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

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

ATTACHMENT 5

Closure Criteria Determination				
Site Name: Big Eddy Unit DI 9 #035H				
Spill Coordinates: 32.457752,-103.879543		X: 605307	Y: 3591728	
Site Specific Conditions		Value	Unit	Reference
1	Depth to Groundwater (nearest reference)	**109**	feet	1
	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	2
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	5,934	feet	3
4	Within 300 feet from an occupied residence, school, hospital, institution or church	18,697	feet	4
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	5
	ii) Within 1000 feet of any fresh water well or spring	5,620	feet	5
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)	6
7	Within 300 feet of a wetland	4,459	feet	7
8	Within the area overlying a subsurface mine	No	(Y/N)	8
	Distance between release and nearest registered mine	**21,100**	feet	
9	Within an unstable area (Karst Map)	**High**	Critical High Medium Low	9
	Distance between release and nearest High Karst	**0**	feet	
10	Within a 100-year Floodplain	>500	year	10
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	**5,162**	feet	
11	Soil Type	Fine sandy loam, sandy loam		11
12	Ecological Classification	Loamy sand		12
13	Geology	Alluvium		13
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'	

OSE POD 0.5 miles

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

GIS WATERS PODs
- Active
- Inactive

OSE District Boundary

Water Right Regulations
- Artesian Planning Area

NHD Flowlines
- Artificial Path
- Connector
- Stream/River

1:18,056

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

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	Twn	Rng	X	Y	Distance	Depth Well	Depth Water	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

UTMNAD83 Radius Search (in meters):

Easting (X): 605307 **Northing (Y):** 3591728 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum)

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

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

(quarters are smallest to largest)

(NAD83 UTM in met

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 64	q 16	q 4	Sec	Tws	Rng	X	Y
C 02722	CUB	MON	0	U.S. DEPT. OF ENERGY, WIPP	ED	C 02722					1	2	1	21	21S	30E	604435	3593203*
C 03726	CUB	MON	0	FOTH INFRASTRUCTURE & ENVIROMT	ED	C 03726 POD3				Shallow	4	3	2	20	21S	30E	603463	3592652
C 03773	CUB	CLS	0	SCHLUMBERGER TECHNOLOGY CORP	ED	C 03773 POD1		C		Shallow	4	2	2	32	21S	30E	604038	3589799
C 03774	CUB	CLS	0	SCHLUMBERGER TECHNOLOGY CORP	ED	C 03774 POD1		C		Shallow	2	4	2	32	21S	30E	604038	3589799
C 03772	CUB	CLS	0	SCHLUMBERGER TECHNOLOGY CORP	ED	C 03772 POD1		C		Shallow	2	4	2	32	21S	30E	603859	3589714
					ED	C 03772 POD2		C		Shallow	4	2	2	32	21S	30E	603849	3589707
					ED	C 03772 POD3		C		Shallow	4	2	2	32	21S	30E	603840	3589699
					ED	C 03772 POD4		C		Shallow	4	2	2	32	21S	30E	603823	3589692
					ED	C 03772 POD5		C		Shallow	4	2	2	32	21S	30E	603822	3589681
					ED	C 03772 POD6		C		Shallow	4	2	2	32	21S	30E	603813	3589666
					ED	C 03772 POD7		C		Shallow	4	2	2	32	21S	30E	603805	3589655
					ED	C 03772 POD8		C		Shallow	4	2	2	32	21S	30E	603796	3589636
C 03726	CUB	MON	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 03726 POD1				Shallow	3	2	4	19	21S	30E	602039	3592182
C 03234	CUB	MON	0	U.S. DEPART OF ENERGY	ED	C 03234 EXPLORE				Artesian	1	2	3	35	21S	30E	607695	3589207*
C 04420	CUB	MON	0	TETRA TECH INC	ED	C 04420 POD1	NA				3	4	4	32	21S	30E	603624	3588504
C 03625	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 03625 POD1				Shallow	1	4	4	18	21S	30E	602108	3593530
C 03726	CUB	MON	0	FOTH INFRASTRUCTURE & ENVIROMT	ED	C 03726 POD2				Shallow	3	4	3	18	21S	30E	601213	3593389
C 03624	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 03624 POD1				Shallow	3	2	3	18	21S	30E	601286	3593689
C 03363	C	STK	3	MENDY WATTS	ED	C 03363				Shallow	4	4	4	25	21S	29E	601615	3589198
CP 00648	CP	IND	1451	INTREPID POTASH-NEW MEXICO LLC	ED	C 03672 POD1					3	2	3	18	21S	30E	601209	3593779
C 04504	CUB	GEO	0	INTREPID POTASH	ED	C 04504 POD1	NA				2	4	1	18	21S	30E	601436	3594476
					ED	C 04504 POD3					4	2	1	18	21S	30E	601376	3594598
C 04674	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 04674 POD 8	NA				1	4	1	18	21S	30E	601139	3594281
					ED	C 04674 POD 9					1	4	1	18	21S	30E	601148	3594314
C 04504	CUB	GEO	0	INTREPID POTASH	ED	C 04504 POD4	NA				2	2	1	18	21S	30E	601362	3594709
C 04674	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 04674 POD 7	NA				1	4	1	18	21S	30E	601053	3594276

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**

New Mexico Office of the State Engineer
Water Right Summary

get image list

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 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
	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 256	Q 64	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other	Location Desc
	4	2	2	32	21S	30E	0	0		CLS		CLS		

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: VIRGILIO COCIANNI

Events

	Date	Type	Description	Comment	Processed By
get images	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	*******
get images	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 of the State Engineer.

C Driller's well record 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.

6/10/24 1:52 PM TRANSACTION SUMMARY

Logout Refresh Page All

View... Edit... Send to...

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): LATITUDE 32 26 25.49; LONGITUDE 103 53 35.49

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1210	Bryan Mydoske	National EWP

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED
8-22-14	8-22-14	55	61	NA

STATIC WATER LEVEL IN COMPLETED WELL: NA

COMPLETED WELL IS: ARTESIAN / DRY HOLE / ● SHALLOW (UNCONFINED)

DRILLING FLUID: AIR / MUD / ADDITIVES – SPECIFY: none

DRILLING METHOD: ROTARY / HAMMER / CABLE TOOL / ● 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 WALL 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 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)

Google Earth

5000 ft

N

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 322814103531501

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

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.

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

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.

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2024-05-11 20:39:41 EDT
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 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	542145	EXPL	2014-02-27	PMT	LOG	C 03726 POD1-3	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 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

U.S. Fish and Wildlife Service

National Wetlands Inventory

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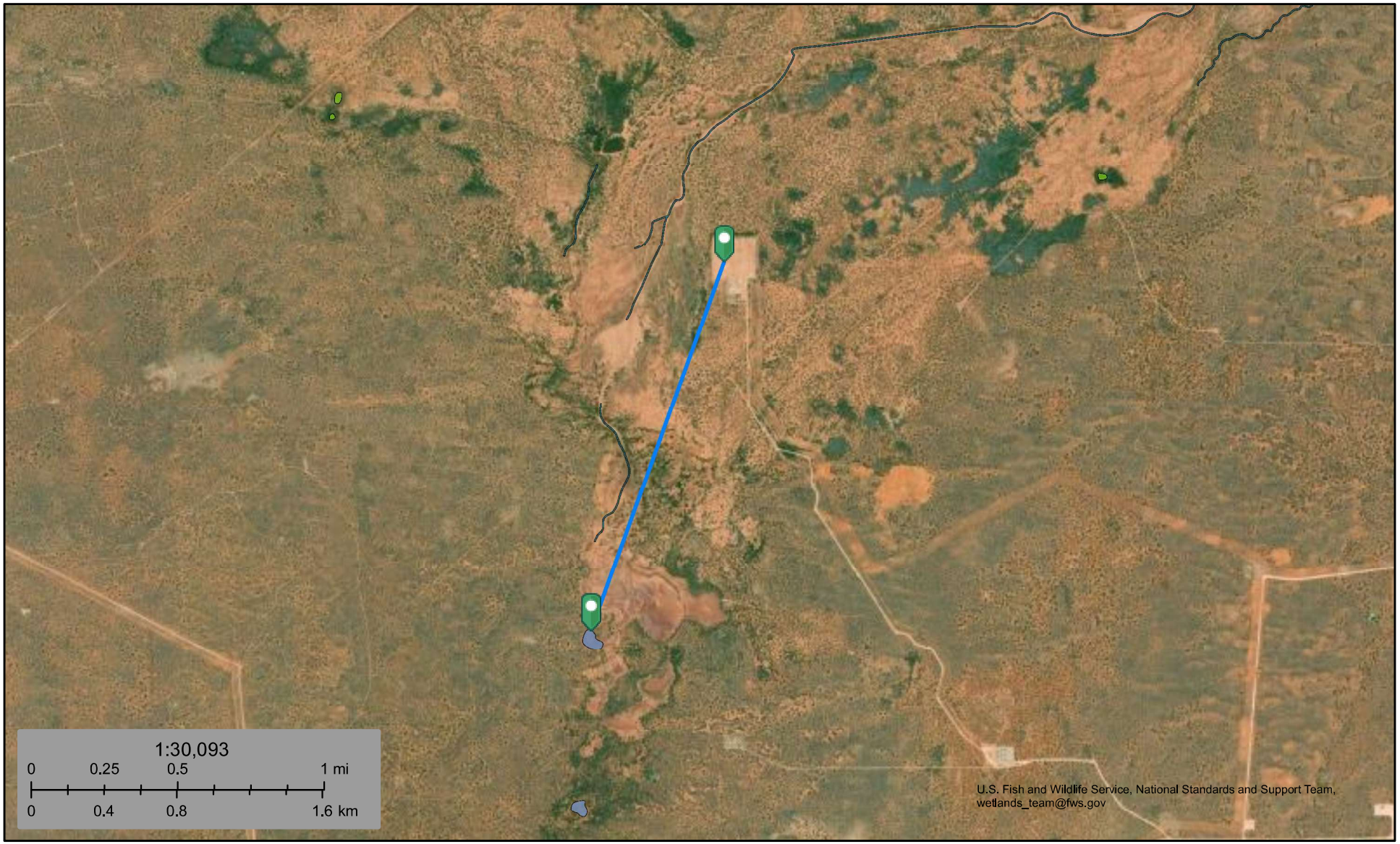
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

Pond 5,934 feet



May 11, 2024

Wetlands

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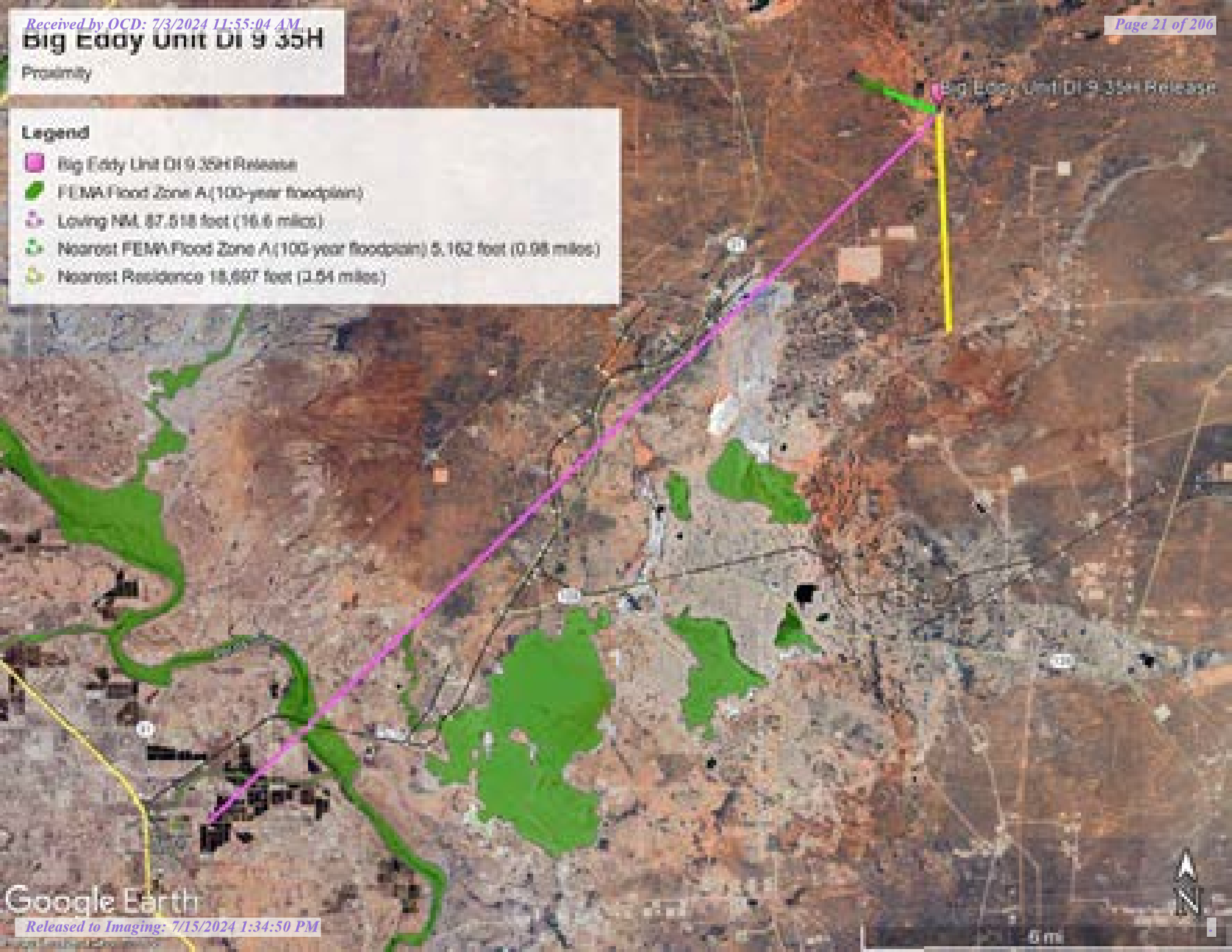
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

(acre ft per annum) (R=POD has been replaced and no longer serves this file, C=the file is closed) (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)

WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q 64	q 16	q 4	Sec	Twn	Rng	X	Y	Distance
C 02722	CUB	MON	0	U.S. DEPT. OF ENERGY, WIPP	ED	C 02722					1	2	1	21	21S	30E	604435	3593203*	1713
C 03726	CUB	MON	0	FOTH INFRASTRUCTURE & ENVIROMT	ED	C 03726 POD3				Shallow	4	3	2	20	21S	30E	603463	3592652	2062
C 03773	CUB	CLS	0	SCHLUMBERGER TECHNOLOGY CORP	ED	C 03773 POD1		C		Shallow	4	2	2	32	21S	30E	604038	3589799	2308
C 03774	CUB	CLS	0	SCHLUMBERGER TECHNOLOGY CORP	ED	C 03774 POD1		C		Shallow	2	4	2	32	21S	30E	604038	3589799	2308
C 03772	CUB	CLS	0	SCHLUMBERGER TECHNOLOGY CORP	ED	C 03772 POD1		C		Shallow	2	4	2	32	21S	30E	603859	3589714	2479
					ED	C 03772 POD2		C		Shallow	4	2	2	32	21S	30E	603849	3589707	2491
					ED	C 03772 POD3		C		Shallow	4	2	2	32	21S	30E	603840	3589699	2502
					ED	C 03772 POD4		C		Shallow	4	2	2	32	21S	30E	603823	3589692	2518
					ED	C 03772 POD5		C		Shallow	4	2	2	32	21S	30E	603822	3589681	2528
					ED	C 03772 POD6		C		Shallow	4	2	2	32	21S	30E	603813	3589666	2545
					ED	C 03772 POD7		C		Shallow	4	2	2	32	21S	30E	603805	3589655	2559
					ED	C 03772 POD8		C		Shallow	4	2	2	32	21S	30E	603796	3589636	2579
C 03726	CUB	MON	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 03726 POD1				Shallow	3	2	4	19	21S	30E	602039	3592182	3299
C 03234	CUB	MON	0	U.S. DEPART OF ENERGY	ED	C 03234 EXPLORE				Artesian	1	2	3	35	21S	30E	607695	3589207*	3472
C 04420	CUB	MON	0	TETRA TECH INC	ED	C 04420 POD1	NA				3	4	4	32	21S	30E	603624	3588504	3636
C 03625	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 03625 POD1				Shallow	1	4	4	18	21S	30E	602108	3593530	3671
C 03726	CUB	MON	0	FOTH INFRASTRUCTURE & ENVIROMT	ED	C 03726 POD2				Shallow	3	4	3	18	21S	30E	601213	3593389	4417
C 03624	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 03624 POD1				Shallow	3	2	3	18	21S	30E	601286	3593689	4473
C 03363	C	STK	3	MENDY WATTS	ED	C 03363				Shallow	4	4	4	25	21S	29E	601615	3589198	4474
CP 00648	CP	IND	1451	INTREPID POTASH-NEW MEXICO LLC	ED	C 03672 POD1					3	2	3	18	21S	30E	601209	3593779	4582
C 04504	CUB	GEO	0	INTREPID POTASH	ED	C 04504 POD1	NA				2	4	1	18	21S	30E	601436	3594476	4747
					ED	C 04504 POD3					4	2	1	18	21S	30E	601376	3594598	4866
C 04674	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 04674 POD 8	NA				1	4	1	18	21S	30E	601139	3594281	4887
					ED	C 04674 POD 9					1	4	1	18	21S	30E	601148	3594314	4897
C 04504	CUB	GEO	0	INTREPID POTASH	ED	C 04504 POD4	NA				2	2	1	18	21S	30E	601362	3594709	4944
C 04674	CUB	EXP	0	INTREPID POTASH-NEW MEXICO LLC	ED	C 04674 POD 7	NA				1	4	1	18	21S	30E	601053	3594276	4958

New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02722	1	2	1	21	21S	30E	604435	3593203*

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

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**

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 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
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	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
C 02722			1	2	1	21	21S	30E	604435	3593203*	

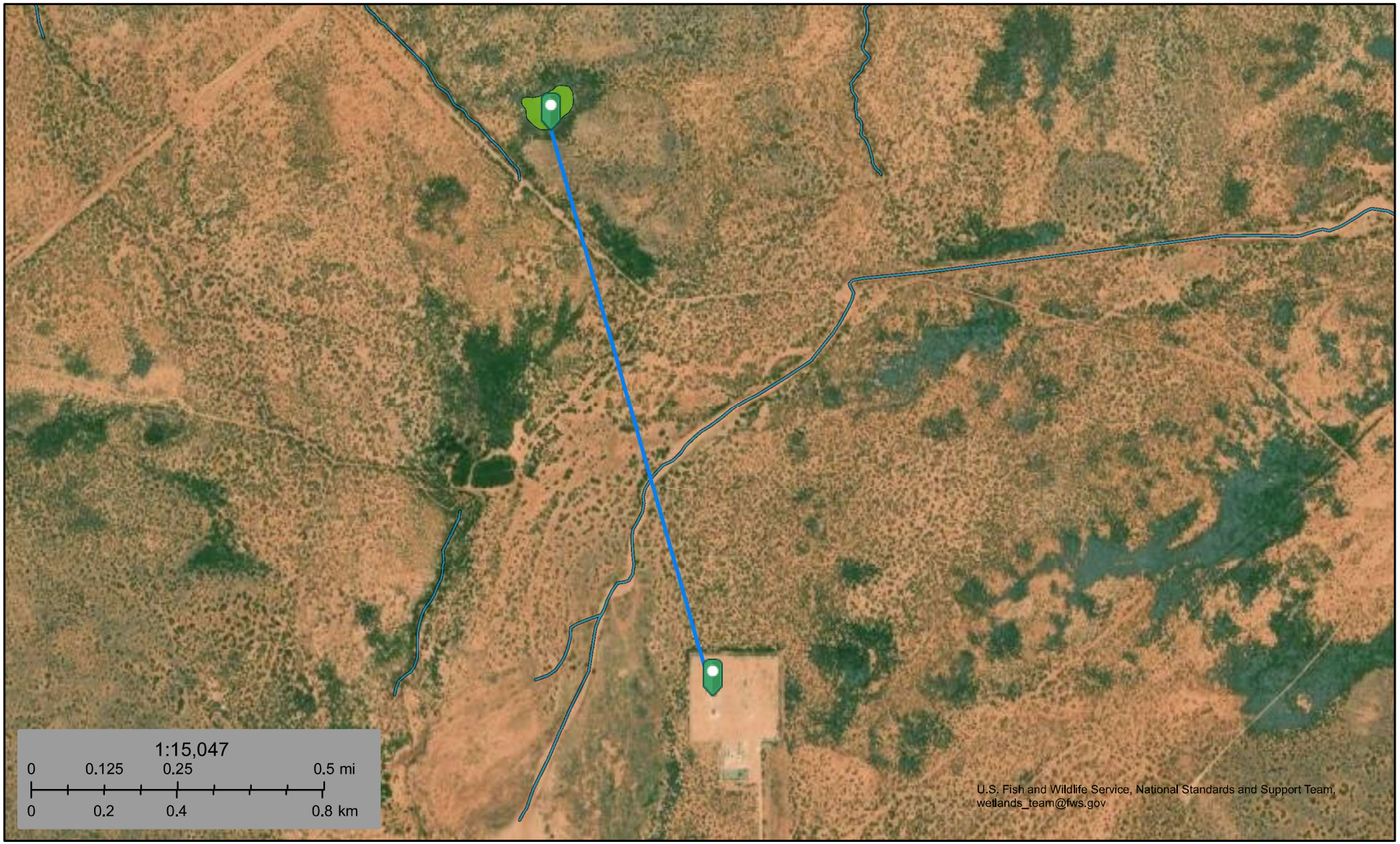
***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0	0		MON		GW	

U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetland 4,459 feet



May 11, 2024

Wetlands

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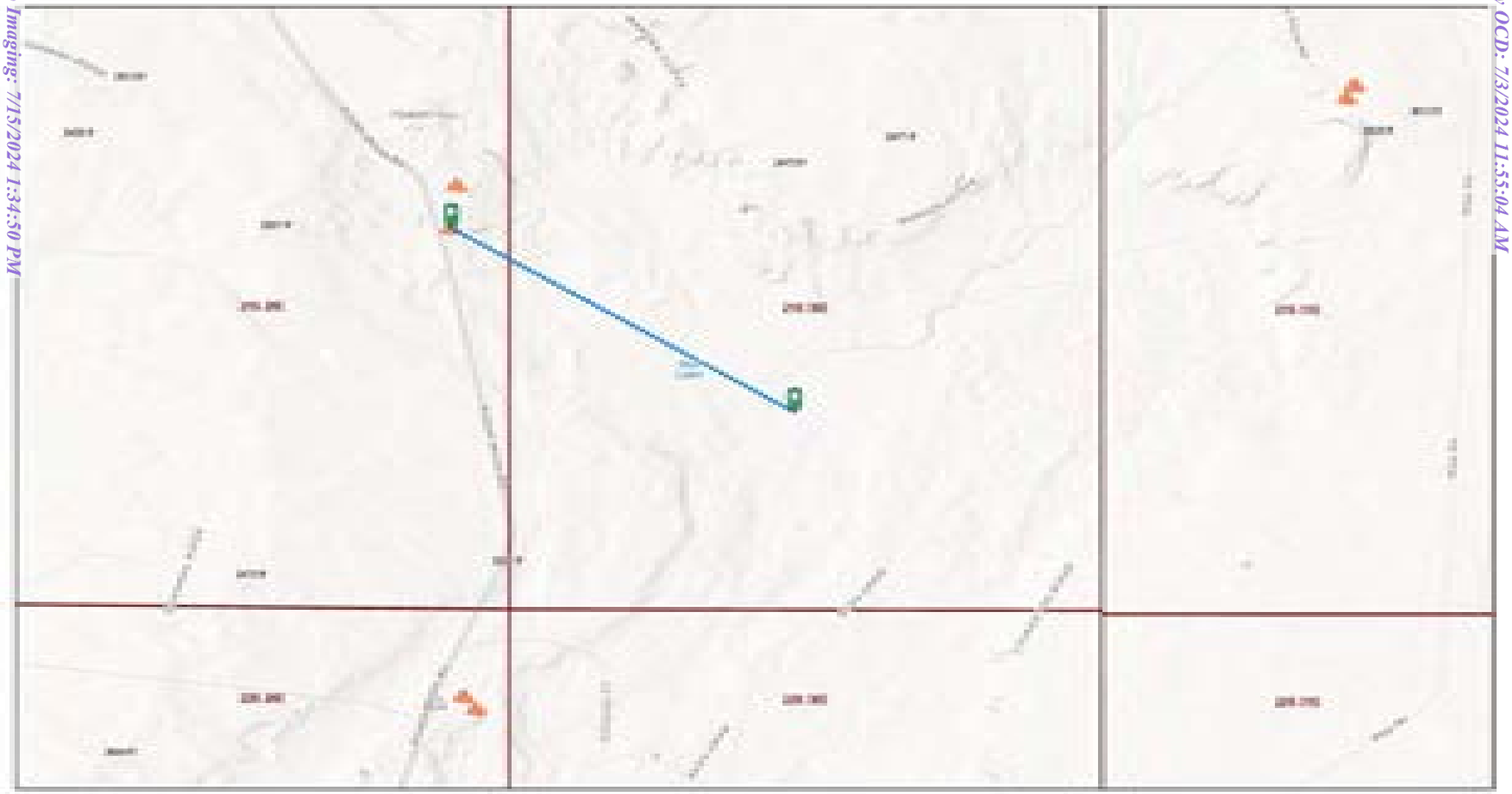
National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Nearest Mine 21,100 feet



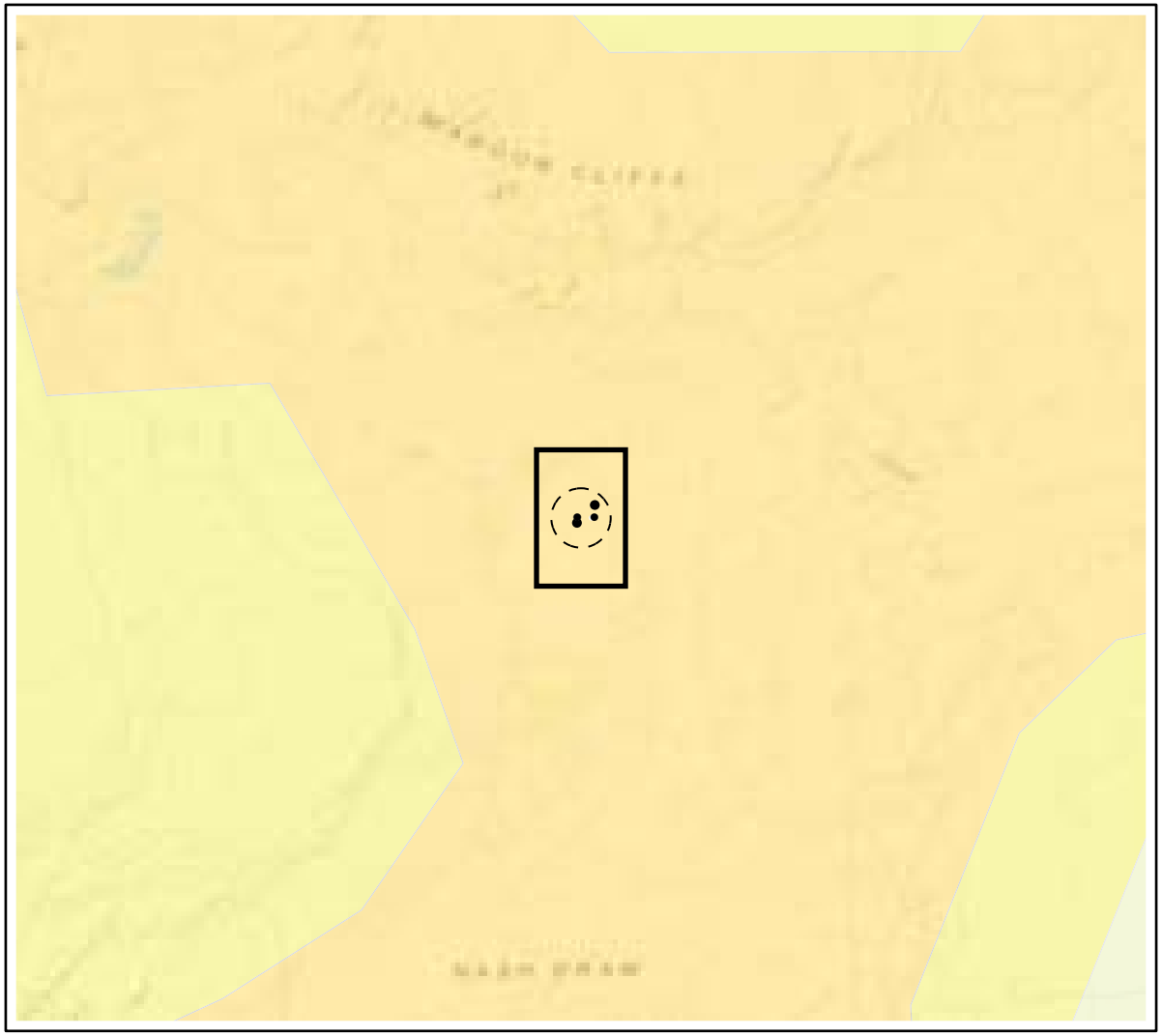
Registered Mines

Aggregate, Stone etc.

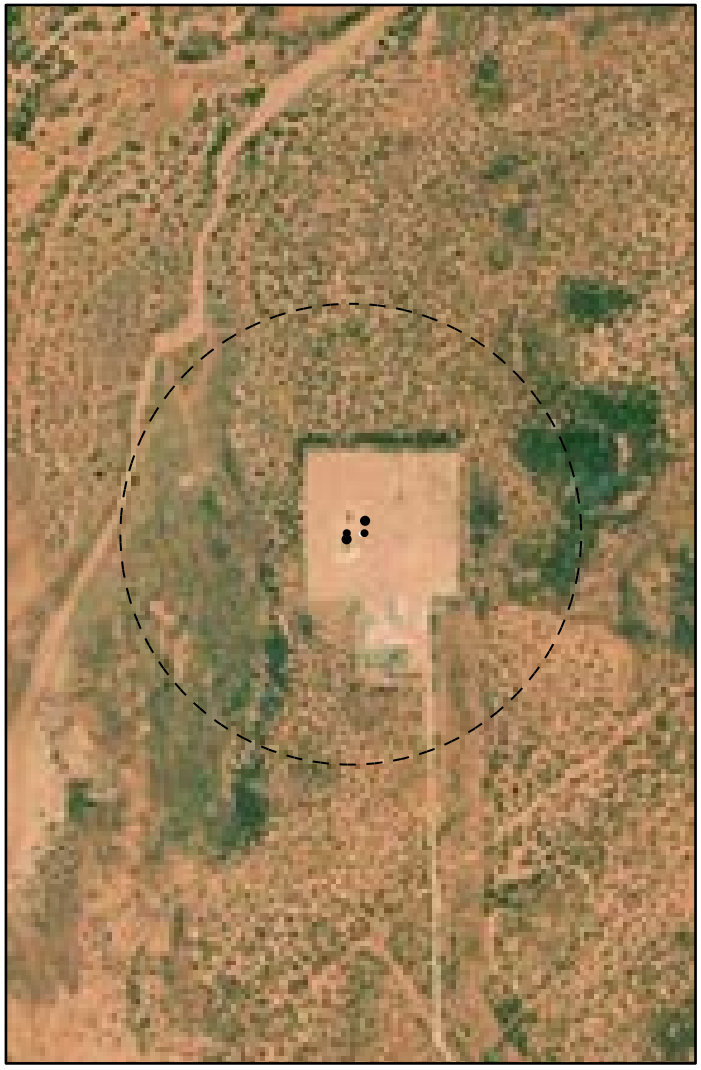
Potash

Salt

PLSS Townships



Overview Map
0 0.25 0.5 1 mi



Detail Map
0 150 300 600 ft

Karst Potential
- Critical
- High
- Medium
- Low

- Site Location
- Site Buffer (1000 ft.)

VERTEX

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

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

Karst Potential Map
Big Eddy Unit DI 9 35H

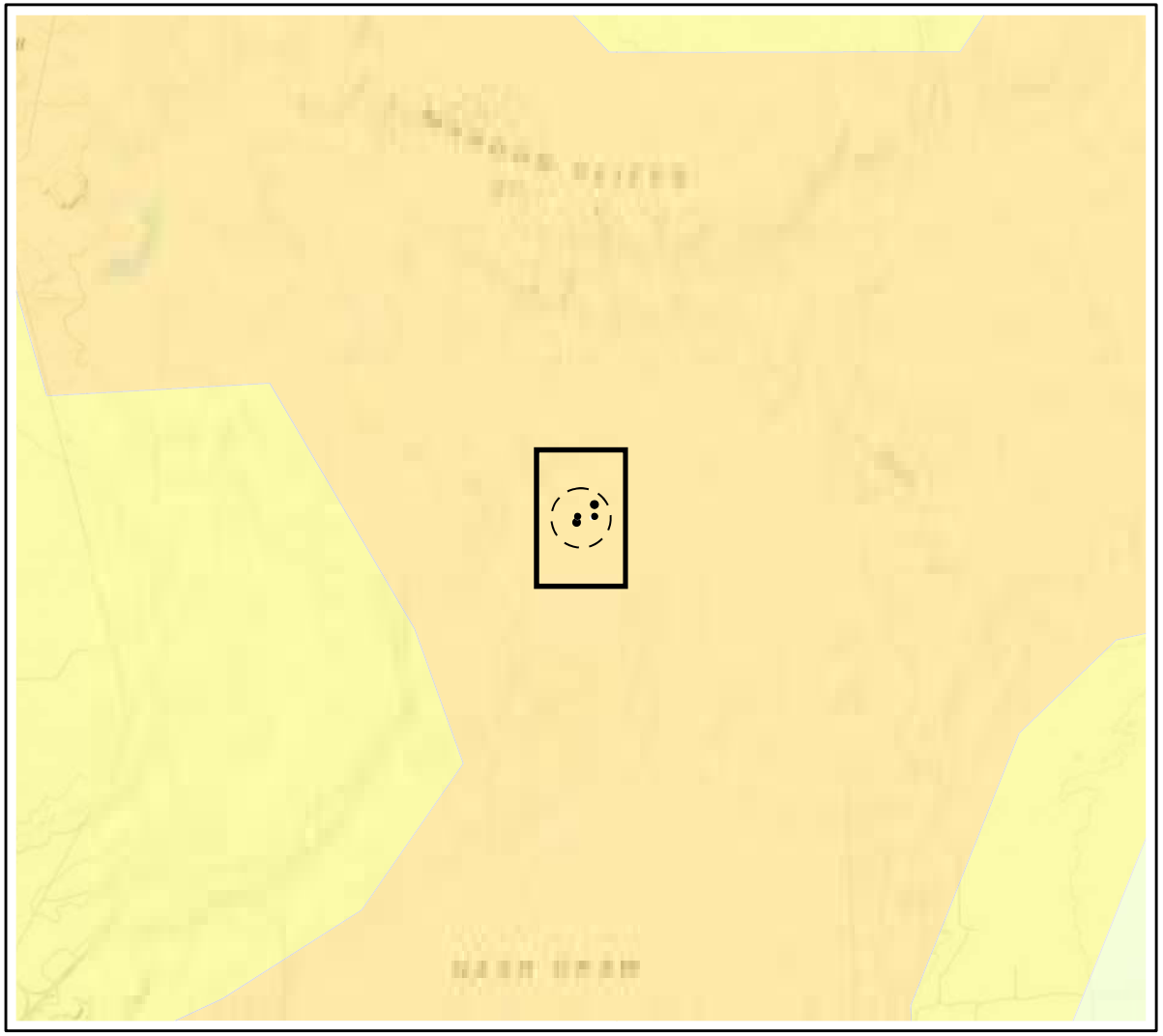
Figure:
X

XTO ENERGY

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.

Document Path: G:\1-Projects_US PROJECTS\XTO Energy\24E-01314 - Big Eddy Unit DI 9 35H\Project\24E-01314.aprx



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

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VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\XTO Energy\24E-01314 - Big Eddy Unit DI 9 35H\Project\24E-01314.aprx

National Flood Hazard Layer FIRMette

Legend

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE)

With BFE or Depth

Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

0.2% Annual Chance Flood Hazard

Future Conditions 1% Annual Chance Flood Hazard

Area with Reduced Flood Risk due to Levee

Area with Flood Risk due to Levee

OTHER AREAS

Area of Minimal Flood Hazard

Effective LOMRs

Area of Undetermined Flood Hazard

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

OTHER FEATURES

Cross Sections with 1% Annual Chance

Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

MAP PANELS

Digital Data Available

No Digital Data Available

Unmapped

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 [redacted] 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.

United States Department of Agriculture

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

May 11, 2024

Custom Soil Resource Report
Soil Map

Map Scale: 1:2,590 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

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.

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	30.9	100.0%
Totals for Area of Interest		**30.9**	**100.0%**

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Natural Resources
Conservation Service

Ecological site R070BD003NM
Loamy Sand

Accessed: 05/12/2024

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

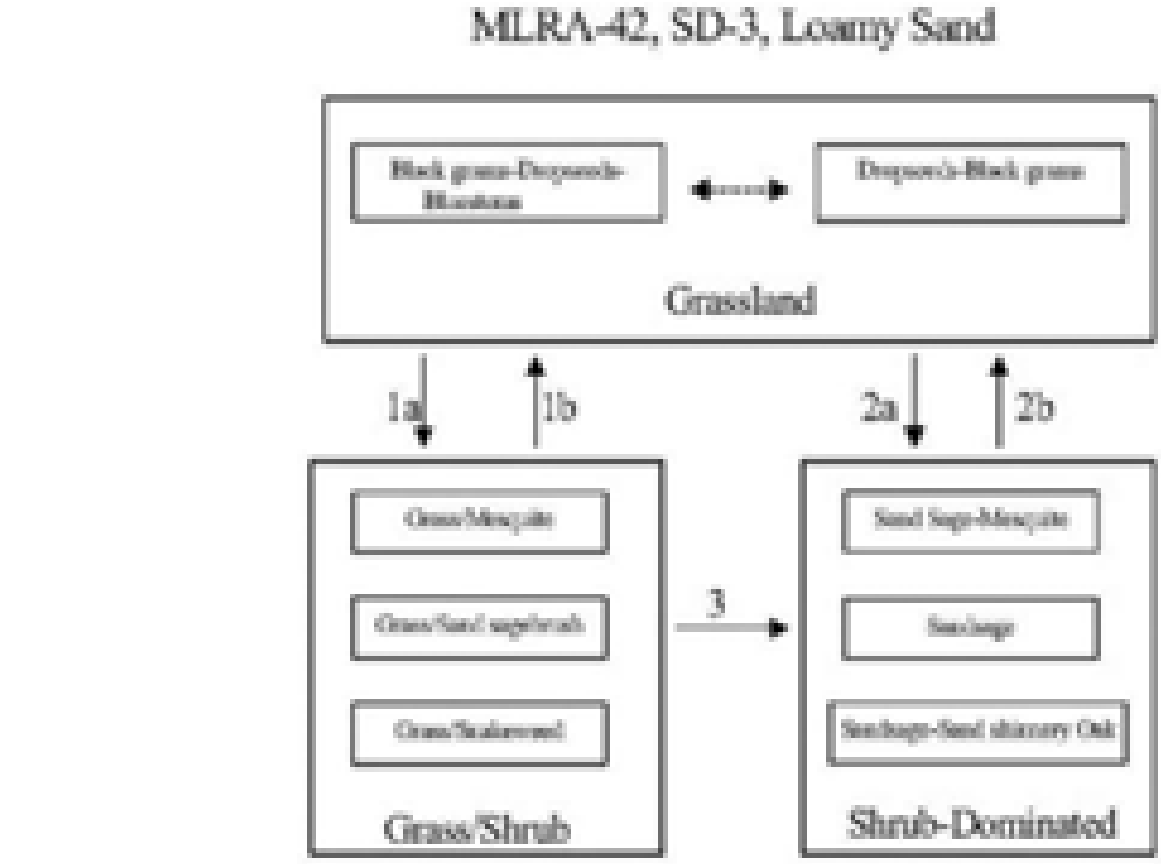
Overview

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.

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

3. Continued loss of grass cover, erosion.

State 1
Historic Climax Plant Community

Community 1.1
Historic Climax Plant Community

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

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

Table 5. Annual production by plant type

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

Table 6. Ground cover

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

Figure 5. Plant community growth curve (percent production by month). NM2803, R042XC003NM-Loamy Sand-HCPC. SD-3 Loamy Sand - Warm season plant community .

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

State 2
Grass/Shrub

Community 2.1
Grass/Shrub

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

State 3
Shrub Dominated

Community 3.1
Shrub Dominated

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

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

Additional community tables

Table 7. Community 1.1 plant community composition

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

Geology

General Information

NMOCD District:	District 2 – Hobbs	Incident ID:	nAPP2335435491
Landowner:	State of New Mexico	RP Reference:	N/A
Client:	XTO Energy, Inc.	Site Location:	Big Eddy Unit DI 9 35H
Date:	June 10, 2024	Project #:	24E-01314
Client Contact:	Amy Ruth	Phone #:	432.661.0571
Vertex PM:	Sally Carttar	Phone #:	575.361.3561

Objective

The objective of the environmental remediation work plan is to identify exceedances found during the site assessment/characterization activity and propose an appropriate remediation technique to address these areas. Areas of environmental concern identified and delineated include the wellhead area, shown on Figure 1 (Attachment 1). Closure criteria have been selected as per New Mexico Administrative Code 19.15.29. All applicable research as it pertains to closure criteria selection is presented in Attachment 2. The closure criteria for the site are presented below.

Table 1. Closure Criteria for Soils Impacted by a Release DTGW <50 feet bgs

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

Site Assessment/Characterization

Site characterization was completed on April 26, 2024. A total of 30 sample points were established and 68 samples collected for field screening. Samples at the greatest lateral limits and deepest vertical distance below closure criteria were submitted to the laboratory for analysis. In total, 48 samples were submitted to Eurofins Environmental Testing, Albuquerque, New Mexico, for analysis. The sample locations are presented on Figure 1 (Attachment 1). Laboratory analysis results have been compared to the above noted closure criteria and the results from the characterization activity are presented in Table 2 (Attachment 2). Daily field reports and laboratory data reports are included in Attachments 3 and 4, respectively. All applicable research as it pertains to closure criteria selection is presented in Attachment 5. Exceedances to reclamation and remediation criteria are identified in the table as bold with grey background. Several samples collected within the documented release area were below characterization criteria limits, as shown in Attachment 2.

A total of 58 sample points were established, and 144 samples collected for field screening. Samples at the greatest lateral limits and deepest vertical distance below closure criteria were submitted to the laboratory for analysis. In total, 142 samples were submitted to Eurofins Environment Testing South Central, formerly, Hall Environmental Analysis Laboratory, Albuquerque, New Mexico for analysis. The sample locations are presented on Figure 1 (Attachment 1). Laboratory analysis results have been compared to the above noted closure criteria and the results from the characterization activity are presented in Table 3 (Attachment 2). Daily field reports and laboratory data reports are included in Attachments 3 and 4, respectively. All applicable research as it pertains to closure criteria selection is presented in Attachment 5. Exceedances to reclamation and remediation criteria are identified in the table as bold with green or gray

background. Several samples collected within the documented release area were below characterization criteria limits, as shown in Attachment 2.

Remedial Activities

Deferral Request

Based on the initial characterization of the impacted area, it was determined that the dimensions of the contamination extend to the edges of the concrete pad supporting the pumpjack for the well. Vertex and Devon Energy Production Company, LP would like to request a deferral for the impacted area beneath the pumpjack. As the well is in production, excavation will be halted adjacent to pumpjack equipment to preserve the structural integrity of the ground beneath equipment. This deferral is being requested due to safety concerns with operating near the production equipment. Remediation of the release area immediately under or around the production equipment will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed per 19.15.29.13 NMAC. The deferral area and proposed excavations on the pad are included in Figure 2 of Attachment 1.

General

Areas identified with contaminant concentrations above closure criteria will be remediated through excavation. Laboratory results from the site assessment/characterization have been referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil to be removed. Soil will be excavated to the extents of the known contamination or in 2 feet increments, whichever is less. Field screening will be utilized to confirm removal of contaminated soil below the applicable closure criteria. Contaminated soils will be stored on a 30mil liner prior to disposal at an approved facility. Once excavation is complete, confirmatory samples will be collected and laboratory analysis completed to confirm closure criteria guidelines are met. Excavations will be backfilled with clean soil sourced locally.

nAPP2335435491 - Release on Pad Area

A total of 30 samples points were established for analysis in the area surrounding the pumpjack. Exceedances to closure criteria were found at multiple sample points within the release area shown on Figure 1 (Attachment 1). A hydrovac truck or hand tools will be utilized to remove contaminated soil in close proximity to underground lines running through the proposed excavation area and around the wellhead and pumpjack equipment. The surrounding excavation will be completed using heavy equipment. Field screening will be utilized to find the horizontal and vertical extents of the spill area. Confirmatory samples will be collected as per New Mexico Oil Conservation Division guidance and submitted for laboratory analysis of all applicable parameters. The estimated volume to be excavated is between **400 and 700 cubic yards**, depending on the final excavation depths. Excavation is planned to be completed within 90 days of approval of this Environmental Site Remediation Work Plan. The completed NMCOD C-141 Reports for the incidents are presented in Attachment 6.

Sample Point	Excavation Depth	Remediation Method
BH24-01	4'	Hydrovac/Handcrew
BH24-02	1-2'	Hydrovac/Handcrew
BH24-03	1-2'	Excavator
BH24-04	1-2'	Excavator
BH24-05	1-2'	Hydrovac/Handcrew
BH24-06	1-2'	Hydrovac/Handcrew
BH24-10	3-4'	Excavator
BH24-12	3-4'	Excavator
BH24-13	3-4'	Hydrovac/Handcrew
BH24-16	1-2'	Excavator
BH24-17	1-2'	Hydrovac/Handcrew
BH24-18	1-2'	Excavator
BH24-19	1-2'	Excavator
BH24-20	1-2'	Excavator
BH24-21	1-2'	Excavator
BH24-23	1-2'	Excavator
BH24-26	1-2'	Hydrovac/Handcrew
BH24-28	1-2'	Excavator

Should you have any questions or concerns, please do not hesitate to contact Sally Carttar at 575.361.3561 or scarttar@vertex.ca.

Lakin Pullman

Lakin Pullman, B.Sc.
ENVIRONMENTAL SPECIALIST, REPORTING

June 10, 2024
Date

Sally Carttar

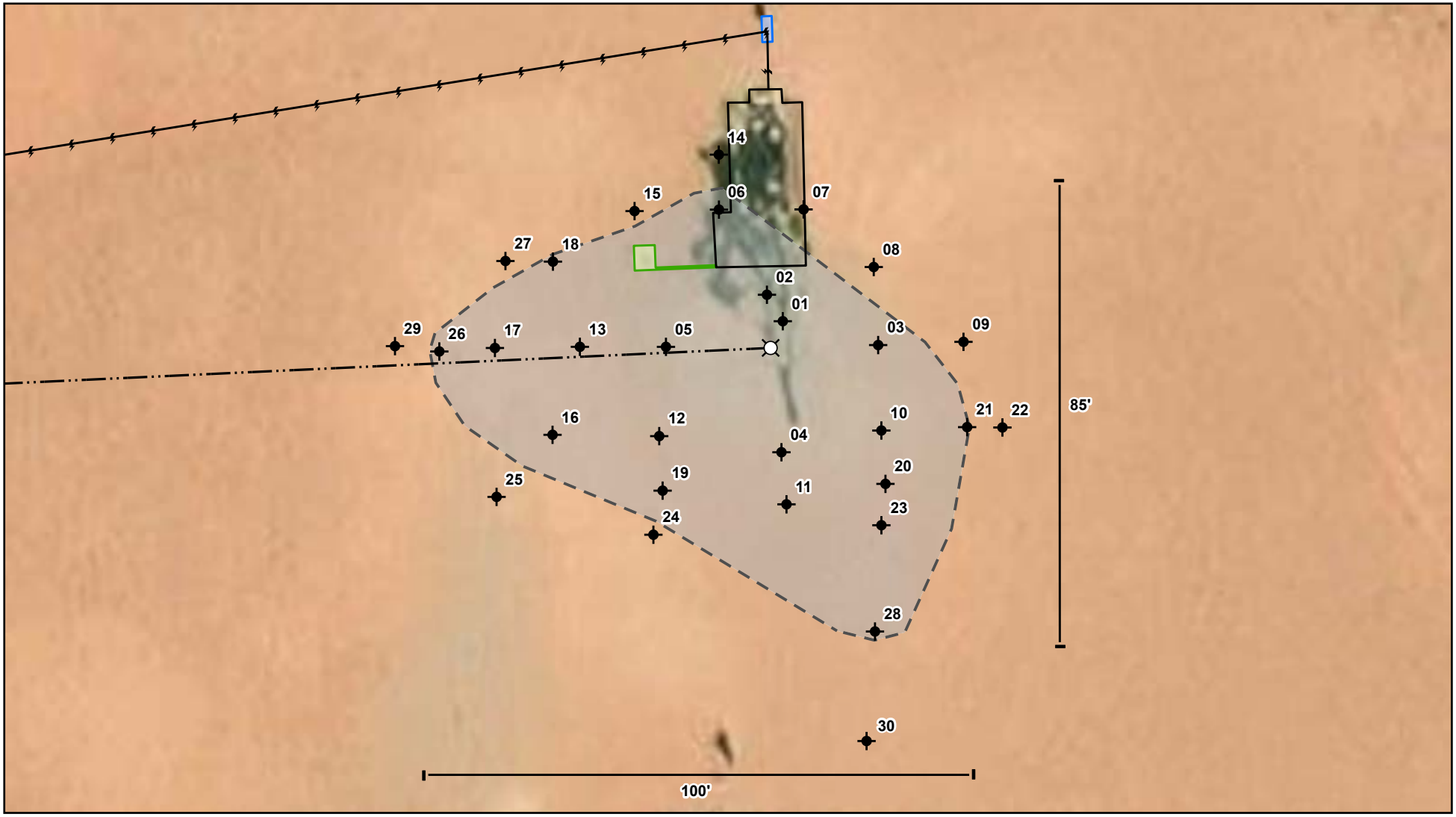
Sally Carttar, BA
PROJECT MANAGER, REPORT REVIEW

June 10, 2024
Date

Attachments

Attachment 1. Characterization Sampling and Excavation Site Schematics
Attachment 2. Field Screening and Laboratory Results Table
Attachment 3. Daily Field Reports with Photographs
Attachment 4. Laboratory Data Reports with Chain of Custody Forms
Attachment 5. Closure Criteria Research
Attachment 6. NMOCD C-141 Report

ATTACHMENT 1



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

VERTEX

0 5 10 20 ft

NAD 1983 UTM Zone 13N

Date: May 29/24

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

N

Characterization Sampling Site Schematic
Big Eddy Unit DI 9 35H

FIGURE:
1

XTO ENERGY

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.

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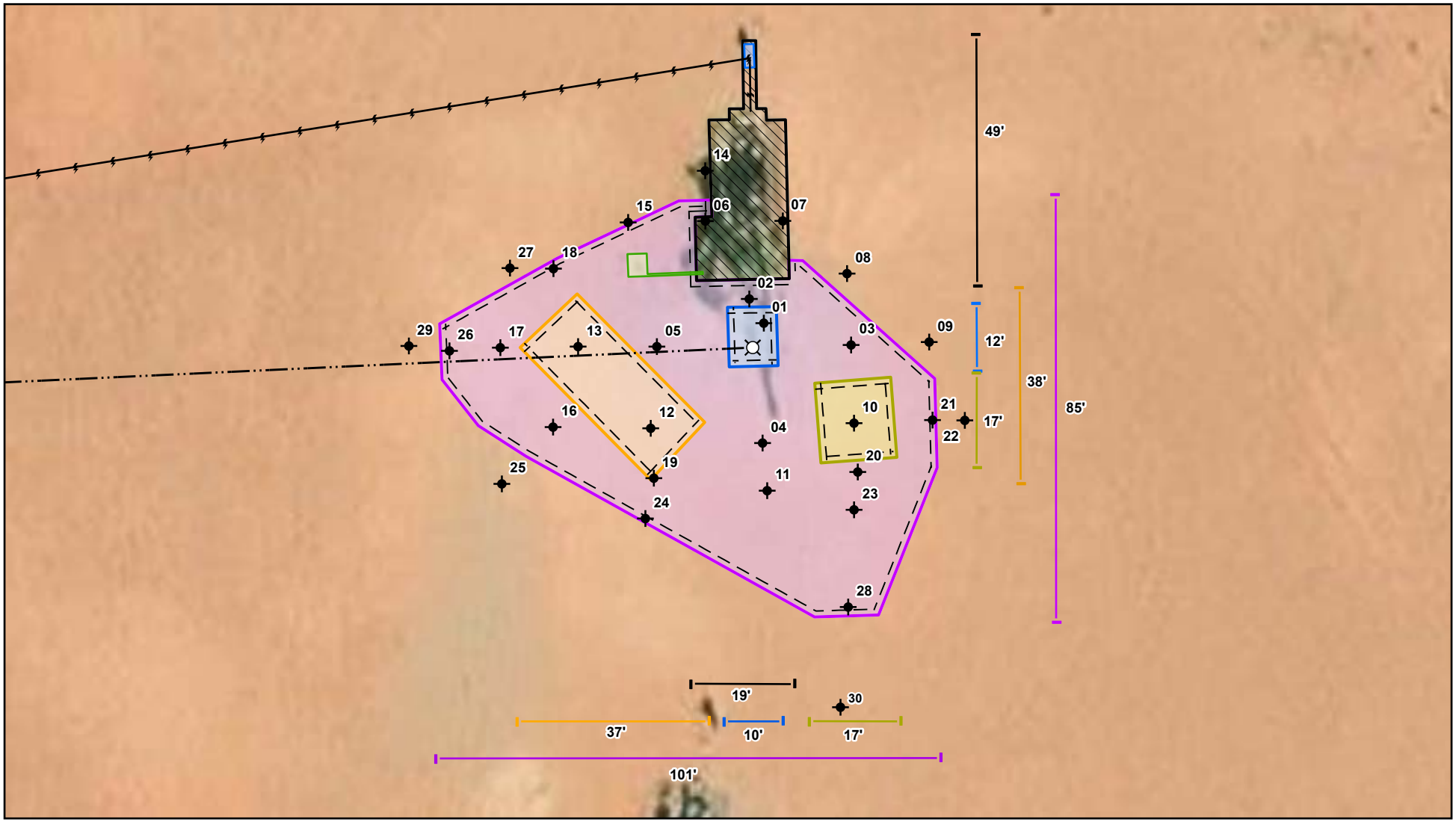

Borehole (Prefixed by "BH24-")
Wellhead
Buried Electrical Line
Buried Pipeline
Control Box and Infrastructure
Electrical Boxes
West Proposed Excavation to 3-4 feet bgs (~ 596 sq. ft.)
East Proposed Excavation to 3-4 feet bgs (~ 252 sq. ft.)
Proposed Deferred Request Area (~ 600 sq. ft.)
Proposed Excavation to 1-2 feet bgs (~5,137 sq. ft.)
Proposed Excavation to 4 feet bgs (~ 120 sq. ft.)

VERTEX

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

Map Center:
Lat/Long
32.457718°,-103.879552°

N

Big Eddy Unit DI 9 35H

FIGURE:
2

XTO ENERGY

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Note: Georeferenced image from Esri, 2023. Site features from GPS, Vertex Professional Services Ltd., 2024.

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ATTACHMENT 2

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 2. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-01	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 2. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH24-22	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

ATTACHMENT 3

Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	4/13/2024
Site Location Name:	Big Eddy Unit DI 9 35H	Report Run Date:	4/14/2024 1:34 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	4/13/2024 8:13 AM
Departed Site	4/13/2024 5:24 PM

Field Notes

8:32 Completed Vertex and XTO JSA on arrival. On site to start delineation of release around north wellhead.

8:52 Swept sampling areas with magnetic locator prior to ground disturbance.

11:15 Advanced boreholes BH24-01 and BH24-02 to attempt vertical delineation of potential deferral area. BH24-01 was located immediately northeast of wellhead with samples collected at 0, 2, and 3.5 feet (refusal depth). BH24-02 was located between wellhead and concrete base of pump jack assembly with samples collected at 0, 2, and 4 feet bgs (refusal depth).

19:05 Advanced boreholes BH24-03, BH24-04, and BH24-05 east, south, and west the wellhead, respectively. Samples were collected from BH24-03 and BH24-04 at 0, 2, and 4 feet bgs (or refusal depth). Samples were collected from BH24-05 at 0, 2, 4, and 6 feet bgs, field screening results BH24-05 at 6 feet bgs were below NMOCD strictest criteria.

19:08 Advanced boreholes BH24-06 and BH24-07 northwest and northeast of wellhead along edges of pump jack equipment. Collected samples at 0, 2, and 4 feet bgs.

19:10 Vertical delineation completed pending laboratory results. Horizontal delineation in progress.

Next Steps & Recommendations

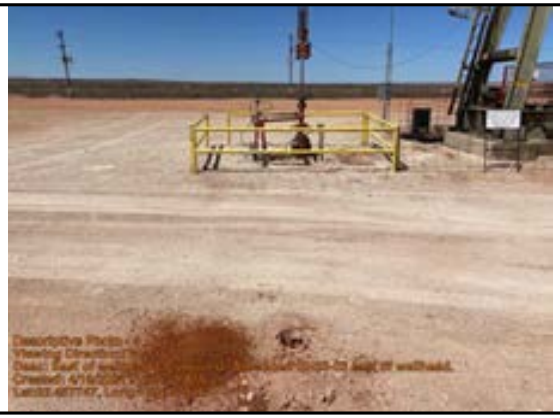
1 Continue horizontal delineation.

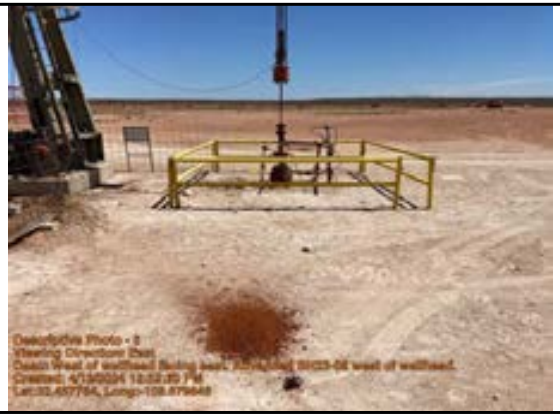
Daily Site Visit Report

Site Photos

Viewing Direction: West	**Viewing Direction**: South
	
Northeast of wellhead facing west.	South of pump jack base facing south. Advanced BH24-01 immediately northeast of wellhead for delineation of deferral area.

Daily Site Visit Report

Viewing Direction: West	**Viewing Direction**: West
	
Northeast of wellhead facing west. Advanced BH24-02 between wellhead and pump jack base for delineation of deferral area.	East of wellhead facing west. Advanced BH23-03 east of wellhead.

Viewing Direction: North	**Viewing Direction**: East
	
South of wellhead facing north. Advanced BH23-04 south of wellhead.	West of wellhead facing east. Advanced BH23-05 west of wellhead.

Daily Site Visit Report

Viewing Direction: Southeast	**Viewing Direction**: Southwest
	
West of pump jack facing southeast. Advanced BH24-06 immediately north of chemical tank.	East of pump jack facing southwest. Advanced BH24-06 approximately 5 feet east of concrete pad supporting pump jack.

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:

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.

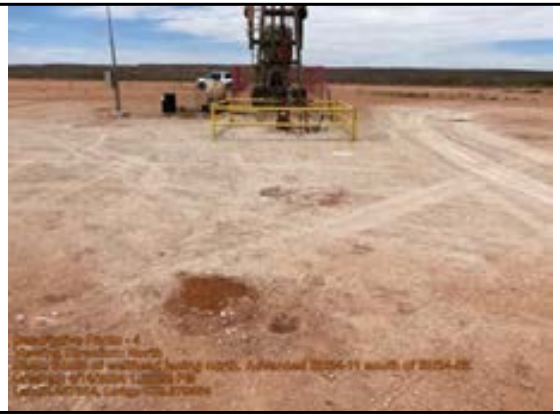
19:49 Field screening results from BH24-10, BH24-12, and BH24-13 exceeded threshold for chloride. Borehole depths were increased and samples collected at 4 feet bgs to confirm vertical delineation in high karst area.

Next Steps & Recommendations

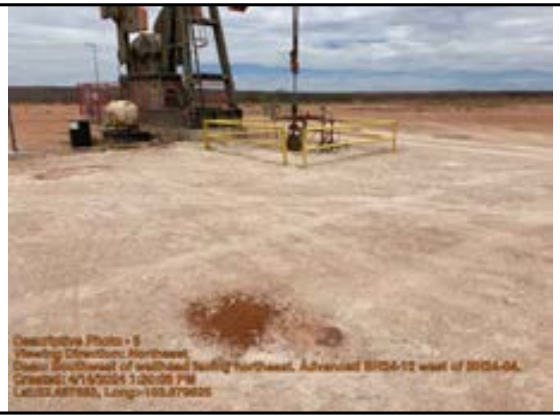
1 Continue delineation.

Daily Site Visit Report

Site Photos

Viewing Direction: Southwest	**Viewing Direction**: West
	
Northeast of wellhead facing southwest. Advanced BH24-08 north of BH24-03.	East of wellhead facing west. Advanced BH24-09 east of BH24-03.
Viewing Direction: Northwest	**Viewing Direction**: North
	
Southeast of wellhead facing northwest. Advanced BH24-10 southeast of BH24-03.	South of wellhead facing north. Advanced BH24-11 south of BH24-04.

Daily Site Visit Report

Viewing Direction: Northeast	**Viewing Direction**: East
	
Southwest of wellhead facing northeast. Advanced BH24-12 west of BH24-04.	West of wellhead facing east. Advanced BH24-13 west of BH24-05.
Viewing Direction: South	**Viewing Direction**: East
	
Northwest of pump jack facing south. Advanced BH24-14 north of BH24-06.	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:

Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	4/25/2024
Site Location Name:	Big Eddy Unit DI 9 35H	Report Run Date:	4/25/2024 11:01 PM
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	4/25/2024 10:45 AM
Departed Site	

Field Notes

11:06 On site assed for hazards filled out JSAs received worked authorization from Wes Byrd with XTO

11:34 Began delineation

14:09 Began field screening samples for chlorides and TPH

16:58 All samples were below criteria for Chlorides. All surface samples were well over 150 on TPH

Next Steps & Recommendations

1 Continuation of delineation of release.

Daily Site Visit Report

Site Photos

Viewing Direction: Northeast

BH24-16 was collected at surface and 2ft bgs

Viewing Direction: Northeast

BH24-17 was collected at surface and 2ft bgs just south of BH24-13

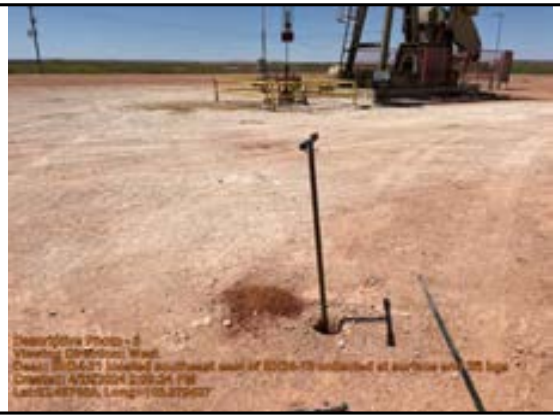
Viewing Direction: Northeast

BH24-18 was collected southwest of BH24-15 at surface and 2ft bgs

Viewing Direction: Northwest

BH24-19 east of BH24-16 and south of BH24-12 was collect at surface and 2ft bgs

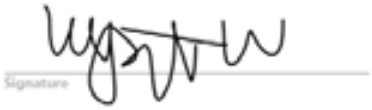
Daily Site Visit Report

Viewing Direction: Northwest	**Viewing Direction**: West
	
BH24-20 south of BH24-10 east of BH11&19	BH24-21 located southeast east of BH24-10 collected at surface and 2ft bgs

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature: 

Daily Site Visit Report

Client:	XTO Energy Inc. (US)	Inspection Date:	4/26/2024
Site Location Name:	Big Eddy Unit DI 9 35H	Report Run Date:	4/26/2024 10:02 PM
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	4/26/2024 7:36 AM
Departed Site	

Field Notes

7:36 Invite field out JSAs gained work authorization from Wes

12:40 Continued delineation

15:15 Samples collected were BH24-22 though 27 samples were field screened at surface

15:16 After screening BH24-22,24,25,27 were all below criteria at surface. BH24-23,26 were not and needed to be stepped out.

15:16 BH24-28 was stepped out from Bh24-23 and BH24-29 was from 27. Field screens for 28 were above criteria while 29 was below.

15:17 Collected surface for BH24-30 which was stepped out from Bh24-28. It was clean at surface.

15:17 BH24-22,24,25,27,29,30 were all sampled at surface and 2ft bgs and were all below criteria of field screens and were jarred on site.

Next Steps & Recommendations

1

Daily Site Visit Report

Site Photos

Viewing Direction: Northwest	**Viewing Direction**: North
	
BH24-30 SE of BH24-28	BH24-24 located south of BH24-19
Viewing Direction: Northeast	**Viewing Direction**: Northeast
	
BH24-25 located southwest of BH24-16	BH24-29 located SW of BH24-26

Daily Site Visit Report

Viewing Direction: East	**Viewing Direction**: Northwest
	
BH24-27 west of BH24-17	BH24-22 is located southeast of BH24-21

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Wyatt Wadleigh

Signature:

ATTACHMENT 4

eurofins | Environment Testing

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

See page two for job notes and contact information.

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
5/6/2024 2:03:16 PM

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

Table of Contents

Definitions/Glossary

Client: Vertex Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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.
¤	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 <AffectedAnalytBH24-22 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.

Client Sample Results

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

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

Date Collected: 04/26/24 10:15
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-2

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		4.9		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

Date Collected: 04/26/24 10:45
Date Received: 04/30/24 07:47

Lab Sample ID: 885-3596-3

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		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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

Client Sample ID: BH24-30 0ft
Lab Sample ID: 885-3596-11
Date Collected: 04/26/24 13:00
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 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
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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
Matrix: Solid
Analysis Batch: 4186

Client Sample ID: Method Blank
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 4186

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		
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
Matrix: Solid
Analysis Batch: 4186

Client Sample ID: BH24-22 0ft
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 4186

Client Sample ID: BH24-22 0ft
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
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
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
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

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*

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
Matrix: Solid
Analysis Batch: 4346

Client Sample ID: Method Blank
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 4346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 79961

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			05/04/24 04:43	1

Lab Sample ID: LCS 880-79939/2-A
Matrix: Solid
Analysis Batch: 79961

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 79961

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	234		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 885-3596-1 MS
Matrix: Solid
Analysis Batch: 79961

Client Sample ID: BH24-22 0ft
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	130	F1	249	343	F1	mg/Kg		84	90 - 110		

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
Matrix: Solid
Analysis Batch: 79961

Client Sample ID: BH24-22 0ft
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 79961

Client Sample ID: BH24-30 0ft
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 79961

Client Sample ID: BH24-30 0ft
Prep Type: Soluble

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

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	

QC Association Summary

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

Job ID: 885-3596-1

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

Lab Chronicle

Client: Vertex
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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

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

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
Lab Sample ID: 885-3596-3
Date Collected: 04/26/24 10:45
Matrix: Solid
Date Received: 04/30/24 07:47

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
Lab Sample ID: 885-3596-4
Date Collected: 04/26/24 11:00
Matrix: Solid
Date Received: 04/30/24 07:47

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

Lab Chronicle

Client: Vertex
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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

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
Lab Sample ID: 885-3596-5
Date Collected: 04/26/24 11:15
Matrix: Solid
Date Received: 04/30/24 07:47

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
Lab Sample ID: 885-3596-6
Date Collected: 04/26/24 11:30
Matrix: Solid
Date Received: 04/30/24 07:47

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
Lab Sample ID: 885-3596-7
Date Collected: 04/26/24 11:45
Matrix: Solid
Date Received: 04/30/24 07:47

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

Lab Chronicle

Client: Vertex
Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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

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
Lab Sample ID: 885-3596-8
Date Collected: 04/26/24 12:00
Matrix: Solid
Date Received: 04/30/24 07:47

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
Lab Sample ID: 885-3596-9
Date Collected: 04/26/24 12:30
Matrix: Solid
Date Received: 04/30/24 07:47

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
Lab Sample ID: 885-3596-10
Date Collected: 04/26/24 12:45
Matrix: Solid
Date Received: 04/30/24 07:47

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

Lab Chronicle

Client: Vertex Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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

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 — Lab Sample ID: 885-3596-11

Date Collected: 04/26/24 13:00 **Matrix: Solid**
Date Received: 04/30/24 07:47

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 — Lab Sample ID: 885-3596-12

Date Collected: 04/26/24 13:15 **Matrix: Solid**
Date Received: 04/30/24 07:47

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 Job ID: 885-3596-1
Project/Site: Big Eddy Unit DI 9 35H

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

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel 505-345-3975 Fax 505-345-4107

895-3596 COC

Client: Vertex (XTO)

Mailing Address: On File

Phone #: On File

email or Fax#: Scartlar@vertex.ca

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☑ Rush 5 Days

Project Name: Big Eddy Unit DI 9 35H

Project #: 01314

Project Manager: Sally Cartlar

Sampler: Wyatt Wadleigh
On Ice: ☑ Yes ☐ No Marty
# of Cooler(s): 1
Cooler Temp: 4.1 + 0 = 4.1°C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO3, NO2, PO4, SO4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
04/25/24	10:00	Soil	BH24-22 0 ft	1, 4oz jar		1	X	X					X			
04/25/24	10:15	Soil	BH24-22 2 ft	1, 4oz jar		2	X	X					X			
04/25/24	10:45	Soil	BH24-24 0ft	1, 4oz jar		3	X	X					X			
04/25/24	11:00	Soil	BH24-24 2ft	1, 4oz jar		4	X	X					X			
04/25/24	11:15	Soil	BH24-25 0ft	1, 4oz jar		5	X	X					X			
04/25/24	11:30	Soil	BH24-25 2ft	1, 4oz jar		6	X	X					X			
04/25/24	11:45	Soil	BH24-27 0 ft	1, 4oz jar		7	X	X					X			
04/25/24	12:00	Soil	BH24-27 2ft	1, 4oz jar		8	X	X					X			
04/25/24	12:30	Soil	BH24-29 0ft	1, 4oz jar		9	X	X					X			
04/25/24	12:45	Soil	BH24-29 2ft	1, 4oz jar		10	X	X					X			
04/25/24	13:00	Soil	BH24-30 0ft	1 4oz jar		11	X	X					X			
04/25/24	13:15	Soil	BH24-30 2ft	1 4oz jar		12	X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
		Wyatt Wadleigh			4/29/24	0945
4/29/24	1900			Courier	4/30/24	7:47

Remarks: Please CC wwadleigh@vertex.ca
Cost center Number: 1140661001

(Necessary samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any subcontracted data will be clearly notated on the analytical report.)

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-3596-1

Login Number: 3596 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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 Source: Eurofins Midland**
List Number: 2 **List Creation: 05/03/24 11:32 AM**
Creator: Rodriguez, Leticia

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	

eurofins | Environment Testing

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

See page two for job notes and contact information.

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
4/23/2024 7:52:53 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: 885-2895-1

Table of Contents

Definitions/Glossary

Client: Vertex Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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.
¤	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.

Client Sample Results

Client: Vertex
Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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'

Date Collected: 04/13/24 09:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-2

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 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'
Date Collected: 04/13/24 09:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-4
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]	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

Client Sample Results

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

Job ID: 885-2895-1

Client Sample ID: BH24-02 2'

Date Collected: 04/13/24 09:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-5

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		4.9		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'
Date Collected: 04/13/24 09:35
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-6
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 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
Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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

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'
Date Collected: 04/13/24 11:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-8
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		4.9		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'

Date Collected: 04/13/24 12:05
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-9

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 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'

Date Collected: 04/13/24 12:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-10

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		04/17/24 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'

Date Collected: 04/13/24 12:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-11

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		4.6		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'

Date Collected: 04/13/24 12:45
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-12

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 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'
Date Collected: 04/13/24 12:50
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-13
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		4.9		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

Client Sample Results

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

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'

Date Collected: 04/13/24 13:05
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-16

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 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

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'

Date Collected: 04/13/24 13:20
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-18

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		4.9		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'

Date Collected: 04/13/24 13:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-19

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		4.9		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'

Date Collected: 04/13/24 13:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-20

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		4.9		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

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
Matrix: Solid
Analysis Batch: 3574

Client Sample ID: Method Blank
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 3574

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		
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
Matrix: Solid
Analysis Batch: 3574

Client Sample ID: BH24-01 0'
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 3574

Client Sample ID: BH24-01 0'
Prep Type: Total/NA
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
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
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

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	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*

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

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		

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
Matrix: Solid
Analysis Batch: 78802

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	252		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 885-2895-1 MS
Matrix: Solid
Analysis Batch: 78802

Client Sample ID: BH24-01 0'
Prep Type: Soluble

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
Matrix: Solid
Analysis Batch: 78802

Client Sample ID: BH24-01 0'
Prep Type: Soluble

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

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	

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	

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

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'
Date Collected: 04/13/24 09:00
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-1
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		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'
Date Collected: 04/13/24 09:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-2
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 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'
Date Collected: 04/13/24 09:20
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-3
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 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'
Date Collected: 04/13/24 09:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-4
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		2	3574	JP	EET ALB	04/18/24 16:14

Lab Chronicle

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

Job ID: 885-2895-1

Client Sample ID: BH24-02 0'
Date Collected: 04/13/24 09:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-4
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		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'
Date Collected: 04/13/24 09:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-5
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 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'
Date Collected: 04/13/24 09:35
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2895-6
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 17:00
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'
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	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

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

Lab Chronicle

Client: Vertex
Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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

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'
Lab Sample ID: 885-2895-11
Date Collected: 04/13/24 12:40
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			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'
Lab Sample ID: 885-2895-12
Date Collected: 04/13/24 12:45
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			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'
Lab Sample ID: 885-2895-13
Date Collected: 04/13/24 12:50
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 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

Lab Chronicle

Client: Vertex
Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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

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'
Lab Sample ID: 885-2895-15
Date Collected: 04/13/24 12:55
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			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'
Lab Sample ID: 885-2895-16
Date Collected: 04/13/24 13:05
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 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'
Lab Sample ID: 885-2895-17
Date Collected: 04/13/24 13:10
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 22:05

Lab Chronicle

Client: Vertex
Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

Client Sample ID: BH24-06 4'
Lab Sample ID: 885-2895-17
Date Collected: 04/13/24 13:10
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	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'
Lab Sample ID: 885-2895-18
Date Collected: 04/13/24 13:20
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 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'
Lab Sample ID: 885-2895-19
Date Collected: 04/13/24 13:25
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		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'
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	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

Lab Chronicle

Client: Vertex
Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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	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

Accreditation/Certification Summary

Client: Vertex Job ID: 885-2895-1
Project/Site: Big Eddy Unit DI 9 35H

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

Chain-of-Custody Record

Client: Vertex (Bill to XTO Energy, Inc)

Mailing Address: On file

Phone #:

email or Fax#:

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: ☑ Standard ☑ Rush 5-day

Project Name: Big Eddy Unit DI 9 35H

Project #: 24E-01314

Project Manager: Sally Carttar

SCarttar@vertex.ca

Sampler: L Pullman

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6+0.1=1.7

HALL ENVIRONMENTAL ANALYSIS LABOR
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque NM 8710
Tel 505-345-3975 Fax 505-345-4107

885-2895 DOC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO3, NO2, PO4, SO4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)					
04 13 24	9 00	Soil	BH24-01 0'	1, 4oz jar			X	X					X								
04 13 24	9 10	Soil	BH24-01 2'	1, 4oz jar			X	X					X								
04 13 24	9 20	Soil	BH24-01 3 5'	1, 4oz jar			X	X					X								
04 13 24	9 25	Soil	BH24-02 0'	1, 4oz jar			X	X					X								
04 13 24	9 30	Soil	BH24-02 2'	1, 4oz jar			X	X					X								
04 13 24	9 35	Soil	BH24-02 4'	1, 4oz jar			X	X					X								
04 13 24	11 35	Soil	BH24-03 2'	1, 4oz jar			X	X					X								
04 13 24	11 40	Soil	BH24-03 4'	1, 4oz jar			X	X					X								
04 13 24	12 05	Soil	BH24-04 2'	1, 4oz jar			X	X					X								
04 13 24	12 10	Soil	BH24-04 3'	1, 4oz jar			X	X					X								
04 13 24	12 40	Soil	BH24-05 0'	1, 4oz jar			X	X					X								
04 13 24	12 45	Soil	BH24-05 2'	1, 4oz jar			X	X					X								

Date	Time	Relinquished by	Received by	Via	Date	Time
4-16-24	07:00	Jake Pullman			4/15/24	1710
4/15/24	1910			courier	4/16/24	9:15

Remarks:
Direct Bill to XTO Energy, Inc.
NAPP2335435491
Cost Center # 1140661001
CC.Sally Carttar (scarttar@vertex.ca) for Final Report.

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.

1/2

Chain-of-Custody Record

Client: Vertex (Bill to XTO Energy, Inc)

Mailing Address: On file

Phone #

email or Fax#

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time
☐ Standard ☐ Rush 5-day

Project Name: Big Eddy Unit DI 9 35H

Project #: 24E-01314

Project Manager: Sally Carttar

SCarttar@vertex.ca

Sampler: L Pullman

On Ice: ☑ Yes ☐ No

# of Coolers: 1 4045

Cooler Temp(including CF): 1.6+0.1=1.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi VOA)	Total Coliform (Present/Absent)						
04 13 24	12 50	Soil	BH24-05 4'	1 4oz jar			X	X					X									
04 13 24	15 30	Soil	BH24-05 6'	1 4oz jar			X	X					X									
04 13 24	12 55	Soil	BH24-06 0'	1 4oz jar			X	X					X									
04 13 24	13 05	Soil	BH24-06 2'	1 4oz jar			X	X					X									
04 13 24	13 10	Soil	BH24-06 4'	1 4oz jar			X	X					X									
04 13 24	13 20	Soil	BH24-07 0'	1 4oz jar			X	X					X									
04 13 24	13 25	Soil	BH24-07 2'	1 4oz jar			X	X					X									
04 13 24	13 30	Soil	BH24-07 4'	1 4oz jar			X	X					X									

Date	Time	Relinquished by	Received by	Via	Date	Time
4-15-24	0700	[signature]	[signature]		4/15/24	0700
4/15/24	1900	[signature]	[signature]	COURIER	4/16/24	7:55

Remarks:
Direct **Bill to XTO Energy, Inc.**
NAPP2335435491
Cost Center # 1140661001
CC.Sally Carttar (scarttar@vertex.ca) for Final Report.

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.

2/2

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-2895-1

Login Number: 2895 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Rojas, Juan

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	

eurofins | Environment Testing

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

See page two for job notes and contact information.

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

Table of Contents

Definitions/Glossary

Client: Vertex Job ID: 885-2902-1
Project/Site: Big Eddy Unit DI 9 35H

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.
¤	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.

Client Sample Results

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

Job ID: 885-2902-1

Client Sample ID: BH24-08 0'

Date Collected: 04/14/24 09:45
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-1

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		4.9		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

Client Sample Results

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

Job ID: 885-2902-1

Client Sample ID: BH24-08 2'
Date Collected: 04/14/24 09:55
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-2
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		04/16/24 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

Client Sample Results

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

Job ID: 885-2902-1

Client Sample ID: BH24-09 0'
Date Collected: 04/14/24 10:00
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-3
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		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'
Date Collected: 04/14/24 10:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-4
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		04/16/24 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

Client Sample Results

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

Job ID: 885-2902-1

Client Sample ID: BH24-10 2'
Date Collected: 04/14/24 10:25
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-5
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		04/16/24 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'

Date Collected: 04/14/24 13:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-6

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		04/16/24 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'

Date Collected: 04/14/24 10:30
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-7

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		4.6		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'

Date Collected: 04/14/24 10:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-8

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		4.6		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'

Date Collected: 04/14/24 10:55
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-9

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		04/16/24 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

Client Sample Results

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

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

Client Sample Results

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

Job ID: 885-2902-1

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

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'

Date Collected: 04/14/24 13:40
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-12

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		4.9		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

Client Sample Results

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

Job ID: 885-2902-1

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

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

Client Sample Results

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

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

Client Sample Results

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

Job ID: 885-2902-1

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

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

Client Sample Results

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

Job ID: 885-2902-1

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

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

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*

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

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

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

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

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

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'
Date Collected: 04/14/24 09:45
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-1
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 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'
Date Collected: 04/14/24 09:55
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-2
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 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'
Date Collected: 04/14/24 10:00
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-3
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 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'
Date Collected: 04/14/24 10:10
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2902-4
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 03:21

Lab Chronicle

Client: Vertex
Job ID: 885-2902-1
Project/Site: Big Eddy Unit DI 9 35H

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

Lab Chronicle

Client: Vertex
Job ID: 885-2902-1
Project/Site: Big Eddy Unit DI 9 35H

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

Lab Chronicle

Client: Vertex
Job ID: 885-2902-1
Project/Site: Big Eddy Unit DI 9 35H

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
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'
Lab Sample ID: 885-2902-11
Date Collected: 04/14/24 11:10
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 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'
Lab Sample ID: 885-2902-12
Date Collected: 04/14/24 13:40
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 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'
Lab Sample ID: 885-2902-13
Date Collected: 04/14/24 11:15
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 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

Lab Chronicle

Client: Vertex
Job ID: 885-2902-1
Project/Site: Big Eddy Unit DI 9 35H

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

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'
Lab Sample ID: 885-2902-15
Date Collected: 04/14/24 11:30
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 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'
Lab Sample ID: 885-2902-16
Date Collected: 04/14/24 11:40
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 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 Job ID: 885-2902-1
Project/Site: Big Eddy Unit DI 9 35H

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

Chain-of-Custody Record

Client: Vertex (Bill to XTO Energy, Inc)

Mailing Address: On file

Phone #:

email or Fax#:

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other ☐ EDD (Type)

Turn-Around Time: ☑ Standard ☑ Rush 5-day

Project Name: Big Eddy Unit DI 9 35H

Project #: 24E-01314

Project Manager: Sally Carttar

SCarttar@vertex.ca

Sampler: L Pullman

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 1.6+0.1=1.7

HALL ENVIRONMENTAL ANALYSIS LABORA
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel 505-345-3975 Fax 505-345-4107

685-2902 COC

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
04 14 24	9.45	Soil	BH24-08 0'	1, 4oz jar		1	X	X					X			
04 14 24	9 55	Soil	BH24-08 2	1, 4oz jar		2	X	X					X			
04 14 24	10 00	Soil	BH24-09 0'	1 4oz jar		3	X	X					X			
04 14 24	10 10	Soil	BH24-09 2'	1 4oz jar		4	X	X					X			
04 14 24	10 25	Soi	BH24-10 2'	1, 4oz jar		5	X	X					X			
04 14 24	13 30	Soi	BH24-10 4'	1, 4oz jar		6	X	X					X			
04 14 24	10 30	Soi	BH24-11 0'	1, 4oz jar		7	X	X					X			
04 14 24	10 40	Soil	BH24-11 2'	1, 4oz jar		8	X	X					X			
04 14 24	10 55	Soi	BH24-12 2'	1, 4oz jar		9	X	X					X			
04 14 24	13 35	Soi	BH24-12 4'	1, 4oz jar		10	X	X					X			
04 14 24	11 10	Soi	BH24-13 2'	1, 4oz jar		11	X	X					X			
04 14 24	13 40	Soi	BH24-13 4'	1, 4oz jar		12	X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
4-15-24	07:00				4/15/24	1700
4/15/24	1902			courier	4/16/24	7:15

Remarks:
Direct Bill to XTO Energy, Inc.
NAPP2335435491
Cost Center # 1140661001
CC.Sally Carttar (scarttar@vertex.ca) for Final Report.

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

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Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Vertex (Bill to XTO Energy, Inc)	Turn-Around Time: ☑ Standard ☑ Rush 5-day
Mailing Address: On file	Project Name: Big Eddy Unit DI 9 35H
Phone #	Project #: 24E-01314
email or Fax#	Project Manager: Sally Carttar
QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)	SCarttar@vertex.ca
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other	Sampler: L. Pullman
☐ EDD (Type)	On Ice: ☑ Yes ☐ No
	# of Coolers: 1
	Cooler Temp(including CF): 1.6+0=1.6 (4.0°C)

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
04 14 24	11 15	Soil	BH24-14 0'	1, 4oz jar		13	X	X					X			
04 14 24	11 25	Soil	BH24-14 2'	1, 4oz jar		14	X	X					X			
04 14 24	11 30	Soil	BH24-15 0'	1, 4oz jar		15	X	X					X			
04 14 24	11 40	Soil	BH24-15 2'	1, 4oz jar		16	X	X					X			

Date	Time	Relinquished by	Received by	Via	Date	Time
4-15-24	0700				4/15/24	0700
4/15/24	1900			Courier	4/16/24	7:55

Remarks:
Direct Bill to XTO Energy, Inc.
NAPP2335435491
Cost Center # 1140661001
CC Sally Carttar (scarttar@vertex.ca) for Final Report.

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

2/2

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Freeman, Andy	Carrier Tracking No(s):	COC No: 885-432 1
Client Contact: Shipping/Receiving	Phone	E Mail: andy.freeman@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Oregon NELAP - Texas, State - New Mexico		Job #: 885-2902-1
Address: 121 W Florida Ave	Due Date Requested: 4/22/2024	Analysis Requested		Preservation Codes:
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			Other:
Email:	WO #:			
Project Name: Big Eddy Unit DI 9 35H	Project #: 28501279			
Site:	SSOW#:			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28DAY_LEACH Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
BH24-08 0' (885-2902-1)	4/14/24	09:45 Mountain		Solid			X	1	
BH24-08 2' (885-2902-2)	4/14/24	09:55 Mountain		Solid			X	1	
BH24-09 0' (885-2902-3)	4/14/24	10:00 Mountain		Solid			X	1	
BH24-09 2' (885-2902-4)	4/14/24	10:10 Mountain		Solid			X	1	
BH24-10 2' (885-2902-5)	4/14/24	10:25 Mountain		Solid			X	1	
BH24-10 4' (885-2902-6)	4/14/24	13:30 Mountain		Solid			X	1	
BH24-11 0' (885-2902-7)	4/14/24	10:30 Mountain		Solid			X	1	
BH24-11 2' (885-2902-8)	4/14/24	10:40 Mountain		Solid			X	1	
BH24-12 2' (885-2902-9)	4/14/24	10:55 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins 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/tests/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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ 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	Date/Time	Company
	4/17/24 14:30				
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

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

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Freeman, Andy	Carrier Tracking No(s)	COC No: 885-4372
Client Contact: Shipping/Receiving	Phone	E-Mail: andy.freeman@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Cent		Accreditations Required (See note): NELAP - Oregon NELAP - Texas State New Mexico		Job #: 885-2902-1
Address: 1211 W. Florida Ave	Due Date Requested: 4/22/2024	Analysis Requested		Preservation Codes:
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701	PO #:			
Phone: 432-704-5440(Tel)	WO #:			
Email:	Project #: 88501279			
Project Name: Big Eddy Unit DI 9 35H	SSOW#:			
Site:				Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, o=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300_ORGFM_28D/DI_LEACH Chlorides	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
BH24-12 4' (885-2902-10)	4/14/24	12:35 Mountain		Solid			X	1	
BH24-13 2' (885-2902-11)	4/14/24	11:10 Mountain		Solid			X	1	
BH24-13 4' (885-2902-12)	4/14/24	12:40 Mountain		Solid			X	1	
BH24-14 0' (885-2902-13)	4/14/24	11:15 Mountain		Solid			X	1	
BH24-14 2' (885-2902-14)	4/14/24	11:25 Mountain		Solid			X	1	
BH24-15 0' (885-2902-15)	4/14/24	11:30 Mountain		Solid			X	1	
BH24-15 2' (885-2902-16)	4/14/24	11:40 Mountain		Solid			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins 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/tests/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 reported 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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ 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: Date/Time: Company:
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: Company:
Relinquished by:	Date/Time:	Company:	Received by: Date/Time: Company:
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No:		Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Vertex Job Number: 885-2902-1

Login Number: 2902 **List Source: Eurofins Albuquerque**
List Number: 1
Creator: Casarrubias, Tracy

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	

ATTACHMENT 5

ATTACHMENT 6

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**

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
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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 (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 (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

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

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QUESTIONS

Action 360908

QUESTIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

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 (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	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	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Alan Romero Title: Regulatory Analyst Email: alan.romero1@exxonmobil.com Date: 07/03/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	***{Unavailable.}***

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 360908

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 360908
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation plan conditionally approved. A deferral will have to be requested after carrying out the remediation. Remediation on an active site can be deferred in areas immediately under or around production equipment such as production tanks, wellheads, and pipelines where remediation could cause a major facility deconstruction so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. The deferral request must specify which sample points are being requested for deferral including an explanation as to why the contaminants can't be removed. Excavate to the maximum extent practical and then, if for instance, it's a sidewall that can't be further excavated due to production equipment, then request a deferral for that sample point(s) in your resubmission. Submit report by 10/14/2024.	7/15/2024