



Incident Number: nPCH0514328346

Release Assessment and Closure

Crow Flats Federal Com #001

Section 30, Township 16 South, Range 28 East

API: 30-015-23386

County: Eddy

Vertex File Number: 23E-05855

Prepared for:

EOG Resources, Inc.

Prepared by:

Vertex Resource Services Inc.

Date:

May 2024

EOG Resources, Inc.
Crow Flats Federal Com #001

Release Assessment and Closure
May 2024

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Crow Flats Federal Com #001
Section 30, Township 16 South, Range 28 East
API: 30-015-23386
County: Eddy

Prepared for:
EOG Resources, Inc.
104 S. 4th Street
Artesia, New Mexico 88210

New Mexico Oil Conservation Division – District 2
811 S. 1st Street
Artesia, New Mexico 88210

Prepared by:
Vertex Resource Services Inc.
3101 Boyd Drive
Carlsbad, New Mexico 88220

Angela Mohle
Angela Mohle, B.A., B.Sc.
ENVIRONMENTAL TECHNICIAN, REPORTING

6/5/2024
Date

Chance Dixon
Chance Dixon, B.Sc.
PROJECT MANAGER, REPORT REVIEW

6/5/2024
Date

EOG Resources, Inc.
Crow Flats Federal Com #001

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<50 feet bgs

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1.0 Introduction

EOG Resources, Inc. (EOG) retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure to address the historical impacts at Crow Flats Federal Com #001, API 30-015-23386 (hereafter referred to as the “site”). NMOCD reported the impacts as a Complaint on July 31, 2005. EOG inspected the site and submitted a closure request on July 29, 2022. NMOCD denied the closure request on November 27, 2023, due to discoloration in the berm containment in May 2005 and requested the site be assessed as a release based on findings from satellite imagery of the tank battery. Incident ID number nPCH0514328346 was originally assigned to this Complaint. There was no submission of a C-141 by the operator at the time of the complaint. Vertex performed the assessment to address the closure denial and relieve EOG of the Incident ID with the site now being operated by a different operator.

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

2.0 Incident Description

The impacted area was discovered and a request was made for assessment by NMOCD through historical satellite imagery. The impacted area was located against the tanks within the bermed containment continuing south of the battery. The dates, times, and volumes of the historical impacts are unknown.

3.0 Site Characteristics

The site is located approximately 10 miles northeast of Artesia, New Mexico (Google Inc., 2024). The legal location for the site is Section 30, Township 16 South and Range 28 East in Eddy County, New Mexico. The release area is located on Bureau of Land Management property. An aerial photograph and site schematic are presented in Figure 1.

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas production and storage. The location was acquired by EOG from Three Span Oil and Gas, Inc. in December of 2011. The site was acquired by MRNM from EOG on February 3, 2022. The following sections specifically describe the impacted area on or in proximity to the constructed pad (Figure 1).

The surrounding landscape is associated with ridges and hills with elevations ranging between 1,250 and 5,000 feet. The climate is semiarid with average annual precipitation ranging between 10 and 25 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to tobosa, black grama, and blue grama. Grasses with shrubs and half-shrubs dominate the historical plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Limited to no vegetation is allowed to grow on the compacted production pad, right-of-way, and access road.

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The surface geology at the site primarily comprises Psl – Salado Formation (Upper Permian) Evaporite Sequence, dominantly halite (New Mexico Bureau of Geology and Mineral Resources, 2024) and the soil at the site is characterized as loamy (United States Department of Agriculture, Natural Resources Conservation Service, 2024). Additional soil characteristics include a drainage class of well drained to somewhat excessively drained with a runoff class of low. The karst geology potential for the site is high (United States Department of the Interior, Bureau of Land Management, 2018).

4.0 Closure Criteria Determination

The nearest active well to the site is a New Mexico Office of the State Engineer (NMOSE) monitoring well located approximately 0.86 miles southwest of the location (United States Geological Survey, 2024). Data from 2023 shows the NMOSE borehole recorded a depth to groundwater of 55 feet below ground surface (bgs). Information pertaining to the depth to ground water determination is included in Appendix B.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is a riverine habitat (National Wetlands Inventory) located approximately 0.42 miles southwest of the site (United States Fish and Wildlife Service, 2024).

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

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Closure Criteria Worksheet			
Site Name: EOG Crow Flats Fed Com #1			
Spill Coordinates: 32.8907967, -104.2174301		X:	Y:
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	<50	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	2,183	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	4,675	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	34,263	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	4,510	feet
	ii) Within 1000 feet of any fresh water well or spring		feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	3,333	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
10	Within a 100-year Floodplain	>100	year
11	Soil Type	loam, clay loam	
12	Ecological Classification	Reeves- Gypsum	
13	Geology	Psl	
NMAC 19.15.29.12 E (Table 1) Closure Criteria		<50'	<50' 51-100' >100'

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

Table 1. Closure Criteria for Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
< 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

TDS – total dissolved solids
TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics
BTEX – benzene, toluene, ethylbenzene and xylenes

5.0 Remedial Actions Taken

On December 6, 2023, EOG contracted Vertex to conduct a site investigation including sampling activities which included field screening procedures to address area observed by NMOCD from aerial imagery. It was confirmed by lab analysis that remnant impacts remained in the area. Laboratory results for the site investigation are included in Table 3.

Remediation efforts began on December 18, 2023, and were halted on January 23, 2024, due to production tanks and a pipeline obstructing a portion of the remediation area on the north side of the excavation, deeming it unsafe to excavate with machinery. Excavation and confirmation sampling continued on April 3, 2024, after the production equipment had been moved to allow for safe excavation. Vertex personnel supervised the excavation of impacted soils. Field screening was with results being used to identify areas requiring further remediation throughout the project. Excavation of the site was completed from 12 to 18 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility as stipulated by the Form C-138 Request for Approval to Accept Solid Waste. The final DFR documenting the final excavation before backfill is presented in Appendix C.

Notification that confirmatory samples were being collected was provided to the NMOCD before each sampling event and they are included in Appendix D. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. All samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Eurofins and Cardinal Laboratories under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are presented in Table 4, and the laboratory data reports are included in Appendix E. All confirmatory samples collected and analyzed were below closure criteria for the site.

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6.0 Closure Request

Vertex recommends no additional remediation action to address the impacted area at the site. Laboratory analyses of confirmation samples collected show final confirmatory values below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs. There are no anticipated risks to human, ecological, or hydrological receptors at the site.

The excavation was backfilled with non-waste-containing, uncontaminated, earthen material sourced locally and placed to meet the site's existing grade to prevent water ponding and erosion. The pasture portion of the site was seeded on June 6, 2024, with the BLM recommended seed mixture for loamy soils.

Vertex requests that this open incident be approved for closure as all requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. EOG certifies that all information in this report and the appendices are correct and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain Remediation Closure Approval.

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

7.0 References

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- United States Fish and Wildlife Service. (2024). *National Wetland Inventory - Surface Waters and Wetlands*. Retrieved from <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>
- United States Geological Survey. (2024). *National Water Information System: Web Interface*. Retrieved from <https://waterdata.usgs.gov/nwis>

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8.0 Limitations

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


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

FIGURES

Crow Flats Federal Com #1

Investigation Samples

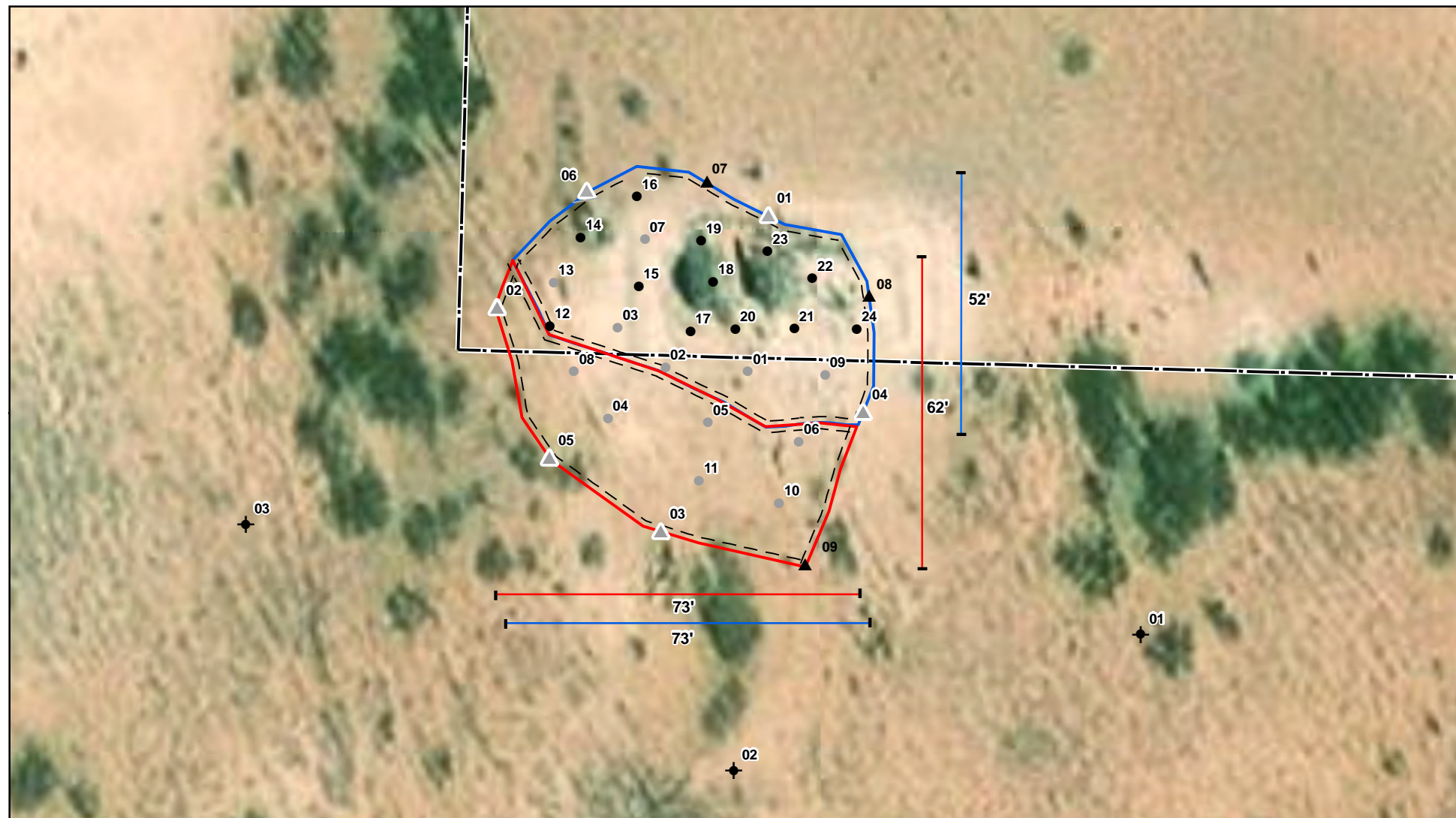
Legend

 Feature 1



Google Earth

50 ft



- 2023 Base Sample (Excavated) (Prefixed by "BES23-") ◆ Borehole (Prefixed by "BH24-") ▲ 2024 Wall Sample (Prefixed by "WES24-") [Red Outline] Excavation to 14' bgs (~ 1,908 sq. ft.)
- 2024 Base Sample (Excavated) (Prefixed by "BES24-") ▲ 2023 Wall Sample (Prefixed by "WES23-") [Black Outline] Approximate Lease Boundary [Blue Outline] Excavation to 18' bgs (~ 2,554 sq. ft.)



0 10 20 40 ft

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



Site Schematic Crow Flats Federal Com #1

FIGURE:

2



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

Note: Georeferenced image from Esri, 2023. Boreholes and excavation from GPS by Vertex Professional Services Ltd. (Vertex), 2023 and 2024. Approximate lease boundary from imagery by Vertex, 2024.

VERSATILITY. EXPERTISE.

TABLES

Client Name: EOG Resources Inc.
 Site Name: Crow Flats Federal Com #1
 NMOCD Tracking #: nPCH0514328346
 Project #: 23E-05855
 Lab Report(s): 2315211,

Table 3. Initial Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Table 3. Initial Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BH23-01	0	12/6/2023	—	2,090	105	ND	ND	ND	360	530	360	990	ND
	1	12/6/2023	—	1,600	144	ND	ND	ND	1700	2100	1700	3800	ND
	1.5	12/7/2023	—	7,560	275								
	2	12/13/2023	1	6,800	470								
	3	12/13/2023	2	7,650	391								
	4	12/13/2023	574	8,470	377								
BH23-02	0	12/6/2023	—	2,560	74	ND	ND	ND	33	76	36	109	ND
	1	12/6/2023	—	3,090	115	ND	ND	ND	92	98	92	190	ND
	2	12/6/2023	—	4,960	130								
	3	12/13/2023	172	EEEE	175								
	4	12/13/2023	560	4,560	380								
	6	12/13/2023	777	11,690	177								
7.5	12/13/2023	1,747	8,980	197									
BH23-03	0	12/6/2023	—	1,970	135	ND	ND	ND	57	61	57	118	ND
	1	12/6/2023	—	2,370	67	ND	ND	ND	130	180	130	310	ND
	1.5	12/7/2023	—	1,560	140								
	2	12/13/2023	2	2,460	393								
	3	12/13/2023	1	3,180	280								
	4	12/13/2023	65	6,490	276								
BH23-04	0	12/6/2023	—	2,540	120	ND	ND	ND	140	170	140	310	88
	1	12/6/2023	—	2,730	98	ND	ND	ND	350	650	350	1000	ND
	1.5	12/7/2023	—	2,250	150								
	2	12/13/2023	2	3,270	421								
	3	12/13/2023	9	3,460	291								
	4	12/13/2023	93	EEEE	467								
	6	12/13/2023	655	EEEE	237								
	7.5	12/13/2023	778	7,090	320								

Client Name: EOG Resources Inc.

Site Name: Crow Flats Federal Com #1

NMOCD Tracking #: nPCH0514328346

Project #: 23E-05855

Lab Report(s): 2312C17, 2312D12, 2401129, 2401791, 2401724, 2401791, H240045, 2401839, 2401878, 2401925, 2401A13, 2401B97, 2402004, 885-2702-1, 885-2769-1, 885-2834-1, 885-2892-1, H241993, 885-3593-1, 885-3733

Table 2. Confirmation Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	GRO + DRO	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
WES23-01	0-7	4/9/2024	-	-	1,200	ND	ND	ND	ND	ND	ND	ND	360
	8-17	4/9/2024	-	-	1,125	ND	ND	ND	ND	ND	ND	ND	240
WES23-02	0-6	1/23/2024	-	108	500	ND	ND	ND	ND	ND	ND	ND	460
	6-11	1/18/2024	-	161	425	ND	ND	ND	24	ND	24	24	330
WES23-03	0-12	1/26/2024	-	124	175	ND	ND	ND	ND	ND	ND	ND	400
	0-6	5/13/2024	-	90	500	ND	ND	ND	ND	ND	ND	ND	ND
WES23-04	0-6	1/22/2024	-	58	475	ND	ND	ND	ND	ND	ND	ND	540
	6-12	1/22/2024	-	236	700	ND	ND	ND	60	ND	60	60	590
WES23-05	0-6	1/26/2024	-	148	538	ND	ND	ND	54	ND	54	54	480
	6-12	1/26/2024	-	177	550	ND	ND	ND	48	ND	48	48	420
WES23-06	0-7	4/15/2024	-	64	663	ND	ND	ND	ND	ND	ND	ND	288
	8-17	4/15/2024	-	22	375	ND	ND	ND	ND	ND	ND	ND	336
WES24-07	0-6	4/25/2024		34	302	ND	ND	ND	ND	ND	ND	ND	ND
	6-12	4/25/2024		23	356	ND	ND	ND	ND	ND	ND	ND	ND
	12-17	4/25/2024		75	285	ND	ND	ND	ND	ND	ND	ND	ND
WES24-08	0-6	4/25/2024		26	245	ND	ND	ND	ND	ND	ND	ND	ND
	6-12	4/25/2024		36	495	ND	ND	ND	ND	ND	ND	ND	ND
	12-17	4/25/2024		14	412	ND	ND	ND	ND	ND	ND	ND	ND
WES24-09	0-4	5/13/2024	-	65	300	ND	ND	ND	ND	ND	ND	ND	16
	4-8	5/13/2024	-	95	338	ND	ND	ND	ND	ND	ND	ND	32
	8-12	5/13/2024	-	96	325	ND	ND	ND	ND	ND	ND	ND	16
BES23-01	17	1/30/2024	-	160	350	ND	1	34	66	ND	ND	56	210
BES23-02	18	4/15/2024	-	105	713	0.313	0.313	ND	ND	ND	ND	ND	352
BES23-03	16	1/30/2024	-	160	350	0.065	0.29	10	46	ND	56	56	430
BES23-05	11	1/18/2024	-	199	450	ND	ND	ND	19	ND	19	19	360
BES23-06	12	1/19/2024	-	107	375	ND	ND	ND	12	ND	12	12	480
BES23-07	12	1/19/2024	-	206	325	ND	ND	ND	46	ND	46	46	240
BES23-08	12	1/19/2024	-	111	280	ND	ND	ND	16	ND	16	16	330
BES23-09	14	1/19/2024	-	254	300	ND	0.3	24	54	ND	78	78	260
BES23-10	12	1/23/2024	-	111	450	ND	ND	ND	ND	ND	ND	ND	360
BES24-11	13	1/26/2024	-	88	525	ND	ND	ND	ND	ND	ND	ND	480
BES24-12	16	4/10/2024	-	109	550	ND	ND	ND	15	ND	15	15	370
BES24-13	16	4/10/2024	-	88	525	ND	ND	ND	17	ND	17	17	240
BES24-14	16	4/10/2024	-	83	425	ND	ND	ND	ND	ND	ND	ND	330
BES24-15	18	4/15/2024	-	193	725	ND	1.07	ND	ND	ND	ND	ND	320
BES24-16	17	4/11/2024	-	59	575	ND	ND	ND	ND	ND	ND	ND	300
BES24-17	18	4/11/2024	-	157	380	ND	0.22	18	45	ND	63	63	320
BES24-18	18	4/11/2024	-	251	475	ND	ND	31	22	ND	53	53	230
BES24-19	17	4/10/2024	-	110	400	ND	ND	ND	ND	ND	ND	ND	250
BES24-20	18	4/11/2024	-	174	325	ND	0.1	17	20	57	37	94	270
BES24-21	17	4/12/2024	-	198	725	ND	ND	ND	12	ND	12	12	360
BES24-22	17	4/12/2024	-	203	775	ND	ND	ND	ND	ND	ND	ND	280
BES24-23	16	4/12/2024	-	105	500	ND	0.35	18	32	ND	50	50	490
BES24-24	16	4/12/2024	-	204	400	ND	ND	5.3	14	ND	19.3	19.3	410

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria (on-pad)

APPENDIX A – Closure Criteria Research Documentation



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	Tw	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
RA 12455 POD1		RA	ED	2	1	2	36	16S	27E	571998	3638766	1379	200	55	145
RA 04176		RA	XX	3	4	1	23	16S	27E	569885	3641470*	3876	300		
Average Depth to Water:														55 feet	
Minimum Depth:														55 feet	
Maximum Depth:														55 feet	

Record Count: 2

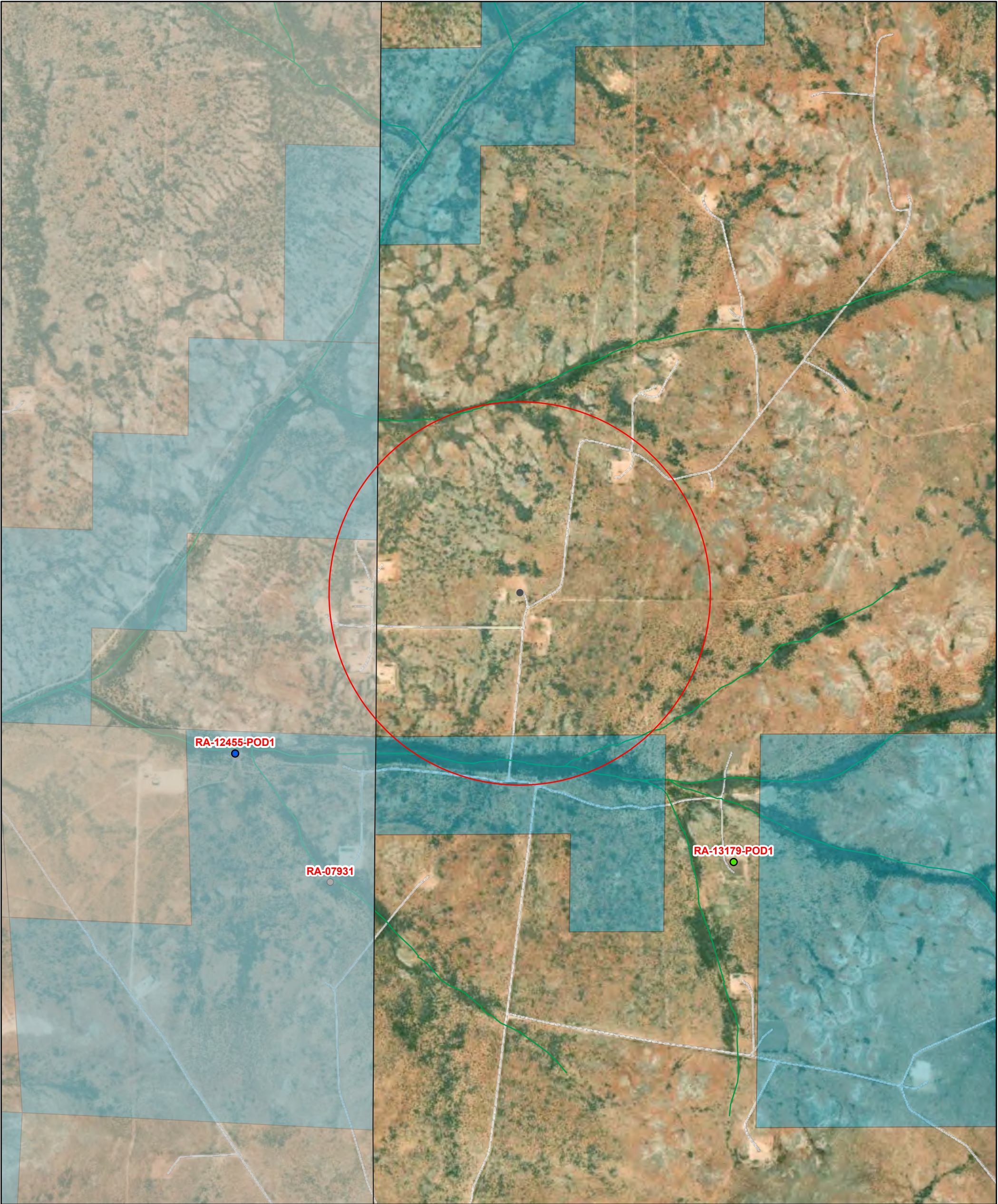
UTMNAD83 Radius Search (in meters):

Easting (X): 573195 Northing (Y): 3639452 Radius: 5000

*UTM location was derived from PLSS - see Help

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

01 - Crow Flats Fed Com #1 - POD



12/8/2023, 10:08:03 AM

GIS WATERS PODs

- Active
- Pending
-

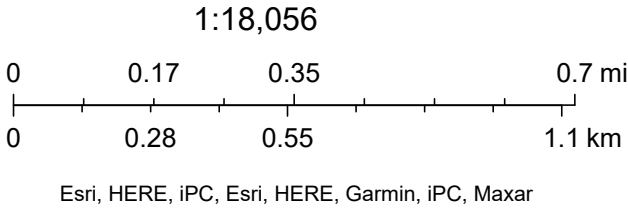
OSE District Boundary

Water Right Regulations

- Closure Area
- New Mexico State Trust Lands
- Subsurface Estate
- Both Estates

NHD Flowlines


- Artificial Path
- Stream River





New Mexico Office of the State Engineer

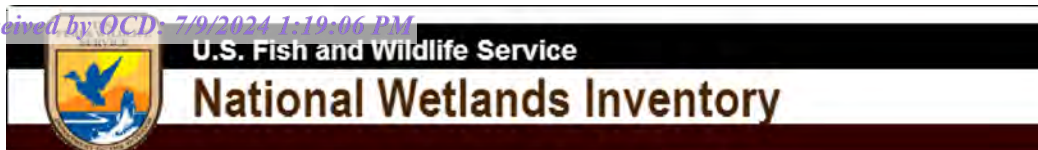
Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
RA	12455 POD1	2	1	2	36	16S	27E	571998	3638766 
<hr/>									
Driller License:	1058	Driller Company:		KEY'S DRILLING & PUMP SERVICE					
Driller Name:	KUEHN III, DONALD								
Drill Start Date:	09/12/2016	Drill Finish Date:		09/13/2016		Plug Date:			
Log File Date:	09/29/2016	PCW Rev Date:				Source:		Shallow	
Pump Type:		Pipe Discharge Size:				Estimated Yield:		17 GPM	
Casing Size:	4.50	Depth Well:		200 feet		Depth Water:		55 feet	
<hr/>									
Water Bearing Stratifications:		Top	Bottom	Description					
		55	65	Sandstone/Gravel/Conglomerate					
		80	90	Other/Unknown					
		160	200	Other/Unknown					
<hr/>									
Casing Perforations:		Top	Bottom						
		160	200						
<hr/>									

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POINT OF DIVERSION SUMMARY



02 - Watercourse - Crow Flats Fed Com #1
2,183 feet away (0.42 mi)



December 8, 2023

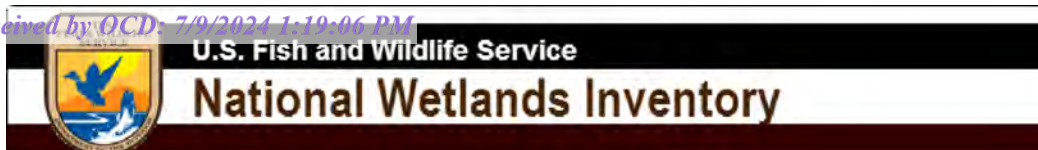
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

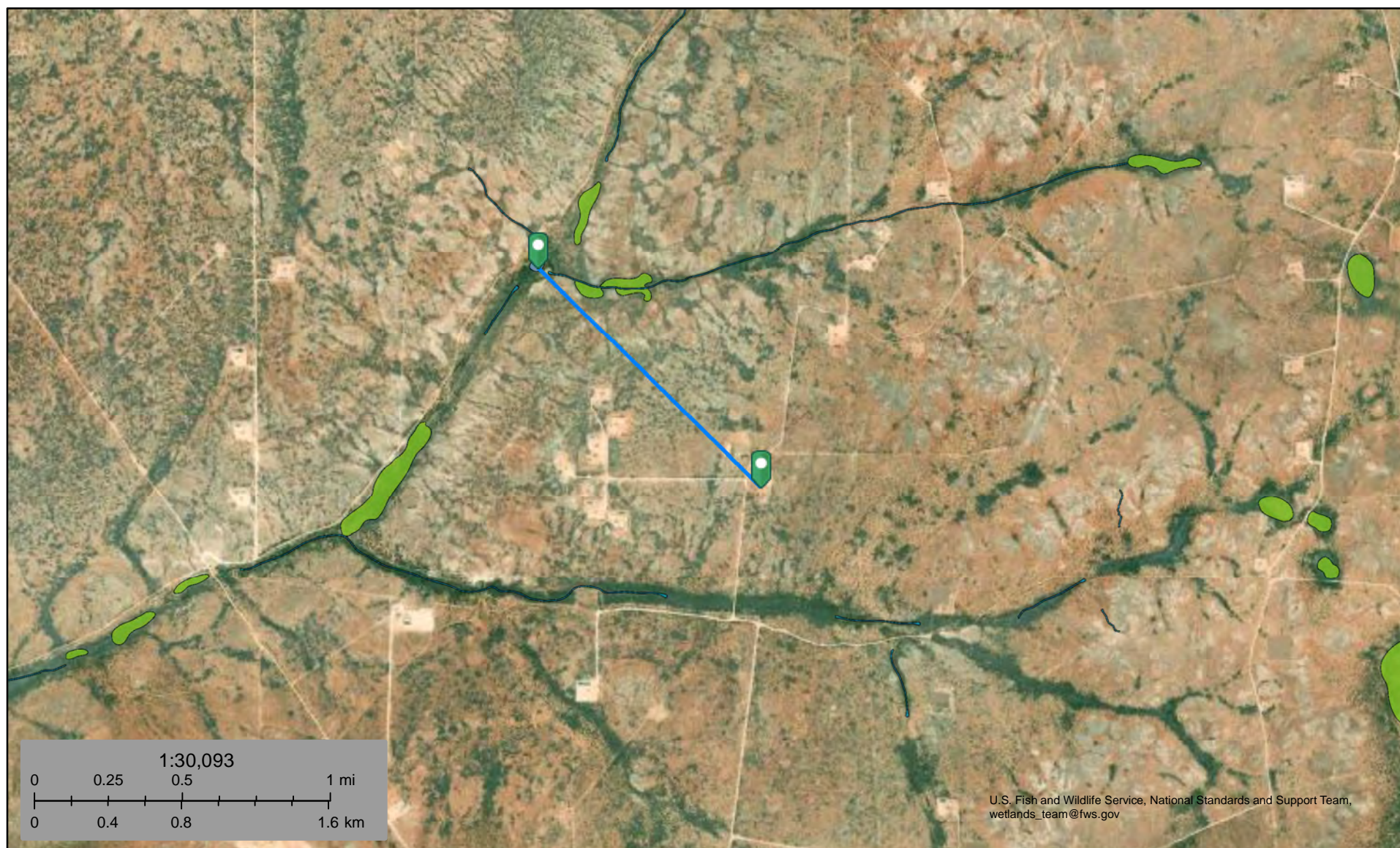
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

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



03 - Lakebed - Crow Flats Fed Com #1
4,675 feet away (0.89 mi)



December 8, 2023

Wetlands




- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

Nearest Residence:
34,263 feet away (6.49 mi)

-  Crow Flats Fed Com #1
-  Line Measure
-  Nearest Residence



ence

Google Earth

Crow Flats Fed



2 mi

200



New Mexico Office of the State Engineer

(with Ownership Information)

(NAD83 UTM in met)

7

UTMNAD83 Radius Search (in meters):

Radius: 5000

Sorted by: Distance

*UTM location was derived from PLSS - see Help




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ACTIVE & INACTIVE POINTS OF DI

Crow Flats Fed Com #1

Nearest Livestock Well:
RA12455
4,510 feet away (0.86 mi)

Legend

-  Crow Flats Fed Com #1
-  Line Measure
-  RA12455 Livestock Well

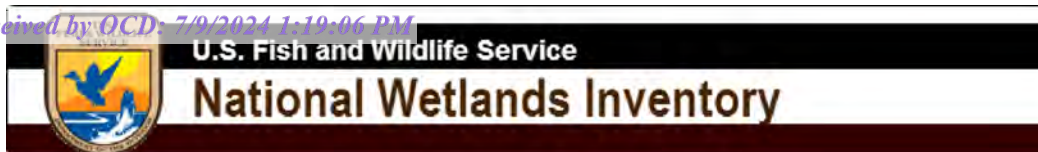


Crow Flats Fed Com #1

RA12455 Livestock Well



2000 ft



07 - Wetland - Crow Flats Fed Com #1
3,333 feet away (0.63 mi)



December 8, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

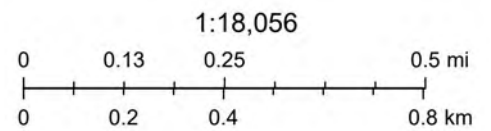
- Lake
- Other
- Riverine

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

Mines - Crow Flats Fed Com #1



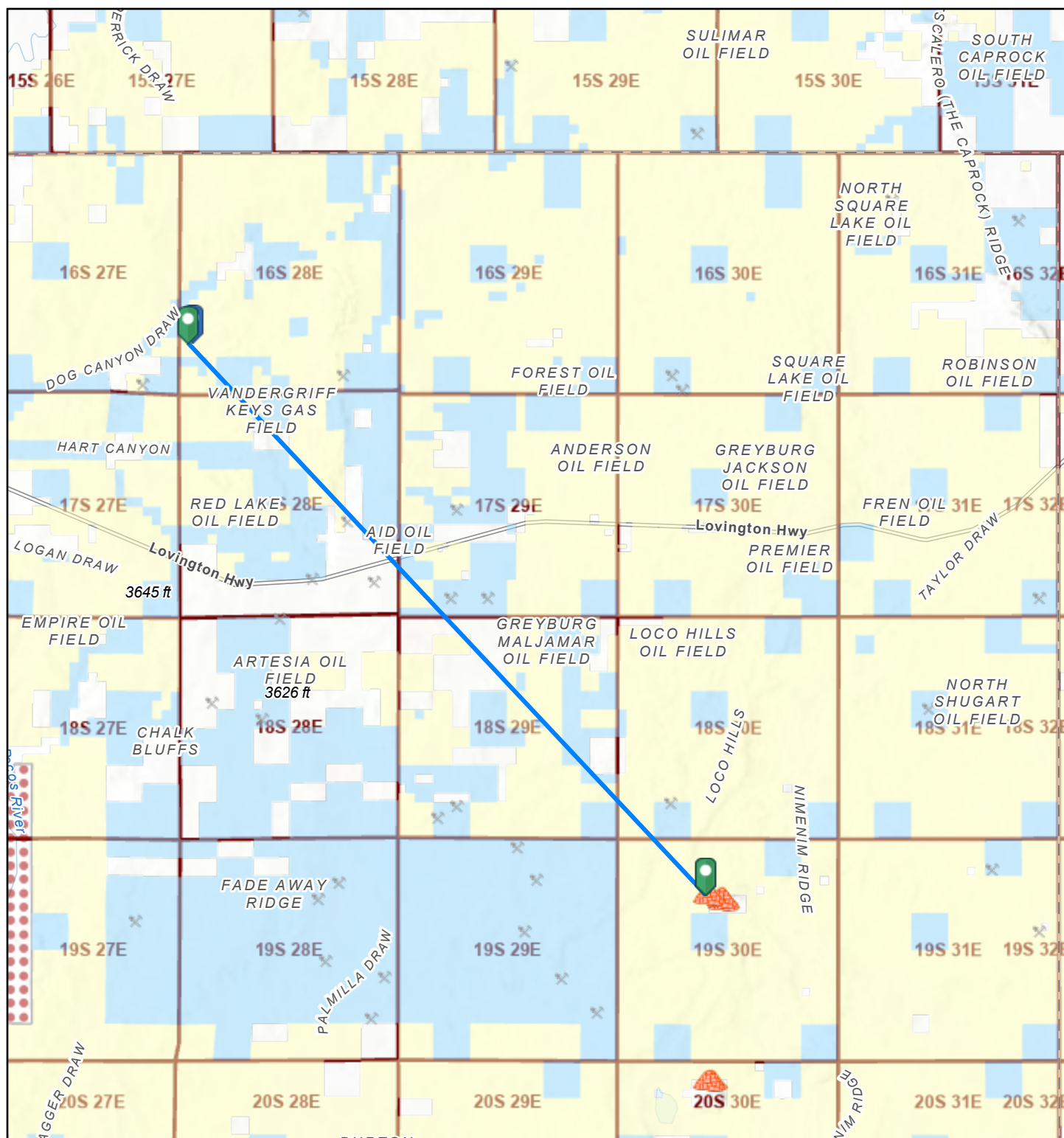
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Esri Community Maps Contributors, New Mexico State University, Texas Parks & Wildlife, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, FEMA

EMNRD MMD GIS Coordinator

Active Mines in New Mexico



2/8/2024, 8:52:45 AM

1:288,895

Registered Mines

Land Ownership

Aggregate, Stone etc.

BLM

Aggregate, Stone etc.

BOR

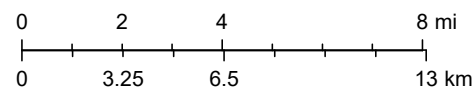
Aggregate, Stone etc.

P

Potash

S

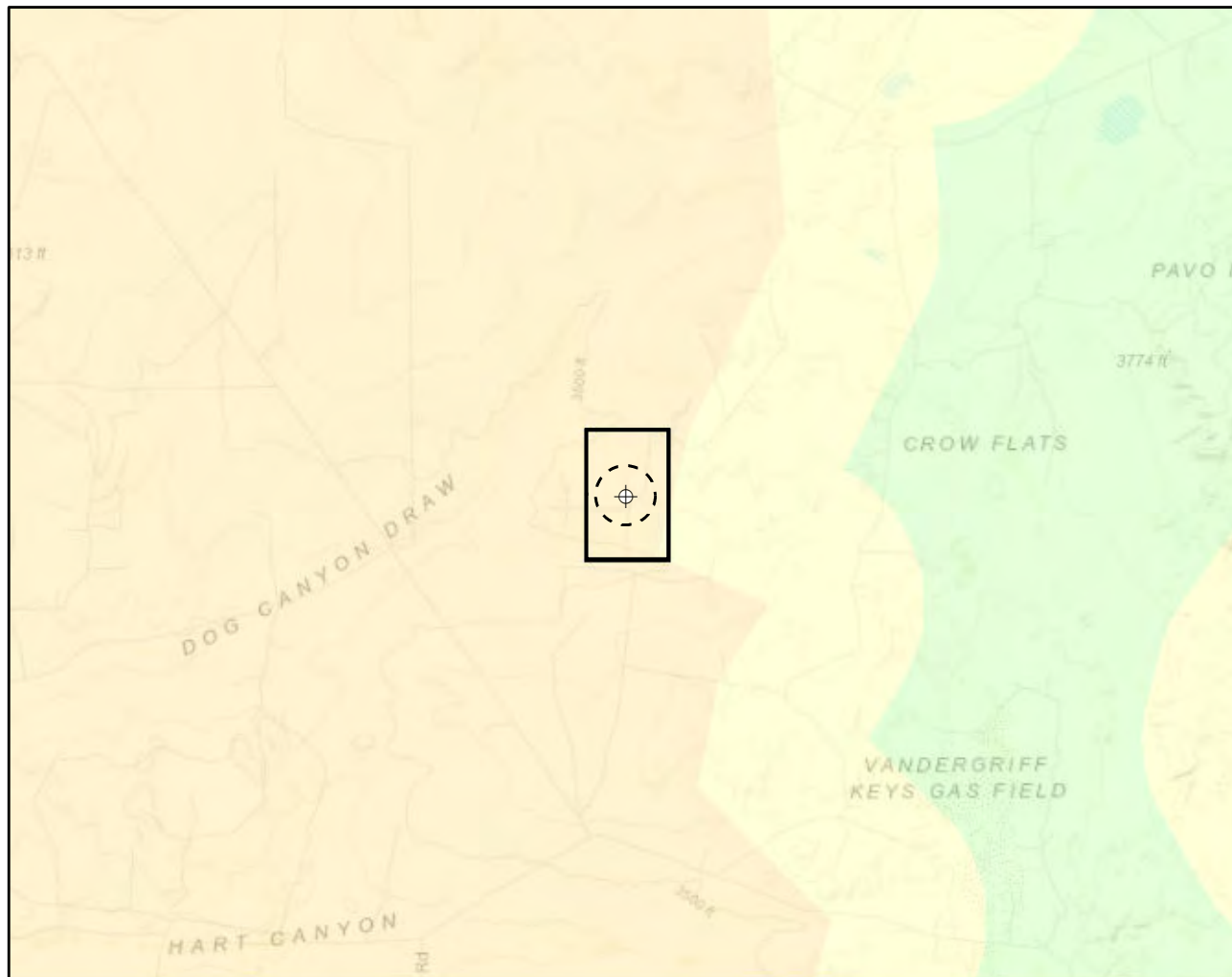
PLSS Townships



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

EMNRD MMD GIS Coordinator

Document Path: C:\Users\scartan\Vertex Resource Group Ltd\Vertex US Operations - General\Environmental Services\10 - Geomatics\SPCEOG 23E-05855 Crow Flats Fed Com #1\Figure X Karst Potential 23E-05855 Reg 17528.mxd



Karst Potential

- 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: 32.890797, -104.217430

NAD 1983 UTM Zone 13N
Date: Dec 13/23



Karst Potential Map Crow Flats Fed Com #1

FIGURE:

X



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

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

VERSATILITY. EXPERTISE.

National Flood Hazard Layer FIRMette

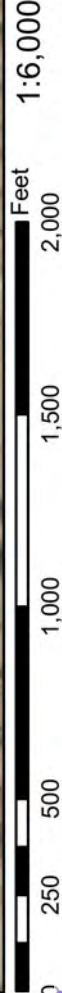


Received by OCD: 7/9/2024 1:19:06 PM

14°13'21"W 32°53'42"N



104°12'44"W 32°53'12"N



Basemap Imagery Source: USGS National Map 2023

Legend

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

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, AE, AH, VE, AP
- With BFE or Depth
Zone AE, AO, AH, VE, AP
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

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

OTHER AREAS

- Area of Minimal Flood Hazard
- Effective LOMRs
- Area of Undetermined Flood Hazard
- 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 12/8/2023 at 6:03 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for **Eddy Area, New Mexico**

Crow Flats Fed Com #1 - Soil Survey



December 8, 2023

Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

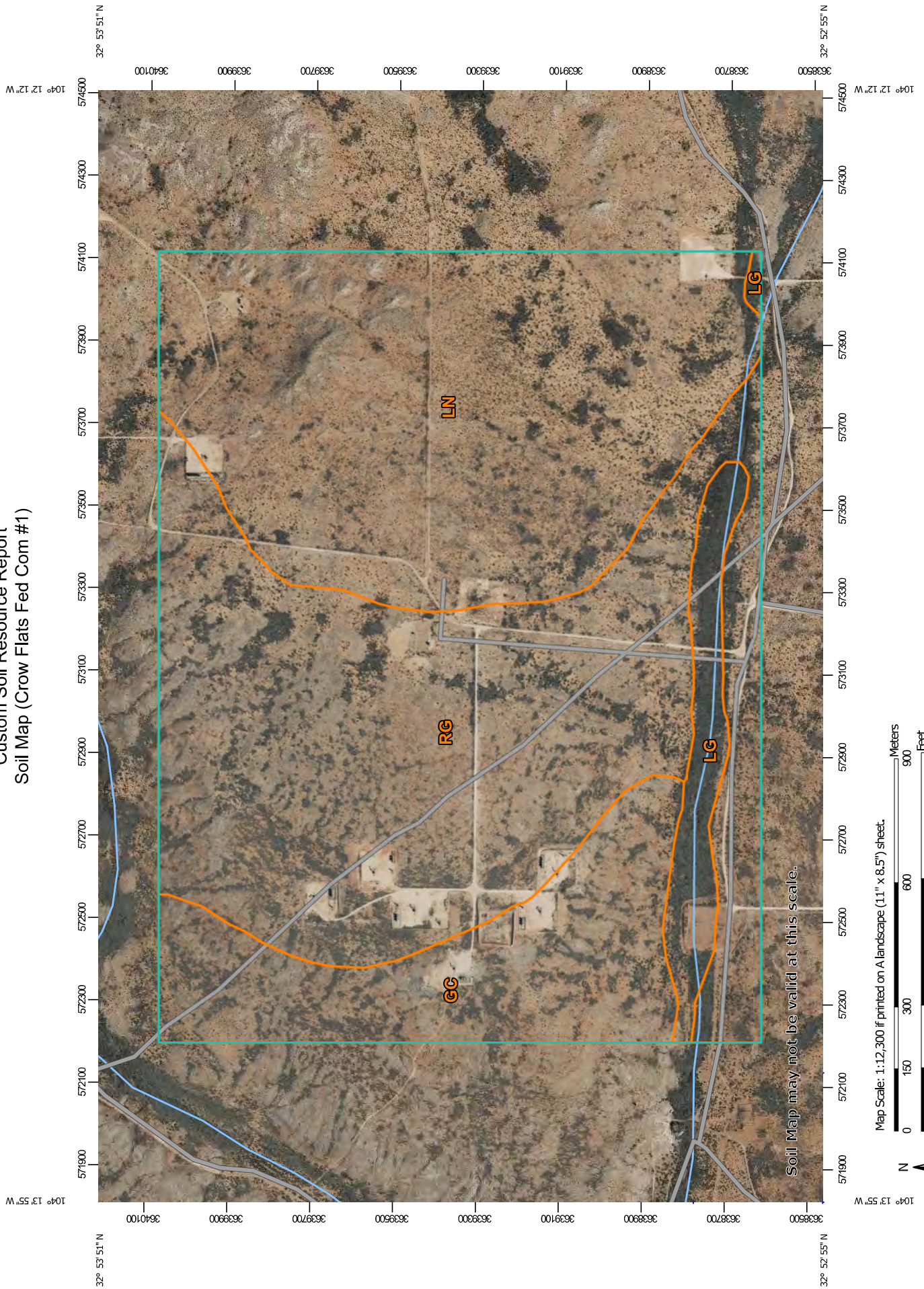
Custom Soil Resource Report

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

Soil Map

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

Custom Soil Resource Report
Soil Map (Crow Flats Fed Com #1)



Custom Soil Resource Report

Map Unit Legend (Crow Flats Fed Com #1)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GC	Gypsum land-Cottonwood complex, 0 to 3 percent slopes	102.0	14.7%
LG	Largo silt loam, overflow, 0 to 1 percent slopes	30.5	4.4%
LN	Largo-Stony land complex, 0 to 25 percent slopes	253.9	36.7%
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	305.6	44.2%
Totals for Area of Interest		692.1	100.0%

Map Unit Descriptions (Crow Flats Fed Com #1)

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

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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.

Custom Soil Resource Report

Eddy Area, New Mexico**GC—Gypsum land-Cottonwood complex, 0 to 3 percent slopes****Map Unit Setting**

National map unit symbol: 1w4g
Elevation: 1,250 to 5,000 feet
Mean annual precipitation: 10 to 25 inches
Mean annual air temperature: 57 to 66 degrees F
Frost-free period: 190 to 225 days
Farmland classification: Not prime farmland

Map Unit Composition

Gypsum land: 60 percent
Cottonwood and similar soils: 30 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gypsum Land**Setting**

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Description of Cottonwood**Setting**

Landform: Ridges, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: bedrock

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 3 to 12 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

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Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 5 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: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R070BB006NM - Gyp Upland
Hydric soil rating: No

Minor Components**Cottonwood**

Percent of map unit: 5 percent
Ecological site: R070BC033NM - Salty Bottomland
Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent
Hydric soil rating: No

LG—Largo silt loam, overflow, 0 to 1 percent slopes**Map Unit Setting**

National map unit symbol: 1w4z
Elevation: 2,000 to 5,700 feet
Mean annual precipitation: 6 to 14 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 180 to 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Largo and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Largo**Setting**

Landform: Plains, alluvial fans
Landform position (three-dimensional): Talf, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Calcareous alluvium

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Typical profile*H1 - 0 to 6 inches: silt loam**H2 - 6 to 60 inches: stratified silt loam to silty clay loam***Properties and qualities***Slope: 0 to 1 percent**Depth to restrictive feature: More than 80 inches**Drainage class: Well drained**Runoff class: Low**Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)**Depth to water table: More than 80 inches**Frequency of flooding: Occasional**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: High (about 11.4 inches)***Interpretive groups***Land capability classification (irrigated): None specified**Land capability classification (nonirrigated): 7c**Hydrologic Soil Group: B**Ecological site: R070BC017NM - Bottomland**Hydric soil rating: No***Minor Components****Pajarito***Percent of map unit: 1 percent**Ecological site: R070BD003NM - Loamy Sand**Hydric soil rating: No***Largo***Percent of map unit: 1 percent**Ecological site: R070BC007NM - Loamy**Hydric soil rating: No***LN—Largo-Stony land complex, 0 to 25 percent slopes****Map Unit Setting***National map unit symbol: 1w50**Elevation: 2,000 to 5,700 feet**Mean annual precipitation: 6 to 14 inches**Mean annual air temperature: 57 to 70 degrees F**Frost-free period: 180 to 260 days**Farmland classification: Not prime farmland***Map Unit Composition***Largo and similar soils: 41 percent*

Custom Soil Resource Report

Stony land: 40 percent

Minor components: 19 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Largo**Setting**

Landform: Plains, alluvial fans

Landform position (three-dimensional): Talf, rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Calcareous alluvium

Typical profile

H1 - 0 to 4 inches: loam

H2 - 4 to 47 inches: silt loam

H3 - 47 to 65 inches: loam

Properties and qualities

Slope: 1 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 10.0 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: R070BC007NM - Loamy

Hydric soil rating: No

Minor Components**Simona**

Percent of map unit: 7 percent

Ecological site: R070BD002NM - Shallow Sandy

Hydric soil rating: No

Largo

Percent of map unit: 6 percent

Ecological site: R070BC017NM - Bottomland

Hydric soil rating: No

Pajarito

Percent of map unit: 6 percent

Ecological site: R070BD003NM - Loamy Sand

Hydric soil rating: No

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RG—Reeves-Gypsum land complex, 0 to 3 percent slopes**Map Unit Setting**

National map unit symbol: 1w5f

Elevation: 1,250 to 5,000 feet

Mean annual precipitation: 10 to 25 inches

Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 190 to 235 days

Farmland classification: Not prime farmland

Map Unit Composition

Reeves and similar soils: 55 percent

Gypsum land: 30 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reeves**Setting**

Landform: Ridges, plains, hills

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

Landform position (three-dimensional): Side slope, head slope, nose slope, crest

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Residuum weathered from gypsum

Typical profile

H1 - 0 to 8 inches: loam

H2 - 8 to 32 inches: clay loam

H3 - 32 to 60 inches: gypsiferous material

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Gypsum, maximum content: 80 percent

Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): 3s

Land capability classification (nonirrigated): 7s

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Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Description of Gypsum Land**Setting**

Landform: Ridges, plains, hills
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from gypsum

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8s
Hydric soil rating: No

Minor Components**Reagan**

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Largo

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Cottonwood

Percent of map unit: 5 percent
Ecological site: R070BC033NM - Salty Bottomland
Hydric soil rating: No

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United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for **Eddy Area, New Mexico**

Crow Flats Fed Com #1 - Ecological Sites



December 8, 2023

Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

Custom Soil Resource Report

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

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

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

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

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

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

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

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

Soil Information for All Uses

Ecological Sites

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

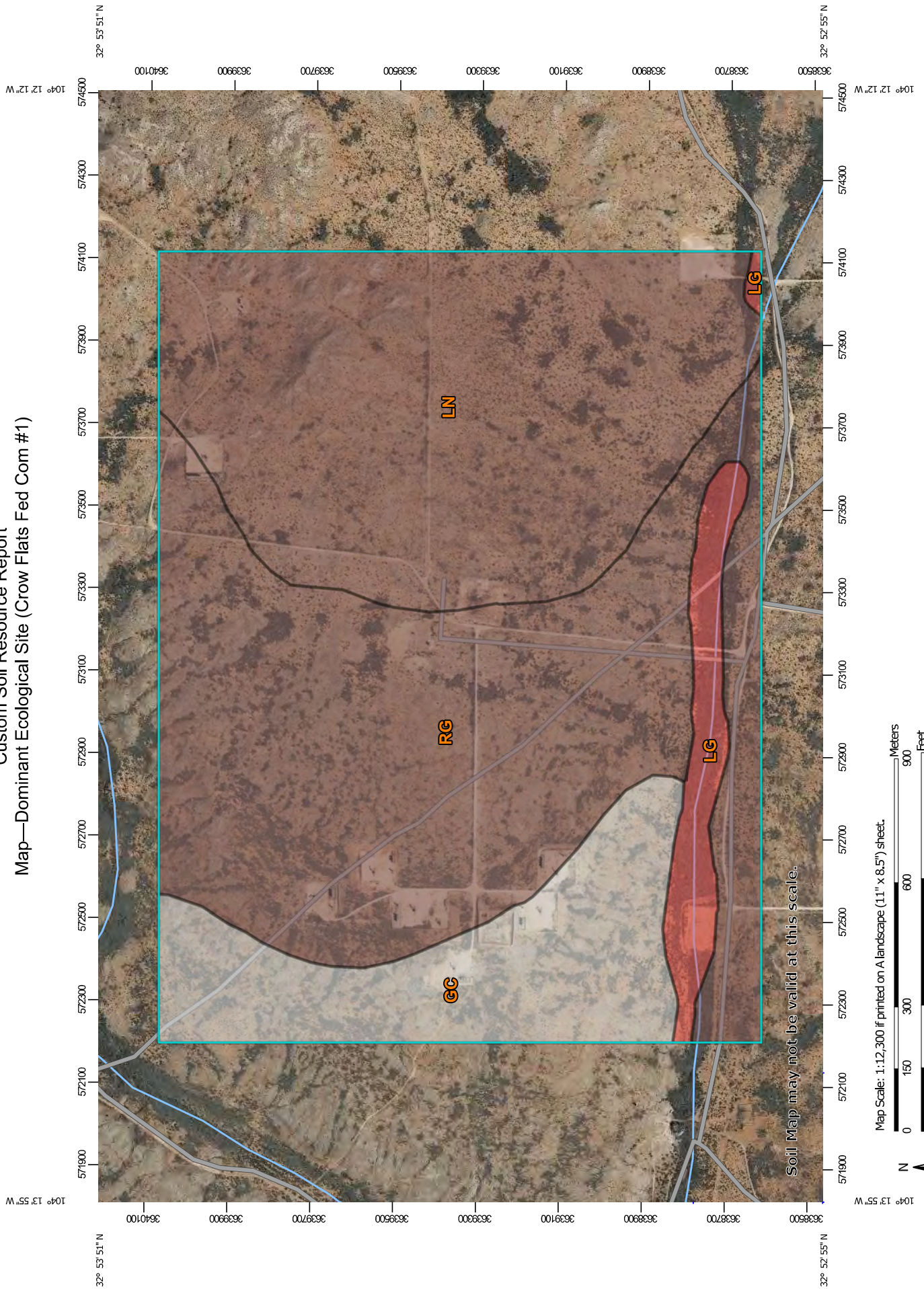
All Ecological Sites — (Crow Flats Fed Com #1)

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

Custom Soil Resource Report
Map—Dominant Ecological Site (Crow Flats Fed Com #1)



MAP INFORMATION

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

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.

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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.

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

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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)

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

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

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.

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.

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

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

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

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

Custom Soil Resource Report

Table—Ecological Sites by Map Unit Component (Crow Flats Fed Com #1)

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
GC	Gypsum land-Cottonwood complex, 0 to 3 percent slopes	Gypsum land (60%)		102.0	14.7%
		Cottonwood (30%)	R070BB006NM — Gyp Upland		
		Cottonwood (5%)	R070BC033NM — Salty Bottomland		
		Rock outcrop (5%)			
LG	Largo silt loam, overflow, 0 to 1 percent slopes	Largo (98%)	R070BC017NM — Bottomland	30.5	4.4%
		Largo (1%)	R070BC007NM — Loamy		
		Pajarito (1%)	R070BD003NM — Loamy Sand		
LN	Largo-Stony land complex, 0 to 25 percent slopes	Largo (41%)	R070BC007NM — Loamy	253.9	36.7%
		Stony land (40%)			
		Simona (7%)	R070BD002NM — Shallow Sandy		
		Largo (6%)	R070BC017NM — Bottomland		
		Pajarito (6%)	R070BD003NM — Loamy Sand		
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	Reeves (55%)	R070BC007NM — Loamy	305.6	44.2%
		Gypsum land (30%)			
		Cottonwood (5%)	R070BC033NM — Salty Bottomland		
		Largo (5%)	R070BC007NM — Loamy		
		Reagan (5%)	R070BC007NM — Loamy		
Totals for Area of Interest				692.1	100.0%

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

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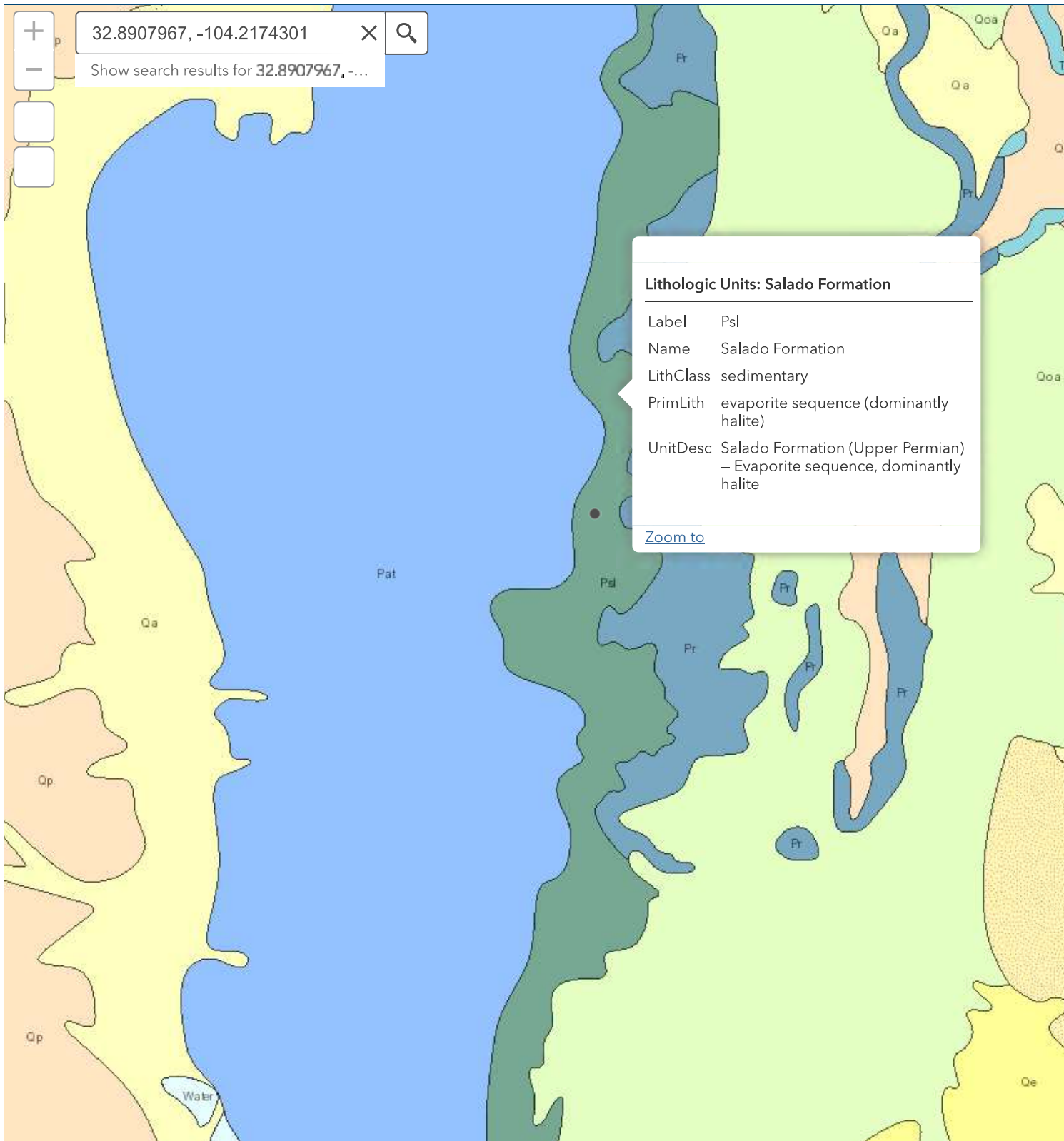
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NMBGMR Interactive Resources Map



APPENDIX B – Daily Field and Sampling Reports

Daily Site Visit Report



Client	EOG Resources Inc.	Inspection Date	4/25/2024
Site Location Name	Crow Flats Federal Com #1	API #	30-015-26299
Client Contact Name	Chase Settle	Project Owner	
Client Contact Phone #	575-703-6537	Project Manager	
Project Reference #			
Unique Project ID			

Summary of Times

Arrived at Site 4/25/2024 11:34 AM

Departed Site 4/25/2024 12:30 PM

Field Notes

11:34 Arrived on site to collect more wall samples to fulfill the 200 square-foot requirement.

12:39 Collected WES24-07 and WES24-08 at 0-6', 6-12', and 12-17' bgs. All samples field screened under strictest criteria.

Next Steps & Recommendations

- 1 Send samples to lab for analysis.

Daily Site Visit Report



Site Photos

Viewing Direction: North



Final excavation

Viewing Direction: Northeast



Final excavation

Viewing Direction: Southeast



Final excavation

Viewing Direction: South



Final excavation

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' or similar initials, written over a horizontal line.

Signature

APPENDIX C – Notifications

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: Fwd: Crow Flats Federal Com 1 (nPCH0514328346) Sampling notification
Date: November 28, 2023 2:53:09 PM
Attachments: [image001.png](#)

Get [Outlook for iOS](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, November 28, 2023 2:46:16 PM
To: ocd.enviro@emnrd.nm.gov <ocd.enviro@emnrd.nm.gov>; blm_nm_cfo_spill@blm.gov <blm_nm_cfo_spill@blm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling notification

Good afternoon,

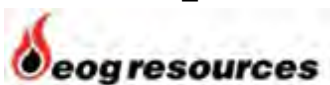
EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Crow Flats Federal Com 1
K-30-16S-28E
Eddy County, NM
nPCH0514328346

Sampling will begin at 8:00 a.m. on Friday, December 1, 2023.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: December 4, 2023 8:25:01 AM
Attachments: [image001.png](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Monday, December 4, 2023 8:22 AM
To: ocd.enviro@emnrd.nm.gov; blm_nm_cfo_spill@blm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

Good morning,

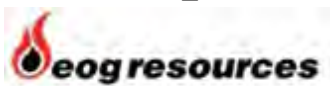
EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Crow Flats Federal Com 1
K-30-16S-28E
Eddy County, NM
nPCH0514328346

Sampling will begin at 9:00 a.m. on Wednesday, December 6, 2023, and continue through Thursday, December 7, 2023.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: Fwd: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: December 11, 2023 6:09:29 AM
Attachments: [image001.png](#)

Get [Outlook for iOS](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Friday, December 8, 2023 10:04:56 AM
To: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 12/13/2023 @ 08:30

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 12/14/2023 @ 08:30

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

Tina Huerta

Regulatory Specialist

Direct: 575.748.4168

Cell: 575.703.3121

Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: Fwd: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: December 12, 2023 7:45:24 PM
Attachments: [image001.png](#)

Get [Outlook for iOS](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, December 12, 2023 3:36:28 PM
To: blm_nm_cfo_spill@blm.gov <blm_nm_cfo_spill@blm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 12/15/2023 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for
incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 12/18/2023 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505
Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: December 18, 2023 1:55:27 PM
Attachments: [image001.png](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Monday, December 18, 2023 1:55 PM
To: blm_nm_cfo_spill@blm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 12/21/2023 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 12/22/2023 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

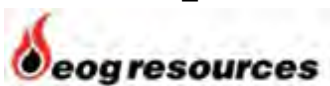
- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505
Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: January 2, 2024 8:55:36 AM
Attachments: [image001.png](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, December 27, 2023 3:11 PM
To: blm_nm_cfo_spill@blm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/02/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/03/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/04/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/05/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

Thank you,

Tina Huerta

Regulatory Specialist

Direct: 575.748.4168

Cell: 575.703.3121

Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: January 4, 2024 10:35:37 AM
Attachments: [image001.png](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, January 4, 2024 10:35 AM
To: blm_nm_cfo_spill@blm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/08/2024 @ 11:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/09/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/10/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/11/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/12/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505
Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: Thursday, January 18, 2024 7:16:48 AM
Attachments: [image001.png](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Tuesday, January 9, 2024 10:39 AM
To: blm_nm_cfo_spill@blm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/12/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

Thank you,

Tina Huerta

Regulatory Specialist

Direct: 575.748.4168

Cell: 575.703.3121

Email: tina_huerta@eogresources.com



Artesia Division

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: Fwd: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification
Date: January 11, 2024 12:35:46 AM
Attachments: [image001.png](#)

Get [Outlook for iOS](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, January 10, 2024 4:37:26 PM
To: blm_nm_cfo_spill@blm.gov <blm_nm_cfo_spill@blm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling Notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/16/2024 @ 11:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/17/2024 @ 11:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

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If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/18/2024 @ 11:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-

141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/19/2024 @ 11:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

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New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

Thank you,

Tina Huerta

Regulatory Specialist

Direct: 575.748.4168

Cell: 575.703.3121

Email: tina_huerta@eogresources.com



From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: Crow Flats Federal Com 1 (nPCH0514328346) Sampling notification
Date: Thursday, January 18, 2024 9:19:41 AM
Attachments: [image001.png](#)

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, January 18, 2024 9:19 AM
To: blm_nm_cfo_spill@blm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Subject: Crow Flats Federal Com 1 (nPCH0514328346) Sampling notification

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),
The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/22/2024 @ 10:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in**

the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/23/2024 @ 10:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

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New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/24/2024 @ 10:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

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New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/25/2024 @ 10:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle

Rep Safety & Environmental Sr

EOG Resources

104 S. 4th Street

Artesia, NM 88210

575-748-4171 (Office)

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New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

To whom it may concern (c/o Tina Huerta for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release (C-141N)*, for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 01/26/2024 @ 10:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
Rep Safety & Environmental Sr
EOG Resources
104 S. 4th Street
Artesia, NM 88210
575-748-4171 (Office)

Additional Instructions: Site navigation information can be provided through email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

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If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive
Santa Fe, NM 87505
Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 328373
Date: Monday, April 1, 2024 10:09:20 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, April 1, 2024 11:08 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 328373

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/04/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 328381
Date: Monday, April 1, 2024 10:18:04 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, April 1, 2024 11:16 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 328381

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/05/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 328361
Date: Monday, April 1, 2024 10:09:16 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Monday, April 1, 2024 10:55 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 328361

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/03/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332327
Date: Thursday, April 11, 2024 8:30:21 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, April 11, 2024 9:17 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332327

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/16/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332329
Date: Thursday, April 11, 2024 8:30:27 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, April 11, 2024 9:28 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332329

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/17/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332345
Date: Thursday, April 11, 2024 8:38:34 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, April 11, 2024 9:38 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332345

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/19/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332316
Date: Thursday, April 11, 2024 8:30:15 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, April 11, 2024 9:07 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332316

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/15/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [James Kennedy](#)
To: [Chase Settle](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332336
Date: Thursday, April 11, 2024 8:30:38 AM

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Thursday, April 11, 2024 9:30 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 332336

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/18/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in**

date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [Chase Settle](#)
To: [Chance Dixon](#)
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 336422
Date: Tuesday, April 23, 2024 4:08:26 PM

From: James Kennedy <James_Kennedy@eogresources.com>
Sent: Tuesday, April 23, 2024 8:57 AM
To: Chase Settle <Chase_Settle@eogresources.com>
Subject: FW: The Oil Conservation Division (OCD) has accepted the application, Application ID: 336422

James F. Kennedy

Environmental Supervisor
Midland Division
C: 432-258-4346
O: 432-848-9146



From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Tuesday, April 23, 2024 9:57 AM
To: James Kennedy <James_Kennedy@eogresources.com>
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 336422

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern (c/o James Kennedy for EOG RESOURCES INC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nPCH0514328346.

The sampling event is expected to take place:

When: 04/25/2024 @ 08:00

Where: K-30-16S-28E 1980 FSL 1980 FWL (32.8907967,-104.2174301)

Additional Information: Chase Settle
575-703-6537
chase_settle@eogresources.com

Additional Instructions: Directions to the site can be provided after an email request

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

APPENDIX D – Laboratory Data Reports and Chain of Custody Forms



Environment Testing

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 02, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2312C17

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 12/21/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2312C17
Date Reported: 1/2/2024

CLIENT: EOG Client Sample ID: WES23-01
Project: Crow Flats Fed Com 1 Collection Date: 12/18/2023 2:05:00 PM
Lab ID: 2312C17-001 Matrix: MEOH (SOIL) Received Date: 12/21/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	300	60		mg/Kg	20	12/21/2023 2:12:28 PM	79551
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	4200	95		mg/Kg	10	12/22/2023 5:28:09 PM	79548
Motor Oil Range Organics (MRO)	2800	470		mg/Kg	10	12/22/2023 5:28:09 PM	79548
Surr: DNOP	0	69-147	S	%Rec	10	12/22/2023 5:28:09 PM	79548
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	77	23		mg/Kg	5	12/21/2023 12:15:00 PM	GS10201
Surr: BFB	220	15-244		%Rec	5	12/21/2023 12:15:00 PM	GS10201
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.12		mg/Kg	5	12/21/2023 12:15:00 PM	R102015
Toluene	ND	0.23		mg/Kg	5	12/21/2023 12:15:00 PM	R102015
Ethylbenzene	0.91	0.23		mg/Kg	5	12/21/2023 12:15:00 PM	R102015
Xylenes, Total	1.6	0.46		mg/Kg	5	12/21/2023 12:15:00 PM	R102015
Surr: 4-Bromofluorobenzene	130	39.1-146		%Rec	5	12/21/2023 12:15:00 PM	R102015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2312C17**

Date Reported: 1/2/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES23-02

Project: Crow Flats Fed Com 1

Collection Date: 12/18/2023 2:10:00 PM

Lab ID: 2312C17-002

Matrix: MEOH (SOIL) **Received Date:** 12/21/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	240	60		mg/Kg	20	12/21/2023 2:27:38 PM	79551
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	1800	96		mg/Kg	10	12/22/2023 6:08:29 PM	79548
Motor Oil Range Organics (MRO)	1300	480		mg/Kg	10	12/22/2023 6:08:29 PM	79548
Surr: DNOP	0	69-147	S	%Rec	10	12/22/2023 6:08:29 PM	79548
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	35	4.2		mg/Kg	1	12/21/2023 12:37:00 PM	GS10201
Surr: BFB	277	15-244	S	%Rec	1	12/21/2023 12:37:00 PM	GS10201
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.021		mg/Kg	1	12/21/2023 12:37:00 PM	R102015
Toluene	ND	0.042		mg/Kg	1	12/21/2023 12:37:00 PM	R102015
Ethylbenzene	0.18	0.042		mg/Kg	1	12/21/2023 12:37:00 PM	R102015
Xylenes, Total	0.48	0.083		mg/Kg	1	12/21/2023 12:37:00 PM	R102015
Surr: 4-Bromofluorobenzene	190	39.1-146	S	%Rec	1	12/21/2023 12:37:00 PM	R102015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 2 of 7

Analytical Report

Lab Order 2312C17

Date Reported: 1/2/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES23-03

Project: Crow Flats Fed Com 1

Collection Date: 12/18/2023 2:15:00 PM

Lab ID: 2312C17-003

Matrix: MEOH (SOIL)

Received Date: 12/21/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	130	60		mg/Kg	20	12/21/2023 2:42:48 PM	79551
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	13000	200		mg/Kg	20	12/22/2023 6:48:47 PM	79548
Motor Oil Range Organics (MRO)	6100	990		mg/Kg	20	12/22/2023 6:48:47 PM	79548
Surr: DNOP	0	69-147	S	%Rec	20	12/22/2023 6:48:47 PM	79548
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	530	21		mg/Kg	5	12/21/2023 12:59:00 PM	GS10201
Surr: BFB	587	15-244	S	%Rec	5	12/21/2023 12:59:00 PM	GS10201
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.10		mg/Kg	5	12/21/2023 12:59:00 PM	R102015
Toluene	0.75	0.21		mg/Kg	5	12/21/2023 12:59:00 PM	R102015
Ethylbenzene	6.1	0.21		mg/Kg	5	12/21/2023 12:59:00 PM	R102015
Xylenes, Total	11	0.41		mg/Kg	5	12/21/2023 12:59:00 PM	R102015
Surr: 4-Bromofluorobenzene	256	39.1-146	S	%Rec	5	12/21/2023 12:59:00 PM	R102015

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 3 of 7

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312C17

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-79551	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 79551	RunNo: 102021								
Prep Date: 12/21/2023	Analysis Date: 12/21/2023	SeqNo: 3765804	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-79551	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 79551	RunNo: 102021								
Prep Date: 12/21/2023	Analysis Date: 12/21/2023	SeqNo: 3765805	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312C17
02-Jan-24

Client: EOG
Project: Crow Flats Fed Com 1

Sample ID: MB-79548	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 79548	RunNo: 102022								
Prep Date: 12/21/2023	Analysis Date: 12/21/2023	SeqNo: 3764561	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		88.4	69	147			

Sample ID: LCS-79548	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 79548	RunNo: 102022								
Prep Date: 12/21/2023	Analysis Date: 12/21/2023	SeqNo: 3764562	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.4	61.9	130			
Surr: DNOP	3.8		5.000		75.7	69	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 7

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312C17

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102015		RunNo: 102015							
Prep Date:	Analysis Date: 12/21/2023		SeqNo: 3764420		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.9	70	130			
Surr: BFB	2200		1000		222	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102015		RunNo: 102015							
Prep Date:	Analysis Date: 12/21/2023		SeqNo: 3764421		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		110	15	244			

Sample ID: lcs-79509	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102015		RunNo: 102015							
Prep Date: 12/19/2023	Analysis Date: 12/21/2023		SeqNo: 3765287		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	70	130			
Surr: BFB	2200		1000		217	15	244			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 6 of 7

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312C17

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: R102015	RunNo: 102015								
Prep Date:	Analysis Date: 12/21/2023	SeqNo: 3764443	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	70	130			
Toluene	0.98	0.050	1.000	0	97.8	70	130			
Ethylbenzene	1.0	0.050	1.000	0	100	70	130			
Xylenes, Total	3.0	0.10	3.000	0	101	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	39.1	146			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: R102015	RunNo: 102015								
Prep Date:	Analysis Date: 12/21/2023	SeqNo: 3764445	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	39.1	146			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit



Environment Testin

Eurofins Environment Testing South
Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2312C17

RcptNo: 1

Received By: Tracy Casarrubias

12/21/2023 7:45:00 AM

Completed By: Tracy Casarrubias

12/21/2023 8:00:14 AM

Reviewed By:

SCM 12/21/23

Chain of Custody1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐2. How was the sample delivered? CourierLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by:

m 12/21/23

Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address, phone number and Email/Fax are missing on COC- TMC 12/21/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes	Yogi		

Chain-of-Custody Record

Client: EOG (Vertex)

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 Same day

Project Name: Crow Flats Fed Con #1

Project #:

23E-05855

Project Manager:

C. Dixon

Sampler: A. Mohr

On Ice: ☒ Yes ☐ No 40g

of Coolers: 1

Cooler Temp (including CF): 7.8 ± 0.2.8 (°C)

Container Type and # Preservative Type HEAL No. 2312C17

Date	Time	Matrix	Sample Name
12/18/13	14:05	Soil	WES23-01
1	14:10	1	WES23-02
1	14:15	1	WES23-03

Container Type and #	Preservative Type	HEAL No.
402 jar	ice	001
1	1	002
1	1	003

Date:

Time:

Relinquished by:

Received by:

Via:

Date

Time

Remarks:

results to: cdixon@vertex.ca

Relinquished by:

Received by:

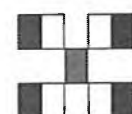
Via:

Date

Time

Remarks:

Direct Bill EOG



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

<input checked="" type="checkbox"/> BTEX / MTBE / TMB's (8021)
<input checked="" type="checkbox"/> TPH:8015D/GRO / DRO / MRO
8081 Pesticides/8082 PCB's
EDB (Method 504.1)
PAHs by 8310 or 8270SIMS
RCRA 8 Metals
<input checked="" type="checkbox"/> C, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄
8260 (VOA)
8270 (Semi-VOA)
Total Coliform (Present/Absent)



Environment Testing

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 02, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2312D12

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 12/22/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2312D12

Date Reported: 1/2/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES23-01

Project: Crow Flats Fed Com 1

Collection Date: 12/21/2023 9:45:00 AM

Lab ID: 2312D12-001

Matrix: MEOH (SOIL)

Received Date: 12/22/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	12/22/2023 2:05:02 PM	79565
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	7700	190		mg/Kg	20	12/22/2023 12:34:35 PM	79574
Motor Oil Range Organics (MRO)	3200	940		mg/Kg	20	12/22/2023 12:34:35 PM	79574
Surr: DNOP	0	69-147	S	%Rec	20	12/22/2023 12:34:35 PM	79574
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	380	23		mg/Kg	5	12/22/2023 12:15:00 PM	GS10204
Surr: BFB	458	15-244	S	%Rec	5	12/22/2023 12:15:00 PM	GS10204
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	0.28	0.11		mg/Kg	5	12/22/2023 12:15:00 PM	BS10204
Toluene	0.85	0.23		mg/Kg	5	12/22/2023 12:15:00 PM	BS10204
Ethylbenzene	9.6	0.23		mg/Kg	5	12/22/2023 12:15:00 PM	BS10204
Xylenes, Total	16	0.45		mg/Kg	5	12/22/2023 12:15:00 PM	BS10204
Surr: 4-Bromofluorobenzene	276	39.1-146	S	%Rec	5	12/22/2023 12:15:00 PM	BS10204

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 1 of 7

Analytical Report

Lab Order 2312D12

Date Reported: 1/2/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES23-02

Project: Crow Flats Fed Com 1

Collection Date: 12/21/2023 9:50:00 AM

Lab ID: 2312D12-002

Matrix: MEOH (SOIL)

Received Date: 12/22/2023 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	12/22/2023 2:17:27 PM	79565
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	6700	180		mg/Kg	20	12/22/2023 12:45:16 PM	79574
Motor Oil Range Organics (MRO)	2800	900		mg/Kg	20	12/22/2023 12:45:16 PM	79574
Surr: DNOP	0	69-147	S	%Rec	20	12/22/2023 12:45:16 PM	79574
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	490	22		mg/Kg	5	12/22/2023 12:37:00 PM	GS10204
Surr: BFB	537	15-244	S	%Rec	5	12/22/2023 12:37:00 PM	GS10204
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	0.45	0.11		mg/Kg	5	12/22/2023 12:37:00 PM	BS10204
Toluene	0.34	0.22		mg/Kg	5	12/22/2023 12:37:00 PM	BS10204
Ethylbenzene	9.5	0.22		mg/Kg	5	12/22/2023 12:37:00 PM	BS10204
Xylenes, Total	8.3	0.43		mg/Kg	5	12/22/2023 12:37:00 PM	BS10204
Surr: 4-Bromofluorobenzene	322	39.1-146	S	%Rec	5	12/22/2023 12:37:00 PM	BS10204

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Page 2 of 7

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312D12

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-79565	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 79565	RunNo: 102051								
Prep Date: 12/22/2023	Analysis Date: 12/22/2023	SeqNo: 3768118	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-79565	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 79565	RunNo: 102051								
Prep Date: 12/22/2023	Analysis Date: 12/22/2023	SeqNo: 3768119	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312D12

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: LCS-79574	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 79574	RunNo: 102050								
Prep Date: 12/22/2023	Analysis Date: 12/22/2023	SeqNo: 3766039	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.4	61.9	130			
Surr: DNOP	4.7		5.000		94.9	69	147			

Sample ID: MB-79574	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 79574	RunNo: 102050								
Prep Date: 12/22/2023	Analysis Date: 12/22/2023	SeqNo: 3766040	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		86.5	69	147			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312D12

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102049		RunNo: 102049							
Prep Date:	Analysis Date: 12/22/2023		SeqNo: 3765997		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	70	130			
Surr: BFB	2300		1000		231	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102049		RunNo: 102049							
Prep Date:	Analysis Date: 12/22/2023		SeqNo: 3765998		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	15	244			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2312D12

02-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: BS102049		RunNo: 102049							
Prep Date:	Analysis Date: 12/22/2023		SeqNo: 3766013		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	101	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.1	0.050	1.000	0	106	70	130			
Xylenes, Total	3.2	0.10	3.000	0	107	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	39.1	146			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: BS102049		RunNo: 102049							
Prep Date:	Analysis Date: 12/22/2023		SeqNo: 3766014		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	39.1	146			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit



Environment Testin™

Eurofins Environment Testing South
Central, LLC4901 Hawkins NE
Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2312D12

RcptNo: 1

Received By: Tracy Casarrubias

12/22/2023 7:45:00 AM

Completed By: Tracy Casarrubias

12/22/2023 8:14:37 AM

Reviewed By: *One*

12/22/23

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *WJ 12/22/23*Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address, phone number, and Email/Fax are missing on COC- TMC 12/22/23

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	6.0	Good	Yes	Morty		

Released to Imaging: 7/9/2024 2:25:28 PM

☒ Rush some day

snout to tail length

Project #: 23E-05855

Project Manager:

☐ Level 4 (Full Validation)

C. Dixon

Sampler: A. Mahu

On Ice:

of Coolers:

Cooler Temp(including CF): $5.8 + 0.2 = 6.0$ (°C)

MTBE / TMB's (8021)

15D(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)

[illegible]

Received by:

Via:

Date Time

2

2

$$\begin{array}{r} 12 \\ 21 \overline{) 23} \\ \underline{12} \\ 11 \end{array}$$

Received by:

Via:

Date Time

A

12/22/23

Remarks:

results to: cdixon@vertex.ca

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request



*Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

January 11, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2401129

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 1 sample(s) on 1/4/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401129

11-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-79738		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 79738		RunNo: 102237						
Prep Date: 1/4/2024		Analysis Date: 1/4/2024		SeqNo: 3775192		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-79738		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 79738		RunNo: 102237						
Prep Date: 1/4/2024		Analysis Date: 1/4/2024		SeqNo: 3775193		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.8	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401129

11-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: LCS-79731	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 79731	RunNo: 102236								
Prep Date: 1/4/2024	Analysis Date: 1/4/2024	SeqNo: 3774135	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	61.9	130			
Surr: DNOP	5.7		5.000		115	69	147			

Sample ID: MB-79731	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 79731	RunNo: 102236								
Prep Date: 1/4/2024	Analysis Date: 1/4/2024	SeqNo: 3774136	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		101	69	147			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401129

11-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102232		RunNo: 102232							
Prep Date:	Analysis Date: 1/4/2024		SeqNo: 3773960		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	70	130			
Surr: BFB	2100		1000		212	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102232		RunNo: 102232							
Prep Date:	Analysis Date: 1/4/2024		SeqNo: 3773961		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	15	244			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401129

11-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: BS102232		RunNo: 102232							
Prep Date:	Analysis Date: 1/4/2024		SeqNo: 3773965		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.7	70	130			
Toluene	0.92	0.050	1.000	0	91.9	70	130			
Ethylbenzene	0.94	0.050	1.000	0	93.8	70	130			
Xylenes, Total	2.8	0.10	3.000	0	94.4	70	130			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.8	39.1	146			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: BS102232		RunNo: 102232							
Prep Date:	Analysis Date: 1/4/2024		SeqNo: 3773966		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.2	39.1	146			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit



Environment Testin

Eurofins Environment Testing South
Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG Work Order Number: 2401129 RcptNo: 1

Received By: Tracy Casarrubias 1/4/2024 7:20:00 AM

Completed By: Tracy Casarrubias 1/4/2024 7:35:13 AM

Reviewed By: CMC 1/4/24

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: jm 1/4/24Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: Mailing address, phone number and Email/Fax are missing on COC- TMC 1/4/24

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes	Yogi		



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

January 05, 2024

CHANCE DIXON

VERTEX RESOURCE GROUP

420 SOUTH MAIN, SUITE 202

TULSA, OK 74103

RE: CROW FLATS FED COM 1

Enclosed are the results of analyses for samples received by the laboratory on 01/05/24 11:02.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Halocetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading 'Celey D. Keene' in a cursive script.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	01/05/2024	Sampling Date:	01/04/2024
Reported:	01/05/2024	Sampling Type:	Soil
Project Name:	CROW FLATS FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	23E - 05855	Sample Received By:	Shalyn Rodriguez
Project Location:	EOG		

Sample ID: WES 23 - 03 0-4.0' (H240045-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
Chloride	784	16.0	01/05/2024	ND	416	104	3.77
TPH 8015M		mg/kg		Analyzed By: MS			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
GRO C6-C10*	<10.0	10.0	01/05/2024	ND	181	90.7	1.32
DRO >C10-C28*	<10.0	10.0	01/05/2024	ND	191	95.4	0.846
EXT DRO >C28-C36	<10.0	10.0	01/05/2024	ND			

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

Volatile 8260		mg/kg		Analyzed By: MS			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
Methyl tert-butyl ether	<0.050	0.050	01/05/2024	ND	0.944	94.4	1.16
Benzene*	<0.025	0.025	01/05/2024	ND	0.461	92.3	3.61
Toluene*	<0.025	0.025	01/05/2024	ND	0.460	91.9	5.49
Ethylbenzene*	<0.025	0.025	01/05/2024	ND	0.486	97.2	3.49
m+p - Xylene*	<0.050	0.050	01/05/2024	ND	0.993	99.3	3.54
o-Xylene*	<0.025	0.025	01/05/2024	ND	0.468	93.6	3.56
1,3,5-Trimethylbenzene*	<0.025	0.025	01/05/2024	ND	0.483	96.6	6.05
1,2,4-Trimethylbenzene*	<0.025	0.025	01/05/2024	ND	0.491	98.2	3.09

Surrogate: Toluene-d8 96.7 % 90.4-109

Surrogate: 4-Bromofluorobenzene 97.6 % 82.5-117

Cardinal Laboratories

*=Accredited Analyte

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Ally D. Keene

Celely D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	01/05/2024	Sampling Date:	01/04/2024
Reported:	01/05/2024	Sampling Type:	Soil
Project Name:	CROW FLATS FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	23E - 05855	Sample Received By:	Shalyn Rodriguez
Project Location:	EOG		

Sample ID: WES 23 - 04 0-4.0' (H240045-02)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
Chloride	752	16.0	01/05/2024	ND	416	104	3.77
TPH 8015M		mg/kg		Analyzed By: MS			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
GRO C6-C10*	<10.0	10.0	01/05/2024	ND	181	90.7	1.32
DRO >C10-C28*	86.6	10.0	01/05/2024	ND	191	95.4	0.846
EXT DRO >C28-C36	16.7	10.0	01/05/2024	ND			

Surrogate: 1-Chlorooctane	105 %	48.2-134							
Surrogate: 1-Chlorooctadecane	124 %	49.1-148							
Volatile 8260		mg / kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Methyl tert-butyl ether	<0.050	0.050	01/05/2024	ND	0.944	94.4	1.00	1.16	
Benzene*	<0.025	0.025	01/05/2024	ND	0.461	92.3	0.500	3.61	
Toluene*	<0.025	0.025	01/05/2024	ND	0.460	91.9	0.500	5.49	
Ethylbenzene*	<0.025	0.025	01/05/2024	ND	0.486	97.2	0.500	3.49	
m+p - Xylene*	<0.050	0.050	01/05/2024	ND	0.993	99.3	1.00	3.54	
o-Xylene*	<0.025	0.025	01/05/2024	ND	0.468	93.6	0.500	3.56	
1,3,5-Trimethylbenzene*	<0.025	0.025	01/05/2024	ND	0.483	96.6	0.500	6.05	
1,2,4-Trimethylbenzene*	<0.025	0.025	01/05/2024	ND	0.491	98.2	0.500	3.09	

Surrogate: Toluene-d8 96.5 % 90.4-109

Surrogate: 4-Bromofluorobenzene 97.7 % 82.5-117

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*=Accredited Analyte

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Ally D. Keene

Ceiley D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE GROUP
CHANCE DIXON
420 SOUTH MAIN, SUITE 202
TULSA OK, 74103
Fax To: NA

Received:	01/05/2024	Sampling Date:	01/03/2024
Reported:	01/05/2024	Sampling Type:	Soil
Project Name:	CROW FLATS FED COM 1	Sampling Condition:	Cool & Intact
Project Number:	23E - 05855	Sample Received By:	Shalyn Rodriguez
Project Location:	EOG		

Sample ID: WES 23 - 01 0-4' (H240045-03)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
Chloride	480	16.0	01/05/2024	ND	416	104	3.77
TPH 8015M		mg/kg		Analyzed By: MS			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
GRO C6-C10*	<10.0	10.0	01/05/2024	ND	181	90.7	1.32
DRO >C10-C28*	<10.0	10.0	01/05/2024	ND	191	95.4	0.846
EXT DRO >C28-C36	<10.0	10.0	01/05/2024	ND			
Surrogate: 1-Chlorooctane 88.2 % 48.2-134							
Surrogate: 1-Chlorooctadecane 101 % 49.1-148							
Volatile 8260		mg/kg		Analyzed By: MS			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	Qualifier
Methyl tert-butyl ether	<0.050	0.050	01/05/2024	ND	0.944	94.4	1.16
Benzene*	<0.025	0.025	01/05/2024	ND	0.461	92.3	3.61
Toluene*	<0.025	0.025	01/05/2024	ND	0.460	91.9	5.49
Ethylbenzene*	<0.025	0.025	01/05/2024	ND	0.486	97.2	3.49
m+p - Xylene*	<0.050	0.050	01/05/2024	ND	0.993	99.3	3.54
o-Xylene*	<0.025	0.025	01/05/2024	ND	0.468	93.6	3.56
1,3,5-Trimethylbenzene*	<0.025	0.025	01/05/2024	ND	0.483	96.6	6.05
1,2,4-Trimethylbenzene*	0.046	0.025	01/05/2024	ND	0.491	98.2	3.09

Surrogate: Toluene-d8 96.9 % 90.4-109

Surrogate: 4-Bromofluorobenzene 97.6 % 82.5-117

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*=Accredited Analyte

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Ally D. Keene

Celely D. Keene, Lab Director/Quality Manager



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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celestine

Celestine D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Vertex</u>				BILL TO				ANALYSIS REQUEST															
Project Manager: <u>Chance Dixon</u>				P.O. #:				<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX / MTBE / TMB's (8021)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH: 8015D (400/000/MRO)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">CI</div> </div>															
Address: <u>3101 Boyd Dr</u>				Company: <u>EOG</u>																			
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Orville</u>																			
Phone #: <u>575-725-5001</u> Fax #:				Address:																			
Project #: <u>23E-05855</u> Project Owner: <u>Chase Settle</u>				City:																			
Project Name: <u>Crow Flats Fed Com #1</u>				State:				Zip:															
Project Location:				Phone #:																			
Sampler Name: <u>Austin Harris</u>				Fax #:																			
FOR LAB USE ONLY				MATRIX		PRESERV.		SAMPLING															
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER	DATE	TIME									
<u>H240045</u>																							
<u>1</u>	<u>WES23-03 0-4.0'</u>	<u>C1</u>	<u>1</u>			<u>X</u>				<u>X</u>			<u>1-4-24</u>	<u>10:30</u>	<u>X</u>	<u>X</u>	<u>X</u>						
<u>2</u>	<u>WES23-04 0-4.0'</u>	<u>C1</u>	<u>1</u>			<u>X</u>				<u>X</u>			<u>1-4-24</u>	<u>10:50A</u>	<u>X</u>	<u>X</u>	<u>X</u>						
<u>3</u>	<u>WES28-01 0-4'</u>	<u>C1</u>	<u>1</u>			<u>✓</u>				<u>✓</u>			<u>1-3-24</u>	<u>9:30</u>	<u>✓</u>	<u>✓</u>	<u>✓</u>						

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Relinquished By: <u>[Signature]</u>	Date: <u>1/15/24</u>	Received By: <u>[Signature]</u>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Time: <u>1102</u>	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One)	Observed Temp. <u>3-8°</u>	Sample Condition	REMARKS: <u>CC: Chance Dixon cdixon@vertex.com</u>	
Sampler - UPS - Bus - Other:	Corrected Temp. °C	<input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	<u>Direct Bill Chase - Settle @ecogresources.com</u> Turnaround Time: <u>Standard</u> <input checked="" type="checkbox"/> <u>Rush</u> <input type="checkbox"/> Bacteria (only) <input type="checkbox"/> <input checked="" type="checkbox"/> Sample Condition Cool Intact <input type="checkbox"/> <input checked="" type="checkbox"/> Observed Temp. °C Thermometer ID <u>#113</u> Correction Factor <u>0.5°C</u> <input checked="" type="checkbox"/> <u>SD</u> <input type="checkbox"/> Corrected Temp. °C	

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



Environment Testing

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 29, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2401656

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 9 sample(s) on 1/17/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2401656

Date Reported: 1/29/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BG24-01 0'

Project: Crow Flats Fed Com 1

Collection Date: 1/12/2024 2:00:00 PM

Lab ID: 2401656-001

Matrix: SOIL

Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	1/18/2024 4:04:13 PM	79973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/19/2024 12:16:27 PM	79997
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/19/2024 12:16:27 PM	79997
Surr: DNOP	79.1	69-147		%Rec	1	1/19/2024 12:16:27 PM	79997
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/19/2024 12:55:44 AM	79963
Surr: BFB	93.6	15-244		%Rec	1	1/19/2024 12:55:44 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/19/2024 12:55:44 AM	79963
Toluene	ND	0.050		mg/Kg	1	1/19/2024 12:55:44 AM	79963
Ethylbenzene	ND	0.050		mg/Kg	1	1/19/2024 12:55:44 AM	79963
Xylenes, Total	ND	0.099		mg/Kg	1	1/19/2024 12:55:44 AM	79963
Surr: 4-Bromofluorobenzene	85.9	39.1-146		%Rec	1	1/19/2024 12:55:44 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2401656

Date Reported: 1/29/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BG24-01 2'

Project: Crow Flats Fed Com 1

Collection Date: 1/12/2024 2:05:00 PM

Lab ID: 2401656-002

Matrix: SOIL

Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	610	60		mg/Kg	20	1/18/2024 4:19:22 PM	79973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/18/2024 8:15:20 PM	79964
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/18/2024 8:15:20 PM	79964
Surr: DNOP	74.7	69-147		%Rec	1	1/18/2024 8:15:20 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/19/2024 1:19:25 AM	79963
Surr: BFB	90.9	15-244		%Rec	1	1/19/2024 1:19:25 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/19/2024 1:19:25 AM	79963
Toluene	ND	0.050		mg/Kg	1	1/19/2024 1:19:25 AM	79963
Ethylbenzene	ND	0.050		mg/Kg	1	1/19/2024 1:19:25 AM	79963
Xylenes, Total	ND	0.10		mg/Kg	1	1/19/2024 1:19:25 AM	79963
Surr: 4-Bromofluorobenzene	83.9	39.1-146		%Rec	1	1/19/2024 1:19:25 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401656
Date Reported: 1/29/2024

CLIENT: EOG Client Sample ID: BG24-02 0'
Project: Crow Flats Fed Com 1 Collection Date: 1/12/2024 2:10:00 PM
Lab ID: 2401656-003 Matrix: SOIL Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	1/18/2024 5:35:09 PM	79973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	1/18/2024 8:26:00 PM	79964
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/18/2024 8:26:00 PM	79964
Surr: DNOP	72.2	69-147		%Rec	1	1/18/2024 8:26:00 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/19/2024 1:43:00 AM	79963
Surr: BFB	92.0	15-244		%Rec	1	1/19/2024 1:43:00 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/19/2024 1:43:00 AM	79963
Toluene	ND	0.050		mg/Kg	1	1/19/2024 1:43:00 AM	79963
Ethylbenzene	ND	0.050		mg/Kg	1	1/19/2024 1:43:00 AM	79963
Xylenes, Total	ND	0.10		mg/Kg	1	1/19/2024 1:43:00 AM	79963
Surr: 4-Bromofluorobenzene	85.5	39.1-146		%Rec	1	1/19/2024 1:43:00 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401656
Date Reported: 1/29/2024

CLIENT: EOG Client Sample ID: BG24-02 2'
Project: Crow Flats Fed Com 1 Collection Date: 1/12/2024 2:15:00 PM
Lab ID: 2401656-004 Matrix: SOIL Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	1/18/2024 5:50:19 PM	79973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	1/18/2024 8:36:39 PM	79964
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/18/2024 8:36:39 PM	79964
Surr: DNOP	106	69-147		%Rec	1	1/18/2024 8:36:39 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/19/2024 2:06:32 AM	79963
Surr: BFB	91.5	15-244		%Rec	1	1/19/2024 2:06:32 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/19/2024 2:06:32 AM	79963
Toluene	ND	0.050		mg/Kg	1	1/19/2024 2:06:32 AM	79963
Ethylbenzene	ND	0.050		mg/Kg	1	1/19/2024 2:06:32 AM	79963
Xylenes, Total	ND	0.10		mg/Kg	1	1/19/2024 2:06:32 AM	79963
Surr: 4-Bromofluorobenzene	85.1	39.1-146		%Rec	1	1/19/2024 2:06:32 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2401656

Date Reported: 1/29/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BG24-02 4'

Project: Crow Flats Fed Com 1

Collection Date: 1/12/2024 2:20:00 PM

Lab ID: 2401656-005

Matrix: SOIL

Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	100	60		mg/Kg	20	1/18/2024 6:05:27 PM	79973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	1/18/2024 8:47:16 PM	79964
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/18/2024 8:47:16 PM	79964
Surr: DNOP	99.8	69-147		%Rec	1	1/18/2024 8:47:16 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/19/2024 2:30:02 AM	79963
Surr: BFB	93.2	15-244		%Rec	1	1/19/2024 2:30:02 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	1/19/2024 2:30:02 AM	79963
Toluene	ND	0.050		mg/Kg	1	1/19/2024 2:30:02 AM	79963
Ethylbenzene	ND	0.050		mg/Kg	1	1/19/2024 2:30:02 AM	79963
Xylenes, Total	ND	0.099		mg/Kg	1	1/19/2024 2:30:02 AM	79963
Surr: 4-Bromofluorobenzene	87.0	39.1-146		%Rec	1	1/19/2024 2:30:02 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401656
Date Reported: 1/29/2024

CLIENT: EOG Client Sample ID: BG24-02 4.5'
Project: Crow Flats Fed Com 1 Collection Date: 1/12/2024 2:25:00 PM
Lab ID: 2401656-006 Matrix: SOIL Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	120	60		mg/Kg	20	1/18/2024 6:20:36 PM	79973
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/18/2024 8:57:52 PM	79964
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/18/2024 8:57:52 PM	79964
Surr: DNOP	78.3	69-147		%Rec	1	1/18/2024 8:57:52 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/19/2024 2:53:35 AM	79963
Surr: BFB	93.2	15-244		%Rec	1	1/19/2024 2:53:35 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/19/2024 2:53:35 AM	79963
Toluene	ND	0.047		mg/Kg	1	1/19/2024 2:53:35 AM	79963
Ethylbenzene	ND	0.047		mg/Kg	1	1/19/2024 2:53:35 AM	79963
Xylenes, Total	ND	0.094		mg/Kg	1	1/19/2024 2:53:35 AM	79963
Surr: 4-Bromofluorobenzene	87.4	39.1-146		%Rec	1	1/19/2024 2:53:35 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2401656

Date Reported: 1/29/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BG24-03 0'

Project: Crow Flats Fed Com 1

Collection Date: 1/12/2024 2:30:00 PM

Lab ID: 2401656-007

Matrix: SOIL

Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	1/18/2024 7:06:03 PM	79989
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/24/2024 12:29:18 PM	79988
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/24/2024 12:29:18 PM	79988
Surr: DNOP	75.0	69-147		%Rec	1	1/24/2024 12:29:18 PM	79988
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/19/2024 3:17:06 AM	79963
Surr: BFB	93.2	15-244		%Rec	1	1/19/2024 3:17:06 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/19/2024 3:17:06 AM	79963
Toluene	ND	0.047		mg/Kg	1	1/19/2024 3:17:06 AM	79963
Ethylbenzene	ND	0.047		mg/Kg	1	1/19/2024 3:17:06 AM	79963
Xylenes, Total	ND	0.094		mg/Kg	1	1/19/2024 3:17:06 AM	79963
Surr: 4-Bromofluorobenzene	86.8	39.1-146		%Rec	1	1/19/2024 3:17:06 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401656
Date Reported: 1/29/2024

CLIENT: EOG Client Sample ID: BG24-03 2'
Project: Crow Flats Fed Com 1 Collection Date: 1/12/2024 2:35:00 PM
Lab ID: 2401656-008 Matrix: SOIL Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	230	60		mg/Kg	20	1/18/2024 7:21:13 PM	79989
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/18/2024 9:08:27 PM	79964
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/18/2024 9:08:27 PM	79964
Surr: DNOP	111	69-147		%Rec	1	1/18/2024 9:08:27 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/19/2024 3:40:43 AM	79963
Surr: BFB	93.6	15-244		%Rec	1	1/19/2024 3:40:43 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/19/2024 3:40:43 AM	79963
Toluene	ND	0.049		mg/Kg	1	1/19/2024 3:40:43 AM	79963
Ethylbenzene	ND	0.049		mg/Kg	1	1/19/2024 3:40:43 AM	79963
Xylenes, Total	ND	0.097		mg/Kg	1	1/19/2024 3:40:43 AM	79963
Surr: 4-Bromofluorobenzene	87.5	39.1-146		%Rec	1	1/19/2024 3:40:43 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401656
Date Reported: 1/29/2024

CLIENT: EOG Client Sample ID: BG24-03 4'
Project: Crow Flats Fed Com 1 Collection Date: 1/12/2024 2:40:00 PM
Lab ID: 2401656-009 Matrix: SOIL Received Date: 1/17/2024 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	97	60		mg/Kg	20	1/18/2024 8:06:39 PM	79989
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/18/2024 9:19:02 PM	79964
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/18/2024 9:19:02 PM	79964
Surr: DNOP	79.5	69-147		%Rec	1	1/18/2024 9:19:02 PM	79964
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/19/2024 4:04:21 AM	79963
Surr: BFB	89.0	15-244		%Rec	1	1/19/2024 4:04:21 AM	79963
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	1/19/2024 4:04:21 AM	79963
Toluene	ND	0.047		mg/Kg	1	1/19/2024 4:04:21 AM	79963
Ethylbenzene	ND	0.047		mg/Kg	1	1/19/2024 4:04:21 AM	79963
Xylenes, Total	ND	0.094		mg/Kg	1	1/19/2024 4:04:21 AM	79963
Surr: 4-Bromofluorobenzene	82.9	39.1-146		%Rec	1	1/19/2024 4:04:21 AM	79963

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401656

29-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-79973	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 79973	RunNo: 102522
Prep Date: 1/18/2024	Analysis Date: 1/18/2024	SeqNo: 3788315 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-79973	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 79973	RunNo: 102522
Prep Date: 1/18/2024	Analysis Date: 1/18/2024	SeqNo: 3788316 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.4 90 110

Sample ID: MB-79989	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 79989	RunNo: 102522
Prep Date: 1/18/2024	Analysis Date: 1/18/2024	SeqNo: 3788360 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-79989	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 79989	RunNo: 102522
Prep Date: 1/18/2024	Analysis Date: 1/18/2024	SeqNo: 3788362 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.4 90 110

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401656

29-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: LCS-79964	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 79964		RunNo: 102525							
Prep Date: 1/17/2024	Analysis Date: 1/18/2024		SeqNo: 3788592		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	65	10	50.00	0	130	61.9	130			S
Surr: DNOP	7.4		5.000		147	69	147			S

Sample ID: MB-79964	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 79964		RunNo: 102525							
Prep Date: 1/17/2024	Analysis Date: 1/18/2024		SeqNo: 3788593		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		110	69	147			

Sample ID: MB-79997	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 79997		RunNo: 102557							
Prep Date: 1/19/2024	Analysis Date: 1/19/2024		SeqNo: 3788742		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		99.4	69	147			

Sample ID: LCS-79997	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 79997		RunNo: 102557							
Prep Date: 1/19/2024	Analysis Date: 1/19/2024		SeqNo: 3788743		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.9	61.9	130			
Surr: DNOP	4.6		5.000		92.5	69	147			

Sample ID: LCS-79964	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 79964		RunNo: 102563							
Prep Date: 1/17/2024	Analysis Date: 1/19/2024		SeqNo: 3789043		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	121	61.9	130			
Surr: DNOP	6.7		5.000		134	69	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401656

29-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-79988	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 79988	RunNo: 102563								
Prep Date: 1/18/2024	Analysis Date: 1/19/2024	SeqNo: 3789044	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	69	147			

Sample ID: LCS-79988	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 79988	RunNo: 102563								
Prep Date: 1/18/2024	Analysis Date: 1/19/2024	SeqNo: 3789045	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	119	61.9	130			
Surr: DNOP	6.0		5.000		120	69	147			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401656

29-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: Ics-79963	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 79963			RunNo: 102518						
Prep Date: 1/17/2024	Analysis Date: 1/18/2024			SeqNo: 3787610		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	70	130			
Surr: BFB	2200		1000		216	15	244			

Sample ID: MB-79963	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 79963			RunNo: 102518						
Prep Date: 1/17/2024	Analysis Date: 1/18/2024			SeqNo: 3787611		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	15	244			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401656

29-Jan-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: LCS-79963	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 79963	RunNo: 102518								
Prep Date: 1/17/2024	Analysis Date: 1/18/2024	SeqNo: 3787613	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	84.3	70	130			
Toluene	0.86	0.050	1.000	0	86.4	70	130			
Ethylbenzene	0.88	0.050	1.000	0	88.0	70	130			
Xylenes, Total	2.7	0.10	3.000	0	89.9	70	130			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.1	39.1	146			

Sample ID: MB-79963	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 79963	RunNo: 102518								
Prep Date: 1/17/2024	Analysis Date: 1/18/2024	SeqNo: 3787614	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.9	39.1	146			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2401656

RcptNo: 1

Received By: Tracy Casarrubias

1/17/2024 8:10:00 AM

Completed By: Tracy Casarrubias

1/17/2024 8:34:41 AM

Reviewed By:

SCM 1/17/24

Chain of Custody1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐

2. How was the sample delivered?

Courier

Log In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

m. 1/17/24

Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

Mailing address, phone number and Email/Fax are missing on COC- TMC 1/17/24

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes	Yogi		

Chain-of-Custody Record

Client: EOG (vertex)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 ☒ Rush2-Day

Project Name:

Crow Flats Fed Com 1

Project #:

23E-05855

Project Manager:

C. DixonSampler: A. MohleOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 2.0 ± 0.2.0 (°C)

Container Type and #

Preservative Type

HEAL No.

2401055001002003004005006007008009010011012013014015016017018019020021022023024025026027028029030031032033034035036037038039040041042043044045046047048049050051052053054055056057058059060061062063064065066067068069070071072073074075076077078079080081082083084085086087088089090091092093094095096097098099100101102103104105106107108109110111112113114115116117118119120121122123124125126127128129130131132133134135136137138139140141142143144145146147148149150151152153154155156157158159160161162163164165166167168169170171172173174175176177178179180181182183184185186187188189190191192193194195196197198199200201202203204205206207208209210211212213214215216217218219220221222223224225226227228229230231232233234235236237238239240241242243244245246247248249250251252253254255256257258259260261262263264265266267268269270271272273274275276277278279280281282283284285286287288289290291292293294295296297298299300301302303304



*Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

January 25, 2024

Chance Dixon
Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2401791

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 2 sample(s) on 1/19/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2401791

Date Reported: 1/25/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WES23-02 0-5'

Project: Crow Flats Fed Com 1

Collection Date: 1/17/2024 11:30:00 AM

Lab ID: 2401791-001

Matrix: MEOH (SOIL)

Received Date: 1/19/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/19/2024 11:09:20 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/19/2024 11:09:20 AM
Surr: DNOP	95.9	69-147		%Rec	1	1/19/2024 11:09:20 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	1/19/2024 11:12:27 AM
Surr: BFB	93.9	15-244		%Rec	1	1/19/2024 11:12:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.021		mg/Kg	1	1/19/2024 11:12:27 AM
Toluene	ND	0.041		mg/Kg	1	1/19/2024 11:12:27 AM
Ethylbenzene	ND	0.041		mg/Kg	1	1/19/2024 11:12:27 AM
Xylenes, Total	ND	0.083		mg/Kg	1	1/19/2024 11:12:27 AM
Surr: 4-Bromofluorobenzene	86.6	39.1-146		%Rec	1	1/19/2024 11:12:27 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	750	60		mg/Kg	20	1/19/2024 1:21:49 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401791

Date Reported: 1/25/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES23-03 0-5'
Project: Crow Flats Fed Com 1 Collection Date: 1/17/2024 11:40:00 AM
Lab ID: 2401791-002 Matrix: MEOH (SOIL) Received Date: 1/19/2024 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/19/2024 11:21:16 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/19/2024 11:21:16 AM
Surr: DNOP	99.4	69-147		%Rec	1	1/19/2024 11:21:16 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/19/2024 11:36:29 AM
Surr: BFB	96.4	15-244		%Rec	1	1/19/2024 11:36:29 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/19/2024 11:36:29 AM
Toluene	ND	0.049		mg/Kg	1	1/19/2024 11:36:29 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/19/2024 11:36:29 AM
Xylenes, Total	ND	0.097		mg/Kg	1	1/19/2024 11:36:29 AM
Surr: 4-Bromofluorobenzene	85.7	39.1-146		%Rec	1	1/19/2024 11:36:29 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	1900	60		mg/Kg	20	1/19/2024 1:37:03 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401791

25-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: MB-79999		SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID: PBS	Batch ID: 79999			RunNo: 102562						
Prep Date: 1/19/2024	Analysis Date: 1/19/2024			SeqNo: 3790298			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-79999		SampType: LCS		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS	Batch ID: 79999			RunNo: 102562						
Prep Date: 1/19/2024	Analysis Date: 1/19/2024			SeqNo: 3790299			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Above Quantitation Range/Estimated Value
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401791
25-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: MB-79997	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 79997	RunNo: 102557								
Prep Date: 1/19/2024	Analysis Date: 1/19/2024	SeqNo: 3788742			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.9		10.00		99.4	69	147			

Sample ID: LCS-79997	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 79997	RunNo: 102557								
Prep Date: 1/19/2024	Analysis Date: 1/19/2024	SeqNo: 3788743			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.9	61.9	130			
Surr: DNOP	4.6		5.000		92.5	69	147			

Sample ID: 2401791-002AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WES23-03 0-5'	Batch ID: 79997	RunNo: 102557								
Prep Date: 1/19/2024	Analysis Date: 1/19/2024	SeqNo: 3788749			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.1	45.54	0	96.1	54.2	135			
Surr: DNOP	4.5		4.554		99.4	69	147			

Sample ID: 2401791-002AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WES23-03 0-5'	Batch ID: 79997	RunNo: 102557								
Prep Date: 1/19/2024	Analysis Date: 1/19/2024	SeqNo: 3788750			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	9.4	47.17	0	88.1	54.2	135	5.12	29.2	
Surr: DNOP	4.6		4.717		98.2	69	147	0	0	

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401791
25-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: GS102555	RunNo: 102555								
Prep Date:	Analysis Date: 1/19/2024	SeqNo: 3788694 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	91.6	70	130			
Surr: BFB	2000		1000		199	15	244			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: GS102555	RunNo: 102555								
Prep Date:	Analysis Date: 1/19/2024	SeqNo: 3788695 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.2	15	244			

Sample ID: 2401791-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WES23-02 0-5'	Batch ID: GS102555	RunNo: 102555								
Prep Date:	Analysis Date: 1/19/2024	SeqNo: 3789404 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.1	20.68	0	87.8	70	130			
Surr: BFB	1700		827.1		204	15	244			

Sample ID: 2401791-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WES23-02 0-5'	Batch ID: GS102555	RunNo: 102555								
Prep Date:	Analysis Date: 1/19/2024	SeqNo: 3789405 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.1	20.68	0	85.6	70	130	2.63	20	
Surr: BFB	1700		827.1		201	15	244	0	0	

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401791

25-Jan-24

Client: Vertex Resources Services, Inc.**Project:** Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: R102555		RunNo: 102555							
Prep Date:	Analysis Date: 1/19/2024		SeqNo: 3788697		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.4	70	130			
Toluene	0.91	0.050	1.000	0	90.6	70	130			
Ethylbenzene	0.92	0.050	1.000	0	92.5	70	130			
Xylenes, Total	2.8	0.10	3.000	0	92.9	70	130			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.3	39.1	146			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: R102555		RunNo: 102555							
Prep Date:	Analysis Date: 1/19/2024		SeqNo: 3788698		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.9	39.1	146			

Sample ID: 2401791-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: WES23-03 0-5'	Batch ID: R102555		RunNo: 102555							
Prep Date:	Analysis Date: 1/19/2024		SeqNo: 3789428		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9718	0	88.7	70	130			
Toluene	0.88	0.049	0.9718	0	90.6	70	130			
Ethylbenzene	0.88	0.049	0.9718	0	91.0	70	130			
Xylenes, Total	2.7	0.097	2.915	0	92.0	70	130			
Surr: 4-Bromofluorobenzene	0.84		0.9718		86.0	39.1	146			

Sample ID: 2401791-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: WES23-03 0-5'	Batch ID: R102555		RunNo: 102555							
Prep Date:	Analysis Date: 1/19/2024		SeqNo: 3789429		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9718	0	85.7	70	130	3.52	20	
Toluene	0.85	0.049	0.9718	0	87.7	70	130	3.30	20	
Ethylbenzene	0.86	0.049	0.9718	0	88.5	70	130	2.86	20	
Xylenes, Total	2.6	0.097	2.915	0	90.4	70	130	1.83	20	
Surr: 4-Bromofluorobenzene	0.85		0.9718		87.1	39.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		



Environment Testin

Eurofins Environment Testing South

Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources

Work Order Number: 2401791

RcptNo: 1

Received By: Cheyenne Cason

1/19/2024 8:00:00 AM

Chul

Completed By: Cheyenne Cason

1/19/2024 8:27:22 AM

Chul

Reviewed By:

SCM 1/19/24

Chain of Custody1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? CourierLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

M 1/19/24

Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good	Not Present	Morty		

Chain-of-Custody Record

Client: EOG (ver+tx)

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 Same Day

Project Name:

Crow Flats Fed Com 1

Project #:

23E-05855

Project Manager:

C. Dixon

Sampler: A Mohr

On Ice: ☒ Yes ☐ No *met*

of Coolers:

	Cooler Temp (including CF):	0.3	0.1	0.2	(°C)
1					
2					
3					
4					
5					
6					
7					
8					
9					
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98					
99					
100					

Date	Time	Matrix	Sample Name
------	------	--------	-------------

01/17	11:30	Soil	WES23-02 0-5'
-------	-------	------	---------------

1	11:40	1	WES23-03	0-5'
---	-------	---	----------	------

Date:	Time:	Relinquished by:
-------	-------	------------------

13/24 1100

Date:	Time:	Relinquished by:
-------	-------	------------------

10/14 900 10/14 900

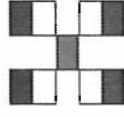
Received by:	Via:	Date	Time
--------------	------	------	------

opening 11/24/11 1100

Received by:	Via:	Date	Time
--------------	------	------	------

Chr- Cw 11/9/24 0800

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



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Project Manager: C. Dixon						Sampler: A. Mohr			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>MCA</i>		
									# of Coolers: 1		
Cooler Temp (including CF): 0.3-0.1± 0.2 °C											
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.					
01/17/21	11:30	soil	WES23-02 0-5'	4oz jar	1A	2401791					
1	11:40	1	WES23-03 0-5'	1	1	002					

Remarks:

results to: `cdixon@vortex: ~`



*Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

January 25, 2024

Chance Dixon
Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2401839

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 1/20/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401839
Date Reported: 1/25/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BES23-05 11'
Project: Crow Flats Fed Com 1 Collection Date: 1/18/2024 9:03:00 AM
Lab ID: 2401839-001 Matrix: MEOH (SOIL) Received Date: 1/20/2024 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	19	9.2		mg/Kg	1	1/22/2024 10:54:02 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/22/2024 10:54:02 AM
Surr: DNOP	81.8	69-147		%Rec	1	1/22/2024 10:54:02 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	1/22/2024 11:44:08 AM
Surr: BFB	102	15-244		%Rec	1	1/22/2024 11:44:08 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.020		mg/Kg	1	1/22/2024 11:44:08 AM
Toluene	ND	0.039		mg/Kg	1	1/22/2024 11:44:08 AM
Ethylbenzene	ND	0.039		mg/Kg	1	1/22/2024 11:44:08 AM
Xylenes, Total	ND	0.078		mg/Kg	1	1/22/2024 11:44:08 AM
Surr: 4-Bromofluorobenzene	89.9	39.1-146		%Rec	1	1/22/2024 11:44:08 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	360	60		mg/Kg	20	1/22/2024 3:14:54 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order 2401839

Date Reported: 1/25/2024

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WES23-02 5-11'

Project: Crow Flats Fed Com 1

Collection Date: 1/18/2024 1:20:00 PM

Lab ID: 2401839-002

Matrix: MEOH (SOIL)

Received Date: 1/20/2024 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	24	9.5		mg/Kg	1	1/22/2024 11:30:23 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/22/2024 11:30:23 AM
Surr: DNOP	86.7	69-147		%Rec	1	1/22/2024 11:30:23 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/22/2024 12:08:05 PM
Surr: BFB	99.0	15-244		%Rec	1	1/22/2024 12:08:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	1/22/2024 12:08:05 PM
Toluene	ND	0.047		mg/Kg	1	1/22/2024 12:08:05 PM
Ethylbenzene	ND	0.047		mg/Kg	1	1/22/2024 12:08:05 PM
Xylenes, Total	ND	0.095		mg/Kg	1	1/22/2024 12:08:05 PM
Surr: 4-Bromofluorobenzene	88.3	39.1-146		%Rec	1	1/22/2024 12:08:05 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	330	60		mg/Kg	20	1/22/2024 3:29:32 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401839
Date Reported: 1/25/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES23-03 5-11'
Project: Crow Flats Fed Com 1 Collection Date: 1/18/2024 1:30:00 PM
Lab ID: 2401839-003 Matrix: MEOH (SOIL) Received Date: 1/20/2024 8:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/22/2024 11:42:23 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/22/2024 11:42:23 AM
Surr: DNOP	86.3	69-147		%Rec	1	1/22/2024 11:42:23 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/22/2024 12:31:56 PM
Surr: BFB	101	15-244		%Rec	1	1/22/2024 12:31:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/22/2024 12:31:56 PM
Toluene	ND	0.037		mg/Kg	1	1/22/2024 12:31:56 PM
Ethylbenzene	ND	0.037		mg/Kg	1	1/22/2024 12:31:56 PM
Xylenes, Total	ND	0.074		mg/Kg	1	1/22/2024 12:31:56 PM
Surr: 4-Bromofluorobenzene	91.2	39.1-146		%Rec	1	1/22/2024 12:31:56 PM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	750	60		mg/Kg	20	1/22/2024 3:44:42 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401839

25-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: MB-80030		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 80030		RunNo: 102597						
Prep Date: 1/22/2024		Analysis Date: 1/22/2024		SeqNo: 3791140			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80030		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 80030		RunNo: 102597						
Prep Date: 1/22/2024		Analysis Date: 1/22/2024		SeqNo: 3791141			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401839

25-Jan-24

Client: Vertex Resources Services, Inc.**Project:** Crow Flats Fed Com 1

Sample ID: MB-80016	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80016	RunNo: 102589								
Prep Date: 1/22/2024	Analysis Date: 1/22/2024	SeqNo: 3789958 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.5		10.00		84.8	69	147			

Sample ID: LCS-80016	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80016	RunNo: 102589								
Prep Date: 1/22/2024	Analysis Date: 1/22/2024	SeqNo: 3789959 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	78.6	61.9	130			
Surr: DNOP	4.2		5.000		83.9	69	147			

Sample ID: 2401839-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BES23-05 11'	Batch ID: 80016	RunNo: 102589								
Prep Date: 1/22/2024	Analysis Date: 1/22/2024	SeqNo: 3789961 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.5	47.35	19.08	53.5	54.2	135			S
Surr: DNOP	3.9		4.735		82.0	69	147			

Sample ID: 2401839-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BES23-05 11'	Batch ID: 80016	RunNo: 102589								
Prep Date: 1/22/2024	Analysis Date: 1/22/2024	SeqNo: 3789962 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	59	9.6	47.85	19.08	83.2	54.2	135	28.0	29.2	
Surr: DNOP	3.8		4.785		80.4	69	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401839

25-Jan-24

Client: Vertex Resources Services, Inc.

Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3789866		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.9	70	130			
Surr: BFB	2100		1000		207	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3789867		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.6	15	244			

Sample ID: 2401839-001ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BES23-05 11'	Batch ID: GS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3790202		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.9	19.62	0	97.3	70	130			
Surr: BFB	1700		784.9		217	15	244			

Sample ID: 2401839-001amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BES23-05 11'	Batch ID: GS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3790203		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	3.9	19.62	0	96.6	70	130	0.701	20	
Surr: BFB	1700		784.9		217	15	244	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401839

25-Jan-24

Client: Vertex Resources Services, Inc.**Project:** Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: BS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3789872		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.3	70	130			
Toluene	0.91	0.050	1.000	0	90.5	70	130			
Ethylbenzene	0.91	0.050	1.000	0	91.1	70	130			
Xylenes, Total	2.8	0.10	3.000	0	91.8	70	130			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	39.1	146			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: BS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3789873		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.2	39.1	146			

Sample ID: 2401839-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: WES23-02 5-11'	Batch ID: BS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3790204		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9452	0	86.4	70	130			
Toluene	0.84	0.047	0.9452	0	88.4	70	130			
Ethylbenzene	0.85	0.047	0.9452	0	89.6	70	130			
Xylenes, Total	2.6	0.095	2.836	0	90.2	70	130			
Surr: 4-Bromofluorobenzene	0.84		0.9452		88.6	39.1	146			

Sample ID: 2401839-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: WES23-02 5-11'	Batch ID: BS102587		RunNo: 102587							
Prep Date:	Analysis Date: 1/22/2024		SeqNo: 3790205		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9452	0	87.5	70	130	1.24	20	
Toluene	0.84	0.047	0.9452	0	88.7	70	130	0.384	20	
Ethylbenzene	0.85	0.047	0.9452	0	90.2	70	130	0.657	20	
Xylenes, Total	2.6	0.095	2.836	0	91.3	70	130	1.11	20	
Surr: 4-Bromofluorobenzene	0.86		0.9452		90.6	39.1	146	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		



Environment Testin

Eurofins Environment Testing South

Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources

Work Order Number: 2401839

RcptNo: 1

Received By: Cheyenne Cason

1/20/2024 8:05:00 AM

Completed By: Cheyenne Cason

1/20/2024 8:20:20 AM

Reviewed By:

SCM 1/22/24

Chain of Custody1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? CourierLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by

CME 1/20/24

Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.1	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: EOG (Vertex)

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

Project Name:

Crow Flats Fed Com 1

Project #:

23E-05835

Project Manager:

C. Dixon

Sampler:

A. Mohr

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 0.1 - 0.1 (°C)

Container Type and #

403 jar

Preservative Type

14

HEAL No.

2401839

001

002

003

004

005

006

007

008

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010

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Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 30, 2024

Chance Dixon
Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2401878

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 4 sample(s) on 1/23/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401878

Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BES23-07 12'

Project: Crow Flats Fed Com 1

Collection Date: 1/19/2024 9:55:00 AM

Lab ID: 2401878-001

Matrix: MEOH (SOIL)

Received Date: 1/23/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	46	9.7		mg/Kg	1	1/23/2024 10:37:55 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/23/2024 10:37:55 AM
Surr: DNOP	97.6	69-147		%Rec	1	1/23/2024 10:37:55 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/23/2024 11:29:17 AM
Surr: BFB	103	15-244		%Rec	1	1/23/2024 11:29:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.019		mg/Kg	1	1/23/2024 11:29:17 AM
Toluene	ND	0.038		mg/Kg	1	1/23/2024 11:29:17 AM
Ethylbenzene	ND	0.038		mg/Kg	1	1/23/2024 11:29:17 AM
Xylenes, Total	ND	0.075		mg/Kg	1	1/23/2024 11:29:17 AM
Surr: 4-Bromofluorobenzene	88.1	39.1-146		%Rec	1	1/23/2024 11:29:17 AM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	240	60		mg/Kg	20	1/23/2024 12:16:55 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401878
Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BES23-08 12'
Project: Crow Flats Fed Com 1 Collection Date: 1/19/2024 10:00:00 AM
Lab ID: 2401878-002 Matrix: MEOH (SOIL) Received Date: 1/23/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	16	9.2		mg/Kg	1	1/23/2024 10:48:22 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/23/2024 10:48:22 AM
Surr: DNOP	101	69-147		%Rec	1	1/23/2024 10:48:22 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/23/2024 11:52:59 AM
Surr: BFB	97.9	15-244		%Rec	1	1/23/2024 11:52:59 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.019		mg/Kg	1	1/23/2024 11:52:59 AM
Toluene	ND	0.038		mg/Kg	1	1/23/2024 11:52:59 AM
Ethylbenzene	ND	0.038		mg/Kg	1	1/23/2024 11:52:59 AM
Xylenes, Total	ND	0.075		mg/Kg	1	1/23/2024 11:52:59 AM
Surr: 4-Bromofluorobenzene	86.7	39.1-146		%Rec	1	1/23/2024 11:52:59 AM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	330	60		mg/Kg	20	1/23/2024 12:32:04 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401878
Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BES23-06 12'
Project: Crow Flats Fed Com 1 Collection Date: 1/19/2024 10:05:00 AM
Lab ID: 2401878-003 Matrix: MEOH (SOIL) Received Date: 1/23/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	12	9.4		mg/Kg	1	1/23/2024 10:58:52 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/23/2024 10:58:52 AM
Surr: DNOP	104	69-147		%Rec	1	1/23/2024 10:58:52 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/23/2024 12:17:01 PM
Surr: BFB	101	15-244		%Rec	1	1/23/2024 12:17:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/23/2024 12:17:01 PM
Toluene	ND	0.036		mg/Kg	1	1/23/2024 12:17:01 PM
Ethylbenzene	ND	0.036		mg/Kg	1	1/23/2024 12:17:01 PM
Xylenes, Total	ND	0.072		mg/Kg	1	1/23/2024 12:17:01 PM
Surr: 4-Bromofluorobenzene	88.6	39.1-146		%Rec	1	1/23/2024 12:17:01 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	480	60		mg/Kg	20	1/23/2024 12:47:14 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401878

Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BES23-09 14'
Project: Crow Flats Fed Com 1 Collection Date: 1/19/2024 2:20:00 PM
Lab ID: 2401878-004 Matrix: MEOH (SOIL) Received Date: 1/23/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: DGH
Diesel Range Organics (DRO)	54	9.4		mg/Kg	1	1/23/2024 11:09:35 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/23/2024 11:09:35 AM
Surr: DNOP	96.6	69-147		%Rec	1	1/23/2024 11:09:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	24	9.6		mg/Kg	2	1/23/2024 12:40:51 PM
Surr: BFB	167	15-244		%Rec	2	1/23/2024 12:40:51 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.048		mg/Kg	2	1/23/2024 12:40:51 PM
Toluene	ND	0.096		mg/Kg	2	1/23/2024 12:40:51 PM
Ethylbenzene	ND	0.096		mg/Kg	2	1/23/2024 12:40:51 PM
Xylenes, Total	0.30	0.19		mg/Kg	2	1/23/2024 12:40:51 PM
Surr: 4-Bromofluorobenzene	89.6	39.1-146		%Rec	2	1/23/2024 12:40:51 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	260	60		mg/Kg	20	1/23/2024 1:02:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401878

30-Jan-24

Client: Vertex Resources Services, Inc.

Project: Crow Flats Fed Com 1

Sample ID: MB-80050	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 80050	RunNo: 102622								
Prep Date: 1/23/2024	Analysis Date: 1/23/2024	SeqNo: 3792208	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80050	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 80050	RunNo: 102622								
Prep Date: 1/23/2024	Analysis Date: 1/23/2024	SeqNo: 3792209	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401878

30-Jan-24

Client: Vertex Resources Services, Inc.

Project: Crow Flats Fed Com 1

Sample ID: LCS-80044	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80044	RunNo: 102621								
Prep Date: 1/23/2024	Analysis Date: 1/23/2024	SeqNo: 3791160			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.7	61.9	130			
Surr: DNOP	4.6		5.000		92.3	69	147			

Sample ID: 2401878-004AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BES23-09 14'	Batch ID: 80044	RunNo: 102621								
Prep Date: 1/23/2024	Analysis Date: 1/23/2024	SeqNo: 3791168			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	82	8.9	44.40	53.63	64.1	54.2	135			
Surr: DNOP	4.5		4.440		100	69	147			

Sample ID: 2401878-004AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BES23-09 14'	Batch ID: 80044	RunNo: 102621								
Prep Date: 1/23/2024	Analysis Date: 1/23/2024	SeqNo: 3791169			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	110	9.8	49.21	53.63	106	54.2	135	25.4	29.2	
Surr: DNOP	4.9		4.921		100	69	147	0	0	

Sample ID: MB-80044	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80044	RunNo: 102621								
Prep Date: 1/23/2024	Analysis Date: 1/23/2024	SeqNo: 3791174			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		92.6	69	147			

Sample ID: MB-80076	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80076	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793415			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.5		10.00		84.6	69	147			

Sample ID: LCS-80076	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80076	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793416			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401878

30-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: LCS-80076	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80076	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793416		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.4	69	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 7 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401878

30-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: 2.5UG GRO LCS		SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS		Batch ID: GS102620			RunNo: 102620					
Prep Date: 1/22/2024		Analysis Date: 1/23/2024			SeqNo: 3791158		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.8	70	130			
Surr: BFB	2100		1000		212	15	244			

Sample ID: mb		SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS		Batch ID: GS102620			RunNo: 102620					
Prep Date:		Analysis Date: 1/23/2024			SeqNo: 3791159		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		97.7	15	244			

Sample ID: 2401878-001ams		SampType: MS			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BES23-07 12'		Batch ID: GS102620			RunNo: 102620					
Prep Date:		Analysis Date: 1/23/2024			SeqNo: 3791803		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.8	18.78	0	97.0	70	130			
Surr: BFB	1600		751.3		218	15	244			

Sample ID: 2401878-001amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: BES23-07 12'		Batch ID: GS102620			RunNo: 102620					
Prep Date:		Analysis Date: 1/23/2024			SeqNo: 3791804		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	3.8	18.78	0	93.8	70	130	3.40	20	
Surr: BFB	1600		751.3		217	15	244	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 9

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401878

30-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: BS102620	RunNo: 102620								
Prep Date:	Analysis Date: 1/23/2024	SeqNo: 3791179		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.0	70	130			
Toluene	0.93	0.050	1.000	0	93.5	70	130			
Ethylbenzene	0.93	0.050	1.000	0	93.2	70	130			
Xylenes, Total	2.8	0.10	3.000	0	93.8	70	130			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.0	39.1	146			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: BS102620	RunNo: 102620								
Prep Date:	Analysis Date: 1/23/2024	SeqNo: 3791180		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.0	39.1	146			

Sample ID: 2401878-002ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BES23-08 12'	Batch ID: BS102620	RunNo: 102620								
Prep Date:	Analysis Date: 1/23/2024	SeqNo: 3791844		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.63	0.019	0.7513	0	83.6	70	130			
Toluene	0.64	0.038	0.7513	0	85.7	70	130			
Ethylbenzene	0.66	0.038	0.7513	0	87.4	70	130			
Xylenes, Total	2.0	0.075	2.254	0	87.5	70	130			
Surr: 4-Bromofluorobenzene	0.66		0.7513		87.5	39.1	146			

Sample ID: 2401878-002amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BES23-08 12'	Batch ID: BS102620	RunNo: 102620								
Prep Date:	Analysis Date: 1/23/2024	SeqNo: 3791845		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.61	0.019	0.7513	0	81.2	70	130	2.94	20	
Toluene	0.62	0.038	0.7513	0	82.8	70	130	3.44	20	
Ethylbenzene	0.64	0.038	0.7513	0	84.7	70	130	3.10	20	
Xylenes, Total	1.9	0.075	2.254	0	85.2	70	130	2.64	20	
Surr: 4-Bromofluorobenzene	0.65		0.7513		85.9	39.1	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 9 of 9

Sample Log-In Check List

Client Name: Vertex Resources

Work Order Number: 2401878

RcptNo: 1

Received By: Joseph Alderette

1/23/2024 8:15:00 AM

Completed By: Desiree Dominguez

1/23/2024 8:26:44 AM

Reviewed By:

SCM 1/23/24

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

1-23-24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes	Yogi		



Environment Testing

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 30, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Crow Flats Fed COM 1

OrderNo.: 2401925

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 1/24/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401925
Date Reported: 1/30/2024

CLIENT: EOG Client Sample ID: WES23-03 0-6'
Project: Crow Flats Fed COM 1 Collection Date: 1/22/2024 11:40:00 AM
Lab ID: 2401925-001 Matrix: MEOH (SOIL) Received Date: 1/24/2024 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	650	60		mg/Kg	20	1/25/2024 12:59:28 PM	80097
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/24/2024 1:02:42 PM	80061
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/24/2024 1:02:42 PM	80061
Surr: DNOP	90.8	69-147		%Rec	1	1/24/2024 1:02:42 PM	80061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/24/2024 11:56:26 AM	GS10264
Surr: BFB	99.3	15-244		%Rec	1	1/24/2024 11:56:26 AM	GS10264
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.019		mg/Kg	1	1/24/2024 11:56:26 AM	BS10264
Toluene	ND	0.038		mg/Kg	1	1/24/2024 11:56:26 AM	BS10264
Ethylbenzene	ND	0.038		mg/Kg	1	1/24/2024 11:56:26 AM	BS10264
Xylenes, Total	ND	0.075		mg/Kg	1	1/24/2024 11:56:26 AM	BS10264
Surr: 4-Bromofluorobenzene	88.8	39.1-146		%Rec	1	1/24/2024 11:56:26 AM	BS10264

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401925
Date Reported: 1/30/2024

CLIENT: EOG Client Sample ID: WES23-04 0-6'
Project: Crow Flats Fed COM 1 Collection Date: 1/22/2024 2:10:00 PM
Lab ID: 2401925-002 Matrix: MEOH (SOIL) Received Date: 1/24/2024 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	540	60		mg/Kg	20	1/24/2024 12:11:08 PM	80070
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/24/2024 1:14:45 PM	80061
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/24/2024 1:14:45 PM	80061
Surr: DNOP	94.1	69-147		%Rec	1	1/24/2024 1:14:45 PM	80061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/24/2024 12:20:06 PM	GS10264
Surr: BFB	96.9	15-244		%Rec	1	1/24/2024 12:20:06 PM	GS10264
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/24/2024 12:20:06 PM	BS10264
Toluene	ND	0.035		mg/Kg	1	1/24/2024 12:20:06 PM	BS10264
Ethylbenzene	ND	0.035		mg/Kg	1	1/24/2024 12:20:06 PM	BS10264
Xylenes, Total	ND	0.071		mg/Kg	1	1/24/2024 12:20:06 PM	BS10264
Surr: 4-Bromofluorobenzene	86.4	39.1-146		%Rec	1	1/24/2024 12:20:06 PM	BS10264

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401925
Date Reported: 1/30/2024

CLIENT: EOG Client Sample ID: WES23-04 6-12'
Project: Crow Flats Fed COM 1 Collection Date: 1/22/2024 2:15:00 PM
Lab ID: 2401925-003 Matrix: MEOH (SOIL) Received Date: 1/24/2024 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	590	60		mg/Kg	20	1/25/2024 1:14:37 PM	80097
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	60	8.8		mg/Kg	1	1/24/2024 1:27:01 PM	80061
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/24/2024 1:27:01 PM	80061
Surr: DNOP	85.7	69-147		%Rec	1	1/24/2024 1:27:01 PM	80061
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/24/2024 12:43:54 PM	GS10264
Surr: BFB	98.3	15-244		%Rec	1	1/24/2024 12:43:54 PM	GS10264
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/24/2024 12:43:54 PM	BS10264
Toluene	ND	0.037		mg/Kg	1	1/24/2024 12:43:54 PM	BS10264
Ethylbenzene	ND	0.037		mg/Kg	1	1/24/2024 12:43:54 PM	BS10264
Xylenes, Total	ND	0.074		mg/Kg	1	1/24/2024 12:43:54 PM	BS10264
Surr: 4-Bromofluorobenzene	88.5	39.1-146		%Rec	1	1/24/2024 12:43:54 PM	BS10264

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401925

30-Jan-24

Client: EOG

Project: Crow Flats Fed COM 1

Sample ID: MB-80070	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 80070	RunNo: 102655								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793184	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80070	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 80070	RunNo: 102655								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793185	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Sample ID: MB-80097	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 80097	RunNo: 102684								
Prep Date: 1/25/2024	Analysis Date: 1/25/2024	SeqNo: 3794754	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80097	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 80097	RunNo: 102684								
Prep Date: 1/25/2024	Analysis Date: 1/25/2024	SeqNo: 3794755	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401925

30-Jan-24

Client: EOG

Project: Crow Flats Fed COM 1

Sample ID: MB-80061	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80061	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3792423	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.1	69	147			

Sample ID: LCS-80061	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80061	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3792424	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	42	10	50.00	0	84.3	61.9	130			
Surr: DNOP	4.3		5.000		85.7	69	147			

Sample ID: MB-80076	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80076	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793415	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: DNOP	8.5		10.00		84.6	69	147			
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Sample ID: LCS-80076	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80076	RunNo: 102657								
Prep Date: 1/24/2024	Analysis Date: 1/24/2024	SeqNo: 3793416	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: DNOP	4.4		5.000		88.4	69	147			
------------	-----	--	-------	--	------	----	-----	--	--	--

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401925

30-Jan-24

Client: EOG

Project: Crow Flats Fed COM 1

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102647		RunNo: 102647							
Prep Date:	Analysis Date: 1/24/2024		SeqNo: 3792240		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.2	70	130			
Surr: BFB	2100		1000		214	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102647		RunNo: 102647							
Prep Date:	Analysis Date: 1/24/2024		SeqNo: 3792241		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.1	15	244			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401925

30-Jan-24

Client: EOG

Project: Crow Flats Fed COM 1

Sample ID: 100ng btex lcs		SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS		Batch ID: BS102647			RunNo: 102647					
Prep Date:		Analysis Date: 1/24/2024			SeqNo: 3792243		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.9	70	130			
Toluene	0.91	0.050	1.000	0	91.2	70	130			
Ethylbenzene	0.92	0.050	1.000	0	92.2	70	130			
Xylenes, Total	2.8	0.10	3.000	0	92.8	70	130			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	39.1	146			

Sample ID: mb		SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS		Batch ID: BS102647			RunNo: 102647					
Prep Date:		Analysis Date: 1/24/2024			SeqNo: 3792244		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.0	39.1	146			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 7 of 7



Environment Testin

Eurofins Environment Testing South
Central, LLC4901 Hawkins NE
Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2401925

RcptNo: 1

Received By: Tracy Casarrubias

1/24/2024 7:15:00 AM

Completed By: Tracy Casarrubias

1/24/2024 8:00:35 AM

Reviewed By: *cmc*

1/24/24

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *SCM 1/24/24*Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

Mailing address, phone number and Email/Fax are missing on COC- TMC 1/24/24

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good	Yes	Yogi		



*Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

January 30, 2024

Chance Dixon
Vertex Resources Services, Inc.
3101 Boyd Drive
Carlsbad, NM 88220
TEL: (505) 506-0040
FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2401A13

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 1/25/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401A13
Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES23-02 0-6'
Project: Crow Flats Fed Com 1 Collection Date: 1/23/2024 11:05:00 AM
Lab ID: 2401A13-001 Matrix: MEOH (SOIL) Received Date: 1/25/2024 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/25/2024 12:13:05 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/25/2024 12:13:05 PM
Surr: DNOP	80.5	69-147		%Rec	1	1/25/2024 12:13:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	1/25/2024 11:33:18 AM
Surr: BFB	97.8	15-244		%Rec	1	1/25/2024 11:33:18 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.021		mg/Kg	1	1/25/2024 11:33:18 AM
Toluene	ND	0.042		mg/Kg	1	1/25/2024 11:33:18 AM
Ethylbenzene	ND	0.042		mg/Kg	1	1/25/2024 11:33:18 AM
Xylenes, Total	ND	0.083		mg/Kg	1	1/25/2024 11:33:18 AM
Surr: 4-Bromofluorobenzene	86.7	39.1-146		%Rec	1	1/25/2024 11:33:18 AM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	460	60		mg/Kg	20	1/25/2024 1:29:47 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401A13
Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BES23-10 12'
Project: Crow Flats Fed Com 1 Collection Date: 1/23/2024 2:20:00 PM
Lab ID: 2401A13-002 Matrix: MEOH (SOIL) Received Date: 1/25/2024 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/25/2024 12:25:15 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/25/2024 12:25:15 PM
Surr: DNOP	76.5	69-147		%Rec	1	1/25/2024 12:25:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/25/2024 11:57:08 AM
Surr: BFB	96.2	15-244		%Rec	1	1/25/2024 11:57:08 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/25/2024 11:57:08 AM
Toluene	ND	0.037		mg/Kg	1	1/25/2024 11:57:08 AM
Ethylbenzene	ND	0.037		mg/Kg	1	1/25/2024 11:57:08 AM
Xylenes, Total	ND	0.074		mg/Kg	1	1/25/2024 11:57:08 AM
Surr: 4-Bromofluorobenzene	87.0	39.1-146		%Rec	1	1/25/2024 11:57:08 AM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	360	60		mg/Kg	20	1/25/2024 1:44:56 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2401A13
Date Reported: 1/30/2024

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BES23-11 12'
Project: Crow Flats Fed Com 1 Collection Date: 1/23/2024 2:25:00 PM
Lab ID: 2401A13-003 Matrix: MEOH (SOIL) Received Date: 1/25/2024 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: JKU
Diesel Range Organics (DRO)	23	8.7		mg/Kg	1	1/25/2024 12:37:35 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/25/2024 12:37:35 PM
Surr: DNOP	80.3	69-147		%Rec	1	1/25/2024 12:37:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/25/2024 12:20:52 PM
Surr: BFB	100	15-244		%Rec	1	1/25/2024 12:20:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.017		mg/Kg	1	1/25/2024 12:20:52 PM
Toluene	ND	0.034		mg/Kg	1	1/25/2024 12:20:52 PM
Ethylbenzene	ND	0.034		mg/Kg	1	1/25/2024 12:20:52 PM
Xylenes, Total	ND	0.069		mg/Kg	1	1/25/2024 12:20:52 PM
Surr: 4-Bromofluorobenzene	89.6	39.1-146		%Rec	1	1/25/2024 12:20:52 PM
EPA METHOD 300.0: ANIONS						Analyst: KCB
Chloride	680	60		mg/Kg	20	1/25/2024 2:00:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401A13
30-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: MB-80097		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 80097		RunNo: 102684						
Prep Date: 1/25/2024		Analysis Date: 1/25/2024		SeqNo: 3794754			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80097		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 80097		RunNo: 102684						
Prep Date: 1/25/2024		Analysis Date: 1/25/2024		SeqNo: 3794755			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401A13
30-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: MB-80090	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80090	RunNo: 102682								
Prep Date: 1/25/2024	Analysis Date: 1/25/2024	SeqNo: 3793405	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		85.8	69	147			

Sample ID: LCS-80090	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80090	RunNo: 102682								
Prep Date: 1/25/2024	Analysis Date: 1/25/2024	SeqNo: 3793406	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	10	50.00	0	77.1	61.9	130			
Surr: DNOP	4.3		5.000		86.1	69	147			

Sample ID: 2401A13-002AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BES23-10 12'	Batch ID: 80090	RunNo: 102682								
Prep Date: 1/25/2024	Analysis Date: 1/25/2024	SeqNo: 3793453	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.2	45.87	0	79.2	54.2	135			
Surr: DNOP	3.7		4.587		79.7	69	147			

Sample ID: 2401A13-002AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BES23-10 12'	Batch ID: 80090	RunNo: 102682								
Prep Date: 1/25/2024	Analysis Date: 1/25/2024	SeqNo: 3793454	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	9.6	48.17	0	82.8	54.2	135	9.27	29.2	
Surr: DNOP	4.0		4.817		82.7	69	147	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401A13
30-Jan-24

Client: Vertex Resources Services, Inc.
Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: GS102681	RunNo: 102681								
Prep Date:	Analysis Date: 1/25/2024	SeqNo: 3793388 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.1	70	130			
Surr: BFB	2100		1000		206	15	244			

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: GS102681	RunNo: 102681								
Prep Date:	Analysis Date: 1/25/2024	SeqNo: 3793389 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.0	15	244			

Sample ID: 2401a13-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WES23-02 0-6'	Batch ID: GS102681	RunNo: 102681								
Prep Date:	Analysis Date: 1/25/2024	SeqNo: 3795016 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.2	20.78	0	92.6	70	130			
Surr: BFB	1800		831.3		212	15	244			

Sample ID: 2401a13-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WES23-02 0-6'	Batch ID: GS102681	RunNo: 102681								
Prep Date:	Analysis Date: 1/25/2024	SeqNo: 3795017 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.2	20.78	0	92.7	70	130	0.173	20	
Surr: BFB	1800		831.3		214	15	244	0	0	

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401A13

30-Jan-24

Client: Vertex Resources Services, Inc.

Project: Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: BS102681		RunNo: 102681							
Prep Date:	Analysis Date: 1/25/2024		SeqNo: 3793394		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	70	130			
Toluene	0.90	0.050	1.000	0	90.4	70	130			
Ethylbenzene	0.92	0.050	1.000	0	91.6	70	130			
Xylenes, Total	2.8	0.10	3.000	0	92.5	70	130			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.4	39.1	146			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: BS102681		RunNo: 102681							
Prep Date:	Analysis Date: 1/25/2024		SeqNo: 3793395		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.8	39.1	146			

Sample ID: 2401a13-002ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BES23-10 12'	Batch ID: BS102681		RunNo: 102681							
Prep Date:	Analysis Date: 1/25/2024		SeqNo: 3795035		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.64	0.018	0.7375	0	86.4	70	130			
Toluene	0.65	0.037	0.7375	0	88.6	70	130			
Ethylbenzene	0.66	0.037	0.7375	0	89.5	70	130			
Xylenes, Total	2.0	0.074	2.213	0	90.5	70	130			
Surr: 4-Bromofluorobenzene	0.67		0.7375		90.2	39.1	146			

Sample ID: 2401a13-002amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BES23-10 12'	Batch ID: BS102681		RunNo: 102681							
Prep Date:	Analysis Date: 1/25/2024		SeqNo: 3795036		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.018	0.7375	0	84.4	70	130	2.32	20	
Toluene	0.63	0.037	0.7375	0	86.0	70	130	2.98	20	
Ethylbenzene	0.65	0.037	0.7375	0	87.5	70	130	2.34	20	
Xylenes, Total	2.0	0.074	2.213	0	88.7	70	130	2.04	20	
Surr: 4-Bromofluorobenzene	0.66		0.7375		89.2	39.1	146	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
PQL Practical Quantitative Limit
S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank
E Above Quantitation Range/Estimated Value
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Limit

Page 7 of 7



Environment Testin

Eurofins Environment Testing South
Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Vertex Resources

Work Order Number: 2401A13

RcptNo: 1

Received By: Cheyenne Cason

1/25/2024 7:50:00 AM

Completed By: Cheyenne Cason

1/25/2024 7:56:53 AM

Reviewed By:

1-25-24

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

1/25/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via:

☐ eMail☐ Phone☐ Fax☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.5	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: EOG (vertex)

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 same day

Project Name:

Crow Flats Fed Com

Project #:

23E-05855

Project Manager:

C. Dixon

Sampler: A. Mohu

On Ice: ☒ Yes ☐ No *yes*

of Coolers:

Cooler Temp (including CF): 3.6-0.1 = 3.5 (°C)

Container Type and #

Preservative Type

HEAL No.

403 jar

il

2401A13

001

002

003

Date

Time

Matrix

Sample Name

01/23/24

11:05

001

WES23-02

0-6'

14:20

1

BES23-10

12'

14:25

1

BES23-11

12'

Date

Time

Relinquished by

10/24/24

1045

Relinquished by

10/24/24

1900

Received by:

Via:

Date

Time

10/24/24

1045

Received by:

Via:

Remarks:

results to: cdixon@vertex.ca

Results to: cdixon@vertex.ca

Results to: cdixon@vertex.ca

Results to: cdixon@vertex.ca

Results to: cdixon@vertex.ca

Results to: cdixon@vertex.ca

Results to: cdixon@vertex.ca



Environment Testing

Eurofins Environment Testing South
Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

May 14, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX

RE: Crow Flats Fed Com 1

OrderNo.: 2401B97

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 4 sample(s) on 1/31/2024 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued February 07, 2024.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401B97

Date Reported: 5/14/2024

CLIENT: EOG Client Sample ID: BES23-11 13'
Project: Crow Flats Fed Com 1 Collection Date: 1/26/2024 9:00:00 AM
Lab ID: 2401B97-001 Matrix: MEOH (SOIL) Received Date: 1/31/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	480	60		mg/Kg	20	1/31/2024 8:06:15 PM	80185
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2024 10:57:15 AM	80180
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2024 10:57:15 AM	80180
Surr: DNOP	86.1	69-147		%Rec	1	1/31/2024 10:57:15 AM	80180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/31/2024 11:15:12 AM	GS10278
Surr: BFB	96.7	15-244		%Rec	1	1/31/2024 11:15:12 AM	GS10278
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.019		mg/Kg	1	1/31/2024 11:15:12 AM	R102788
Toluene	ND	0.038		mg/Kg	1	1/31/2024 11:15:12 AM	R102788
Ethylbenzene	ND	0.038		mg/Kg	1	1/31/2024 11:15:12 AM	R102788
Xylenes, Total	ND	0.075		mg/Kg	1	1/31/2024 11:15:12 AM	R102788
Surr: 4-Bromofluorobenzene	86.7	39.1-146		%Rec	1	1/31/2024 11:15:12 AM	R102788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401B97

Date Reported: 5/14/2024

CLIENT: EOG Client Sample ID: WES23-05 6-12'
Project: Crow Flats Fed Com 1 Collection Date: 1/26/2024 9:10:00 AM
Lab ID: 2401B97-002 Matrix: MEOH (SOIL) Received Date: 1/31/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	460	60		mg/Kg	20	1/31/2024 8:21:23 PM	80185
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	54	9.6		mg/Kg	1	1/31/2024 11:09:16 AM	80180
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2024 11:09:16 AM	80180
Surr: DNOP	81.9	69-147		%Rec	1	1/31/2024 11:09:16 AM	80180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	1/31/2024 11:38:41 AM	GS10278
Surr: BFB	95.5	15-244		%Rec	1	1/31/2024 11:38:41 AM	GS10278
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.017		mg/Kg	1	1/31/2024 11:38:41 AM	R102788
Toluene	ND	0.035		mg/Kg	1	1/31/2024 11:38:41 AM	R102788
Ethylbenzene	ND	0.035		mg/Kg	1	1/31/2024 11:38:41 AM	R102788
Xylenes, Total	ND	0.070		mg/Kg	1	1/31/2024 11:38:41 AM	R102788
Surr: 4-Bromofluorobenzene	87.6	39.1-146		%Rec	1	1/31/2024 11:38:41 AM	R102788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401B97

Date Reported: 5/14/2024

CLIENT: EOG Client Sample ID: WES23-05 0-6'
Project: Crow Flats Fed Com 1 Collection Date: 1/26/2024 9:15:00 AM
Lab ID: 2401B97-003 Matrix: MEOH (SOIL) Received Date: 1/31/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	420	60		mg/Kg	20	1/31/2024 8:36:33 PM	80185
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	48	9.2		mg/Kg	1	1/31/2024 11:21:16 AM	80180
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/31/2024 11:21:16 AM	80180
Surr: DNOP	79.4	69-147		%Rec	1	1/31/2024 11:21:16 AM	80180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/31/2024 12:02:17 PM	GS10278
Surr: BFB	92.8	15-244		%Rec	1	1/31/2024 12:02:17 PM	GS10278
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.018		mg/Kg	1	1/31/2024 12:02:17 PM	R102788
Toluene	ND	0.036		mg/Kg	1	1/31/2024 12:02:17 PM	R102788
Ethylbenzene	ND	0.036		mg/Kg	1	1/31/2024 12:02:17 PM	R102788
Xylenes, Total	ND	0.072		mg/Kg	1	1/31/2024 12:02:17 PM	R102788
Surr: 4-Bromofluorobenzene	83.9	39.1-146		%Rec	1	1/31/2024 12:02:17 PM	R102788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2401B97

Date Reported: 5/14/2024

CLIENT: EOG Client Sample ID: WES23-03 6-12'
Project: Crow Flats Fed Com 1 Collection Date: 1/26/2024 9:20:00 AM
Lab ID: 2401B97-004 Matrix: MEOH (SOIL) Received Date: 1/31/2024 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: KCB
Chloride	400	60		mg/Kg	20	1/31/2024 8:51:42 PM	80185
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/31/2024 11:33:22 AM	80180
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2024 11:33:22 AM	80180
Surr: DNOP	73.3	69-147		%Rec	1	1/31/2024 11:33:22 AM	80180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/31/2024 12:25:55 PM	GS10278
Surr: BFB	99.2	15-244		%Rec	1	1/31/2024 12:25:55 PM	GS10278
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	1/31/2024 12:25:55 PM	R102788
Toluene	ND	0.046		mg/Kg	1	1/31/2024 12:25:55 PM	R102788
Ethylbenzene	ND	0.046		mg/Kg	1	1/31/2024 12:25:55 PM	R102788
Xylenes, Total	ND	0.093		mg/Kg	1	1/31/2024 12:25:55 PM	R102788
Surr: 4-Bromofluorobenzene	88.3	39.1-146		%Rec	1	1/31/2024 12:25:55 PM	R102788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B97
14-May-24

Client: EOG
Project: Crow Flats Fed Com 1

Sample ID: MB-80185	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 80185	RunNo: 102791
Prep Date: 1/31/2024	Analysis Date: 1/31/2024	SeqNo: 3798618 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-80185	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 80185	RunNo: 102791
Prep Date: 1/31/2024	Analysis Date: 1/31/2024	SeqNo: 3798619 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.1 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B97
14-May-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-80180	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80180	RunNo: 102789								
Prep Date: 1/31/2024	Analysis Date: 1/31/2024	SeqNo: 3797732	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.8	69	147			

Sample ID: LCS-80180	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80180	RunNo: 102789								
Prep Date: 1/31/2024	Analysis Date: 1/31/2024	SeqNo: 3797733	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	10	50.00	0	76.8	61.9	130			
Surr: DNOP	4.5		5.000		90.0	69	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 6 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B97
14-May-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: GS102788			RunNo: 102788						
Prep Date:	Analysis Date: 1/31/2024			SeqNo: 3797719		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.8	70	130			
Surr: BFB	1900		1000		193	15	244			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: GS102788			RunNo: 102788						
Prep Date:	Analysis Date: 1/31/2024			SeqNo: 3797720		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.4	15	244			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 7 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2401B97
14-May-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 100ng btex lcs		SampType: LCS			TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS		Batch ID: R102788			RunNo: 102788					
Prep Date:		Analysis Date: 1/31/2024			SeqNo: 3797724		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.9	70	130			
Toluene	0.89	0.050	1.000	0	89.2	70	130			
Ethylbenzene	0.89	0.050	1.000	0	89.0	70	130			
Xylenes, Total	2.7	0.10	3.000	0	89.2	70	130			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.2	39.1	146			

Sample ID: mb		SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS		Batch ID: R102788			RunNo: 102788					
Prep Date:		Analysis Date: 1/31/2024			SeqNo: 3797725		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.83		1.000		82.5	39.1	146			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 8



Environment Testin

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG Work Order Number: 2401B97 RcptNo: 1

Received By: Tracy Casarrubias 1/31/2024 8:15:00 AM

Completed By: Tracy Casarrubias 1/31/2024 8:55:20 AM

Reviewed By: SCM 1/31/24

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: SCM 1/31/24

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

Mailing address, phone number and Email/Fax are missing on COC- TMC 1/31/24

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.5	Good	Yes	Yogi		



Environment Testing

Eurofins Environment Testing South
Central, LLC
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

February 13, 2024

Chance Dixon

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Crow Flats Fed Com 1

OrderNo.: 2402004

Dear Chance Dixon:

Eurofins Environment Testing South Central, LLC received 3 sample(s) on 2/1/2024 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please do not hesitate to contact Eurofins Albuquerque for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2402004

Date Reported: 2/13/2024

CLIENT: EOG Client Sample ID: BES23-01 17'
Project: Crow Flats Fed Com 1 Collection Date: 1/30/2024 9:30:00 AM
Lab ID: 2402004-001 Matrix: MEOH (SOIL) Received Date: 2/1/2024 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: RBC
Chloride	210	60		mg/Kg	20	2/1/2024 10:50:26 AM	80198
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	66	9.2		mg/Kg	1	2/1/2024 11:35:42 AM	80201
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/1/2024 11:35:42 AM	80201
Surr: DNOP	89.8	69-147		%Rec	1	2/1/2024 11:35:42 AM	80201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	34	4.2		mg/Kg	1	2/1/2024 12:03:13 PM	GS10281
Surr: BFB	323	15-244	S	%Rec	1	2/1/2024 12:03:13 PM	GS10281
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.021		mg/Kg	1	2/1/2024 12:03:13 PM	BS10281
Toluene	0.18	0.042		mg/Kg	1	2/1/2024 12:03:13 PM	BS10281
Ethylbenzene	0.21	0.042		mg/Kg	1	2/1/2024 12:03:13 PM	BS10281
Xylenes, Total	1.0	0.085		mg/Kg	1	2/1/2024 12:03:13 PM	BS10281
Surr: 4-Bromofluorobenzene	98.3	39.1-146		%Rec	1	2/1/2024 12:03:13 PM	BS10281

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 2402004
Date Reported: 2/13/2024

CLIENT: EOG Client Sample ID: BES23-02 16'
Project: Crow Flats Fed Com 1 Collection Date: 1/30/2024 9:40:00 AM
Lab ID: 2402004-002 Matrix: MEOH (SOIL) Received Date: 2/1/2024 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: RBC
Chloride	380	60		mg/Kg	20	2/1/2024 11:05:36 AM	80198
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	130	9.1		mg/Kg	1	2/1/2024 11:47:54 AM	80201
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/1/2024 11:47:54 AM	80201
Surr: DNOP	89.0	69-147		%Rec	1	2/1/2024 11:47:54 AM	80201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	13	4.6		mg/Kg	1	2/1/2024 11:39:45 AM	GS10281
Surr: BFB	190	15-244		%Rec	1	2/1/2024 11:39:45 AM	GS10281
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	2/1/2024 11:39:45 AM	BS10281
Toluene	0.049	0.046		mg/Kg	1	2/1/2024 11:39:45 AM	BS10281
Ethylbenzene	0.11	0.046		mg/Kg	1	2/1/2024 11:39:45 AM	BS10281
Xylenes, Total	0.25	0.091		mg/Kg	1	2/1/2024 11:39:45 AM	BS10281
Surr: 4-Bromofluorobenzene	95.1	39.1-146		%Rec	1	2/1/2024 11:39:45 AM	BS10281

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 2402004

Date Reported: 2/13/2024

CLIENT: EOG Client Sample ID: BES23-03 16'
Project: Crow Flats Fed Com 1 Collection Date: 1/30/2024 9:50:00 AM
Lab ID: 2402004-003 Matrix: MEOH (SOIL) Received Date: 2/1/2024 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: RBC
Chloride	430	60		mg/Kg	20	2/1/2024 11:51:02 AM	80198
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JKU
Diesel Range Organics (DRO)	46	9.1		mg/Kg	1	2/1/2024 12:00:07 PM	80201
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	2/1/2024 12:00:07 PM	80201
Surr: DNOP	91.1	69-147		%Rec	1	2/1/2024 12:00:07 PM	80201
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	10	3.3		mg/Kg	1	2/1/2024 1:14:04 PM	GS10281
Surr: BFB	155	15-244		%Rec	1	2/1/2024 1:14:04 PM	GS10281
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	0.065	0.016		mg/Kg	1	2/1/2024 1:14:04 PM	BS10281
Toluene	0.20	0.033		mg/Kg	1	2/1/2024 1:14:04 PM	BS10281
Ethylbenzene	0.15	0.033		mg/Kg	1	2/1/2024 1:14:04 PM	BS10281
Xylenes, Total	0.29	0.066		mg/Kg	1	2/1/2024 1:14:04 PM	BS10281
Surr: 4-Bromofluorobenzene	95.4	39.1-146		%Rec	1	2/1/2024 1:14:04 PM	BS10281

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402004

13-Feb-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-80198		SampType: MBLK		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 80198		RunNo: 102829						
Prep Date: 2/1/2024		Analysis Date: 2/1/2024		SeqNo: 3799553			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-80198		SampType: LCS		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 80198		RunNo: 102829						
Prep Date: 2/1/2024		Analysis Date: 2/1/2024		SeqNo: 3799554			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402004

13-Feb-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: MB-80201	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 80201	RunNo: 102822								
Prep Date: 2/1/2024	Analysis Date: 2/1/2024	SeqNo: 3799077		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		89.5	69	147			

Sample ID: LCS-80201	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 80201	RunNo: 102822								
Prep Date: 2/1/2024	Analysis Date: 2/1/2024	SeqNo: 3799078		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.2	61.9	130			
Surr: DNOP	4.4		5.000		88.7	69	147			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402004

13-Feb-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: GS102815		RunNo: 102815							
Prep Date:	Analysis Date: 2/1/2024		SeqNo: 3798884		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	90.3	70	130			
Surr: BFB	2000		1000		203	15	244			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: GS102815		RunNo: 102815							
Prep Date:	Analysis Date: 2/1/2024		SeqNo: 3798885		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	15	244			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2402004

13-Feb-24

Client: EOG

Project: Crow Flats Fed Com 1

Sample ID: 100ng btex lcs	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: BS102815			RunNo: 102815						
Prep Date:	Analysis Date: 2/1/2024			SeqNo: 3798889		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	86.9	70	130			
Toluene	0.88	0.050	1.000	0	87.9	70	130			
Ethylbenzene	0.87	0.050	1.000	0	87.3	70	130			
Xylenes, Total	2.6	0.10	3.000	0	87.4	70	130			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.0	39.1	146			

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: BS102815			RunNo: 102815						
Prep Date:	Analysis Date: 2/1/2024			SeqNo: 3798890		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.5	39.1	146			

Qualifiers:

*

Value exceeds Maximum Contaminant Level.

D

Sample Diluted Due to Matrix

H

Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit

PQL

Practical Quantitative Limit

S

% Recovery outside of standard limits. If undiluted results may be estimated.

B

Analyte detected in the associated Method Blank

E

Above Quantitation Range/Estimated Value

J

Analyte detected below quantitation limits

P

Sample pH Not In Range

RL

Reporting Limit



Environment Testing

Eurofins Environment Testing South

Central, LLC

4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EOG Work Order Number: 2402004 RcptNo: 1

Received By: Tracy Casarrubias 2/1/2024 7:30:00 AM

Completed By: Desiree Dominguez 2/1/2024 8:13:43 AM

Reviewed By: Jan 21/1/24

D2

Chain of Custody

1. Is Chain of Custody complete? Yes ☐ No ☒ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: Jan 2/1/24Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

Mailing address, phone number and Email/Fax are missing on COC- DAD 2/1/24

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.0	Good	Yes	Yogi		

Chain-of-Custody Record

Client: EOG (Vertex)

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 same day

Project Name:

Crow Flats Fed Con 1

Project #:

23E-05855

Project Manager:

C. Dixon

Sampler:

A. Mohu

On Ice:

☒ Yes ☐ No40g

of Coolers:

1Cooler Temp (including CF): 2.1 - 0.1 = 2.0 (°C)

Container Type and #

402 jar

Preservative Type

1u

HEAL No.

2402-004

Date

1/30/24

Sample Name

BES23-01 17'

Time

9:30

Date

1/31/24

Time

9:40

Sample Name

BES23-02 16'

Time

9:50

Sample Name

BES23-03 16'

Time

9:50

Sample Name

BES23-04 16'

Time

9:50

Sample Name

BES23-05 16'

Time

9:50

Sample Name

BES23-06 16'

Time

9:50

Sample Name

BES23-07 16'

Time

9:50

Sample Name

BES23-08 16'

Time

9:50

Sample Name

BES23-09 16'

Time

9:50

Sample Name

BES23-10 16'

Time

9:50

Sample Name

BES23-11 16'

Time

9:50

Sample Name

BES23-12 16'

Time

9:50

Sample Name

BES23-13 16'

Time

9:50

Sample Name

BES23-14 16'

Time

9:50

Sample Name

BES23-15 16'

Time

9:50

Sample Name

BES23-16 16'

Time

9:50

Sample Name

BES23-17 16'

Time

9:50

Sample Name

BES23-18 16'

Time

9:50

Sample Name

BES23-19 16'

Time

9:50

Sample Name

BES23-20 16'

Time

9:50

Sample Name

BES23-21 16'

Time

9:50

Sample Name

BES23-22 16'

Time

9:50

Sample Name

BES23-23 16'

Time

9:50

Sample Name

BES23-24 16'

Time

9:50

Sample Name

BES23-25 16'

Time

9:50

Sample Name

BES23-26 16'

Time

9:50

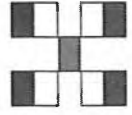
Sample Name

BES23-27 16'

Time

9:50

Sample Name

BES23-28 16'HALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

TPH:8015D(GRO / DRO / MRO) ☒ (BTX) ☒ MTBE / TMB's (8021)

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) ☐

Remarks:

Results to: cdixon@vertex.caReceived by: CDixon Date: 1/31/24 Time: 1:30Received by: CDixon Date: 2/1/24 Time: 7:30



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/16/2024 2:26:19 PM

JOB DESCRIPTION

Crow Flats Fed Com1

JOB NUMBER

885-2702-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



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

Generated
4/16/2024 2:26:19 PM

Client: Vertex
Project/Site: Crow Flats Fed Com1

Laboratory Job ID: 885-2702-1



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Definitions/Glossary

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

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: Crow Flats Fed Com1

Job ID: 885-2702-1

Job ID: 885-2702-1Eurofins Albuquerque

Job Narrative
885-2702-1

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 4/11/2024 7:50 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 5.4°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

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

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

Client Sample ID: WES24-01,0-7'

Lab Sample ID: 885-2702-1

Date Collected: 04/09/24 16:45

Matrix: Solid

Date Received: 04/11/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.5	mg/Kg		04/12/24 09:11	04/12/24 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		15 - 244	04/12/24 09:11	04/12/24 13:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.018	mg/Kg		04/12/24 09:11	04/12/24 13:51	1
Ethylbenzene	ND		0.035	mg/Kg		04/12/24 09:11	04/12/24 13:51	1
Toluene	ND		0.035	mg/Kg		04/12/24 09:11	04/12/24 13:51	1
Xylenes, Total	ND		0.070	mg/Kg		04/12/24 09:11	04/12/24 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		39 - 146	04/12/24 09:11	04/12/24 13:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<8.3		9.7	8.3 mg/Kg		04/11/24 08:58	04/11/24 11:37	1
Motor Oil Range Organics [C28-C40]	<27		48	27 mg/Kg		04/11/24 08:58	04/11/24 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134	04/11/24 08:58	04/11/24 11:37	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		60	60 mg/Kg		04/11/24 14:23	04/11/24 23:40	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

Client Sample ID: WES24-01,8-17'

Lab Sample ID: 885-2702-2

Date Collected: 04/09/24 16:55

Matrix: Solid

Date Received: 04/11/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.9	mg/Kg		04/12/24 09:11	04/12/24 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		15 - 244	04/12/24 09:11	04/12/24 14:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.020	mg/Kg		04/12/24 09:11	04/12/24 14:14	1
Ethylbenzene	ND		0.039	mg/Kg		04/12/24 09:11	04/12/24 14:14	1
Toluene	ND		0.039	mg/Kg		04/12/24 09:11	04/12/24 14:14	1
Xylenes, Total	ND		0.078	mg/Kg		04/12/24 09:11	04/12/24 14:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		39 - 146	04/12/24 09:11	04/12/24 14:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<8.4		9.8	8.4 mg/Kg		04/11/24 08:58	04/11/24 11:49	1
Motor Oil Range Organics [C28-C40]	<27		49	27 mg/Kg		04/11/24 08:58	04/11/24 11:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	104		62 - 134	04/11/24 08:58	04/11/24 11:49	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		60	60 mg/Kg		04/11/24 14:23	04/11/24 23:55	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

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

Lab Sample ID: MB 885-3171/1-A

Matrix: Solid

Analysis Batch: 3221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3171

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 09:11	04/12/24 11:06	1

Lab Sample ID: LCS 885-3171/2-A

Matrix: Solid

Analysis Batch: 3221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	25.6		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	211		15 - 244				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3171/1-A

Matrix: Solid

Analysis Batch: 3222

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3171

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Toluene	ND		0.050	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 09:11	04/12/24 11:06	1

Lab Sample ID: LCS 885-3171/3-A

Matrix: Solid

Analysis Batch: 3222

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.846		mg/Kg		85	70 - 130
Ethylbenzene	1.00	0.863		mg/Kg		86	70 - 130
m,p-Xylene	2.00	1.76		mg/Kg		88	70 - 130
o-Xylene	1.00	0.856		mg/Kg		86	70 - 130
Toluene	1.00	0.853		mg/Kg		85	70 - 130
Xylenes, Total	3.00	2.61		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	90		39 - 146				

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

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

Lab Sample ID: MB 885-3074/1-A

Matrix: Solid

Analysis Batch: 3123

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3074

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<8.6		10	8.6 mg/Kg		04/11/24 08:58	04/11/24 11:12	1
Motor Oil Range Organics [C28-C40]	<28		50	28 mg/Kg		04/11/24 08:58	04/11/24 11:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	107		62 - 134			04/11/24 08:58	04/11/24 11:12	1

Lab Sample ID: LCS 885-3074/2-A

Matrix: Solid

Analysis Batch: 3123

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	44.1		mg/Kg		88	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	104		62 - 134				

Lab Sample ID: 885-2702-2 MS

Matrix: Solid

Analysis Batch: 3123

Client Sample ID: WES24-01,8-17'

Prep Type: Total/NA

Prep Batch: 3074

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	<8.4		45.0	33.4		mg/Kg		74	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	104		62 - 134						

Lab Sample ID: 885-2702-2 MSD

Matrix: Solid

Analysis Batch: 3123

Client Sample ID: WES24-01,8-17'

Prep Type: Total/NA

Prep Batch: 3074

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<8.4		46.9	41.9		mg/Kg		89	44 - 136	23	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	99		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3137/1-A

Matrix: Solid

Analysis Batch: 3168

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3137

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<1.5		1.5	1.5 mg/Kg		04/11/24 14:23	04/11/24 21:08	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-3137/2-A				Client Sample ID: Lab Control Sample					
Matrix: Solid				Prep Type: Total/NA					
Analysis Batch: 3168				Prep Batch: 3137					
Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride		15.0	14.0		mg/Kg		93	90 - 110	

Lab Sample ID: MB 885-3168/4				Client Sample ID: Method Blank					
Matrix: Solid				Prep Type: Total/NA					
Analysis Batch: 3168									
Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.50		0.50	0.50	mg/Kg			04/11/24 08:46	1

Lab Sample ID: MRL 885-3168/3				Client Sample ID: Lab Control Sample					
Matrix: Solid				Prep Type: Total/NA					
Analysis Batch: 3168									
Analyte		Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride		0.500	0.529		mg/L		106	50 - 150	

QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

GC VOA

Prep Batch: 3171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	5035	
885-2702-2	WES24-01,8-17"	Total/NA	Solid	5035	
MB 885-3171/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-3171/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-3171/3-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 3221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	8015D	3171
885-2702-2	WES24-01,8-17"	Total/NA	Solid	8015D	3171
MB 885-3171/1-A	Method Blank	Total/NA	Solid	8015D	3171
LCS 885-3171/2-A	Lab Control Sample	Total/NA	Solid	8015D	3171

Analysis Batch: 3222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	8021B	3171
885-2702-2	WES24-01,8-17"	Total/NA	Solid	8021B	3171
MB 885-3171/1-A	Method Blank	Total/NA	Solid	8021B	3171
LCS 885-3171/3-A	Lab Control Sample	Total/NA	Solid	8021B	3171

GC Semi VOA

Prep Batch: 3074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	SHAKE	
885-2702-2	WES24-01,8-17"	Total/NA	Solid	SHAKE	
MB 885-3074/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3074/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2702-2 MS	WES24-01,8-17"	Total/NA	Solid	SHAKE	
885-2702-2 MSD	WES24-01,8-17"	Total/NA	Solid	SHAKE	

Analysis Batch: 3123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	8015D	3074
885-2702-2	WES24-01,8-17"	Total/NA	Solid	8015D	3074
MB 885-3074/1-A	Method Blank	Total/NA	Solid	8015D	3074
LCS 885-3074/2-A	Lab Control Sample	Total/NA	Solid	8015D	3074
885-2702-2 MS	WES24-01,8-17"	Total/NA	Solid	8015D	3074
885-2702-2 MSD	WES24-01,8-17"	Total/NA	Solid	8015D	3074

HPLC/IC

Prep Batch: 3137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	300_Prep	
885-2702-2	WES24-01,8-17"	Total/NA	Solid	300_Prep	
MB 885-3137/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3137/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 3168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-1	WES24-01,0-7"	Total/NA	Solid	300.0	3137

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

HPLC/IC (Continued)

Analysis Batch: 3168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2702-2	WES24-01,8-17'	Total/NA	Solid	300.0	3137
MB 885-3137/1-A	Method Blank	Total/NA	Solid	300.0	3137
MB 885-3168/4	Method Blank	Total/NA	Solid	300.0	3137
LCS 885-3137/2-A	Lab Control Sample	Total/NA	Solid	300.0	
MRL 885-3168/3	Lab Control Sample	Total/NA	Solid	300.0	

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- 10
- 11

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

Client Sample ID: WES24-01,0-7'
Date Collected: 04/09/24 16:45
Date Received: 04/11/24 07:50

Lab Sample ID: 885-2702-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8015D		1	3221	JP	EET ALB	04/12/24 13:51
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8021B		1	3222	JP	EET ALB	04/12/24 13:51
Total/NA	Prep	SHAKE			3074	JU	EET ALB	04/11/24 08:58
Total/NA	Analysis	8015D		1	3123	JU	EET ALB	04/11/24 11:37
Total/NA	Prep	300_Prep			3137	KB	EET ALB	04/11/24 14:23
Total/NA	Analysis	300.0		20	3168	RC	EET ALB	04/11/24 23:40

Client Sample ID: WES24-01,8-17'
Date Collected: 04/09/24 16:55
Date Received: 04/11/24 07:50

Lab Sample ID: 885-2702-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8015D		1	3221	JP	EET ALB	04/12/24 14:14
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8021B		1	3222	JP	EET ALB	04/12/24 14:14
Total/NA	Prep	SHAKE			3074	JU	EET ALB	04/11/24 08:58
Total/NA	Analysis	8015D		1	3123	JU	EET ALB	04/11/24 11:49
Total/NA	Prep	300_Prep			3137	KB	EET ALB	04/11/24 14:23
Total/NA	Analysis	300.0		20	3168	RC	EET ALB	04/11/24 23:55

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

Accreditation/Certification Summary

Client: Vertex
Project/Site: Crow Flats Fed Com1

Job ID: 885-2702-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

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- 10
- 11

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2702-1

Login Number: 2702

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/16/2024 4:01:30 PM

JOB DESCRIPTION

Crow Flats Fed Com 1

JOB NUMBER

885-2769-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



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

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Laboratory Job ID: 885-2769-1



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Definitions/Glossary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

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: Crow Flats Fed Com 1

Job ID: 885-2769-1

Job ID: 885-2769-1

Eurofins Albuquerque

Job Narrative 885-2769-1

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 4/12/2024 7:50 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 4.9°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

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

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Client Sample ID: BES24-12 16'

Lab Sample ID: 885-2769-1

Date Collected: 04/10/24 12:00

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		3.6	mg/Kg		04/12/24 09:11	04/12/24 11:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		15 - 244			04/12/24 09:11	04/12/24 11:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.018	mg/Kg		04/12/24 09:11	04/12/24 11:30	1
Ethylbenzene	ND		0.036	mg/Kg		04/12/24 09:11	04/12/24 11:30	1
Toluene	ND		0.036	mg/Kg		04/12/24 09:11	04/12/24 11:30	1
Xylenes, Total	ND		0.072	mg/Kg		04/12/24 09:11	04/12/24 11:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		39 - 146			04/12/24 09:11	04/12/24 11:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	15		9.2	mg/Kg		04/12/24 08:32	04/12/24 11:38	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/12/24 08:32	04/12/24 11:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	96		62 - 134			04/12/24 08:32	04/12/24 11:38	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	370		60	mg/Kg		04/12/24 07:53	04/12/24 11:05	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Client Sample ID: BES24-13 16'
Date Collected: 04/10/24 12:05
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2769-2
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		4.0	mg/Kg		04/12/24 09:11	04/12/24 11:54	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	107		15 - 244			04/12/24 09:11	04/12/24 11:54	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.020	mg/Kg		04/12/24 09:11	04/12/24 11:54	1	
Ethylbenzene	ND		0.040	mg/Kg		04/12/24 09:11	04/12/24 11:54	1	
Toluene	ND		0.040	mg/Kg		04/12/24 09:11	04/12/24 11:54	1	
Xylenes, Total	ND		0.079	mg/Kg		04/12/24 09:11	04/12/24 11:54	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	89		39 - 146			04/12/24 09:11	04/12/24 11:54	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	17		9.3	mg/Kg		04/12/24 08:32	04/12/24 11:51	1	
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/12/24 08:32	04/12/24 11:51	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	97		62 - 134			04/12/24 08:32	04/12/24 11:51	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	240		60	mg/Kg		04/12/24 07:53	04/12/24 11:20	20	

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Client Sample ID: BES24-14 16'
Date Collected: 04/10/24 12:10
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2769-3
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		4.3	mg/Kg		04/12/24 09:11	04/12/24 12:17	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		15 - 244			04/12/24 09:11	04/12/24 12:17	1	
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.021	mg/Kg		04/12/24 09:11	04/12/24 12:17	1	
Ethylbenzene	ND		0.043	mg/Kg		04/12/24 09:11	04/12/24 12:17	1	
Toluene	ND		0.043	mg/Kg		04/12/24 09:11	04/12/24 12:17	1	
Xylenes, Total	ND		0.086	mg/Kg		04/12/24 09:11	04/12/24 12:17	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	89		39 - 146			04/12/24 09:11	04/12/24 12:17	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		04/12/24 08:32	04/12/24 12:03	1	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/12/24 08:32	04/12/24 12:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	94		62 - 134			04/12/24 08:32	04/12/24 12:03	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	330		60	mg/Kg		04/12/24 07:53	04/12/24 12:05	20	

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Client Sample ID: BES24-19 17'

Lab Sample ID: 885-2769-4

Date Collected: 04/10/24 14:10

Matrix: Solid

Date Received: 04/12/24 07:50

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.2	mg/Kg		04/12/24 09:11	04/12/24 12:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244	04/12/24 09:11	04/12/24 12:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.026	mg/Kg		04/12/24 09:11	04/12/24 12:41	1
Ethylbenzene	ND		0.052	mg/Kg		04/12/24 09:11	04/12/24 12:41	1
Toluene	ND		0.052	mg/Kg		04/12/24 09:11	04/12/24 12:41	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 09:11	04/12/24 12:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146	04/12/24 09:11	04/12/24 12:41	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		04/12/24 08:32	04/12/24 12:15	1
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/12/24 08:32	04/12/24 12:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	92		62 - 134	04/12/24 08:32	04/12/24 12:15	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	250		59	mg/Kg		04/12/24 07:53	04/12/24 12:21	20

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

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

Lab Sample ID: MB 885-3171/1-A

Matrix: Solid

Analysis Batch: 3221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3171

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		15 - 244			04/12/24 09:11	04/12/24 11:06	1

Lab Sample ID: LCS 885-3171/2-A

Matrix: Solid

Analysis Batch: 3221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	25.6		mg/Kg		102	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	211		15 - 244				

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3171/1-A

Matrix: Solid

Analysis Batch: 3222

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3171

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Ethylbenzene	ND		0.050	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Toluene	ND		0.050	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Xylenes, Total	ND		0.10	mg/Kg		04/12/24 09:11	04/12/24 11:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		39 - 146			04/12/24 09:11	04/12/24 11:06	1

Lab Sample ID: LCS 885-3171/3-A

Matrix: Solid

Analysis Batch: 3222

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.846		mg/Kg		85	70 - 130
Ethylbenzene	1.00	0.863		mg/Kg		86	70 - 130
m,p-Xylene	2.00	1.76		mg/Kg		88	70 - 130
o-Xylene	1.00	0.856		mg/Kg		86	70 - 130
Toluene	1.00	0.853		mg/Kg		85	70 - 130
Xylenes, Total	3.00	2.61		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	90		39 - 146				

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QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

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

Lab Sample ID: MB 885-3163/1-A

Matrix: Solid

Analysis Batch: 3204

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3163

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/12/24 08:32	04/12/24 10:48	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/12/24 08:32	04/12/24 10:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	102		62 - 134			04/12/24 08:32	04/12/24 10:48	1

Lab Sample ID: LCS 885-3163/2-A

Matrix: Solid

Analysis Batch: 3204

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	50.0	46.6		mg/Kg		93	60 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Di-n-octyl phthalate (Surr)	112		62 - 134				

Lab Sample ID: 885-2769-4 MS

Matrix: Solid

Analysis Batch: 3204

Client Sample ID: BES24-19 17'

Prep Type: Total/NA

Prep Batch: 3163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics [C10-C28]	ND		46.6	44.8		mg/Kg		96	44 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Di-n-octyl phthalate (Surr)	95		62 - 134						

Lab Sample ID: 885-2769-4 MSD

Matrix: Solid

Analysis Batch: 3204

Client Sample ID: BES24-19 17'

Prep Type: Total/NA

Prep Batch: 3163

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		49.3	44.8		mg/Kg		91	44 - 136	0	32
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Di-n-octyl phthalate (Surr)	98		62 - 134								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3159/1-A

Matrix: Solid

Analysis Batch: 3227

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3159

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		3.0	mg/Kg		04/12/24 07:53	04/12/24 09:03	1

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QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-3159/2-A				Client Sample ID: Lab Control Sample			
Matrix: Solid				Prep Type: Total/NA			
Analysis Batch: 3227				Prep Batch: 3159			
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	30.0	28.1		mg/Kg		94	90 - 110

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QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

GC VOA

Prep Batch: 3171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	5035	
885-2769-2	BES24-13 16'	Total/NA	Solid	5035	
885-2769-3	BES24-14 16'	Total/NA	Solid	5035	
885-2769-4	BES24-19 17'	Total/NA	Solid	5035	
MB 885-3171/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-3171/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-3171/3-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 3221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	8015D	3171
885-2769-2	BES24-13 16'	Total/NA	Solid	8015D	3171
885-2769-3	BES24-14 16'	Total/NA	Solid	8015D	3171
885-2769-4	BES24-19 17'	Total/NA	Solid	8015D	3171
MB 885-3171/1-A	Method Blank	Total/NA	Solid	8015D	3171
LCS 885-3171/2-A	Lab Control Sample	Total/NA	Solid	8015D	3171

Analysis Batch: 3222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	8021B	3171
885-2769-2	BES24-13 16'	Total/NA	Solid	8021B	3171
885-2769-3	BES24-14 16'	Total/NA	Solid	8021B	3171
885-2769-4	BES24-19 17'	Total/NA	Solid	8021B	3171
MB 885-3171/1-A	Method Blank	Total/NA	Solid	8021B	3171
LCS 885-3171/3-A	Lab Control Sample	Total/NA	Solid	8021B	3171

GC Semi VOA

Prep Batch: 3163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	SHAKE	
885-2769-2	BES24-13 16'	Total/NA	Solid	SHAKE	
885-2769-3	BES24-14 16'	Total/NA	Solid	SHAKE	
885-2769-4	BES24-19 17'	Total/NA	Solid	SHAKE	
MB 885-3163/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3163/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-2769-4 MS	BES24-19 17'	Total/NA	Solid	SHAKE	
885-2769-4 MSD	BES24-19 17'	Total/NA	Solid	SHAKE	

Analysis Batch: 3204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	8015D	3163
885-2769-2	BES24-13 16'	Total/NA	Solid	8015D	3163
885-2769-3	BES24-14 16'	Total/NA	Solid	8015D	3163
885-2769-4	BES24-19 17'	Total/NA	Solid	8015D	3163
MB 885-3163/1-A	Method Blank	Total/NA	Solid	8015D	3163
LCS 885-3163/2-A	Lab Control Sample	Total/NA	Solid	8015D	3163
885-2769-4 MS	BES24-19 17'	Total/NA	Solid	8015D	3163
885-2769-4 MSD	BES24-19 17'	Total/NA	Solid	8015D	3163

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

HPLC/IC

Prep Batch: 3159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	300_Prep	
885-2769-2	BES24-13 16'	Total/NA	Solid	300_Prep	
885-2769-3	BES24-14 16'	Total/NA	Solid	300_Prep	
885-2769-4	BES24-19 17'	Total/NA	Solid	300_Prep	
MB 885-3159/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3159/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 3227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2769-1	BES24-12 16'	Total/NA	Solid	300.0	3159
885-2769-2	BES24-13 16'	Total/NA	Solid	300.0	3159
885-2769-3	BES24-14 16'	Total/NA	Solid	300.0	3159
885-2769-4	BES24-19 17'	Total/NA	Solid	300.0	3159
MB 885-3159/1-A	Method Blank	Total/NA	Solid	300.0	3159
LCS 885-3159/2-A	Lab Control Sample	Total/NA	Solid	300.0	3159

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Client Sample ID: BES24-12 16'

Lab Sample ID: 885-2769-1

Date Collected: 04/10/24 12:00

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8015D		1	3221	JP	EET ALB	04/12/24 11:30
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8021B		1	3222	JP	EET ALB	04/12/24 11:30
Total/NA	Prep	SHAKE			3163	JU	EET ALB	04/12/24 08:32
Total/NA	Analysis	8015D		1	3204	JU	EET ALB	04/12/24 11:38
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 11:05

Client Sample ID: BES24-13 16'

Lab Sample ID: 885-2769-2

Date Collected: 04/10/24 12:05

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8015D		1	3221	JP	EET ALB	04/12/24 11:54
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8021B		1	3222	JP	EET ALB	04/12/24 11:54
Total/NA	Prep	SHAKE			3163	JU	EET ALB	04/12/24 08:32
Total/NA	Analysis	8015D		1	3204	JU	EET ALB	04/12/24 11:51
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 11:20

Client Sample ID: BES24-14 16'

Lab Sample ID: 885-2769-3

Date Collected: 04/10/24 12:10

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8015D		1	3221	JP	EET ALB	04/12/24 12:17
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8021B		1	3222	JP	EET ALB	04/12/24 12:17
Total/NA	Prep	SHAKE			3163	JU	EET ALB	04/12/24 08:32
Total/NA	Analysis	8015D		1	3204	JU	EET ALB	04/12/24 12:03
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 12:05

Client Sample ID: BES24-19 17'

Lab Sample ID: 885-2769-4

Date Collected: 04/10/24 14:10

Matrix: Solid

Date Received: 04/12/24 07:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8015D		1	3221	JP	EET ALB	04/12/24 12:41

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Client Sample ID: BES24-19 17'
Date Collected: 04/10/24 14:10
Date Received: 04/12/24 07:50

Lab Sample ID: 885-2769-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3171	JP	EET ALB	04/12/24 09:11
Total/NA	Analysis	8021B		1	3222	JP	EET ALB	04/12/24 12:41
Total/NA	Prep	SHAKE			3163	JU	EET ALB	04/12/24 08:32
Total/NA	Analysis	8015D		1	3204	JU	EET ALB	04/12/24 12:15
Total/NA	Prep	300_Prep			3159	JT	EET ALB	04/12/24 07:53
Total/NA	Analysis	300.0		20	3227	RC	EET ALB	04/12/24 12:21

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2769-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
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
300.0	300_Prep	Solid	Chloride
8015D	5035	Solid	Gasoline Range Organics [C6 - C10]
8015D	SHAKE	Solid	Diesel Range Organics [C10-C28]
8015D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]
8021B	5035	Solid	Benzene
8021B	5035	Solid	Ethylbenzene
8021B	5035	Solid	Toluene
8021B	5035	Solid	Xylenes, Total

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2769-1

Login Number: 2769

List Number: 1

Creator: Casarrubias, Tracy

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/18/2024 4:48:44 PM

JOB DESCRIPTION

Crow Flats Fed Com 1

JOB NUMBER

885-2834-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



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

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Laboratory Job ID: 885-2834-1



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Definitions/Glossary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Qualifiers

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

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

Case Narrative

Client: Vertex
Project: Crow Flats Fed Com 1

Job ID: 885-2834-1

Job ID: 885-2834-1

Eurofins Albuquerque

Job Narrative 885-2834-1

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 4/13/2024 8:05 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 0.7°C.

Gasoline Range Organics

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following samples: BES24-17, 18' (885-2834-1). The sample(s) shows evidence of matrix interference.

Method 8015D_GRO: Internal standard responses were outside of acceptance limits for the following samples: BES24-18, 18' (885-2834-4). 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

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

HPLC/IC

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

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Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Client Sample ID: BES24-17, 18'

Lab Sample ID: 885-2834-1

Date Collected: 04/11/24 13:10

Matrix: Solid

Date Received: 04/13/24 08:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	18		4.4	mg/Kg		04/15/24 10:29	04/15/24 12:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	253	S1+	15 - 244			04/15/24 10:29	04/15/24 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.022	mg/Kg		04/15/24 10:29	04/15/24 12:44	1
Ethylbenzene	0.050		0.044	mg/Kg		04/15/24 10:29	04/15/24 12:44	1
Toluene	ND		0.044	mg/Kg		04/15/24 10:29	04/15/24 12:44	1
Xylenes, Total	0.22		0.088	mg/Kg		04/15/24 10:29	04/15/24 12:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			04/15/24 10:29	04/15/24 12:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]	ND		48	mg/Kg		04/15/24 13:24	04/15/24 18:27	1
Diesel Range Organics [C10-C28]	45		9.7	mg/Kg		04/15/24 13:24	04/15/24 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			04/15/24 13:24	04/15/24 18:27	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		60	mg/Kg		04/15/24 15:17	04/15/24 21:55	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Client Sample ID: BES24-16, 17'
Date Collected: 04/11/24 13:15
Date Received: 04/13/24 08:05

Lab Sample ID: 885-2834-2
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		5.4	mg/Kg		04/15/24 10:29	04/15/24 13:08		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	109		15 - 244			04/15/24 10:29	04/15/24 13:08		1
Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.027	mg/Kg		04/15/24 10:29	04/15/24 13:08		1
Ethylbenzene	ND		0.054	mg/Kg		04/15/24 10:29	04/15/24 13:08		1
Toluene	ND		0.054	mg/Kg		04/15/24 10:29	04/15/24 13:08		1
Xylenes, Total	ND		0.11	mg/Kg		04/15/24 10:29	04/15/24 13:08		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	88		39 - 146			04/15/24 10:29	04/15/24 13:08		1
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Motor Oil Range Organics [C28-C40]	ND		47	mg/Kg		04/15/24 13:24	04/15/24 18:39		1
Diesel Range Organics [C10-C28]	ND		9.4	mg/Kg		04/15/24 13:24	04/15/24 18:39		1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	94		62 - 134			04/15/24 13:24	04/15/24 18:39		1
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	300		60	mg/Kg		04/15/24 15:17	04/15/24 22:08		20

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Client Sample ID: BES24-20, 18'

Lab Sample ID: 885-2834-3

Date Collected: 04/11/24 13:20

Matrix: Solid

Date Received: 04/13/24 08:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	17		4.3	mg/Kg		04/15/24 10:29	04/15/24 13:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	223		15 - 244			04/15/24 10:29	04/15/24 13:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.022	mg/Kg		04/15/24 10:29	04/15/24 13:31	1
Ethylbenzene	0.054		0.043	mg/Kg		04/15/24 10:29	04/15/24 13:31	1
Toluene	ND		0.043	mg/Kg		04/15/24 10:29	04/15/24 13:31	1
Xylenes, Total	0.10		0.086	mg/Kg		04/15/24 10:29	04/15/24 13:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		39 - 146			04/15/24 10:29	04/15/24 13:31	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]	57		47	mg/Kg		04/15/24 13:24	04/15/24 18:52	1
Diesel Range Organics [C10-C28]	20		9.4	mg/Kg		04/15/24 13:24	04/15/24 18:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	91		62 - 134			04/15/24 13:24	04/15/24 18:52	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		60	mg/Kg		04/15/24 15:17	04/15/24 22:46	20

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Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Client Sample ID: BES24-18, 18'

Lab Sample ID: 885-2834-4

Date Collected: 04/11/24 13:25

Matrix: Solid

Date Received: 04/13/24 08:05

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	31		4.6	mg/Kg		04/15/24 10:29	04/15/24 13:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	310	S1+	15 - 244			04/15/24 10:29	04/15/24 13:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.023	mg/Kg		04/15/24 10:29	04/15/24 13:55	1
Ethylbenzene	0.096		0.046	mg/Kg		04/15/24 10:29	04/15/24 13:55	1
Toluene	ND		0.046	mg/Kg		04/15/24 10:29	04/15/24 13:55	1
Xylenes, Total	ND		0.092	mg/Kg		04/15/24 10:29	04/15/24 13:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		39 - 146			04/15/24 10:29	04/15/24 13:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/15/24 13:24	04/15/24 19:04	1
Diesel Range Organics [C10-C28]	22		9.1	mg/Kg		04/15/24 13:24	04/15/24 19:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			04/15/24 13:24	04/15/24 19:04	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		60	mg/Kg		04/15/24 15:17	04/15/24 22:59	20

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QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

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

Lab Sample ID: MB 885-3274/1-A

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3274

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/15/24 10:30	04/15/24 12:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		15 - 244			04/15/24 10:30	04/15/24 12:21	1

Lab Sample ID: LCS 885-3274/2-A

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3274

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	26.5		mg/Kg		106	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	219		15 - 244				

Lab Sample ID: 885-2834-1 MS

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: BES24-17, 18'

Prep Type: Total/NA

Prep Batch: 3274

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	18		21.9	41.3		mg/Kg		108	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	359	S1+	15 - 244						

Lab Sample ID: 885-2834-1 MSD

Matrix: Solid

Analysis Batch: 3341

Client Sample ID: BES24-17, 18'

Prep Type: Total/NA

Prep Batch: 3274

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics [C6 - C10]	18		21.9	41.0		mg/Kg		106	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	359	S1+	15 - 244								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3274/1-A

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3274

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/15/24 10:30	04/15/24 12:21	1
Ethylbenzene	ND		0.050	mg/Kg		04/15/24 10:30	04/15/24 12:21	1
Toluene	ND		0.050	mg/Kg		04/15/24 10:30	04/15/24 12:21	1

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QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

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

Lab Sample ID: MB 885-3274/1-A

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3274

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/15/24 10:30	04/15/24 12:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		39 - 146			04/15/24 10:30	04/15/24 12:21	1

Lab Sample ID: LCS 885-3274/3-A

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3274

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.852		mg/Kg		85	70 - 130
Ethylbenzene	1.00	0.867		mg/Kg		87	70 - 130
Toluene	1.00	0.864		mg/Kg		86	70 - 130
Xylenes, Total	3.00	2.61		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	91		39 - 146				

Lab Sample ID: 885-2834-2 MS

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: BES24-16, 17'

Prep Type: Total/NA

Prep Batch: 3274

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		1.07	0.880		mg/Kg		82	70 - 130
Ethylbenzene	ND		1.07	0.903		mg/Kg		84	70 - 130
Toluene	ND		1.07	0.900		mg/Kg		84	70 - 130
Xylenes, Total	ND		3.21	2.72		mg/Kg		84	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	90		39 - 146						

Lab Sample ID: 885-2834-2 MSD

Matrix: Solid

Analysis Batch: 3342

Client Sample ID: BES24-16, 17'

Prep Type: Total/NA

Prep Batch: 3274

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		1.07	0.883		mg/Kg		83	70 - 130	0	20
Ethylbenzene	ND		1.07	0.906		mg/Kg		85	70 - 130	0	20
Toluene	ND		1.07	0.893		mg/Kg		83	70 - 130	1	20
Xylenes, Total	ND		3.21	2.73		mg/Kg		84	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	87		39 - 146								

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QC Sample Results

Client: Vertex

Job ID: 885-2834-1

Project/Site: Crow Flats Fed Com 1

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

Lab Sample ID: MB 885-3301/1-A

Matrix: Solid

Analysis Batch: 3332

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3301

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/15/24 13:24	04/15/24 18:02	1
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/15/24 13:24	04/15/24 18:02	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	98		62 - 134			04/15/24 13:24	04/15/24 18:02	1

Lab Sample ID: LCS 885-3301/2-A

Matrix: Solid

Analysis Batch: 3332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Diesel Range Organics [C10-C28]	50.0	47.4		mg/Kg		95	60 - 135	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	101		62 - 134					

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3312/1-A

Matrix: Solid

Analysis Batch: 3323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3312

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		04/15/24 15:17	04/15/24 21:29	1

Lab Sample ID: LCS 885-3312/2-A

Matrix: Solid

Analysis Batch: 3323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	15.0	14.1		mg/Kg		94	90 - 110	

Lab Sample ID: 885-2834-4 MS

Matrix: Solid

Analysis Batch: 3323

Client Sample ID: BES24-18, 18'

Prep Type: Total/NA

Prep Batch: 3312

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	230		30.1	258	4	mg/Kg		90	50 - 150	

Lab Sample ID: 885-2834-4 MSD

Matrix: Solid

Analysis Batch: 3323

Client Sample ID: BES24-18, 18'

Prep Type: Total/NA

Prep Batch: 3312

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
Chloride	230		29.9	252	4	mg/Kg		69	50 - 150	3 20

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QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 885-3323/4

Matrix: Solid

Analysis Batch: 3323

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			04/15/24 08:58	1

Lab Sample ID: MRL 885-3323/3

Matrix: Solid

Analysis Batch: 3323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	0.500	0.522		mg/L		104	50 - 150

QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

GC VOA

Prep Batch: 3274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	5035	
885-2834-2	BES24-16, 17'	Total/NA	Solid	5035	
885-2834-3	BES24-20, 18'	Total/NA	Solid	5035	
885-2834-4	BES24-18, 18'	Total/NA	Solid	5035	
MB 885-3274/1-A	Method Blank	Total/NA	Solid	5035	
LCS 885-3274/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 885-3274/3-A	Lab Control Sample	Total/NA	Solid	5035	
885-2834-1 MS	BES24-17, 18'	Total/NA	Solid	5035	
885-2834-1 MSD	BES24-17, 18'	Total/NA	Solid	5035	
885-2834-2 MS	BES24-16, 17'	Total/NA	Solid	5035	
885-2834-2 MSD	BES24-16, 17'	Total/NA	Solid	5035	

Analysis Batch: 3341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	8015D	3274
885-2834-2	BES24-16, 17'	Total/NA	Solid	8015D	3274
885-2834-3	BES24-20, 18'	Total/NA	Solid	8015D	3274
885-2834-4	BES24-18, 18'	Total/NA	Solid	8015D	3274
MB 885-3274/1-A	Method Blank	Total/NA	Solid	8015D	3274
LCS 885-3274/2-A	Lab Control Sample	Total/NA	Solid	8015D	3274
885-2834-1 MS	BES24-17, 18'	Total/NA	Solid	8015D	3274
885-2834-1 MSD	BES24-17, 18'	Total/NA	Solid	8015D	3274

Analysis Batch: 3342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	8021B	3274
885-2834-2	BES24-16, 17'	Total/NA	Solid	8021B	3274
885-2834-3	BES24-20, 18'	Total/NA	Solid	8021B	3274
885-2834-4	BES24-18, 18'	Total/NA	Solid	8021B	3274
MB 885-3274/1-A	Method Blank	Total/NA	Solid	8021B	3274
LCS 885-3274/3-A	Lab Control Sample	Total/NA	Solid	8021B	3274
885-2834-2 MS	BES24-16, 17'	Total/NA	Solid	8021B	3274
885-2834-2 MSD	BES24-16, 17'	Total/NA	Solid	8021B	3274

GC Semi VOA

Prep Batch: 3301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	SHAKE	
885-2834-2	BES24-16, 17'	Total/NA	Solid	SHAKE	
885-2834-3	BES24-20, 18'	Total/NA	Solid	SHAKE	
885-2834-4	BES24-18, 18'	Total/NA	Solid	SHAKE	
MB 885-3301/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3301/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	8015D	3301
885-2834-2	BES24-16, 17'	Total/NA	Solid	8015D	3301
885-2834-3	BES24-20, 18'	Total/NA	Solid	8015D	3301
885-2834-4	BES24-18, 18'	Total/NA	Solid	8015D	3301

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QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

GC Semi VOA (Continued)

Analysis Batch: 3332 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3301/1-A	Method Blank	Total/NA	Solid	8015D	3301
LCS 885-3301/2-A	Lab Control Sample	Total/NA	Solid	8015D	3301

HPLC/IC

Prep Batch: 3312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	300_Prep	
885-2834-2	BES24-16, 17'	Total/NA	Solid	300_Prep	
885-2834-3	BES24-20, 18'	Total/NA	Solid	300_Prep	
885-2834-4	BES24-18, 18'	Total/NA	Solid	300_Prep	
MB 885-3312/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3312/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
885-2834-4 MS	BES24-18, 18'	Total/NA	Solid	300_Prep	
885-2834-4 MSD	BES24-18, 18'	Total/NA	Solid	300_Prep	

Analysis Batch: 3323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2834-1	BES24-17, 18'	Total/NA	Solid	300.0	3312
885-2834-2	BES24-16, 17'	Total/NA	Solid	300.0	3312
885-2834-3	BES24-20, 18'	Total/NA	Solid	300.0	3312
885-2834-4	BES24-18, 18'	Total/NA	Solid	300.0	3312
MB 885-3312/1-A	Method Blank	Total/NA	Solid	300.0	3312
MB 885-3323/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-3312/2-A	Lab Control Sample	Total/NA	Solid	300.0	3312
MRL 885-3323/3	Lab Control Sample	Total/NA	Solid	300.0	
885-2834-4 MS	BES24-18, 18'	Total/NA	Solid	300.0	3312
885-2834-4 MSD	BES24-18, 18'	Total/NA	Solid	300.0	3312

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Client Sample ID: BES24-17, 18'
Date Collected: 04/11/24 13:10
Date Received: 04/13/24 08:05

Lab Sample ID: 885-2834-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 12:44
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 12:44
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 18:27
Total/NA	Prep	300_Prep			3312	KB	EET ALB	04/15/24 15:17
Total/NA	Analysis	300.0		20	3323	RC	EET ALB	04/15/24 21:55

Client Sample ID: BES24-16, 17'
Date Collected: 04/11/24 13:15
Date Received: 04/13/24 08:05

Lab Sample ID: 885-2834-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 13:08
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 13:08
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 18:39
Total/NA	Prep	300_Prep			3312	KB	EET ALB	04/15/24 15:17
Total/NA	Analysis	300.0		20	3323	RC	EET ALB	04/15/24 22:08

Client Sample ID: BES24-20, 18'
Date Collected: 04/11/24 13:20
Date Received: 04/13/24 08:05

Lab Sample ID: 885-2834-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 13:31
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 13:31
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 18:52
Total/NA	Prep	300_Prep			3312	KB	EET ALB	04/15/24 15:17
Total/NA	Analysis	300.0		20	3323	RC	EET ALB	04/15/24 22:46

Client Sample ID: BES24-18, 18'
Date Collected: 04/11/24 13:25
Date Received: 04/13/24 08:05

Lab Sample ID: 885-2834-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8015D		1	3341	JP	EET ALB	04/15/24 13:55

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Client Sample ID: BES24-18, 18'
Date Collected: 04/11/24 13:25
Date Received: 04/13/24 08:05

Lab Sample ID: 885-2834-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			3274	JP	EET ALB	04/15/24 10:29
Total/NA	Analysis	8021B		1	3342	JP	EET ALB	04/15/24 13:55
Total/NA	Prep	SHAKE			3301	JU	EET ALB	04/15/24 13:24
Total/NA	Analysis	8015D		1	3332	JU	EET ALB	04/15/24 19:04
Total/NA	Prep	300_Prep			3312	KB	EET ALB	04/15/24 15:17
Total/NA	Analysis	300.0		20	3323	RC	EET ALB	04/15/24 22:59

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2834-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

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Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2834-1

Login Number: 2834
List Number: 1
Creator: Rojas, Juan

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Chance Dixon
Vertex
3101 Boyd Dr
Carlsbad, New Mexico 88220

Generated 4/18/2024 10:30:41 PM

JOB DESCRIPTION

Crow Flats Fed Com 1

JOB NUMBER

885-2892-1

Eurofins Albuquerque
4901 Hawkins NE
Albuquerque NM 87109

Eurofins Albuquerque

Job Notes

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

Authorization



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

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Laboratory Job ID: 885-2892-1



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Definitions/Glossary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

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: Crow Flats Fed Com 1

Job ID: 885-2892-1

Job ID: 885-2892-1

Eurofins Albuquerque

Job Narrative 885-2892-1

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

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

HPLC/IC

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

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Client Sample ID: BES24-21, 17'

Lab Sample ID: 885-2892-1

Date Collected: 04/12/24 11:35

Matrix: Solid

Date Received: 04/16/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		5.0	mg/Kg		04/16/24 15:31	04/17/24 11:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		15 - 244			04/16/24 15:31	04/17/24 11:51	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 15:31	04/17/24 11:51	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 15:31	04/17/24 11:51	1
Toluene	ND		0.050	mg/Kg		04/16/24 15:31	04/17/24 11:51	1
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 15:31	04/17/24 11:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		39 - 146			04/16/24 15:31	04/17/24 11:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	12		9.2	mg/Kg		04/17/24 11:31	04/17/24 17:05	1
Motor Oil Range Organics [C28-C40]	ND		46	mg/Kg		04/17/24 11:31	04/17/24 17:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	94		62 - 134			04/17/24 11:31	04/17/24 17:05	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		60	mg/Kg		04/17/24 15:19	04/17/24 19:49	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Client Sample ID: BES24-22, 17'

Lab Sample ID: 885-2892-2

Date Collected: 04/12/24 11:40

Matrix: Solid

Date Received: 04/16/24 07:55

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 - C10]	ND		4.8	mg/Kg		04/16/24 15:31	04/17/24 12:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		15 - 244			04/16/24 15:31	04/17/24 12:15	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 15:31	04/17/24 12:15	1
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 12:15	1
Toluene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 12:15	1
Xylenes, Total	ND		0.096	mg/Kg		04/16/24 15:31	04/17/24 12:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		39 - 146			04/16/24 15:31	04/17/24 12:15	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 11:31	04/17/24 17:18	1
Motor Oil Range Organics [C28-C40]	ND		45	mg/Kg		04/17/24 11:31	04/17/24 17:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	89		62 - 134			04/17/24 11:31	04/17/24 17:18	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	280		60	mg/Kg		04/17/24 15:19	04/17/24 20:05	20

Eurofins Albuquerque

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Client Sample ID: BES24-23, 16'
Date Collected: 04/12/24 14:00
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2892-3
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]	18		4.8	mg/Kg		04/16/24 15:31	04/17/24 12:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	221		15 - 244			04/16/24 15:31	04/17/24 12:39	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 15:31	04/17/24 12:39	1	
Ethylbenzene	0.055		0.048	mg/Kg		04/16/24 15:31	04/17/24 12:39	1	
Toluene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 12:39	1	
Xylenes, Total	0.35		0.096	mg/Kg		04/16/24 15:31	04/17/24 12:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		39 - 146			04/16/24 15:31	04/17/24 12:39	1	
Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	32		9.9	mg/Kg		04/17/24 11:31	04/17/24 17:31	1	
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 11:31	04/17/24 17:31	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	83		62 - 134			04/17/24 11:31	04/17/24 17:31	1	
Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	490		60	mg/Kg		04/17/24 15:19	04/17/24 20:20	20	

Client Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Client Sample ID: BES24-24, 16'
Date Collected: 04/12/24 14:05
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2892-4
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]	5.3		4.8	mg/Kg		04/16/24 15:31	04/17/24 13:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	143		15 - 244			04/16/24 15:31	04/17/24 13:03	1	

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	ND		0.024	mg/Kg		04/16/24 15:31	04/17/24 13:03	1	
Ethylbenzene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 13:03	1	
Toluene	ND		0.048	mg/Kg		04/16/24 15:31	04/17/24 13:03	1	
Xylenes, Total	ND		0.095	mg/Kg		04/16/24 15:31	04/17/24 13:03	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	91		39 - 146			04/16/24 15:31	04/17/24 13:03	1	

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	14		8.6	mg/Kg		04/17/24 11:31	04/17/24 17:44	1	
Motor Oil Range Organics [C28-C40]	ND		43	mg/Kg		04/17/24 11:31	04/17/24 17:44	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
Di-n-octyl phthalate (Surr)	85		62 - 134			04/17/24 11:31	04/17/24 17:44	1	

Method: EPA 300.0 - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	410		60	mg/Kg		04/17/24 15:19	04/17/24 20:35	20	

QC Sample Results

Client: Vertex

Job ID: 885-2892-1

Project/Site: Crow Flats Fed Com 1

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

Lab Sample ID: MB 885-3391/1-A

Matrix: Solid

Analysis Batch: 3497

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3391

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 15:31	04/17/24 11:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		15 - 244			04/16/24 15:31	04/17/24 11:27	1

Lab Sample ID: LCS 885-3391/2-A

Matrix: Solid

Analysis Batch: 3497

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	25.0	27.4		mg/Kg		110	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	229		15 - 244				

Lab Sample ID: 885-2892-1 MS

Matrix: Solid

Analysis Batch: 3497

Client Sample ID: BES24-21, 17'

Prep Type: Total/NA

Prep Batch: 3391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics [C6 - C10]	ND		24.8	29.3		mg/Kg		118	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	240		15 - 244						

Lab Sample ID: 885-2892-1 MSD

Matrix: Solid

Analysis Batch: 3497

Client Sample ID: BES24-21, 17'

Prep Type: Total/NA

Prep Batch: 3391

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		24.8	29.3		mg/Kg		118	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	238		15 - 244								

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-3391/1-A

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3391

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.025	mg/Kg		04/16/24 15:31	04/17/24 11:27	1
Ethylbenzene	ND		0.050	mg/Kg		04/16/24 15:31	04/17/24 11:27	1
Toluene	ND		0.050	mg/Kg		04/16/24 15:31	04/17/24 11:27	1

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

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

Lab Sample ID: MB 885-3391/1-A

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3391

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		0.10	mg/Kg		04/16/24 15:31	04/17/24 11:27	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		39 - 146			04/16/24 15:31	04/17/24 11:27	1

Lab Sample ID: LCS 885-3391/3-A

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.00	0.825		mg/Kg		82	70 - 130
Ethylbenzene	1.00	0.857		mg/Kg		86	70 - 130
Toluene	1.00	0.840		mg/Kg		84	70 - 130
m,p-Xylene	2.00	1.74		mg/Kg		87	70 - 130
o-Xylene	1.00	0.859		mg/Kg		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	92		39 - 146				

Lab Sample ID: 885-2892-2 MS

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: BES24-22, 17'

Prep Type: Total/NA

Prep Batch: 3391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		0.964	0.887		mg/Kg		92	70 - 130
Ethylbenzene	ND		0.964	0.925		mg/Kg		96	70 - 130
Toluene	ND		0.964	0.911		mg/Kg		95	70 - 130
m,p-Xylene	ND		1.93	1.86		mg/Kg		96	70 - 130
o-Xylene	ND		0.964	0.918		mg/Kg		95	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	91		39 - 146						

Lab Sample ID: 885-2892-2 MSD

Matrix: Solid

Analysis Batch: 3498

Client Sample ID: BES24-22, 17'

Prep Type: Total/NA

Prep Batch: 3391

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	ND		0.964	0.856		mg/Kg		89	70 - 130	4	20
Ethylbenzene	ND		0.964	0.884		mg/Kg		92	70 - 130	4	20
Toluene	ND		0.964	0.864		mg/Kg		90	70 - 130	5	20
m,p-Xylene	ND		1.93	1.78		mg/Kg		92	70 - 130	4	20
o-Xylene	ND		0.964	0.869		mg/Kg		90	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	86		39 - 146								

Eurofins Albuquerque

QC Sample Results

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

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

Lab Sample ID: MB 885-3441/1-A

Matrix: Solid

Analysis Batch: 3463

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3441

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		10	mg/Kg		04/17/24 11:31	04/17/24 16:40	1
Motor Oil Range Organics [C28-C40]	ND		50	mg/Kg		04/17/24 11:31	04/17/24 16:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	97		62 - 134			04/17/24 11:31	04/17/24 16:40	1

Lab Sample ID: LCS 885-3441/2-A

Matrix: Solid

Analysis Batch: 3463

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3441

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Diesel Range Organics [C10-C28]	50.0	42.2		mg/Kg		84	60 - 135	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
Di-n-octyl phthalate (Surr)	102		62 - 134					

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-3459/1-A

Matrix: Solid

Analysis Batch: 3487

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3459

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	mg/Kg		04/17/24 15:19	04/17/24 19:19	1

Lab Sample ID: LCS 885-3459/2-A

Matrix: Solid

Analysis Batch: 3487

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3459

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	15.0	13.7		mg/Kg		92	90 - 110	

Lab Sample ID: MB 885-3487/4

Matrix: Solid

Analysis Batch: 3487

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		0.50	mg/Kg			04/17/24 10:06	1

Lab Sample ID: MRL 885-3487/3

Matrix: Solid

Analysis Batch: 3487

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec Limits	
Chloride	0.500	0.530		mg/L		106	50 - 150	

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

GC VOA

Prep Batch: 3391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	5030C	
885-2892-2	BES24-22, 17'	Total/NA	Solid	5030C	
885-2892-3	BES24-23, 16'	Total/NA	Solid	5030C	
885-2892-4	BES24-24, 16'	Total/NA	Solid	5030C	
MB 885-3391/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-3391/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-3391/3-A	Lab Control Sample	Total/NA	Solid	5030C	
885-2892-1 MS	BES24-21, 17'	Total/NA	Solid	5030C	
885-2892-1 MSD	BES24-21, 17'	Total/NA	Solid	5030C	
885-2892-2 MS	BES24-22, 17'	Total/NA	Solid	5030C	
885-2892-2 MSD	BES24-22, 17'	Total/NA	Solid	5030C	

Analysis Batch: 3497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	8015D	3391
885-2892-2	BES24-22, 17'	Total/NA	Solid	8015D	3391
885-2892-3	BES24-23, 16'	Total/NA	Solid	8015D	3391
885-2892-4	BES24-24, 16'	Total/NA	Solid	8015D	3391
MB 885-3391/1-A	Method Blank	Total/NA	Solid	8015D	3391
LCS 885-3391/2-A	Lab Control Sample	Total/NA	Solid	8015D	3391
885-2892-1 MS	BES24-21, 17'	Total/NA	Solid	8015D	3391
885-2892-1 MSD	BES24-21, 17'	Total/NA	Solid	8015D	3391

Analysis Batch: 3498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	8021B	3391
885-2892-2	BES24-22, 17'	Total/NA	Solid	8021B	3391
885-2892-3	BES24-23, 16'	Total/NA	Solid	8021B	3391
885-2892-4	BES24-24, 16'	Total/NA	Solid	8021B	3391
MB 885-3391/1-A	Method Blank	Total/NA	Solid	8021B	3391
LCS 885-3391/3-A	Lab Control Sample	Total/NA	Solid	8021B	3391
885-2892-2 MS	BES24-22, 17'	Total/NA	Solid	8021B	3391
885-2892-2 MSD	BES24-22, 17'	Total/NA	Solid	8021B	3391

GC Semi VOA

Prep Batch: 3441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	SHAKE	
885-2892-2	BES24-22, 17'	Total/NA	Solid	SHAKE	
885-2892-3	BES24-23, 16'	Total/NA	Solid	SHAKE	
885-2892-4	BES24-24, 16'	Total/NA	Solid	SHAKE	
MB 885-3441/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-3441/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 3463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	8015D	3441
885-2892-2	BES24-22, 17'	Total/NA	Solid	8015D	3441
885-2892-3	BES24-23, 16'	Total/NA	Solid	8015D	3441
885-2892-4	BES24-24, 16'	Total/NA	Solid	8015D	3441

Eurofins Albuquerque

QC Association Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

GC Semi VOA (Continued)

Analysis Batch: 3463 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-3441/1-A	Method Blank	Total/NA	Solid	8015D	3441
LCS 885-3441/2-A	Lab Control Sample	Total/NA	Solid	8015D	3441

HPLC/IC

Prep Batch: 3459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	300_Prep	
885-2892-2	BES24-22, 17'	Total/NA	Solid	300_Prep	
885-2892-3	BES24-23, 16'	Total/NA	Solid	300_Prep	
885-2892-4	BES24-24, 16'	Total/NA	Solid	300_Prep	
MB 885-3459/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-3459/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

Analysis Batch: 3487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-2892-1	BES24-21, 17'	Total/NA	Solid	300.0	3459
885-2892-2	BES24-22, 17'	Total/NA	Solid	300.0	3459
885-2892-3	BES24-23, 16'	Total/NA	Solid	300.0	3459
885-2892-4	BES24-24, 16'	Total/NA	Solid	300.0	3459
MB 885-3459/1-A	Method Blank	Total/NA	Solid	300.0	3459
MB 885-3487/4	Method Blank	Total/NA	Solid	300.0	
LCS 885-3459/2-A	Lab Control Sample	Total/NA	Solid	300.0	3459
MRL 885-3487/3	Lab Control Sample	Total/NA	Solid	300.0	

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Client Sample ID: BES24-21, 17'

Lab Sample ID: 885-2892-1

Date Collected: 04/12/24 11:35

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 11:51
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 11:51
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 17:05
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 19:49

Client Sample ID: BES24-22, 17'

Lab Sample ID: 885-2892-2

Date Collected: 04/12/24 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			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 12:15
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 12:15
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 17:18
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 20:05

Client Sample ID: BES24-23, 16'

Lab Sample ID: 885-2892-3

Date Collected: 04/12/24 14:00

Matrix: Solid

Date Received: 04/16/24 07:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 12:39
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 12:39
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 17:31
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 20:20

Client Sample ID: BES24-24, 16'

Lab Sample ID: 885-2892-4

Date Collected: 04/12/24 14:05

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			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8015D		1	3497	JP	EET ALB	04/17/24 13:03

Eurofins Albuquerque

Lab Chronicle

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Client Sample ID: BES24-24, 16'
Date Collected: 04/12/24 14:05
Date Received: 04/16/24 07:55

Lab Sample ID: 885-2892-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030C			3391	JP	EET ALB	04/16/24 15:31
Total/NA	Analysis	8021B		1	3498	JP	EET ALB	04/17/24 13:03
Total/NA	Prep	SHAKE			3441	JU	EET ALB	04/17/24 11:31
Total/NA	Analysis	8015D		1	3463	JU	EET ALB	04/17/24 17:44
Total/NA	Prep	300_Prep			3459	RC	EET ALB	04/17/24 15:19
Total/NA	Analysis	300.0		20	3487	JT	EET ALB	04/17/24 20:35

Laboratory References:
EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

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Accreditation/Certification Summary

Client: Vertex
Project/Site: Crow Flats Fed Com 1

Job ID: 885-2892-1

Laboratory: Eurofins Albuquerque

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

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	NM100001	02-26-25

- 1
- 2
- 3
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- 8
- 9
- 10
- 11

Chain-of-Custody Record

Client: Vertex (E06)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 2-day

Project Name:

Crow Flats Fed Com 1

Project #:

23E-05855

Project Manager:

C. DixonSampler: A MohrOn Ice: ☐ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 16.1-17.7 °C

Container Type and #

Preservative Type

HEAL No.

402 jar

ice

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Received by

Via

Date

Time

4/15/24

1045

Received by

Via

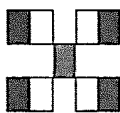
Date

Time

4/15/24

1900

Remarks:

Please send results to:
cdixon@vertex.com
amohr@vertex.com**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

885-2892 COC



Analysis Request

BTX / MTBE / TMB's (8021)

X

X

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl⁻, Br⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Login Sample Receipt Checklist

Client: Vertex

Job Number: 885-2892-1

Login Number: 2892

List Number: 1

Creator: Dominguez, Desiree

List Source: Eurofins Albuquerque

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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

April 18, 2024

CHANCE DIXON

VERTEX RESOURCE GROUP

420 SOUTH MAIN, SUITE 202

TULSA, OK 74103

RE: CROW FLATS FED COM 1

Enclosed are the results of analyses for samples received by the laboratory on 04/16/24 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 04/16/2024
 Reported: 04/18/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 04/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BES 24 - 02 , 18' (H241993-01)

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/17/2024	ND	2.18	109	2.00	1.49	
Toluene*	<0.050	0.050	04/17/2024	ND	2.11	105	2.00	1.23	
Ethylbenzene*	<0.050	0.050	04/17/2024	ND	2.05	102	2.00	1.28	
Total Xylenes*	0.313	0.150	04/17/2024	ND	6.00	100	6.00	1.20	
Total BTX	0.313	0.300	04/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	04/17/2024	ND	448	112	400	3.51	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/17/2024	ND	201	101	200	1.84	
DRO >C10-C28*	<10.0	10.0	04/17/2024	ND	198	98.9	200	2.16	
EXT DRO >C28-C36	<10.0	10.0	04/17/2024	ND					

Surrogate: 1-Chlorooctane 72.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 04/16/2024
 Reported: 04/18/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 04/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: BES 24 - 15 , 18' (H241993-02)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/17/2024	ND	2.18	109	2.00	1.49	
Toluene*	0.056	0.050	04/17/2024	ND	2.11	105	2.00	1.23	
Ethylbenzene*	0.176	0.050	04/17/2024	ND	2.05	102	2.00	1.28	
Total Xylenes*	0.838	0.150	04/17/2024	ND	6.00	100	6.00	1.20	
Total BTEX	1.07	0.300	04/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	04/17/2024	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/17/2024	ND	201	101	200	1.84	
DRO >C10-C28*	<10.0	10.0	04/17/2024	ND	198	98.9	200	2.16	
EXT DRO >C28-C36	<10.0	10.0	04/17/2024	ND					

Surrogate: 1-Chlorooctane 70.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 66.5 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 04/16/2024
 Reported: 04/18/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 04/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES 24 - 01 , 0-7' (H241993-03)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/17/2024	ND	2.18	109	2.00	1.49	
Toluene*	<0.050	0.050	04/17/2024	ND	2.11	105	2.00	1.23	
Ethylbenzene*	<0.050	0.050	04/17/2024	ND	2.05	102	2.00	1.28	
Total Xylenes*	<0.150	0.150	04/17/2024	ND	6.00	100	6.00	1.20	
Total BTEX	<0.300	0.300	04/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.8 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	576	16.0	04/17/2024	ND	448	112	400	3.51		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/17/2024	ND	193	96.6	200	1.14	
DRO >C10-C28*	22.1	10.0	04/17/2024	ND	180	90.1	200	0.662	
EXT DRO >C28-C36	<10.0	10.0	04/17/2024	ND					

Surrogate: 1-Chlorooctane 80.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 04/16/2024
 Reported: 04/18/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 04/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES 24 - 01 , 8-17' (H241993-04)

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/17/2024	ND	2.18	109	2.00	1.49	
Toluene*	0.081	0.050	04/17/2024	ND	2.11	105	2.00	1.23	
Ethylbenzene*	0.060	0.050	04/17/2024	ND	2.05	102	2.00	1.28	
Total Xylenes*	0.530	0.150	04/17/2024	ND	6.00	100	6.00	1.20	
Total BTEX	0.670	0.300	04/17/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	04/18/2024	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/17/2024	ND	193	96.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	04/17/2024	ND	180	90.1	200	0.662	
EXT DRO >C28-C36	<10.0	10.0	04/17/2024	ND					

Surrogate: 1-Chlorooctane 48.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 53.3 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 04/16/2024
 Reported: 04/18/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 04/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES 24 - 06 , 0-7' (H241993-05)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/17/2024	ND	2.18	109	2.00	1.49		
Toluene*	<0.050	0.050	04/17/2024	ND	2.11	105	2.00	1.23		
Ethylbenzene*	<0.050	0.050	04/17/2024	ND	2.05	102	2.00	1.28		
Total Xylenes*	<0.150	0.150	04/17/2024	ND	6.00	100	6.00	1.20		
Total BTEX	<0.300	0.300	04/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	288	16.0	04/18/2024	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/17/2024	ND	193	96.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	04/17/2024	ND	180	90.1	200	0.662	
EXT DRO >C28-C36	<10.0	10.0	04/17/2024	ND					

Surrogate: 1-Chlorooctane 79.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 04/16/2024
 Reported: 04/18/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 04/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES 24 - 06 , 8-17' (H241993-06)

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/17/2024	ND	2.18	109	2.00	1.49		
Toluene*	<0.050	0.050	04/17/2024	ND	2.11	105	2.00	1.23		
Ethylbenzene*	<0.050	0.050	04/17/2024	ND	2.05	102	2.00	1.28		
Total Xylenes*	<0.150	0.150	04/17/2024	ND	6.00	100	6.00	1.20		
Total BTEX	<0.300	0.300	04/17/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 93.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	336	16.0	04/18/2024	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/18/2024	ND	193	96.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	04/18/2024	ND	180	90.1	200	0.662	
EXT DRO >C28-C36	<10.0	10.0	04/18/2024	ND					

Surrogate: 1-Chlorooctane 64.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "C. D. Keene".

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 9 of 9



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

May 15, 2024

CHANCE DIXON

VERTEX RESOURCE GROUP

420 SOUTH MAIN, SUITE 202

TULSA, OK 74103

RE: CROW FLATS FED COM 1

Enclosed are the results of analyses for samples received by the laboratory on 05/14/24 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 05/14/2024
 Reported: 05/15/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 05/13/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES24 -09 0-4' (H242620-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/14/2024	ND	1.90	95.0	2.00	10.5	
Toluene*	<0.050	0.050	05/14/2024	ND	1.89	94.4	2.00	8.94	
Ethylbenzene*	<0.050	0.050	05/14/2024	ND	1.87	93.5	2.00	8.57	
Total Xylenes*	<0.150	0.150	05/14/2024	ND	5.47	91.2	6.00	8.62	
Total BTEX	<0.300	0.300	05/14/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 82.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	05/15/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/14/2024	ND	187	93.3	200	2.25	
DRO >C10-C28*	<10.0	10.0	05/14/2024	ND	202	101	200	0.00	
EXT DRO >C28-C36	<10.0	10.0	05/14/2024	ND					

Surrogate: 1-Chlorooctane 87.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 05/14/2024
 Reported: 05/15/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 05/13/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES24 -09 4-8' (H242620-02)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/14/2024	ND	1.86	92.8	2.00	8.30		
Toluene*	<0.050	0.050	05/14/2024	ND	1.98	99.2	2.00	6.36		
Ethylbenzene*	<0.050	0.050	05/14/2024	ND	2.01	101	2.00	5.40		
Total Xylenes*	<0.150	0.150	05/14/2024	ND	6.25	104	6.00	5.01		
Total BTEX	<0.300	0.300	05/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	05/15/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/14/2024	ND	186	92.8	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/14/2024	ND	199	99.6	200	4.76	
EXT DRO >C28-C36	<10.0	10.0	05/14/2024	ND					

Surrogate: 1-Chlorooctane 115 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 05/14/2024
 Reported: 05/15/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 05/13/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES24 -09 8-12' (H242620-03)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/14/2024	ND	1.86	92.8	2.00	8.30		
Toluene*	<0.050	0.050	05/14/2024	ND	1.98	99.2	2.00	6.36		
Ethylbenzene*	<0.050	0.050	05/14/2024	ND	2.01	101	2.00	5.40		
Total Xylenes*	<0.150	0.150	05/14/2024	ND	6.25	104	6.00	5.01		
Total BTEX	<0.300	0.300	05/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	05/15/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/14/2024	ND	186	92.8	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/14/2024	ND	199	99.6	200	4.76	
EXT DRO >C28-C36	<10.0	10.0	05/14/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Analytical Results For:

VERTEX RESOURCE GROUP
 CHANCE DIXON
 420 SOUTH MAIN, SUITE 202
 TULSA OK, 74103
 Fax To: NA

Received: 05/14/2024
 Reported: 05/15/2024
 Project Name: CROW FLATS FED COM 1
 Project Number: 23E - 05855
 Project Location: EOG

Sampling Date: 05/13/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: WES24 -03 0-6' (H242620-04)

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	05/14/2024	ND	1.86	92.8	2.00	8.30		
Toluene*	<0.050	0.050	05/14/2024	ND	1.98	99.2	2.00	6.36		
Ethylbenzene*	<0.050	0.050	05/14/2024	ND	2.01	101	2.00	5.40		
Total Xylenes*	<0.150	0.150	05/14/2024	ND	6.25	104	6.00	5.01		
Total BTEX	<0.300	0.300	05/14/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	05/15/2024	ND	432	108	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/14/2024	ND	186	92.8	200	1.84	
DRO >C10-C28*	<10.0	10.0	05/14/2024	ND	199	99.6	200	4.76	
EXT DRO >C28-C36	<10.0	10.0	05/14/2024	ND					

Surrogate: 1-Chlorooctane 92.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.3 % 49.1-148

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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
- Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "C. D. Keene", written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager

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

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

QUESTIONS

Action 353954

QUESTIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 353954
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nPCH0514328346
Incident Name	NPCH0514328346 CROW FLATS FEDERAL COM #001 @ 30-015-23386
Incident Type	Complaint
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-23386] CROW FLATS FEDERAL COM #001

Location of Release Source	
Please answer all the questions in this group.	
Site Name	CROW FLATS FEDERAL COM #001
Date Release Discovered	05/22/2005
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Complaint
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: Other Other (Specify) Crude Oil Released: 0 BBL (Unknown Released Amount) Recovered: 0 BBL Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
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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1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

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1220 S. St Francis Dr., Santa Fe, NM 87505
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QUESTIONS, Page 2

Action 353954

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 353954
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: James Kennedy Title: Safety and Environmental Doecialist Email: James_kennedy@eogresources.com Date: 07/09/2024
--	--

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1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

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

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QUESTIONS, Page 3

Action 353954

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID:
	7377
	Action Number: 353954
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (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 ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between ½ and 1 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 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	Yes

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	1900
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	19630
GRO+DRO	(EPA SW-846 Method 8015M)	13530
BTEX	(EPA SW-846 Method 8021B or 8260B)	40.8
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.4

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	12/18/2023
On what date will (or did) the final sampling or liner inspection occur	12/18/2023
On what date will (or was) the remediation complete(d)	05/13/2024
What is the estimated surface area (in square feet) that will be reclaimed	4462
What is the estimated volume (in cubic yards) that will be reclaimed	6900
What is the estimated surface area (in square feet) that will be remediated	74260
What is the estimated volume (in cubic yards) that will be remediated	6900

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.

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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Oil Conservation Division
1220 S. St Francis Dr.
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QUESTIONS, Page 4

Action 353954

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID:	7377
	Action Number:	353954
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	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)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Kennedy Title: Safety and Environmental Doecialist Email: James_kennedy@eogresources.com Date: 07/09/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

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Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS, Page 5

Action 353954

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID:	7377
	Action Number:	353954
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

District I

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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

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1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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Energy, Minerals and Natural Resources
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Santa Fe, NM 87505

QUESTIONS, Page 6

Action 353954

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID:
	7377
	Action Number:
	353954
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	342076
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/13/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	800

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	74260
What was the total volume (cubic yards) remediated	14216
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	74260
What was the total volume (in cubic yards) reclaimed	14216
Summarize any additional remediation activities not included by answers (above)	Please see attached report.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: James Kennedy Title: Safety and Environmental Doecialist Email: James_kennedy@eogresources.com Date: 07/09/2024
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District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

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Action 353954

QUESTIONS (continued)

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID:
	7377
	Action Number:
	353954
Action Type:	
[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 353954

CONDITIONS

Operator: EOG RESOURCES INC 5509 Champions Drive Midland, TX 79706	OGRID: 7377
	Action Number: 353954
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	7/9/2024
amaxwell	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	7/9/2024
amaxwell	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	7/9/2024