/17/24 14:47	04/18/24 19:04	1
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		04/17/24 14:47	04/18/24 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			04/17/24 14:47	04/18/24 19:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9		5.0	mg/Kg			04/19/24 16:47	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-06 4'
Date Collected: 04/13/24 13:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-17
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/17/24 12:10	04/18/24 22:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		15 - 244			04/17/24 12:10	04/18/24 22:05	1
Method: SW846 8021B - Volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 22:05	1
Ethylbenzene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 22:05	1
Toluene	ND		0.047	mg/Kg		04/17/24 12:10	04/18/24 22:05	1
Xylenes, Total	ND		0.095	mg/Kg		04/17/24 12:10	04/18/24 22:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/17/24 12:10	04/18/24 22:05	1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/17/24 14:47	04/18/24 19:16	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 14:47	04/18/24 19:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	95		62 - 134			04/17/24 14:47	04/18/24 19:16	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.7		5.0	mg/Kg			04/19/24 16:52	1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-07 0' Lab Sample ID: 885-2895-18
Date Collected: 04/13/24 13:20 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		15 - 244			04/17/24 12:10	04/18/24 22:29	1
Method: SW846 8021B - Volatile Organic Compounds (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/17/24 12:10	04/18/24 22:29	1
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 22:29	1
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 22:29	1
Xylenes, Total	ND		0.097	mg/Kg		04/17/24 12:10	04/18/24 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/17/24 12:10	04/18/24 22:29	1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.0	mg/Kg		04/17/24 14:47	04/18/24 19:29	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/17/24 14:47	04/18/24 19:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			04/17/24 14:47	04/18/24 19:29	1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		5.0	mg/Kg			04/19/24 16:57	1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-07 2' Lab Sample ID: 885-2895-19
Date Collected: 04/13/24 13:25 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 23:16		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	105		15 - 244			04/17/24 12:10	04/18/24 23:16		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 23:16		1
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 23:16		1
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 23:16		1
Xylenes, Total	ND		0.098	mg/Kg		04/17/24 12:10	04/18/24 23:16		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	86		39 - 146			04/17/24 12:10	04/18/24 23:16		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/17/24 14:52	04/18/24 19:41		1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 14:52	04/18/24 19:41		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	102		62 - 134			04/17/24 14:52	04/18/24 19:41		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	5.2		5.0	mg/Kg			04/19/24 17:02		1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-07 4'

Lab Sample ID: 885-2895-20

Date Collected: 04/13/24 13:30

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/17/24 12:10	04/18/24 23:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/17/24 12:10	04/18/24 23:39	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 23:39	1
Ethylbenzene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 23:39	1
Toluene	ND		0.049	mg/Kg		04/17/24 12:10	04/18/24 23:39	1
Xylenes, Total	ND		0.098	mg/Kg		04/17/24 12:10	04/18/24 23:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		39 - 146			04/17/24 12:10	04/18/24 23:39	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/17/24 14:52	04/18/24 19:53	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 14:52	04/18/24 19:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			04/17/24 14:52	04/18/24 19:53	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.9		5.0	mg/Kg			04/19/24 17:16	1

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-3449/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3574						Prep Batch: 3449			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/17/24 12:10	04/18/24 14:40	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/17/24 12:10	04/18/24 14:40	1	

Lab Sample ID: LCS 885-3449/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3574						Prep Batch: 3449			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]			25.0	25.9		mg/Kg		103	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	215		15 - 244						

Lab Sample ID: 885-2895-1 MS						Client Sample ID: BH24-01 0'			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3574						Prep Batch: 3449			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	51		24.2	79.1		mg/Kg		118	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	383	S1+	15 - 244						

Lab Sample ID: 885-2895-1 MSD								Client Sample ID: BH24-01 0'			
Matrix: Solid								Prep Type: Total/NA			
Analysis Batch: 3574								Prep Batch: 3449			
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	51		24.1	71.7		mg/Kg		87	70 - 130	10	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	358	S1+	15 - 244								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3449/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 3575						Prep Batch: 3449			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/17/24 12:10	04/18/24 14:40	1	
Ethylbenzene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 14:40	1	
Toluene	ND		0.050	mg/Kg		04/17/24 12:10	04/18/24 14:40	1	

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-3449/1-A

Matrix: Solid

Analysis Batch: 3575

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3449

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/17/24 12:10	04/18/24 14:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		39 - 146			04/17/24 12:10	04/18/24 14:40	1

Lab Sample ID: LCS 885-3449/3-A

Matrix: Solid

Analysis Batch: 3575

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3449

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.843		mg/Kg		84	70 - 130
Ethylbenzene	1.00	0.873		mg/Kg		87	70 - 130
m,p-Xylene	2.00	1.75		mg/Kg		87	70 - 130
o-Xylene	1.00	0.857		mg/Kg		86	70 - 130
Toluene	1.00	0.845		mg/Kg		85	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	86		39 - 146				

Lab Sample ID: 885-2895-2 MS

Matrix: Solid

Analysis Batch: 3575

Client Sample ID: BH24-01 2'

Prep Type: Total/NA

Prep Batch: 3449

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.937	0.833		mg/Kg		89	70 - 130
Ethylbenzene	ND		0.937	0.873		mg/Kg		93	70 - 130
m,p-Xylene	ND		1.87	1.74		mg/Kg		92	70 - 130
o-Xylene	ND		0.937	0.866		mg/Kg		91	70 - 130
Toluene	ND		0.937	0.858		mg/Kg		92	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	86		39 - 146						

Lab Sample ID: 885-2895-2 MSD

Matrix: Solid

Analysis Batch: 3575

Client Sample ID: BH24-01 2'

Prep Type: Total/NA

Prep Batch: 3449

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.938	0.838		mg/Kg		89	70 - 130	1	20
Ethylbenzene	ND		0.938	0.879		mg/Kg		94	70 - 130	1	20
m,p-Xylene	ND		1.88	1.77		mg/Kg		94	70 - 130	2	20
o-Xylene	ND		0.938	0.872		mg/Kg		91	70 - 130	1	20
Toluene	ND		0.938	0.862		mg/Kg		92	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	83		39 - 146								

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-3455/1-A

Matrix: Solid

Analysis Batch: 3573

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3455

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/17/24 14:47	04/18/24 15:36	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 14:47	04/18/24 15:36	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			04/17/24 14:47	04/18/24 15:36	1

Lab Sample ID: LCS 885-3455/2-A

Matrix: Solid

Analysis Batch: 3573

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	59.8		mg/Kg		120	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	111		62 - 134				

Lab Sample ID: 885-2895-20 MS

Matrix: Solid

Analysis Batch: 3573

Client Sample ID: BH24-07 4'

Prep Type: Total/NA

Prep Batch: 3455

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		49.5	45.0		mg/Kg		91	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	93		62 - 134						

Lab Sample ID: 885-2895-20 MSD

Matrix: Solid

Analysis Batch: 3573

Client Sample ID: BH24-07 4'

Prep Type: Total/NA

Prep Batch: 3455

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		44.8	39.3		mg/Kg		88	44 - 136	13	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	93		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78727/1-A

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/19/24 15:39	1

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-78727/2-A

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	245		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-78727/3-A

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	245		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 885-2895-9 MS

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: BH24-04 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	290		252	545		mg/Kg		100	90 - 110

Lab Sample ID: 885-2895-9 MSD

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: BH24-04 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	290		252	547		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 885-2895-19 MS

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: BH24-07 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	5.2		249	249		mg/Kg		98	90 - 110

Lab Sample ID: 885-2895-19 MSD

Matrix: Solid

Analysis Batch: 78768

Client Sample ID: BH24-07 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	5.2		249	248		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-78728/1-A

Matrix: Solid

Analysis Batch: 78802

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/20/24 02:33	1

Lab Sample ID: LCS 880-78728/2-A

Matrix: Solid

Analysis Batch: 78802

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253		mg/Kg		101	90 - 110

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-78728/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 78802											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	252		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 885-2895-1 MS				Client Sample ID: BH24-01 0'							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 78802											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1900		1260	3290		mg/Kg		108	90 - 110		

Lab Sample ID: 885-2895-1 MSD				Client Sample ID: BH24-01 0'							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 78802											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1900		1260	3290		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

GC VOA

Prep Batch: 3449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Total/NA	Solid	5030C	
885-2895-2	BH24-01 2'	Total/NA	Solid	5030C	
885-2895-3	BH24-01 3.5'	Total/NA	Solid	5030C	
885-2895-4	BH24-02 0'	Total/NA	Solid	5030C	
885-2895-5	BH24-02 2'	Total/NA	Solid	5030C	
885-2895-6	BH24-02 4'	Total/NA	Solid	5030C	
885-2895-7	BH24-03 2'	Total/NA	Solid	5030C	
885-2895-8	BH24-03 4'	Total/NA	Solid	5030C	
885-2895-9	BH24-04 2'	Total/NA	Solid	5030C	
885-2895-10	BH24-04 3'	Total/NA	Solid	5030C	
885-2895-11	BH24-05 0'	Total/NA	Solid	5030C	
885-2895-12	BH24-05 2'	Total/NA	Solid	5030C	
885-2895-13	BH24-05 4'	Total/NA	Solid	5030C	
885-2895-14	BH24-05 6'	Total/NA	Solid	5030C	
885-2895-15	BH24-06 0'	Total/NA	Solid	5030C	
885-2895-16	BH24-06 2'	Total/NA	Solid	5030C	
885-2895-17	BH24-06 4'	Total/NA	Solid	5030C	
885-2895-18	BH24-07 0'	Total/NA	Solid	5030C	
885-2895-19	BH24-07 2'	Total/NA	Solid	5030C	
885-2895-20	BH24-07 4'	Total/NA	Solid	5030C	
MB 885-3449/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3449/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3449/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2895-1 MS	BH24-01 0'	Total/NA	Solid	5030C	
885-2895-1 MSD	BH24-01 0'	Total/NA	Solid	5030C	
885-2895-2 MS	BH24-01 2'	Total/NA	Solid	5030C	
885-2895-2 MSD	BH24-01 2'	Total/NA	Solid	5030C	

Analysis Batch: 3574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Total/NA	Solid	8015D	3449
885-2895-2	BH24-01 2'	Total/NA	Solid	8015D	3449
885-2895-3	BH24-01 3.5'	Total/NA	Solid	8015D	3449
885-2895-4	BH24-02 0'	Total/NA	Solid	8015D	3449
885-2895-5	BH24-02 2'	Total/NA	Solid	8015D	3449
885-2895-6	BH24-02 4'	Total/NA	Solid	8015D	3449
885-2895-7	BH24-03 2'	Total/NA	Solid	8015D	3449
885-2895-8	BH24-03 4'	Total/NA	Solid	8015D	3449
885-2895-9	BH24-04 2'	Total/NA	Solid	8015D	3449
885-2895-10	BH24-04 3'	Total/NA	Solid	8015D	3449
885-2895-11	BH24-05 0'	Total/NA	Solid	8015D	3449
885-2895-12	BH24-05 2'	Total/NA	Solid	8015D	3449
885-2895-13	BH24-05 4'	Total/NA	Solid	8015D	3449
885-2895-14	BH24-05 6'	Total/NA	Solid	8015D	3449
885-2895-15	BH24-06 0'	Total/NA	Solid	8015D	3449
885-2895-16	BH24-06 2'	Total/NA	Solid	8015D	3449
885-2895-17	BH24-06 4'	Total/NA	Solid	8015D	3449
885-2895-18	BH24-07 0'	Total/NA	Solid	8015D	3449
885-2895-19	BH24-07 2'	Total/NA	Solid	8015D	3449
885-2895-20	BH24-07 4'	Total/NA	Solid	8015D	3449
MB 885-3449/1-A	Method Blank	Total/NA	Solid	8015D	3449

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QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

GC VOA (Continued)

Analysis Batch: 3574 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 885-3449/2-A	Lab Control Sample	Total/NA	Solid	8015D	3449
885-2895-1 MS	BH24-01 0'	Total/NA	Solid	8015D	3449
885-2895-1 MSD	BH24-01 0'	Total/NA	Solid	8015D	3449

Analysis Batch: 3575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Total/NA	Solid	8021B	3449
885-2895-2	BH24-01 2'	Total/NA	Solid	8021B	3449
885-2895-3	BH24-01 3.5'	Total/NA	Solid	8021B	3449
885-2895-4	BH24-02 0'	Total/NA	Solid	8021B	3449
885-2895-5	BH24-02 2'	Total/NA	Solid	8021B	3449
885-2895-6	BH24-02 4'	Total/NA	Solid	8021B	3449
885-2895-7	BH24-03 2'	Total/NA	Solid	8021B	3449
885-2895-8	BH24-03 4'	Total/NA	Solid	8021B	3449
885-2895-9	BH24-04 2'	Total/NA	Solid	8021B	3449
885-2895-10	BH24-04 3'	Total/NA	Solid	8021B	3449
885-2895-11	BH24-05 0'	Total/NA	Solid	8021B	3449
885-2895-12	BH24-05 2'	Total/NA	Solid	8021B	3449
885-2895-13	BH24-05 4'	Total/NA	Solid	8021B	3449
885-2895-14	BH24-05 6'	Total/NA	Solid	8021B	3449
885-2895-15	BH24-06 0'	Total/NA	Solid	8021B	3449
885-2895-16	BH24-06 2'	Total/NA	Solid	8021B	3449
885-2895-17	BH24-06 4'	Total/NA	Solid	8021B	3449
885-2895-18	BH24-07 0'	Total/NA	Solid	8021B	3449
885-2895-19	BH24-07 2'	Total/NA	Solid	8021B	3449
885-2895-20	BH24-07 4'	Total/NA	Solid	8021B	3449
MB 885-3449/1-A	Method Blank	Total/NA	Solid	8021B	3449
LCS 885-3449/3-A	Lab Control Sample	Total/NA	Solid	8021B	3449
885-2895-2 MS	BH24-01 2'	Total/NA	Solid	8021B	3449
885-2895-2 MSD	BH24-01 2'	Total/NA	Solid	8021B	3449

GC Semi VOA

Prep Batch: 3455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Total/NA	Solid	SHAKE	
885-2895-2	BH24-01 2'	Total/NA	Solid	SHAKE	
885-2895-3	BH24-01 3.5'	Total/NA	Solid	SHAKE	
885-2895-4	BH24-02 0'	Total/NA	Solid	SHAKE	
885-2895-5	BH24-02 2'	Total/NA	Solid	SHAKE	
885-2895-6	BH24-02 4'	Total/NA	Solid	SHAKE	
885-2895-7	BH24-03 2'	Total/NA	Solid	SHAKE	
885-2895-8	BH24-03 4'	Total/NA	Solid	SHAKE	
885-2895-9	BH24-04 2'	Total/NA	Solid	SHAKE	
885-2895-10	BH24-04 3'	Total/NA	Solid	SHAKE	
885-2895-11	BH24-05 0'	Total/NA	Solid	SHAKE	
885-2895-12	BH24-05 2'	Total/NA	Solid	SHAKE	
885-2895-13	BH24-05 4'	Total/NA	Solid	SHAKE	
885-2895-14	BH24-05 6'	Total/NA	Solid	SHAKE	
885-2895-15	BH24-06 0'	Total/NA	Solid	SHAKE	
885-2895-16	BH24-06 2'	Total/NA	Solid	SHAKE	

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QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

GC Semi VOA (Continued)

Prep Batch: 3455 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-17	BH24-06 4'	Total/NA	Solid	SHAKE	
885-2895-18	BH24-07 0'	Total/NA	Solid	SHAKE	
885-2895-19	BH24-07 2'	Total/NA	Solid	SHAKE	
885-2895-20	BH24-07 4'	Total/NA	Solid	SHAKE	
MB 885-3455/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3455/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2895-20 MS	BH24-07 4'	Total/NA	Solid	SHAKE	
885-2895-20 MSD	BH24-07 4'	Total/NA	Solid	SHAKE	

Analysis Batch: 3573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Total/NA	Solid	8015D	3455
885-2895-2	BH24-01 2'	Total/NA	Solid	8015D	3455
885-2895-3	BH24-01 3.5'	Total/NA	Solid	8015D	3455
885-2895-4	BH24-02 0'	Total/NA	Solid	8015D	3455
885-2895-5	BH24-02 2'	Total/NA	Solid	8015D	3455
885-2895-6	BH24-02 4'	Total/NA	Solid	8015D	3455
885-2895-7	BH24-03 2'	Total/NA	Solid	8015D	3455
885-2895-8	BH24-03 4'	Total/NA	Solid	8015D	3455
885-2895-9	BH24-04 2'	Total/NA	Solid	8015D	3455
885-2895-10	BH24-04 3'	Total/NA	Solid	8015D	3455
885-2895-11	BH24-05 0'	Total/NA	Solid	8015D	3455
885-2895-12	BH24-05 2'	Total/NA	Solid	8015D	3455
885-2895-13	BH24-05 4'	Total/NA	Solid	8015D	3455
885-2895-14	BH24-05 6'	Total/NA	Solid	8015D	3455
885-2895-15	BH24-06 0'	Total/NA	Solid	8015D	3455
885-2895-16	BH24-06 2'	Total/NA	Solid	8015D	3455
885-2895-17	BH24-06 4'	Total/NA	Solid	8015D	3455
885-2895-18	BH24-07 0'	Total/NA	Solid	8015D	3455
885-2895-19	BH24-07 2'	Total/NA	Solid	8015D	3455
885-2895-20	BH24-07 4'	Total/NA	Solid	8015D	3455
MB 885-3455/1-A	Method Blank	Total/NA	Solid	8015D	3455
LCS 885-3455/2-A	Lab Control Sample	Total/NA	Solid	8015D	3455
885-2895-20 MS	BH24-07 4'	Total/NA	Solid	8015D	3455
885-2895-20 MSD	BH24-07 4'	Total/NA	Solid	8015D	3455

HPLC/IC

Leach Batch: 78727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-9	BH24-04 2'	Soluble	Solid	DI Leach	
885-2895-10	BH24-04 3'	Soluble	Solid	DI Leach	
885-2895-11	BH24-05 0'	Soluble	Solid	DI Leach	
885-2895-12	BH24-05 2'	Soluble	Solid	DI Leach	
885-2895-13	BH24-05 4'	Soluble	Solid	DI Leach	
885-2895-14	BH24-05 6'	Soluble	Solid	DI Leach	
885-2895-15	BH24-06 0'	Soluble	Solid	DI Leach	
885-2895-16	BH24-06 2'	Soluble	Solid	DI Leach	
885-2895-17	BH24-06 4'	Soluble	Solid	DI Leach	
885-2895-18	BH24-07 0'	Soluble	Solid	DI Leach	
885-2895-19	BH24-07 2'	Soluble	Solid	DI Leach	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

HPLC/IC (Continued)

Leach Batch: 78727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-20	BH24-07 4'	Soluble	Solid	DI Leach	
MB 880-78727/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78727/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78727/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2895-9 MS	BH24-04 2'	Soluble	Solid	DI Leach	
885-2895-9 MSD	BH24-04 2'	Soluble	Solid	DI Leach	
885-2895-19 MS	BH24-07 2'	Soluble	Solid	DI Leach	
885-2895-19 MSD	BH24-07 2'	Soluble	Solid	DI Leach	

Leach Batch: 78728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Soluble	Solid	DI Leach	
885-2895-2	BH24-01 2'	Soluble	Solid	DI Leach	
885-2895-3	BH24-01 3.5'	Soluble	Solid	DI Leach	
885-2895-4	BH24-02 0'	Soluble	Solid	DI Leach	
885-2895-5	BH24-02 2'	Soluble	Solid	DI Leach	
885-2895-6	BH24-02 4'	Soluble	Solid	DI Leach	
885-2895-7	BH24-03 2'	Soluble	Solid	DI Leach	
885-2895-8	BH24-03 4'	Soluble	Solid	DI Leach	
MB 880-78728/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78728/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78728/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2895-1 MS	BH24-01 0'	Soluble	Solid	DI Leach	
885-2895-1 MSD	BH24-01 0'	Soluble	Solid	DI Leach	

Analysis Batch: 78768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-9	BH24-04 2'	Soluble	Solid	300.0	78727
885-2895-10	BH24-04 3'	Soluble	Solid	300.0	78727
885-2895-11	BH24-05 0'	Soluble	Solid	300.0	78727
885-2895-12	BH24-05 2'	Soluble	Solid	300.0	78727
885-2895-13	BH24-05 4'	Soluble	Solid	300.0	78727
885-2895-14	BH24-05 6'	Soluble	Solid	300.0	78727
885-2895-15	BH24-06 0'	Soluble	Solid	300.0	78727
885-2895-16	BH24-06 2'	Soluble	Solid	300.0	78727
885-2895-17	BH24-06 4'	Soluble	Solid	300.0	78727
885-2895-18	BH24-07 0'	Soluble	Solid	300.0	78727
885-2895-19	BH24-07 2'	Soluble	Solid	300.0	78727
885-2895-20	BH24-07 4'	Soluble	Solid	300.0	78727
MB 880-78727/1-A	Method Blank	Soluble	Solid	300.0	78727
LCS 880-78727/2-A	Lab Control Sample	Soluble	Solid	300.0	78727
LCSD 880-78727/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78727
885-2895-9 MS	BH24-04 2'	Soluble	Solid	300.0	78727
885-2895-9 MSD	BH24-04 2'	Soluble	Solid	300.0	78727
885-2895-19 MS	BH24-07 2'	Soluble	Solid	300.0	78727
885-2895-19 MSD	BH24-07 2'	Soluble	Solid	300.0	78727

Analysis Batch: 78802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-1	BH24-01 0'	Soluble	Solid	300.0	78728
885-2895-2	BH24-01 2'	Soluble	Solid	300.0	78728

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

HPLC/IC (Continued)

Analysis Batch: 78802 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2895-3	BH24-01 3.5'	Soluble	Solid	300.0	78728
885-2895-4	BH24-02 0'	Soluble	Solid	300.0	78728
885-2895-5	BH24-02 2'	Soluble	Solid	300.0	78728
885-2895-6	BH24-02 4'	Soluble	Solid	300.0	78728
885-2895-7	BH24-03 2'	Soluble	Solid	300.0	78728
885-2895-8	BH24-03 4'	Soluble	Solid	300.0	78728
MB 880-78728/1-A	Method Blank	Soluble	Solid	300.0	78728
LCS 880-78728/2-A	Lab Control Sample	Soluble	Solid	300.0	78728
LCSD 880-78728/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78728
885-2895-1 MS	BH24-01 0'	Soluble	Solid	300.0	78728
885-2895-1 MSD	BH24-01 0'	Soluble	Solid	300.0	78728

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-01 0'

Lab Sample ID: 885-2895-1

Date Collected: 04/13/24 09:00

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		2	3574	JP	EET ALB	04/19/24 00:03
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		2	3575	JP	EET ALB	04/19/24 00:03
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		20	3573	JU	EET ALB	04/18/24 16:01
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		5	78802	SMC	EET MID	04/20/24 02:48

Client Sample ID: BH24-01 2'

Lab Sample ID: 885-2895-2

Date Collected: 04/13/24 09:10

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 15:27
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 15:27
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 16:25
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		1	78802	SMC	EET MID	04/20/24 03:02

Client Sample ID: BH24-01 3.5'

Lab Sample ID: 885-2895-3

Date Collected: 04/13/24 09:20

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 15:50
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 15:50
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 16:38
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		1	78802	SMC	EET MID	04/20/24 03:07

Client Sample ID: BH24-02 0'

Lab Sample ID: 885-2895-4

Date Collected: 04/13/24 09:25

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		2	3574	JP	EET ALB	04/18/24 16:14

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Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-02 0'

Lab Sample ID: 885-2895-4

Date Collected: 04/13/24 09:25

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		2	3575	JP	EET ALB	04/18/24 16:14
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		20	3573	JU	EET ALB	04/18/24 16:13
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		5	78802	SMC	EET MID	04/20/24 03:12

Client Sample ID: BH24-02 2'

Lab Sample ID: 885-2895-5

Date Collected: 04/13/24 09:30

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 16:37
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 16:37
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 16:50
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		1	78802	SMC	EET MID	04/20/24 03:16

Client Sample ID: BH24-02 4'

Lab Sample ID: 885-2895-6

Date Collected: 04/13/24 09:35

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 17:00
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 17:00
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 17:02
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		1	78802	SMC	EET MID	04/20/24 03:31

Client Sample ID: BH24-03 2'

Lab Sample ID: 885-2895-7

Date Collected: 04/13/24 11:35

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 17:24
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 17:24

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Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-03 2'
Date Collected: 04/13/24 11:35
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 17:14
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		1	78802	SMC	EET MID	04/20/24 03:36

Client Sample ID: BH24-03 4'
Date Collected: 04/13/24 11:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 17:47
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 17:47
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 17:26
Soluble	Leach	DI Leach			78728	SMC	EET MID	04/19/24 10:40
Soluble	Analysis	300.0		1	78802	SMC	EET MID	04/20/24 03:41

Client Sample ID: BH24-04 2'
Date Collected: 04/13/24 12:05
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 18:34
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 18:34
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 17:39
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 15:54

Client Sample ID: BH24-04 3'
Date Collected: 04/13/24 12:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 18:58
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 18:58
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 17:51

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Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-04 3'
Date Collected: 04/13/24 12:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:08

Client Sample ID: BH24-05 0'
Date Collected: 04/13/24 12:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 19:21
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 19:21
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 18:03
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:13

Client Sample ID: BH24-05 2'
Date Collected: 04/13/24 12:45
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 19:45
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 19:45
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 18:15
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:18

Client Sample ID: BH24-05 4'
Date Collected: 04/13/24 12:50
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 20:08
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 20:08
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 18:28
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:23

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-05 6'
Date Collected: 04/13/24 15:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 20:31
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 20:31
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 18:40
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:37

Client Sample ID: BH24-06 0'
Date Collected: 04/13/24 12:55
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 20:55
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 20:55
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 18:52
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:42

Client Sample ID: BH24-06 2'
Date Collected: 04/13/24 13:05
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 21:42
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 21:42
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 19:04
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:47

Client Sample ID: BH24-06 4'
Date Collected: 04/13/24 13:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 22:05

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-06 4'
Date Collected: 04/13/24 13:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 22:05
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 19:16
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:52

Client Sample ID: BH24-07 0'
Date Collected: 04/13/24 13:20
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 22:29
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 22:29
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:47
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 19:29
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 16:57

Client Sample ID: BH24-07 2'
Date Collected: 04/13/24 13:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-19
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 23:16
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 23:16
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:52
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 19:41
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 17:02

Client Sample ID: BH24-07 4'
Date Collected: 04/13/24 13:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8015D		1	3574	JP	EET ALB	04/18/24 23:39
Total/NA	Prep	5030C			3449	JP	EET ALB	04/17/24 12:10
Total/NA	Analysis	8021B		1	3575	JP	EET ALB	04/18/24 23:39

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Client Sample ID: BH24-07 4'

Lab Sample ID: 885-2895-20

Date Collected: 04/13/24 13:30

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3455	DH	EET ALB	04/17/24 14:52
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 19:53
Soluble	Leach	DI Leach			78727	SMC	EET MID	04/19/24 10:36
Soluble	Analysis	300.0		1	78768	SMC	EET MID	04/19/24 17:16

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2895-1

Laboratory: Eurofins Albuquerque

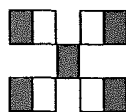
Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.nallenvironmental.com

44901 Hawkins NE - Albuquerque, NM 87109

Tel 505-345-3975 Fax 505-345-4107

[illegible]

if necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2895-1

Login Number: 2895
List Number: 1
Creator: Rojas, Juan

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2895-1

Login Number: 2895
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 04/19/24 11:00 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carter
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/22/2024 11:51:01 AM

JOB DESCRIPTION

Big Eddy Unit DI 9 35H

JOB NUMBER

885-2902-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



Generated
4/22/2024 11:51:01 AM

Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Laboratory Job ID: 885-2902-1

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Definitions/Glossary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Job ID: 885-2902-1

Eurofins Albuquerque

Job Narrative 885-2902-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/16/2024 7:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

Method 8015D_DRO: Surrogate recovery for the following sample was outside the upper control limit: BH24-15 2' (885-2902-16). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-08 0'

Lab Sample ID: 885-2902-1

Date Collected: 04/14/24 09:45

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 17:07	04/18/24 02:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/16/24 17:07	04/18/24 02:16	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/18/24 02:16	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 02:16	1
Toluene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 02:16	1
Xylenes, Total	ND		0.098	mg/Kg		04/16/24 17:07	04/18/24 02:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/16/24 17:07	04/18/24 02:16	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/17/24 09:56	04/18/24 22:19	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/17/24 09:56	04/18/24 22:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	81		62 - 134			04/17/24 09:56	04/18/24 22:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92		5.0	mg/Kg			04/19/24 09:53	1

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-08 2'

Lab Sample ID: 885-2902-2

Date Collected: 04/14/24 09:55

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/16/24 17:07	04/18/24 02:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/16/24 17:07	04/18/24 02:38	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/16/24 17:07	04/18/24 02:38	1
Ethylbenzene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 02:38	1
Toluene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 02:38	1
Xylenes, Total	ND		0.094	mg/Kg		04/16/24 17:07	04/18/24 02:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 17:07	04/18/24 02:38	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/17/24 09:56	04/18/24 22:31	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 09:56	04/18/24 22:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	110		62 - 134			04/17/24 09:56	04/18/24 22:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	mg/Kg			04/19/24 09:58	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-09 0' Lab Sample ID: 885-2902-3
Date Collected: 04/14/24 10:00 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 17:07	04/18/24 03:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		15 - 244			04/16/24 17:07	04/18/24 03:00	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/16/24 17:07	04/18/24 03:00	1	
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 17:07	04/18/24 03:00	1	
Toluene	ND		0.048	mg/Kg		04/16/24 17:07	04/18/24 03:00	1	
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 17:07	04/18/24 03:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 17:07	04/18/24 03:00	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/17/24 09:56	04/18/24 22:43	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/17/24 09:56	04/18/24 22:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	86		62 - 134			04/17/24 09:56	04/18/24 22:43	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	280		5.0	mg/Kg			04/19/24 10:03	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-09 2'

Lab Sample ID: 885-2902-4

Date Collected: 04/14/24 10:10

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/16/24 17:07	04/18/24 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 17:07	04/18/24 03:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/16/24 17:07	04/18/24 03:21	1
Ethylbenzene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 03:21	1
Toluene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 03:21	1
Xylenes, Total	ND		0.094	mg/Kg		04/16/24 17:07	04/18/24 03:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/16/24 17:07	04/18/24 03:21	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.7	mg/Kg		04/17/24 09:56	04/18/24 22:55	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/17/24 09:56	04/18/24 22:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	118		62 - 134			04/17/24 09:56	04/18/24 22:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	210		5.0	mg/Kg			04/19/24 10:08	1

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-10 2' Lab Sample ID: 885-2902-5
Date Collected: 04/14/24 10:25 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 17:07	04/18/24 03:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	104		15 - 244			04/16/24 17:07	04/18/24 03:43	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/18/24 03:43	1	
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 03:43	1	
Toluene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 03:43	1	
Xylenes, Total	ND		0.099	mg/Kg		04/16/24 17:07	04/18/24 03:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	90		39 - 146			04/16/24 17:07	04/18/24 03:43	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.5	mg/Kg		04/17/24 09:56	04/18/24 23:07	1	
Motor Oil Range Organics [C28-C40]	ND		42	mg/Kg		04/17/24 09:56	04/18/24 23:07	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	85		62 - 134			04/17/24 09:56	04/18/24 23:07	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	650		5.0	mg/Kg			04/19/24 10:13	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-10 4' Lab Sample ID: 885-2902-6
Date Collected: 04/14/24 13:30 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/16/24 17:07	04/18/24 04:05		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 17:07	04/18/24 04:05		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/16/24 17:07	04/18/24 04:05		1
Ethylbenzene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 04:05		1
Toluene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 04:05		1
Xylenes, Total	ND		0.095	mg/Kg		04/16/24 17:07	04/18/24 04:05		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 17:07	04/18/24 04:05		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		04/17/24 09:56	04/18/24 23:20		1
Motor Oil Range Organics [C28-C40]	ND		49	mg/Kg		04/17/24 09:56	04/18/24 23:20		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	106		62 - 134			04/17/24 09:56	04/18/24 23:20		1
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	360		5.0	mg/Kg			04/19/24 10:27		1

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-11 0' Lab Sample ID: 885-2902-7
Date Collected: 04/14/24 10:30 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/16/24 17:07	04/18/24 04:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 17:07	04/18/24 04:49	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/16/24 17:07	04/18/24 04:49	1	
Ethylbenzene	ND		0.046	mg/Kg		04/16/24 17:07	04/18/24 04:49	1	
Toluene	ND		0.046	mg/Kg		04/16/24 17:07	04/18/24 04:49	1	
Xylenes, Total	ND		0.092	mg/Kg		04/16/24 17:07	04/18/24 04:49	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	91		39 - 146			04/16/24 17:07	04/18/24 04:49	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/17/24 09:56	04/18/24 23:32	1	
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/17/24 09:56	04/18/24 23:32	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	107		62 - 134			04/17/24 09:56	04/18/24 23:32	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	230		5.0	mg/Kg			04/19/24 10:32	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-11 2' Lab Sample ID: 885-2902-8
Date Collected: 04/14/24 10:40 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/16/24 17:07	04/18/24 05:10	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/16/24 17:07	04/18/24 05:10	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/16/24 17:07	04/18/24 05:10	1	
Ethylbenzene	ND		0.046	mg/Kg		04/16/24 17:07	04/18/24 05:10	1	
Toluene	ND		0.046	mg/Kg		04/16/24 17:07	04/18/24 05:10	1	
Xylenes, Total	ND		0.093	mg/Kg		04/16/24 17:07	04/18/24 05:10	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 17:07	04/18/24 05:10	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/17/24 09:56	04/18/24 23:44	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 09:56	04/18/24 23:44	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	87		62 - 134			04/17/24 09:56	04/18/24 23:44	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	170		5.0	mg/Kg			04/19/24 10:46	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-12 2'

Lab Sample ID: 885-2902-9

Date Collected: 04/14/24 10:55

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 17:07	04/18/24 05:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 244			04/16/24 17:07	04/18/24 05:32	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/18/24 05:32	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 05:32	1
Toluene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 05:32	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 17:07	04/18/24 05:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 17:07	04/18/24 05:32	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.6	mg/Kg		04/17/24 09:56	04/18/24 23:56	1
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/17/24 09:56	04/18/24 23:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	87		62 - 134			04/17/24 09:56	04/18/24 23:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	620		5.0	mg/Kg			04/19/24 10:51	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-12 4'

Lab Sample ID: 885-2902-10

Date Collected: 04/14/24 13:35

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 17:07	04/18/24 05:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/16/24 17:07	04/18/24 05:54	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 17:07	04/18/24 05:54	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 17:07	04/18/24 05:54	1
Toluene	ND		0.048	mg/Kg		04/16/24 17:07	04/18/24 05:54	1
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 17:07	04/18/24 05:54	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 17:07	04/18/24 05:54	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.3	mg/Kg		04/17/24 09:56	04/19/24 00:08	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 09:56	04/19/24 00:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	127		62 - 134			04/17/24 09:56	04/19/24 00:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	460		5.0	mg/Kg			04/19/24 10:56	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-13 2' Lab Sample ID: 885-2902-11
Date Collected: 04/14/24 11:10 Matrix: Solid
Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 17:07	04/18/24 06:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/16/24 17:07	04/18/24 06:16	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/16/24 17:07	04/18/24 06:16	1	
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 06:16	1	
Toluene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 06:16	1	
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 17:07	04/18/24 06:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	90		39 - 146			04/16/24 17:07	04/18/24 06:16	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/17/24 09:56	04/19/24 00:20	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 09:56	04/19/24 00:20	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	91		62 - 134			04/17/24 09:56	04/19/24 00:20	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1200		25	mg/Kg			04/19/24 11:01	5	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-13 4'

Lab Sample ID: 885-2902-12

Date Collected: 04/14/24 13:40

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 17:07	04/18/24 06:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/16/24 17:07	04/18/24 06:38	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/18/24 06:38	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 06:38	1
Toluene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 06:38	1
Xylenes, Total	ND		0.099	mg/Kg		04/16/24 17:07	04/18/24 06:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/16/24 17:07	04/18/24 06:38	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		04/17/24 09:56	04/19/24 00:32	1
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		04/17/24 09:56	04/19/24 00:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			04/17/24 09:56	04/19/24 00:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	470		5.0	mg/Kg			04/19/24 11:06	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-14 0'

Lab Sample ID: 885-2902-13

Date Collected: 04/14/24 11:15

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/16/24 17:07	04/18/24 06:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/16/24 17:07	04/18/24 06:59	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/16/24 17:07	04/18/24 06:59	1
Ethylbenzene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 06:59	1
Toluene	ND		0.047	mg/Kg		04/16/24 17:07	04/18/24 06:59	1
Xylenes, Total	ND		0.093	mg/Kg		04/16/24 17:07	04/18/24 06:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/16/24 17:07	04/18/24 06:59	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		04/17/24 09:56	04/19/24 00:45	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 09:56	04/19/24 00:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134			04/17/24 09:56	04/19/24 00:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.0	mg/Kg			04/19/24 11:10	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-14 2'

Lab Sample ID: 885-2902-14

Date Collected: 04/14/24 11:25

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 17:07	04/18/24 07:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/16/24 17:07	04/18/24 07:21	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/18/24 07:21	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 07:21	1
Toluene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 07:21	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 17:07	04/18/24 07:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/16/24 17:07	04/18/24 07:21	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		04/17/24 09:56	04/19/24 00:57	1
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/17/24 09:56	04/19/24 00:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	100		62 - 134			04/17/24 09:56	04/19/24 00:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		5.0	mg/Kg			04/19/24 11:15	1

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Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-15 0'

Lab Sample ID: 885-2902-15

Date Collected: 04/14/24 11:30

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/16/24 17:07	04/18/24 07:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244			04/16/24 17:07	04/18/24 07:43	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.024	mg/Kg		04/16/24 17:07	04/18/24 07:43	1
Ethylbenzene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 07:43	1
Toluene	ND		0.049	mg/Kg		04/16/24 17:07	04/18/24 07:43	1
Xylenes, Total	ND		0.097	mg/Kg		04/16/24 17:07	04/18/24 07:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 17:07	04/18/24 07:43	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.5	mg/Kg		04/17/24 09:56	04/19/24 01:09	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/17/24 09:56	04/19/24 01:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	80		62 - 134			04/17/24 09:56	04/19/24 01:09	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		5.1	mg/Kg			04/19/24 23:15	1

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-15 2'

Lab Sample ID: 885-2902-16

Date Collected: 04/14/24 11:40

Matrix: Solid

Date Received: 04/16/24 07:55

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 17:07	04/18/24 08:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		15 - 244			04/16/24 17:07	04/18/24 08:05	1

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/18/24 08:05	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 08:05	1
Toluene	ND		0.050	mg/Kg		04/16/24 17:07	04/18/24 08:05	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 17:07	04/18/24 08:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		39 - 146			04/16/24 17:07	04/18/24 08:05	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		04/17/24 09:56	04/19/24 01:21	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 09:56	04/19/24 01:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	139	S1+	62 - 134			04/17/24 09:56	04/19/24 01:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		5.0	mg/Kg			04/19/24 23:19	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-3420/1-A

Matrix: Solid

Analysis Batch: 3503

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3420

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 17:07	04/17/24 23:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		15 - 244			04/16/24 17:07	04/17/24 23:00	1

Lab Sample ID: LCS 885-3420/2-A

Matrix: Solid

Analysis Batch: 3503

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	25.9		mg/Kg		104	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	222		15 - 244				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3420/1-A

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3420

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 17:07	04/17/24 23:00	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 17:07	04/17/24 23:00	1
Toluene	ND		0.050	mg/Kg		04/16/24 17:07	04/17/24 23:00	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 17:07	04/17/24 23:00	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/16/24 17:07	04/17/24 23:00	1

Lab Sample ID: LCS 885-3420/3-A

Matrix: Solid

Analysis Batch: 3505

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.969		mg/Kg		97	70 - 130
Ethylbenzene	1.00	0.972		mg/Kg		97	70 - 130
m,p-Xylene	2.00	1.95		mg/Kg		97	70 - 130
o-Xylene	1.00	0.972		mg/Kg		97	70 - 130
Toluene	1.00	0.970		mg/Kg		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	88		39 - 146				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-3421/1-A
Matrix: Solid
Analysis Batch: 3573

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3421

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/17/24 09:56	04/18/24 20:42	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 09:56	04/18/24 20:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	109		62 - 134			04/17/24 09:56	04/18/24 20:42	1

Lab Sample ID: LCS 885-3421/2-A
Matrix: Solid
Analysis Batch: 3573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	51.8		mg/Kg		104	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	103		62 - 134				

Lab Sample ID: 885-2902-16 MS
Matrix: Solid
Analysis Batch: 3573

Client Sample ID: BH24-15 2'
Prep Type: Total/NA
Prep Batch: 3421

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		43.2	42.6		mg/Kg		98	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	91		62 - 134						

Lab Sample ID: 885-2902-16 MSD
Matrix: Solid
Analysis Batch: 3573

Client Sample ID: BH24-15 2'
Prep Type: Total/NA
Prep Batch: 3421

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	ND		44.4	30.9		mg/Kg		70	44 - 136	32	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	57	S1-	62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-78599/1-A
Matrix: Solid
Analysis Batch: 78704

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/19/24 08:50	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-78599/2-A

Matrix: Solid

Analysis Batch: 78704

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	248		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-78599/3-A

Matrix: Solid

Analysis Batch: 78704

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	248		mg/Kg		99	90 - 110	0	20

Lab Sample ID: 885-2902-5 MS

Matrix: Solid

Analysis Batch: 78704

Client Sample ID: BH24-10 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	650		251	902		mg/Kg		99	90 - 110

Lab Sample ID: 885-2902-5 MSD

Matrix: Solid

Analysis Batch: 78704

Client Sample ID: BH24-10 2'

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	650		251	894		mg/Kg		96	90 - 110	1	20

Lab Sample ID: MB 880-78732/1-A

Matrix: Solid

Analysis Batch: 78778

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		5.0	mg/Kg			04/19/24 21:18	1

Lab Sample ID: LCS 880-78732/2-A

Matrix: Solid

Analysis Batch: 78778

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-78732/3-A

Matrix: Solid

Analysis Batch: 78778

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	249		mg/Kg		100	90 - 110	0	20

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

GC VOA

Prep Batch: 3420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Total/NA	Solid	5030C	
885-2902-2	BH24-08 2'	Total/NA	Solid	5030C	
885-2902-3	BH24-09 0'	Total/NA	Solid	5030C	
885-2902-4	BH24-09 2'	Total/NA	Solid	5030C	
885-2902-5	BH24-10 2'	Total/NA	Solid	5030C	
885-2902-6	BH24-10 4'	Total/NA	Solid	5030C	
885-2902-7	BH24-11 0'	Total/NA	Solid	5030C	
885-2902-8	BH24-11 2'	Total/NA	Solid	5030C	
885-2902-9	BH24-12 2'	Total/NA	Solid	5030C	
885-2902-10	BH24-12 4'	Total/NA	Solid	5030C	
885-2902-11	BH24-13 2'	Total/NA	Solid	5030C	
885-2902-12	BH24-13 4'	Total/NA	Solid	5030C	
885-2902-13	BH24-14 0'	Total/NA	Solid	5030C	
885-2902-14	BH24-14 2'	Total/NA	Solid	5030C	
885-2902-15	BH24-15 0'	Total/NA	Solid	5030C	
885-2902-16	BH24-15 2'	Total/NA	Solid	5030C	
MB 885-3420/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3420/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3420/3-A	Lab Control Sample	Total/NA	Solid	5030C	

Analysis Batch: 3503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Total/NA	Solid	8015D	3420
885-2902-2	BH24-08 2'	Total/NA	Solid	8015D	3420
885-2902-3	BH24-09 0'	Total/NA	Solid	8015D	3420
885-2902-4	BH24-09 2'	Total/NA	Solid	8015D	3420
885-2902-5	BH24-10 2'	Total/NA	Solid	8015D	3420
885-2902-6	BH24-10 4'	Total/NA	Solid	8015D	3420
885-2902-7	BH24-11 0'	Total/NA	Solid	8015D	3420
885-2902-8	BH24-11 2'	Total/NA	Solid	8015D	3420
885-2902-9	BH24-12 2'	Total/NA	Solid	8015D	3420
885-2902-10	BH24-12 4'	Total/NA	Solid	8015D	3420
885-2902-11	BH24-13 2'	Total/NA	Solid	8015D	3420
885-2902-12	BH24-13 4'	Total/NA	Solid	8015D	3420
885-2902-13	BH24-14 0'	Total/NA	Solid	8015D	3420
885-2902-14	BH24-14 2'	Total/NA	Solid	8015D	3420
885-2902-15	BH24-15 0'	Total/NA	Solid	8015D	3420
885-2902-16	BH24-15 2'	Total/NA	Solid	8015D	3420
MB 885-3420/1-A	Method Blank	Total/NA	Solid	8015D	3420
LCS 885-3420/2-A	Lab Control Sample	Total/NA	Solid	8015D	3420

Analysis Batch: 3505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Total/NA	Solid	8021B	3420
885-2902-2	BH24-08 2'	Total/NA	Solid	8021B	3420
885-2902-3	BH24-09 0'	Total/NA	Solid	8021B	3420
885-2902-4	BH24-09 2'	Total/NA	Solid	8021B	3420
885-2902-5	BH24-10 2'	Total/NA	Solid	8021B	3420
885-2902-6	BH24-10 4'	Total/NA	Solid	8021B	3420
885-2902-7	BH24-11 0'	Total/NA	Solid	8021B	3420
885-2902-8	BH24-11 2'	Total/NA	Solid	8021B	3420

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

GC VOA (Continued)

Analysis Batch: 3505 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-9	BH24-12 2'	Total/NA	Solid	8021B	3420
885-2902-10	BH24-12 4'	Total/NA	Solid	8021B	3420
885-2902-11	BH24-13 2'	Total/NA	Solid	8021B	3420
885-2902-12	BH24-13 4'	Total/NA	Solid	8021B	3420
885-2902-13	BH24-14 0'	Total/NA	Solid	8021B	3420
885-2902-14	BH24-14 2'	Total/NA	Solid	8021B	3420
885-2902-15	BH24-15 0'	Total/NA	Solid	8021B	3420
885-2902-16	BH24-15 2'	Total/NA	Solid	8021B	3420
MB 885-3420/1-A	Method Blank	Total/NA	Solid	8021B	3420
LCS 885-3420/3-A	Lab Control Sample	Total/NA	Solid	8021B	3420

GC Semi VOA

Prep Batch: 3421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Total/NA	Solid	SHAKE	
885-2902-2	BH24-08 2'	Total/NA	Solid	SHAKE	
885-2902-3	BH24-09 0'	Total/NA	Solid	SHAKE	
885-2902-4	BH24-09 2'	Total/NA	Solid	SHAKE	
885-2902-5	BH24-10 2'	Total/NA	Solid	SHAKE	
885-2902-6	BH24-10 4'	Total/NA	Solid	SHAKE	
885-2902-7	BH24-11 0'	Total/NA	Solid	SHAKE	
885-2902-8	BH24-11 2'	Total/NA	Solid	SHAKE	
885-2902-9	BH24-12 2'	Total/NA	Solid	SHAKE	
885-2902-10	BH24-12 4'	Total/NA	Solid	SHAKE	
885-2902-11	BH24-13 2'	Total/NA	Solid	SHAKE	
885-2902-12	BH24-13 4'	Total/NA	Solid	SHAKE	
885-2902-13	BH24-14 0'	Total/NA	Solid	SHAKE	
885-2902-14	BH24-14 2'	Total/NA	Solid	SHAKE	
885-2902-15	BH24-15 0'	Total/NA	Solid	SHAKE	
885-2902-16	BH24-15 2'	Total/NA	Solid	SHAKE	
MB 885-3421/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3421/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2902-16 MS	BH24-15 2'	Total/NA	Solid	SHAKE	
885-2902-16 MSD	BH24-15 2'	Total/NA	Solid	SHAKE	

Analysis Batch: 3573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Total/NA	Solid	8015D	3421
885-2902-2	BH24-08 2'	Total/NA	Solid	8015D	3421
885-2902-3	BH24-09 0'	Total/NA	Solid	8015D	3421
885-2902-4	BH24-09 2'	Total/NA	Solid	8015D	3421
885-2902-5	BH24-10 2'	Total/NA	Solid	8015D	3421
885-2902-6	BH24-10 4'	Total/NA	Solid	8015D	3421
885-2902-7	BH24-11 0'	Total/NA	Solid	8015D	3421
885-2902-8	BH24-11 2'	Total/NA	Solid	8015D	3421
885-2902-9	BH24-12 2'	Total/NA	Solid	8015D	3421
885-2902-10	BH24-12 4'	Total/NA	Solid	8015D	3421
885-2902-11	BH24-13 2'	Total/NA	Solid	8015D	3421
885-2902-12	BH24-13 4'	Total/NA	Solid	8015D	3421
885-2902-13	BH24-14 0'	Total/NA	Solid	8015D	3421

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

GC Semi VOA (Continued)

Analysis Batch: 3573 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-14	BH24-14 2'	Total/NA	Solid	8015D	3421
885-2902-15	BH24-15 0'	Total/NA	Solid	8015D	3421
885-2902-16	BH24-15 2'	Total/NA	Solid	8015D	3421
MB 885-3421/1-A	Method Blank	Total/NA	Solid	8015D	3421
LCS 885-3421/2-A	Lab Control Sample	Total/NA	Solid	8015D	3421
885-2902-16 MS	BH24-15 2'	Total/NA	Solid	8015D	3421
885-2902-16 MSD	BH24-15 2'	Total/NA	Solid	8015D	3421

HPLC/IC

Leach Batch: 78599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Soluble	Solid	DI Leach	
885-2902-2	BH24-08 2'	Soluble	Solid	DI Leach	
885-2902-3	BH24-09 0'	Soluble	Solid	DI Leach	
885-2902-4	BH24-09 2'	Soluble	Solid	DI Leach	
885-2902-5	BH24-10 2'	Soluble	Solid	DI Leach	
885-2902-6	BH24-10 4'	Soluble	Solid	DI Leach	
885-2902-7	BH24-11 0'	Soluble	Solid	DI Leach	
885-2902-8	BH24-11 2'	Soluble	Solid	DI Leach	
885-2902-9	BH24-12 2'	Soluble	Solid	DI Leach	
885-2902-10	BH24-12 4'	Soluble	Solid	DI Leach	
885-2902-11	BH24-13 2'	Soluble	Solid	DI Leach	
885-2902-12	BH24-13 4'	Soluble	Solid	DI Leach	
885-2902-13	BH24-14 0'	Soluble	Solid	DI Leach	
885-2902-14	BH24-14 2'	Soluble	Solid	DI Leach	
MB 880-78599/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78599/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78599/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-2902-5 MS	BH24-10 2'	Soluble	Solid	DI Leach	
885-2902-5 MSD	BH24-10 2'	Soluble	Solid	DI Leach	

Analysis Batch: 78704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-1	BH24-08 0'	Soluble	Solid	300.0	78599
885-2902-2	BH24-08 2'	Soluble	Solid	300.0	78599
885-2902-3	BH24-09 0'	Soluble	Solid	300.0	78599
885-2902-4	BH24-09 2'	Soluble	Solid	300.0	78599
885-2902-5	BH24-10 2'	Soluble	Solid	300.0	78599
885-2902-6	BH24-10 4'	Soluble	Solid	300.0	78599
885-2902-7	BH24-11 0'	Soluble	Solid	300.0	78599
885-2902-8	BH24-11 2'	Soluble	Solid	300.0	78599
885-2902-9	BH24-12 2'	Soluble	Solid	300.0	78599
885-2902-10	BH24-12 4'	Soluble	Solid	300.0	78599
885-2902-11	BH24-13 2'	Soluble	Solid	300.0	78599
885-2902-12	BH24-13 4'	Soluble	Solid	300.0	78599
885-2902-13	BH24-14 0'	Soluble	Solid	300.0	78599
885-2902-14	BH24-14 2'	Soluble	Solid	300.0	78599
MB 880-78599/1-A	Method Blank	Soluble	Solid	300.0	78599
LCS 880-78599/2-A	Lab Control Sample	Soluble	Solid	300.0	78599
LCSD 880-78599/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78599

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

HPLC/IC (Continued)

Analysis Batch: 78704 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-5 MS	BH24-10 2'	Soluble	Solid	300.0	78599
885-2902-5 MSD	BH24-10 2'	Soluble	Solid	300.0	78599

Leach Batch: 78732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-15	BH24-15 0'	Soluble	Solid	DI Leach	
885-2902-16	BH24-15 2'	Soluble	Solid	DI Leach	
MB 880-78732/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-78732/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-78732/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 78778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2902-15	BH24-15 0'	Soluble	Solid	300.0	78732
885-2902-16	BH24-15 2'	Soluble	Solid	300.0	78732
MB 880-78732/1-A	Method Blank	Soluble	Solid	300.0	78732
LCS 880-78732/2-A	Lab Control Sample	Soluble	Solid	300.0	78732
LCSD 880-78732/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	78732

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-08 0'

Lab Sample ID: 885-2902-1

Date Collected: 04/14/24 09:45

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 02:16
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 02:16
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 22:19
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 09:53

Client Sample ID: BH24-08 2'

Lab Sample ID: 885-2902-2

Date Collected: 04/14/24 09:55

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 02:38
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 02:38
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 22:31
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 09:58

Client Sample ID: BH24-09 0'

Lab Sample ID: 885-2902-3

Date Collected: 04/14/24 10:00

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 03:00
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 03:00
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 22:43
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:03

Client Sample ID: BH24-09 2'

Lab Sample ID: 885-2902-4

Date Collected: 04/14/24 10:10

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 03:21

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-09 2'

Lab Sample ID: 885-2902-4

Date Collected: 04/14/24 10:10

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 03:21
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 22:55
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:08

Client Sample ID: BH24-10 2'

Lab Sample ID: 885-2902-5

Date Collected: 04/14/24 10:25

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 03:43
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 03:43
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 23:07
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:13

Client Sample ID: BH24-10 4'

Lab Sample ID: 885-2902-6

Date Collected: 04/14/24 13:30

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 04:05
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 04:05
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 23:20
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:27

Client Sample ID: BH24-11 0'

Lab Sample ID: 885-2902-7

Date Collected: 04/14/24 10:30

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 04:49
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 04:49

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-11 0'

Lab Sample ID: 885-2902-7

Date Collected: 04/14/24 10:30

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 23:32
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:32

Client Sample ID: BH24-11 2'

Lab Sample ID: 885-2902-8

Date Collected: 04/14/24 10:40

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 05:10
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 05:10
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 23:44
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:46

Client Sample ID: BH24-12 2'

Lab Sample ID: 885-2902-9

Date Collected: 04/14/24 10:55

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 05:32
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 05:32
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/18/24 23:56
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:51

Client Sample ID: BH24-12 4'

Lab Sample ID: 885-2902-10

Date Collected: 04/14/24 13:35

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 05:54
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 05:54
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 00:08

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Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-12 4'
Date Collected: 04/14/24 13:35
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 10:56

Client Sample ID: BH24-13 2'
Date Collected: 04/14/24 11:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 06:16
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 06:16
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 00:20
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		5	78704	SMC	EET MID	04/19/24 11:01

Client Sample ID: BH24-13 4'
Date Collected: 04/14/24 13:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 06:38
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 06:38
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 00:32
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 11:06

Client Sample ID: BH24-14 0'
Date Collected: 04/14/24 11:15
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 06:59
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 06:59
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 00:45
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 11:10

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Client Sample ID: BH24-14 2'
Date Collected: 04/14/24 11:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 07:21
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 07:21
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 00:57
Soluble	Leach	DI Leach			78599	SMC	EET MID	04/18/24 11:05
Soluble	Analysis	300.0		1	78704	SMC	EET MID	04/19/24 11:15

Client Sample ID: BH24-15 0'
Date Collected: 04/14/24 11:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 07:43
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 07:43
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 01:09
Soluble	Leach	DI Leach			78732	SMC	EET MID	04/19/24 11:37
Soluble	Analysis	300.0		1	78778	SMC	EET MID	04/19/24 23:15

Client Sample ID: BH24-15 2'
Date Collected: 04/14/24 11:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8015D		1	3503	RA	EET ALB	04/18/24 08:05
Total/NA	Prep	5030C			3420	JP	EET ALB	04/16/24 17:07
Total/NA	Analysis	8021B		1	3505	RA	EET ALB	04/18/24 08:05
Total/NA	Prep	SHAKE			3421	PD	EET ALB	04/17/24 09:56
Total/NA	Analysis	8015D		1	3573	JU	EET ALB	04/19/24 01:21
Soluble	Leach	DI Leach			78732	SMC	EET MID	04/19/24 11:37
Soluble	Analysis	300.0		1	78778	SMC	EET MID	04/19/24 23:19

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-2902-1

Laboratory: Eurofins Albuquerque

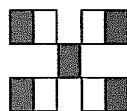
Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.nallenvironmental.com

885-2902 COC

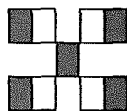
4901 Hawkins NE - Albuquerque, NM 87109

Tel 505-345-3975 Fax 505-345-4107

Analysis Request

Chain-of-Custody Record				Turn-Around Time.				
Client Vertex (Bill to XTO Energy, Inc)				<input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush 5-day				
Mailing Address				Project Name				
On file				Big Eddy Unit DI 9 35H				
Phone #				Project #				
email or Fax#				24E-01314				
QA/QC Package				Project Manager				
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				Sally Carttar				
<input type="checkbox"/> Accreditation <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other				SCarttar@vertex.ca				
<input type="checkbox"/> EDD (Type)				Sampler L Pullman On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
Date		Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	
04 14 24	9 45		Soil	BH24-08 0'	1, 4oz jar		1	
04 14 24	9 55		Soil	BH24-08 2'	1, 4oz jar		2	
04 14 24	10 00		Soil	BH24-09 0'	1, 4oz jar		3	
04 14 24	10 10		Soil	BH24-09 2'	1, 4oz jar		4	
04 14 24	10 25		Soil	BH24-10 2'	1, 4oz jar		5	
04 14 24	13 30		Soil	BH24-10 4'	1, 4oz jar		6	
04 14 24	10 30		Soil	BH24-11 0'	1, 4oz jar		7	
04 14 24	10 40		Soil	BH24-11 2'	1, 4oz jar		8	
04 14 24	10 55		Soil	BH24-12 2'	1, 4oz jar		9	
04 14 24	13 35		Soil	BH24-12 4'	1, 4oz jar		10	
04 14 24	11 10		Soil	BH24-13 2'	1, 4oz jar		11	
04 14 24	13 40		Soil	BH24-13 4'	1, 4oz jar		12	
Date	Time	Relinquished by		Received by		Via	Date	Time
4-15-24	07:00	Sally Carttar		M. M. M. M. M.			4/15/24	0700
Date	Time	Relinquished by		Received by		Via	Date	Time
4/15/24	1900	M. M. M. M. M.		M. M. M. M. M.			4/16/24	0700

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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4901 Hawkins NE - Albuquerque, NM 87109

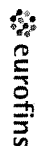
Tel 505-345-3975 Fax 505-345-4107

Chain-of-Custody Record

Chain-of-Custody Record						Turn-Around Time	
Client Vertex (Bill to XTO Energy, Inc)				<input checked="" type="checkbox"/> Standard	<input checked="" type="checkbox"/> Rush 5-day		
Mailing Address On file				Project Name			
				Big Eddy Unit DI 9 35H			
				Project #			
Phone #				24E-01314			
email or Fax#				Project Manager			
QA/QC Package				Sally Carttar			
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				SCarttar@vertex.ca			
Accreditation		<input type="checkbox"/> Az Compliance		Sampler L Pullman			
<input type="checkbox"/> NELAC		<input type="checkbox"/> Other		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<input type="checkbox"/> EDD (Type)				# of Coolers: 1		HEAL No.	
				Cooler Temp (including CP): 1.6 to 1.7			
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	
04 14 24	11 15	Soil	BH24-14 0'	1, 4oz jar		13	
04 14 24	11 25	Soil	BH24-14 2'	1, 4oz jar		14	
04 14 24	11 30	Soil	BH24-15 0'	1, 4oz jar		15	
04 14 24	11 40	Soil	BH24-15 2'	1, 4oz jar		16	
Date	Time	Relinquished by	Received by Via Date Time				
4-15-24	07:30	[Signature]	[Signature] 4/15/24 0700				
Date	Time	Relinquished by	Received by Via Date Time				
4/15/24	1900	[Signature]	[Signature] 4/16/24 2:55				

4901 Hawkins NE
Albuquerque NM 87109
Phone 505-345-3975 Fax: 505-345-4107

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sample:	Lab PM	Carrier/Tracking No(s)	COC No.					
Client Contact:	Shipping/Receiving	Phone	Freeman, Andy		885-432 1					
Company:	Eurolfins Environment Testing South Cent		andy.freeman@eurolfinsus.com	State of Origin New Mexico	Page 1 of 2					
Address	1211 W Florida Ave	Due Date Requested 4/22/2024	Accreditations Required (See note) NELAP - Oregon NELAP - Texas, State - New Mexico	Job #: 885-2902-1	Preservation Codes					
City	Midland	TAT Requested (days)	Analysis Requested							
State Zip:	TX 79701									
Phone	432-704-5440(Tel)	PO #:								
Email		WO #:								
Project Name	Big Eddy Unit DI 9 35H	Project #: 88501279								
Site		SSOV#:								
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, B=biomass, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
BH24-08 0' (885-2902-1)	✓	4/1/4/24	09 45	Mountain	Solid	X			1	
BH24-08 2' (885-2902-2)	✓	4/1/4/24	09 55	Mountain	Solid	X			1	
BH24-09 0' (885-2902-3)	✓	4/1/4/24	10 00	Mountain	Solid	X			1	
BH24-09 2' (885-2902-4)	✓	4/1/4/24	10 10	Mountain	Solid	X			1	
BH24-10 2' (885-2902-5)	✓	4/1/4/24	10 25	Mountain	Solid	X			1	
BH24-10 4' (885-2902-6)	✓	4/1/4/24	13 30	Mountain	Solid	X			1	
BH24-11 0' (885-2902-7)	✓	4/1/4/24	10 30	Mountain	Solid	X			1	
BH24-11 2' (885-2902-8)	✓	4/1/4/24	10 40	Mountain	Solid	X			1	
BH24-12 2' (885-2902-9)	✓	4/1/4/24	10 35	Mountain	Solid	X			1	
Note: Since laboratory accreditations are subject to change, Eurolfins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/assessments being analyzed, the samples must be shipped back to the Eurolfins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurolfins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurolfins Environment Testing South Central, LLC.										
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Deliverable Requested I II III IV Other (specify)		Primary Deliverable Rank 2		Special Instructions/QC Requirements						
Empty Kit Relinquished by		Date	Time	Method of Shipment:						
Relinquished by		Date/Time	Company	Received by						
Relinquished by		Date/Time	Company	Received by						
Relinquished by		Date/Time	Company	Received by						
Custody Seals Intact:		Custody Seal No		Cooler Temperature(s) °C and Other Remarks						
Δ Yes Δ No										

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Eurofins Albuquerque

4901 Hawkins NE
Albuquerque NM 87109
Phone 505-345-3975 Fax 505-345-4107

Chain of Custody Record

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier/Tracking Note	COG No:
Client Contact:	Phone	Freeman, Andy			885-432-2
Shipping/Receiving	E-Mail	andy.freeman@eurofins.com	State of Origin		Page: 2 of 2
Eurofins Environment Testing South Cent		Accreditations Required (See note)		Job #:	
Address		NELAP - Oregon NELAP - Texas State - New Mexico		885-2902-1	
City:	1211 W Florida Ave	Due Date Requested	4/22/2024		
Midland		TAT Requested (days)			
State zip:	TX 79701	Analysis Requested			
Phone:	432-704-5440(Tel)				
Email:	PO #:				
Project Name:	Big Eddy Unit DI 9 35H	Project #:	300_ORGFMM_28D/DI_LEACH Chloride		
Site:	SSOW#	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)		
		Total Number of containers			
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Inert, Semi-solid, Organic, A=Al)
BH24-12 4 (885-2902-10)	✓	4/14/24	13 35	Solid	1
BH24-13 2 (885-2902-11)	✓	4/14/24	11 10	Solid	1
BH24-13 4 (885-2902-12)	✓	4/14/24	13 40	Solid	1
BH24-14 0 (885-2902-13)	✓	4/14/24	11 15	Solid	1
BH24-14 2 (885-2902-14)	✓	4/14/24	11 25	Solid	1
BH24-15 0 (885-2902-15)	✓	4/14/24	11 30	Solid	1
BH24-15 2 (885-2902-16)	✓	4/14/24	11 40	Solid	1
Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyze & accreditation compliance upon our subcontracted laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC.					
Possible Hazard Identification					
Unconfirmed					
Deliverable Requested I, II, III, IV Other (specify)					
Primary Deliverable Rank: 2					
Special Instructions/QC Requirements					
Empty Kit Relinquished by					
Relinquished by					
Relinquished by					
Relinquished by					
Custody Seals Intact: Δ Yes Δ No					
Custody Seal No					
Cooler Temperature(s) °C and Other Remarks					

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2902-1

Login Number: 2902
List Number: 1
Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2902-1

Login Number: 2902
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 04/18/24 11:59 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ms. Sally Carttar
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 5/6/2024 2:03:16 PM

JOB DESCRIPTION

Big Eddy Unit DI 9 35H

JOB NUMBER

885-3596-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization



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Authorized for release by
Andy Freeman, Business Unit Manager
andy.freeman@et.eurofinsus.com
(505)345-3975

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Laboratory Job ID: 885-3596-1



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Definitions/Glossary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Vertex
Project: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Job ID: 885-3596-1

Eurofins Albuquerque

Job Narrative 885-3596-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 4/30/2024 7:47 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.6°C.

Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 300_ORGFM_28D - Soluble: The <AffectedAnalyt>BH24-22 0ft (885-3596-1), BH24-22 2ft (885-3596-2), BH24-24 0ft (885-3596-3), BH24-24 2ft (885-3596-4), BH24-25 0ft (885-3596-5), BH24-25 2ft (885-3596-6), BH24-27 0ft (885-3596-7), BH24-27 2ft (885-3596-8), BH24-29 0ft (885-3596-9), BH24-29 2ft (885-3596-10), (885-3596-B-1-B MS) and (885-3596-B-1-C MSD) es> matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-79939 and 880-79939 and analytical batch 880-79961 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-79939 and analytical batch 880-79961 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

BH24-30 0ft (885-3596-11), BH24-30 2ft (885-3596-12), (885-3596-B-11-B MS) and (885-3596-B-11-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-22 0ft Lab Sample ID: 885-3596-1
Date Collected: 04/26/24 10:00 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/24 16:06	05/01/24 12:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		15 - 244			04/30/24 16:06	05/01/24 12:06	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 12:06	1	
Ethylbenzene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 12:06	1	
Toluene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 12:06	1	
Xylenes, Total	ND		0.096	mg/Kg		04/30/24 16:06	05/01/24 12:06	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 12:06	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	13		9.4	mg/Kg		05/02/24 11:24	05/02/24 16:33	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/02/24 11:24	05/02/24 16:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	85		62 - 134			05/02/24 11:24	05/02/24 16:33	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	130	F1	5.0	mg/Kg			05/04/24 05:02	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-22 2ft Lab Sample ID: 885-3596-2
Date Collected: 04/26/24 10:15 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/24 16:06	05/01/24 12:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		15 - 244			04/30/24 16:06	05/01/24 12:29	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 12:29	1	
Ethylbenzene	ND		0.049	mg/Kg		04/30/24 16:06	05/01/24 12:29	1	
Toluene	ND		0.049	mg/Kg		04/30/24 16:06	05/01/24 12:29	1	
Xylenes, Total	ND		0.098	mg/Kg		04/30/24 16:06	05/01/24 12:29	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 12:29	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.2	mg/Kg		05/02/24 11:24	05/02/24 16:57	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/02/24 11:24	05/02/24 16:57	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	90		62 - 134			05/02/24 11:24	05/02/24 16:57	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	65		5.0	mg/Kg			05/04/24 05:21	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-24 0ft

Lab Sample ID: 885-3596-3

Date Collected: 04/26/24 10:45

Matrix: Solid

Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/24 16:06	05/01/24 12:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/30/24 16:06	05/01/24 12:52	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 12:52	1	
Ethylbenzene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 12:52	1	
Toluene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 12:52	1	
Xylenes, Total	ND		0.097	mg/Kg		04/30/24 16:06	05/01/24 12:52	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		39 - 146			04/30/24 16:06	05/01/24 12:52	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.6	mg/Kg		05/02/24 11:24	05/02/24 17:21	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		05/02/24 11:24	05/02/24 17:21	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	93		62 - 134			05/02/24 11:24	05/02/24 17:21	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	570		5.0	mg/Kg			05/04/24 05:27	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-24 2ft Lab Sample ID: 885-3596-4
Date Collected: 04/26/24 11:00 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/24 16:06	05/01/24 13:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		15 - 244			04/30/24 16:06	05/01/24 13:16	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/30/24 16:06	05/01/24 13:16	1	
Ethylbenzene	ND		0.050	mg/Kg		04/30/24 16:06	05/01/24 13:16	1	
Toluene	ND		0.050	mg/Kg		04/30/24 16:06	05/01/24 13:16	1	
Xylenes, Total	ND		0.099	mg/Kg		04/30/24 16:06	05/01/24 13:16	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		39 - 146			04/30/24 16:06	05/01/24 13:16	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.9	mg/Kg		05/02/24 11:24	05/02/24 17:45	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/02/24 11:24	05/02/24 17:45	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	95		62 - 134			05/02/24 11:24	05/02/24 17:45	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	410		5.0	mg/Kg			05/04/24 05:33	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-25 0ft Lab Sample ID: 885-3596-5
Date Collected: 04/26/24 11:15 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.6	mg/Kg		04/30/24 16:06	05/01/24 13:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/30/24 16:06	05/01/24 13:39	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.023	mg/Kg		04/30/24 16:06	05/01/24 13:39	1	
Ethylbenzene	ND		0.046	mg/Kg		04/30/24 16:06	05/01/24 13:39	1	
Toluene	ND		0.046	mg/Kg		04/30/24 16:06	05/01/24 13:39	1	
Xylenes, Total	ND		0.092	mg/Kg		04/30/24 16:06	05/01/24 13:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 13:39	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	20		8.7	mg/Kg		05/02/24 11:24	05/02/24 18:08	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		05/02/24 11:24	05/02/24 18:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	95		62 - 134			05/02/24 11:24	05/02/24 18:08	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	330		5.0	mg/Kg			05/04/24 05:40	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-25 2ft Lab Sample ID: 885-3596-6
Date Collected: 04/26/24 11:30 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/24 16:06	05/01/24 14:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		15 - 244			04/30/24 16:06	05/01/24 14:03	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 14:03	1	
Ethylbenzene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 14:03	1	
Toluene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 14:03	1	
Xylenes, Total	ND		0.097	mg/Kg		04/30/24 16:06	05/01/24 14:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 14:03	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.7	mg/Kg		05/02/24 11:24	05/02/24 18:32	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/02/24 11:24	05/02/24 18:32	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	95		62 - 134			05/02/24 11:24	05/02/24 18:32	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	320		5.0	mg/Kg			05/04/24 05:59	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-27 0ft Lab Sample ID: 885-3596-7
Date Collected: 04/26/24 11:45 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/30/24 16:06	05/01/24 14:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		15 - 244			04/30/24 16:06	05/01/24 14:26	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 14:26	1	
Ethylbenzene	ND		0.047	mg/Kg		04/30/24 16:06	05/01/24 14:26	1	
Toluene	ND		0.047	mg/Kg		04/30/24 16:06	05/01/24 14:26	1	
Xylenes, Total	ND		0.094	mg/Kg		04/30/24 16:06	05/01/24 14:26	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 14:26	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.1	mg/Kg		05/02/24 11:24	05/02/24 18:56	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		05/02/24 11:24	05/02/24 18:56	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	88		62 - 134			05/02/24 11:24	05/02/24 18:56	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	150		5.0	mg/Kg			05/04/24 06:05	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-27 2ft Lab Sample ID: 885-3596-8
Date Collected: 04/26/24 12:00 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/24 16:06	05/01/24 14:50	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	103		15 - 244			04/30/24 16:06	05/01/24 14:50	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 14:50	1	
Ethylbenzene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 14:50	1	
Toluene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 14:50	1	
Xylenes, Total	ND		0.096	mg/Kg		04/30/24 16:06	05/01/24 14:50	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		39 - 146			04/30/24 16:06	05/01/24 14:50	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.8	mg/Kg		05/02/24 11:24	05/03/24 14:46	1	
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		05/02/24 11:24	05/03/24 14:46	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	100		62 - 134			05/02/24 11:24	05/03/24 14:46	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	310		5.0	mg/Kg			05/04/24 06:11	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-29 0ft Lab Sample ID: 885-3596-9
Date Collected: 04/26/24 12:30 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.7	mg/Kg		04/30/24 16:06	05/01/24 15:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		15 - 244			04/30/24 16:06	05/01/24 15:13	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 15:13	1	
Ethylbenzene	ND		0.047	mg/Kg		04/30/24 16:06	05/01/24 15:13	1	
Toluene	ND		0.047	mg/Kg		04/30/24 16:06	05/01/24 15:13	1	
Xylenes, Total	ND		0.095	mg/Kg		04/30/24 16:06	05/01/24 15:13	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	93		39 - 146			04/30/24 16:06	05/01/24 15:13	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		8.9	mg/Kg		05/02/24 11:24	05/03/24 15:09	1	
Motor Oil Range Organics [C28-C40]	ND		44	mg/Kg		05/02/24 11:24	05/03/24 15:09	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	96		62 - 134			05/02/24 11:24	05/03/24 15:09	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	320		5.0	mg/Kg			05/04/24 06:17	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-29 2ft Lab Sample ID: 885-3596-10
Date Collected: 04/26/24 12:45 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.9	mg/Kg		04/30/24 16:06	05/01/24 16:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		15 - 244			04/30/24 16:06	05/01/24 16:00	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/30/24 16:06	05/01/24 16:00	1	
Ethylbenzene	ND		0.049	mg/Kg		04/30/24 16:06	05/01/24 16:00	1	
Toluene	ND		0.049	mg/Kg		04/30/24 16:06	05/01/24 16:00	1	
Xylenes, Total	ND		0.099	mg/Kg		04/30/24 16:06	05/01/24 16:00	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 16:00	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/02/24 11:24	05/03/24 15:33	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/02/24 11:24	05/03/24 15:33	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	103		62 - 134			05/02/24 11:24	05/03/24 15:33	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	25		5.1	mg/Kg			05/04/24 06:24	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-30 0ft
Date Collected: 04/26/24 13:00
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-11
Matrix: Solid

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/24 16:06	05/01/24 16:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		15 - 244			04/30/24 16:06	05/01/24 16:24	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 16:24	1	
Ethylbenzene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 16:24	1	
Toluene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 16:24	1	
Xylenes, Total	ND		0.096	mg/Kg		04/30/24 16:06	05/01/24 16:24	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		39 - 146			04/30/24 16:06	05/01/24 16:24	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.6	mg/Kg		05/02/24 11:24	05/02/24 20:54	1	
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		05/02/24 11:24	05/02/24 20:54	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	94		62 - 134			05/02/24 11:24	05/02/24 20:54	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	470	F1	5.0	mg/Kg			05/04/24 06:30	1	

Client Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-30 2ft Lab Sample ID: 885-3596-12
Date Collected: 04/26/24 13:15 Matrix: Solid
Date Received: 04/30/24 07:47

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/30/24 16:06	05/01/24 16:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	99		15 - 244			04/30/24 16:06	05/01/24 16:47	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/30/24 16:06	05/01/24 16:47	1	
Ethylbenzene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 16:47	1	
Toluene	ND		0.048	mg/Kg		04/30/24 16:06	05/01/24 16:47	1	
Xylenes, Total	ND		0.095	mg/Kg		04/30/24 16:06	05/01/24 16:47	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	96		39 - 146			04/30/24 16:06	05/01/24 16:47	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		05/02/24 11:24	05/02/24 21:18	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		05/02/24 11:24	05/02/24 21:18	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	97		62 - 134			05/02/24 11:24	05/02/24 21:18	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	540		5.0	mg/Kg			05/04/24 06:49	1	

QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-4138/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4186						Prep Batch: 4138			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/30/24 16:06	05/01/24 11:19	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		15 - 244			04/30/24 16:06	05/01/24 11:19	1	

Lab Sample ID: LCS 885-4138/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4186						Prep Batch: 4138			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]			25.0	25.5		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	204		15 - 244						

Lab Sample ID: 885-3596-1 MS						Client Sample ID: BH24-22 0ft			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4186						Prep Batch: 4138			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		23.8	26.7		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	220		15 - 244						

Lab Sample ID: 885-3596-1 MSD							Client Sample ID: BH24-22 0ft				
Matrix: Solid							Prep Type: Total/NA				
Analysis Batch: 4186							Prep Batch: 4138				
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	ND		23.7	27.1		mg/Kg		114	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	221		15 - 244								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-4138/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4187						Prep Batch: 4138			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.025	mg/Kg		04/30/24 16:06	05/01/24 11:19	1	
Ethylbenzene	ND		0.050	mg/Kg		04/30/24 16:06	05/01/24 11:19	1	
Toluene	ND		0.050	mg/Kg		04/30/24 16:06	05/01/24 11:19	1	

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: MB 885-4138/1-A

Matrix: Solid

Analysis Batch: 4187

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4138

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/30/24 16:06	05/01/24 11:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		39 - 146			04/30/24 16:06	05/01/24 11:19	1

Lab Sample ID: LCS 885-4138/3-A

Matrix: Solid

Analysis Batch: 4187

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	1.04		mg/Kg		104	70 - 130
Ethylbenzene	1.00	0.989		mg/Kg		99	70 - 130
m,p-Xylene	2.00	2.00		mg/Kg		100	70 - 130
o-Xylene	1.00	0.984		mg/Kg		98	70 - 130
Toluene	1.00	0.982		mg/Kg		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	98		39 - 146				

Lab Sample ID: 885-3596-2 MS

Matrix: Solid

Analysis Batch: 4187

Client Sample ID: BH24-22 2ft

Prep Type: Total/NA

Prep Batch: 4138

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.981	1.13		mg/Kg		115	70 - 130
Ethylbenzene	ND		0.981	1.11		mg/Kg		113	70 - 130
m,p-Xylene	ND		1.96	2.26		mg/Kg		115	70 - 130
o-Xylene	ND		0.981	1.11		mg/Kg		113	70 - 130
Toluene	ND		0.981	1.09		mg/Kg		111	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	100		39 - 146						

Lab Sample ID: 885-3596-2 MSD

Matrix: Solid

Analysis Batch: 4187

Client Sample ID: BH24-22 2ft

Prep Type: Total/NA

Prep Batch: 4138

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		0.976	1.08		mg/Kg		111	70 - 130	5	20
Ethylbenzene	ND		0.976	1.05		mg/Kg		108	70 - 130	5	20
m,p-Xylene	ND		1.95	2.11		mg/Kg		108	70 - 130	7	20
o-Xylene	ND		0.976	1.04		mg/Kg		107	70 - 130	7	20
Toluene	ND		0.976	1.02		mg/Kg		105	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	99		39 - 146								

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-4253/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4346						Prep Batch: 4253			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		05/02/24 11:24	05/02/24 15:45	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		05/02/24 11:24	05/02/24 15:45	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	95		62 - 134			05/02/24 11:24	05/02/24 15:45	1	

Lab Sample ID: LCS 885-4253/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 4346						Prep Batch: 4253			
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]			50.0	51.4		mg/Kg		103	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	97		62 - 134						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-79939/1-A						Client Sample ID: Method Blank					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 79961											
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	ND		5.0	mg/Kg			05/04/24 04:43	1			
Lab Sample ID: LCS 880-79939/2-A						Client Sample ID: Lab Control Sample					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 79961											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	234		mg/Kg		94	90 - 110		
Lab Sample ID: LCSD 880-79939/3-A						Client Sample ID: Lab Control Sample Dup					
Matrix: Solid						Prep Type: Soluble					
Analysis Batch: 79961											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	234		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 885-3596-1 MS							Client Sample ID: BH24-22 0ft				
Matrix: Solid							Prep Type: Soluble				
Analysis Batch: 79961											
	Sample	Sample	Spike	MS	MS						
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	%Rec		
Chloride	130	F1	249	343	F1	mg/Kg		84	90 - 110		

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QC Sample Results

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 885-3596-1 MSD												Client Sample ID: BH24-22 0ft	
Matrix: Solid												Prep Type: Soluble	
Analysis Batch: 79961													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	130	F1	249	343	F1	mg/Kg		84	90 - 110	0	20		
Lab Sample ID: 885-3596-11 MS												Client Sample ID: BH24-30 0ft	
Matrix: Solid												Prep Type: Soluble	
Analysis Batch: 79961													
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits				
Chloride	470	F1	248	677	F1	mg/Kg		85	90 - 110				
Lab Sample ID: 885-3596-11 MSD												Client Sample ID: BH24-30 0ft	
Matrix: Solid												Prep Type: Soluble	
Analysis Batch: 79961													
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit		
Chloride	470	F1	248	687	F1	mg/Kg		89	90 - 110	1	20		

QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

GC VOA

Prep Batch: 4138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Total/NA	Solid	5030C	
885-3596-2	BH24-22 2ft	Total/NA	Solid	5030C	
885-3596-3	BH24-24 0ft	Total/NA	Solid	5030C	
885-3596-4	BH24-24 2ft	Total/NA	Solid	5030C	
885-3596-5	BH24-25 0ft	Total/NA	Solid	5030C	
885-3596-6	BH24-25 2ft	Total/NA	Solid	5030C	
885-3596-7	BH24-27 0ft	Total/NA	Solid	5030C	
885-3596-8	BH24-27 2ft	Total/NA	Solid	5030C	
885-3596-9	BH24-29 0ft	Total/NA	Solid	5030C	
885-3596-10	BH24-29 2ft	Total/NA	Solid	5030C	
885-3596-11	BH24-30 0ft	Total/NA	Solid	5030C	
885-3596-12	BH24-30 2ft	Total/NA	Solid	5030C	
MB 885-4138/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-4138/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-4138/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-3596-1 MS	BH24-22 0ft	Total/NA	Solid	5030C	
885-3596-1 MSD	BH24-22 0ft	Total/NA	Solid	5030C	
885-3596-2 MS	BH24-22 2ft	Total/NA	Solid	5030C	
885-3596-2 MSD	BH24-22 2ft	Total/NA	Solid	5030C	

Analysis Batch: 4186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Total/NA	Solid	8015D	4138
885-3596-2	BH24-22 2ft	Total/NA	Solid	8015D	4138
885-3596-3	BH24-24 0ft	Total/NA	Solid	8015D	4138
885-3596-4	BH24-24 2ft	Total/NA	Solid	8015D	4138
885-3596-5	BH24-25 0ft	Total/NA	Solid	8015D	4138
885-3596-6	BH24-25 2ft	Total/NA	Solid	8015D	4138
885-3596-7	BH24-27 0ft	Total/NA	Solid	8015D	4138
885-3596-8	BH24-27 2ft	Total/NA	Solid	8015D	4138
885-3596-9	BH24-29 0ft	Total/NA	Solid	8015D	4138
885-3596-10	BH24-29 2ft	Total/NA	Solid	8015D	4138
885-3596-11	BH24-30 0ft	Total/NA	Solid	8015D	4138
885-3596-12	BH24-30 2ft	Total/NA	Solid	8015D	4138
MB 885-4138/1-A	Method Blank	Total/NA	Solid	8015D	4138
LCS 885-4138/2-A	Lab Control Sample	Total/NA	Solid	8015D	4138
885-3596-1 MS	BH24-22 0ft	Total/NA	Solid	8015D	4138
885-3596-1 MSD	BH24-22 0ft	Total/NA	Solid	8015D	4138

Analysis Batch: 4187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Total/NA	Solid	8021B	4138
885-3596-2	BH24-22 2ft	Total/NA	Solid	8021B	4138
885-3596-3	BH24-24 0ft	Total/NA	Solid	8021B	4138
885-3596-4	BH24-24 2ft	Total/NA	Solid	8021B	4138
885-3596-5	BH24-25 0ft	Total/NA	Solid	8021B	4138
885-3596-6	BH24-25 2ft	Total/NA	Solid	8021B	4138
885-3596-7	BH24-27 0ft	Total/NA	Solid	8021B	4138
885-3596-8	BH24-27 2ft	Total/NA	Solid	8021B	4138
885-3596-9	BH24-29 0ft	Total/NA	Solid	8021B	4138
885-3596-10	BH24-29 2ft	Total/NA	Solid	8021B	4138

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QC Association Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

GC VOA (Continued)

Analysis Batch: 4187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-11	BH24-30 0ft	Total/NA	Solid	8021B	4138
885-3596-12	BH24-30 2ft	Total/NA	Solid	8021B	4138
MB 885-4138/1-A	Method Blank	Total/NA	Solid	8021B	4138
LCS 885-4138/3-A	Lab Control Sample	Total/NA	Solid	8021B	4138
885-3596-2 MS	BH24-22 2ft	Total/NA	Solid	8021B	4138
885-3596-2 MSD	BH24-22 2ft	Total/NA	Solid	8021B	4138

GC Semi VOA

Prep Batch: 4253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Total/NA	Solid	SHAKE	
885-3596-2	BH24-22 2ft	Total/NA	Solid	SHAKE	
885-3596-3	BH24-24 0ft	Total/NA	Solid	SHAKE	
885-3596-4	BH24-24 2ft	Total/NA	Solid	SHAKE	
885-3596-5	BH24-25 0ft	Total/NA	Solid	SHAKE	
885-3596-6	BH24-25 2ft	Total/NA	Solid	SHAKE	
885-3596-7	BH24-27 0ft	Total/NA	Solid	SHAKE	
885-3596-8	BH24-27 2ft	Total/NA	Solid	SHAKE	
885-3596-9	BH24-29 0ft	Total/NA	Solid	SHAKE	
885-3596-10	BH24-29 2ft	Total/NA	Solid	SHAKE	
885-3596-11	BH24-30 0ft	Total/NA	Solid	SHAKE	
885-3596-12	BH24-30 2ft	Total/NA	Solid	SHAKE	
MB 885-4253/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-4253/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 4346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Total/NA	Solid	8015D	4253
885-3596-2	BH24-22 2ft	Total/NA	Solid	8015D	4253
885-3596-3	BH24-24 0ft	Total/NA	Solid	8015D	4253
885-3596-4	BH24-24 2ft	Total/NA	Solid	8015D	4253
885-3596-5	BH24-25 0ft	Total/NA	Solid	8015D	4253
885-3596-6	BH24-25 2ft	Total/NA	Solid	8015D	4253
885-3596-7	BH24-27 0ft	Total/NA	Solid	8015D	4253
885-3596-11	BH24-30 0ft	Total/NA	Solid	8015D	4253
885-3596-12	BH24-30 2ft	Total/NA	Solid	8015D	4253
MB 885-4253/1-A	Method Blank	Total/NA	Solid	8015D	4253
LCS 885-4253/2-A	Lab Control Sample	Total/NA	Solid	8015D	4253

Analysis Batch: 4408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-8	BH24-27 2ft	Total/NA	Solid	8015D	4253
885-3596-9	BH24-29 0ft	Total/NA	Solid	8015D	4253
885-3596-10	BH24-29 2ft	Total/NA	Solid	8015D	4253

HPLC/IC

Leach Batch: 79939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Soluble	Solid	DI Leach	
885-3596-2	BH24-22 2ft	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Vertex

Job ID: 885-3596-1

Project/Site: Big Eddy Unit DI 9 35H

HPLC/IC (Continued)

Leach Batch: 79939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-3	BH24-24 0ft	Soluble	Solid	DI Leach	
885-3596-4	BH24-24 2ft	Soluble	Solid	DI Leach	
885-3596-5	BH24-25 0ft	Soluble	Solid	DI Leach	
885-3596-6	BH24-25 2ft	Soluble	Solid	DI Leach	
885-3596-7	BH24-27 0ft	Soluble	Solid	DI Leach	
885-3596-8	BH24-27 2ft	Soluble	Solid	DI Leach	
885-3596-9	BH24-29 0ft	Soluble	Solid	DI Leach	
885-3596-10	BH24-29 2ft	Soluble	Solid	DI Leach	
885-3596-11	BH24-30 0ft	Soluble	Solid	DI Leach	
885-3596-12	BH24-30 2ft	Soluble	Solid	DI Leach	
MB 880-79939/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-79939/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-79939/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
885-3596-1 MS	BH24-22 0ft	Soluble	Solid	DI Leach	
885-3596-1 MSD	BH24-22 0ft	Soluble	Solid	DI Leach	
885-3596-11 MS	BH24-30 0ft	Soluble	Solid	DI Leach	
885-3596-11 MSD	BH24-30 0ft	Soluble	Solid	DI Leach	

Analysis Batch: 79961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-3596-1	BH24-22 0ft	Soluble	Solid	300.0	79939
885-3596-2	BH24-22 2ft	Soluble	Solid	300.0	79939
885-3596-3	BH24-24 0ft	Soluble	Solid	300.0	79939
885-3596-4	BH24-24 2ft	Soluble	Solid	300.0	79939
885-3596-5	BH24-25 0ft	Soluble	Solid	300.0	79939
885-3596-6	BH24-25 2ft	Soluble	Solid	300.0	79939
885-3596-7	BH24-27 0ft	Soluble	Solid	300.0	79939
885-3596-8	BH24-27 2ft	Soluble	Solid	300.0	79939
885-3596-9	BH24-29 0ft	Soluble	Solid	300.0	79939
885-3596-10	BH24-29 2ft	Soluble	Solid	300.0	79939
885-3596-11	BH24-30 0ft	Soluble	Solid	300.0	79939
885-3596-12	BH24-30 2ft	Soluble	Solid	300.0	79939
MB 880-79939/1-A	Method Blank	Soluble	Solid	300.0	79939
LCS 880-79939/2-A	Lab Control Sample	Soluble	Solid	300.0	79939
LCSD 880-79939/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	79939
885-3596-1 MS	BH24-22 0ft	Soluble	Solid	300.0	79939
885-3596-1 MSD	BH24-22 0ft	Soluble	Solid	300.0	79939
885-3596-11 MS	BH24-30 0ft	Soluble	Solid	300.0	79939
885-3596-11 MSD	BH24-30 0ft	Soluble	Solid	300.0	79939

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Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-22 0ft
Date Collected: 04/26/24 10:00
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 12:06
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 12:06
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 16:33
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 05:02

Client Sample ID: BH24-22 2ft
Date Collected: 04/26/24 10:15
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 12:29
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 12:29
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 16:57
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 05:21

Client Sample ID: BH24-24 0ft
Date Collected: 04/26/24 10:45
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 12:52
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 12:52
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 17:21
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 05:27

Client Sample ID: BH24-24 2ft
Date Collected: 04/26/24 11:00
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 13:16

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Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-24 2ft
Date Collected: 04/26/24 11:00
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 13:16
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 17:45
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 05:33

Client Sample ID: BH24-25 0ft
Date Collected: 04/26/24 11:15
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 13:39
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 13:39
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 18:08
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 05:40

Client Sample ID: BH24-25 2ft
Date Collected: 04/26/24 11:30
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 14:03
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 14:03
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 18:32
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 05:59

Client Sample ID: BH24-27 0ft
Date Collected: 04/26/24 11:45
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 14:26
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 14:26

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-27 0ft
Date Collected: 04/26/24 11:45
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 18:56
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 06:05

Client Sample ID: BH24-27 2ft
Date Collected: 04/26/24 12:00
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 14:50
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 14:50
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/03/24 14:46
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 06:11

Client Sample ID: BH24-29 0ft
Date Collected: 04/26/24 12:30
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 15:13
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 15:13
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/03/24 15:09
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 06:17

Client Sample ID: BH24-29 2ft
Date Collected: 04/26/24 12:45
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 16:00
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 16:00
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4408	JU	EET ALB	05/03/24 15:33

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Client Sample ID: BH24-29 2ft
Date Collected: 04/26/24 12:45
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 06:24

Client Sample ID: BH24-30 0ft
Date Collected: 04/26/24 13:00
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 16:24
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 16:24
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 20:54
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 06:30

Client Sample ID: BH24-30 2ft
Date Collected: 04/26/24 13:15
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8015D		1	4186	JP	EET ALB	05/01/24 16:47
Total/NA	Prep	5030C			4138	JP	EET ALB	04/30/24 16:06
Total/NA	Analysis	8021B		1	4187	JP	EET ALB	05/01/24 16:47
Total/NA	Prep	SHAKE			4253	JU	EET ALB	05/02/24 11:24
Total/NA	Analysis	8015D		1	4346	JU	EET ALB	05/02/24 21:18
Soluble	Leach	DI Leach			79939	SA	EET MID	05/03/24 13:25
Soluble	Analysis	300.0		1	79961	SMC	EET MID	05/04/24 06:49

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Vertex
Project/Site: Big Eddy Unit DI 9 35H

Job ID: 885-3596-1

Laboratory: Eurofins Albuquerque

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New Mexico	State	NM9425, NM0901	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total
Oregon	NELAP	NM100001	02-26-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015D	5030C	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5030C	Solid	Benzene
8021B	5030C	Solid	Ethylbenzene
8021B	5030C	Solid	Toluene
8021B	5030C	Solid	Xylenes, Total

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
300.0		Solid	Chloride

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-3596-1

Login Number: 3596

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-3596-1

Login Number: 3596

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 05/03/24 11:32 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



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

August 19, 2024

SALLY CARTTAR

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BIG EDDY UNIT DI 9 35H

Enclosed are the results of analyses for samples received by the laboratory on 08/15/24 12:58.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 01 1FT (H244947-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46	
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08	
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08	
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01	
Total BTEX	<0.300	0.300	08/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	08/16/2024	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 98.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 02 1FT (H244947-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 93.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 03 1FT (H244947-03)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	528	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 92.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 05 3FT (H244947-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 85.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 06 1FT (H244947-05)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	464	16.0	08/16/2024	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 97.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 SALLY CARTTAR
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/15/2024
 Reported: 08/19/2024
 Project Name: BIG EDDY UNIT DI 9 35H
 Project Number: 24E-01314
 Project Location: XTO

Sampling Date: 08/13/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 07 1FT (H244947-06)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46	
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08	
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08	
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01	
Total BTEX	<0.300	0.300	08/15/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	800	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	221	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	68.8	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 70.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 08 1FT (H244947-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 09 1FT (H244947-08)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	464	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 95.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 10 1FT (H244947-09)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46	
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08	
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08	
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01	
Total BTEX	<0.300	0.300	08/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	08/16/2024	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 79.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 11 1FT (H244947-10)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	08/16/2024	ND	432	108	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 86.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 12 1FT (H244947-11)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	08/16/2024	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 13 3FT (H244947-12)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46	
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08	
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08	
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01	
Total BTEX	<0.300	0.300	08/15/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	448	16.0	08/16/2024	ND	416	104	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 14 1FT (H244947-13)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 89.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 15 1FT (H244947-14)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/15/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/15/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/15/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/15/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/15/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	218	109	200	4.96	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	231	115	200	9.13	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 95.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 16 1FT (H244947-15)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/16/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 142 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 17 1FT (H244947-16)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/16/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 84.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 18 1FT (H244947-17)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/16/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 90.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 01 0-1FT (H244947-18)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/16/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/13/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 03 1-3FT (H244947-19)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/16/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 04 8FT (H244947-20)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	2.00	100	2.00	7.46		
Toluene*	<0.050	0.050	08/16/2024	ND	1.92	96.2	2.00	6.08		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.00	99.8	2.00	5.08		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.95	99.2	6.00	5.01		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1790	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 19 3FT (H244947-21)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 95.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	816	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 89.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 20 1FT (H244947-22)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 94.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 21 1FT (H244947-23)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	560	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 99.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 22 1FT (H244947-24)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 23 1FT (H244947-25)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793	
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73	
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	08/16/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 134 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 24 1FT (H244947-26)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 25 1FT (H244947-27)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	608	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	230	115	200	0.497	
DRO >C10-C28*	16.7	10.0	08/15/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: BS 24 - 26 1FT (H244947-28)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793	
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73	
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	45.6	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	21.3	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 02 1-8FT (H244947-29)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793	
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73	
Total BTEX	<0.300	0.300	08/16/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3120	16.0	08/16/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 95.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 119 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 04 1-8FT (H244947-30)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7040	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 05 1-3FT (H244947-31)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	08/16/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 06 1-3FT (H244947-32)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 07 1-3FT (H244947-33)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	704	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 130 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 08 1-3FT (H244947-34)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	230	115	200	0.497	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	233	117	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 86.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 09 1-3FT (H244947-35)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	223	111	200	6.32	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	220	110	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 75.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 10 0-1FT (H244947-36)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	08/16/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	223	111	200	6.32	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	220	110	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 75.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 14 0-1FT (H244947-37)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	656	16.0	08/16/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	223	111	200	6.32	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	220	110	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 68.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 15 0-1FT (H244947-38)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	223	111	200	6.32	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	220	110	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 84.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 16 3-8FT (H244947-39)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3040	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	223	111	200	6.32	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	220	110	200	10.2	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 91.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 17 3-8FT (H244947-40)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/16/2024	ND	1.95	97.5	2.00	0.793		
Toluene*	<0.050	0.050	08/16/2024	ND	1.88	94.0	2.00	0.854		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	1.89	94.4	2.00	1.48		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	5.61	93.4	6.00	1.73		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2840	16.0	08/16/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/15/2024	ND	199	99.4	200	2.72	
DRO >C10-C28*	<10.0	10.0	08/15/2024	ND	197	98.3	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	08/15/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/15/2024
Reported: 08/19/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/14/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 11 0-1FT (H244947-41)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	2.09	104	2.00	7.88	QR-03
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21	QR-03
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72	QR-03
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41	QR-03
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1640	16.0	08/16/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	199	99.4	200	2.72	
DRO >C10-C28*	61.3	10.0	08/16/2024	ND	197	98.3	200	4.62	
EXT DRO >C28-C36	11.4	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
 SALLY CARTTAR
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/15/2024
 Reported: 08/19/2024
 Project Name: BIG EDDY UNIT DI 9 35H
 Project Number: 24E-01314
 Project Location: XTO

Sampling Date: 08/14/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 12 0-1FT (H244947-42)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	2.09	104	2.00	7.88	
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41	
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/16/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	199	99.4	200	2.72	
DRO >C10-C28*	<10.0	10.0	08/16/2024	ND	197	98.3	200	4.62	
EXT DRO >C28-C36	<10.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 95.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 SALLY CARTTAR
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/15/2024
 Reported: 08/19/2024
 Project Name: BIG EDDY UNIT DI 9 35H
 Project Number: 24E-01314
 Project Location: XTO

Sampling Date: 08/14/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WS 24 - 13 0-1FT (H244947-43)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/16/2024	ND	2.09	104	2.00	7.88	
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41	
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	08/16/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/16/2024	ND	199	99.4	200	2.72	
DRO >C10-C28*	171	10.0	08/16/2024	ND	197	98.3	200	4.62	
EXT DRO >C28-C36	87.0	10.0	08/16/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Notes and Definitions

S-05	The surrogate recovery is outside of lab established statistical control limits but still within method limits. Data is not adversely affected.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BTEX		BILL TO		ANALYSIS REQUEST	
Project Manager: Sally Calital	P.O. #:				
Address: 3102 Seab Drive	Company: XTONECS				
City: CA 1560	Attn: A. H. EAT				
State: NM Zip: 88220	Address: 3104 Green St				
Phone #: 575-361-2561 Fax #:	City: CA 1560				
Project #: 29E-0134 Project Owner:	State: NM Zip: 88220				
Project Name: Big Ed's Unit DI 9 35H	Phone #: 432-661-0571				
Project Location:	Fax #:				
Sampler Name: Wjett Underish	MATRIX	PRESERV.	SAMPLING		
Lab I.D.	(G)RAB OR (C)OMP				
Sample I.D. #B44947 11 12 13 14 15 16 17 18 19	BS-24-12 1 FT	# CONTAINERS	GROUNDWATER	DATE	TIME
	BS-24-13 3 FT		WASTEWATER	08/13/04	8:33
	BS-24-14 1 FT		SOIL	08/13/04	9:00
	BS-24-15 1 FT		OIL		9:10
	BS-24-16 1 FT		SLUDGE		9:15
	BS-24-17 1 FT		OTHER		9:20
	BS-24-18 1 FT		ACID/BASE		9:25
	WS-24-01 0-1 FT		ICE / COOL		10:00
	WS-24-03 1-3 FT		OTHER		10:05
ANALYSIS RESULTS: BTEX 8021 TPA 8015 D Chlorides					

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Relinquished By: L. Hoff V.	Date: 8-15-04	Received By: S. K. Riquelme	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	REMARKS:	
Scatter BTEX Co				

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 22.2	Cool Intact: <input checked="" type="checkbox"/>	Standard: <input checked="" type="checkbox"/>	Bacteria (only) Sample Condition:
	Corrected Temp. °C: 1.0	Thermometer ID: 484	Correction Factor: -0.0	



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex		BILL TO		ANALYSIS REQUEST									
Project Manager: Sally Carter		P.O. #:											
Address: 3103 Reid Dr		Company: X10											
City: Capitol		Attn: Angela											
State: NM Zip: 88220		Address: 3107 Green St											
Phone #: 575 361 3561 Fax #: 		City: Capitol											
Project #: 246-01314 Project Owner: 		State: NM Zip: 88220											
Project Name: 83666 Unit 019 35H		Phone #: 432 661 0571											
Project Location: 		Fax #: 											
Sampler Name: Watt Wash		PRESERV.:											
Lab I.D.:		SAMPLING											
Sample I.D.		(G)RAB OR (C)OMP.											
		# CONTAINERS											
		GROUNDWATER											
		WASTEWATER											
		SOIL											
		OIL											
		SLUDGE											
		OTHER:											
		ACID/BASE:											
		ICE / COOL											
		OTHER:											
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: VerTex		P.O. #:		ANALYSIS REQUEST	
Project Manager: Sally Carlton		Company: XTO Energy			
Address: 3102 Academy Drive		Attn: Arnell			
City: Carlisle		Address: 3104 Greenville			
State: NA		City: Carlisle			
Zip: 88220		State: NA			
Phone #: 575 361 3361		Fax #: 575 361 3361			
Project #: 24E-01314		Project Owner:			
Project Name: 812 Eddy Unit DTG 35H		State: NA			
Project Location:		Zip: 88220			
Sampler Name: Watt Waleish		Phone #: 932 661 0571			
Fax #:		PRESERV.			
FOR LAB USE ONLY		SAMPLING			
Lab I.D.	(G)RAB OR (C)OMP	# CONTAINERS			
Sample I.D.	GROUNDWATER	MATRIX			
	WASTEWATER	PRESERV.			
	SOIL	SAMPLING			
	OIL				
	SLUDGE				
	OTHER :				
	ACID/BASE:				
	ICE / COOL				
	OTHER :				
	DATE	TIME			
41	6:24-11 0-1	08/19/14	9:40	BTX 8021	
42	6:24-12 0-1		9:45	7PH 80150	
43	6:24-13 0-1		9:55	Chlorides	
REMARKS:					
Relinquished By: Sally Carlton					
Received By: Shodriqev					
Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Add'l Phone #:					
All Results are emailed. Please provide Email address:					
REMARKS:					
Scatter at VerTex, CA					
Delivered By: (Circle One)					
Sampler - UPS - Bus - Other:					
Observed Temp. °C					
Corrected Temp. °C					
Sample Condition					
Cool Intact					
<input type="checkbox"/> No <input type="checkbox"/> No					
CHECKED BY: (Initials)					
SR					
Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition					
Thermometer ID: 48 <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Heat					
Correction Factor: 0.00					
Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Corrected Temp. °C					

FORM-006 R 3.2 10/07/21

+ Cardinal cannot accept verbal changes. Please email changes to caley.keene@cardinalabsnm.com



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

August 28, 2024

SALLY CARTTAR

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BIG EDDY UNIT DI 9 35H

Enclosed are the results of analyses for samples received by the laboratory on 08/27/24 13:47.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS 24 - 02 0-10' (H245199-01)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/27/2024	ND	218	109	200	2.16	
DRO >C10-C28*	<10.0	10.0	08/27/2024	ND	209	104	200	1.68	
EXT DRO >C28-C36	<10.0	10.0	08/27/2024	ND					

Surrogate: 1-Chlorooctane 71.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS 24 - 04 10.0' (H245199-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	08/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 74.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 SALLY CARTTAR
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/27/2024
 Reported: 08/28/2024
 Project Name: BIG EDDY UNIT DI 9 35H
 Project Number: 24E-01314
 Project Location: XTO

Sampling Date: 08/23/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WS 24 - 20 0-10' (H245199-03)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 79.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS 24 - 17 0-10' (H245199-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	08/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 78.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS 24 - 18 0-10' (H245199-05)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	272	16.0	08/28/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 81.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.0 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS 24 - 27 10.0' (H245199-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	08/28/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 79.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.8 % 49.1-148

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS 24 - 28 10.0' (H245199-07)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204	
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911	
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14	
Total BTEX	<0.300	0.300	08/27/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	08/28/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 77.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS 24 - 19 5.0' (H245199-08)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204	
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911	
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958	
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14	
Total BTEX	<0.300	0.300	08/27/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/28/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 84.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.0 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/27/2024
Reported: 08/28/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/23/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS 24 - 25 1.0' (H245199-09)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/27/2024	ND	1.93	96.4	2.00	0.204		
Toluene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.911		
Ethylbenzene*	<0.050	0.050	08/27/2024	ND	1.86	93.0	2.00	0.958		
Total Xylenes*	<0.150	0.150	08/27/2024	ND	5.54	92.4	6.00	1.14		
Total BTEX	<0.300	0.300	08/27/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.2 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/28/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/28/2024	ND	217	109	200	2.85	
DRO >C10-C28*	<10.0	10.0	08/28/2024	ND	196	98.2	200	0.734	
EXT DRO >C28-C36	<10.0	10.0	08/28/2024	ND					

Surrogate: 1-Chlorooctane 90.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Vertex Project Manager: Sally Carttar Address: 3103 Boyd Dr. City: Carlsbad State: NM Zip: 88220 Phone #: 575.361.3561 Fax #: Project #: 24E-01314 Project Owner: Project Name: Big Eddy Unit DL 9 35H Project Location: Sampler Name: Andrew Ludvik Lab I.D.:				P.O. #: Company: XTO Energy Attn: Amy Ruth Address: 3104 Green St City: Carlsbad State: NM Zip: 88220 Phone #: 432-661-0571 Fax #:																																																																																																																																																																																						
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th rowspan="2">Sample I.D.</th> <th rowspan="2">Date</th> <th rowspan="2">Time</th> <th colspan="7">MATRIX</th> <th rowspan="2">DATE</th> <th rowspan="2">TIME</th> <th rowspan="2">BTEx 8021</th> <th rowspan="2">TPH 8015 D</th> <th rowspan="2">chloride</th> </tr> <tr> <th>(G)RAB OR (C)OMP</th> <th># CONTAINERS</th> <th>GROUNDWATER</th> <th>WASTEWATER</th> <th>SOIL</th> <th>OIL</th> <th>SLUDGE</th> <th>OTHER</th> <th>ACID/BASE</th> <th>ICE / COOL</th> <th>OTHER</th> </tr> <tr> <td>WS24-02</td> <td>0-10'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8.23.24</td> <td>0810</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BS24-04</td> <td>10.0'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0825</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WS24-20</td> <td>0-10'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1000</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WS24-17</td> <td>0-10'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1025</td> <td></td> <td></td> <td></td> </tr> <tr> <td>WS24-18</td> <td>0-10'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1035</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BS24-27</td> <td>10.0'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1135</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BS24-28</td> <td>10.0'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1140</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BS24-19</td> <td>5.0'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1410</td> <td></td> <td></td> <td></td> </tr> <tr> <td>BS24-25</td> <td>1.0'</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1415</td> <td></td> <td></td> <td></td> </tr> </table>								Sample I.D.	Date	Time	MATRIX							DATE	TIME	BTEx 8021	TPH 8015 D	chloride	(G)RAB OR (C)OMP	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	WS24-02	0-10'											8.23.24	0810				BS24-04	10.0'												0825				WS24-20	0-10'												1000				WS24-17	0-10'												1025				WS24-18	0-10'												1035				BS24-27	10.0'												1135				BS24-28	10.0'												1140				BS24-19	5.0'												1410				BS24-25	1.0'												1415			
Sample I.D.	Date	Time	MATRIX								DATE	TIME	BTEx 8021	TPH 8015 D	chloride																																																																																																																																																																											
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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 03, 2024

SALLY CARTTAR

VERTEX RESOURCE

3101 BOYD DRIVE

CARLSBAD, NM 88220

RE: BIG EDDY UNIT DI 9 35H

Enclosed are the results of analyses for samples received by the laboratory on 08/30/24 10:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 02 10' (H245302-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 05 10' (H245302-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 29 1' (H245302-03)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTEX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 30 1' (H245302-04)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTEX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 31 1' (H245302-05)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	08/30/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 32 1' (H245302-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTEX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 33 3' (H245302-07)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTEX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 34 5' (H245302-08)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/30/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: BS24 - 35 10' (H245302-09)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS24 - 21 0-1' (H245302-10)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	08/30/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
 SALLY CARTTAR
 3101 BOYD DRIVE
 CARLSBAD NM, 88220
 Fax To: NA

Received: 08/30/2024
 Reported: 09/03/2024
 Project Name: BIG EDDY UNIT DI 9 35H
 Project Number: 24E-01314
 Project Location: XTO

Sampling Date: 08/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: WS24 - 22 1-3' (H245302-11)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEX	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	08/30/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 94.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS24 - 23 1-5' (H245302-12)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71	
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0	
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8	
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5	
Total BTEx	<0.300	0.300	08/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.336	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	209	105	200	3.64	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS24 - 24 5-10' (H245302-13)

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.714	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	205	102	200	3.83	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 81.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS24 - 25 1-10' (H245302-14)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTEX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.714	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	205	102	200	3.83	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 89.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE
SALLY CARTTAR
3101 BOYD DRIVE
CARLSBAD NM, 88220
Fax To: NA

Received: 08/30/2024
Reported: 09/03/2024
Project Name: BIG EDDY UNIT DI 9 35H
Project Number: 24E-01314
Project Location: XTO

Sampling Date: 08/29/2024
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Shalyn Rodriguez

Sample ID: WS24 - 26 1-10' (H245302-15)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	08/30/2024	ND	2.10	105	2.00	7.71		
Toluene*	<0.050	0.050	08/30/2024	ND	2.13	106	2.00	11.0		
Ethylbenzene*	<0.050	0.050	08/30/2024	ND	2.39	119	2.00	12.8		
Total Xylenes*	<0.150	0.150	08/30/2024	ND	6.94	116	6.00	13.5		
Total BTEX	<0.300	0.300	08/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	08/30/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/30/2024	ND	209	104	200	0.714	
DRO >C10-C28*	<10.0	10.0	08/30/2024	ND	205	102	200	3.83	
EXT DRO >C28-C36	<10.0	10.0	08/30/2024	ND					

Surrogate: 1-Chlorooctane 86.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

24-11 R

[illegible]



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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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

QUESTIONS

Action 390400

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390400
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2335435491
Incident Name	NAPP2335435491 BIG EDDY UNIT DI 9 35H @ 0
Incident Type	Produced Water Release
Incident Status	Deferral Request Received

Location of Release Source

Please answer all the questions in this group.

Site Name	BIG EDDY UNIT DI 9 35H
Date Release Discovered	12/16/2023
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	Cause: Equipment Failure Well Crude Oil Released: 2 BBL Recovered: 2 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure Well Produced Water Released: 5 BBL Recovered: 5 BBL Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 390400

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number: 390400
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

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: Kailee Smith Title: Regulatory Analyst Email: kailee.smith@exxonmobil.com Date: 10/07/2024
--	---

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QUESTIONS, Page 3

Action 390400

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	390400
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

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

Chloride (EPA 300.0 or SM4500 Cl B)	2100
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	7551
GRO+DRO (EPA SW-846 Method 8015M)	5113
BTEX (EPA SW-846 Method 8021B or 8260B)	0.8
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	07/01/2024
On what date will (or did) the final sampling or liner inspection occur	04/26/2024
On what date will (or was) the remediation complete(d)	10/01/2024
What is the estimated surface area (in square feet) that will be reclaimed	6000
What is the estimated volume (in cubic yards) that will be reclaimed	400
What is the estimated surface area (in square feet) that will be remediated	5137
What is the estimated volume (in cubic yards) that will be remediated	400

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4
Action 390400

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	390400
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	HALFWAY DISPOSAL AND LANDFILL [fEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Kailee Smith Title: Regulatory Analyst Email: kailee.smith@exxonmobil.com Date: 10/07/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

QUESTIONS, Page 5

Action 390400

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:	5380
	Action Number:	390400
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	The impacted area is immediately surrounding the pump jack.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	764
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	155
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	Not answered.
Enter the well API (30-) on which this deferral should be granted	30-015-42007 BIG EDDY UNIT D19 #035H
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Kailee Smith Title: Regulatory Analyst Email: kailee.smith@exxonmobil.com Date: 10/07/2024

District I
1625 N. French Dr., Hobbs, NM 88240
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District III
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District IV
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State of New Mexico
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QUESTIONS, Page 6

Action 390400

QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:
	5380
	Action Number:
	390400
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	379093
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/04/2024
What was the (estimated) number of samples that were to be gathered	25
What was the sampling surface area in square feet	5000

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 390400

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 390400
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
scwells	Deferral approved. Deferral of BS24-07, WS24-11, and WS24-13 is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time.	10/16/2024