Jim Raley



General Information

NMOCD District: District 2 – Artesia RP Reference: 2RP-3233, 2RP-4414, 2RP-4741, 2RP-4971

Phone #:

nAB1524531624, nAB1727057447,

nAB1813442138, nMAP1826042805,

575.689.7587

Landowner: Bureau of Land Management Incident ID: nAPP2106151044

Client: Devon Energy Production Company, LP Site Location: North Pure Gold 8 Federal #011

Date: April 28, 2025 Project #: 25A-02298

Vertex PM: Kent Stallings Phone #: 364.814.1413

Objective

Client Contact:

The objective of this Environmental Site Remediation Work Plan is to identify areas of exceedance for constituents of concern found during spill assessment and site characterization activities, and propose appropriate remediation techniques to address the five open releases at North Pure Gold 8 Federal #011 (hereafter referred to as "site"). All five releases involved produced water and were caused by a hole in the high pressure line on the H pump (2RP-3233); a %-inch bull plug washing out (2RP-4414); an underground injection line that developed a leak (2RP-4741); a mechanical failure involving a flex hose from the charge pump to the H pump blowing off the connector (2RP-4971); and a failed ball valve on the liquid gauge. Devon Energy Production Company, LP provided notification of the releases to New Mexico Oil Conservation Division District 2. and the Bureau of Land Management, who own the property, via initial C-141 Release Notifications submitted on September 1, 2015, September 26, 2017, May 11, 2018, September 14, 2018, and March 2, 2021. An aerial photograph of the site with the cumulative impact area of these five releases is presented on Figure 1 (Attachment 1). Areas of concern identified and delineated include most of the facility pad radiating north, northeast, and east of the tank battery in the southeast corner of the site. Closure criteria have been selected as per New Mexico Administrative Code 19.15.29.12 and are presented below (Table 1).

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				
	Chloride	20,000 mg/kg				
	TPH (GRO+DRO+MRO)	2,500 mg/kg				
> 100 feet	GRO+DRO	1,000 mg/kg				
	BTEX	50 mg/kg				
	Benzene	10 mg/kg				

TDS – Total dissolved solids

TPH - Total petroleum hydrocarbons = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO)

BTEX - Benzene, toluene, ethylbenzene, and xylenes

Characterization and Initial Remediation

The site characterization was completed on July 17, 2023. A total of 42 sample points were established across the release areas and samples were collected from these locations at various depths for field screening. In total, 91 samples were submitted to Hall Environmental Analysis Laboratory, Albuquerque, New Mexico, for analysis. The sample locations are presented on Figure 1 (Attachment 1). Laboratory analysis results were compared to the above noted closure criteria and the results from the characterization activity are presented in Table 2 (Attachment 2). Exceedances to reclamation and remediation criteria are identified in the table in bold with green or grey background, respectively. Daily field reports and laboratory data reports are included in Attachments 3 and 4,

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Environmental Site Remediation Work Plan



respectively. All applicable research as it pertains to closure criteria selection is presented in Attachment 5. The combined NMCOD C-141 Report for the site is included in Attachment 6.

Remedial Activities

General

Areas identified with contaminant concentrations above closure criteria will be remediated through excavation. Laboratory results from the site assessment/characterization have been referenced to estimate both the vertical and horizontal limits of the impacts and the volume of soil to be removed. The soil will be excavated to the extent of the known contamination or in 2-foot increments, whichever is less. Field screening will be utilized to confirm the removal of contaminated soil below the applicable closure criteria. Contaminated soils will be stored on a 30mil liner prior to disposal at an approved facility. Once the excavation is complete, confirmatory samples will be collected and laboratory analysis completed to confirm closure criteria guidelines are met. Excavations will be backfilled with clean soil sourced locally. Upon approval, remediation efforts will be completed within 90 days.

Pad From Tank Battery to North and East edges of pad – nAB1524531624, nAB1727057447, nAB1813442138, nMAP1826042805, nAPP2106151044

Samples were collected at a total of 42 points on the pad and into the pasture north of the pad to characterize the area to be excavated. Exceedances to closure criteria were found at one sample point (BH21-04). The soil will be excavated from the impact area at the tank battery to a planned depth of 3 feet below ground surface. The proposed excavation area is shown on Figure 2 (Attachment 1). A hand crew and/or hydrovac truck will be utilized to remove contaminated soil in close proximity to the wellhead, underground flowlines, and remaining equipment. Heavy equipment will be used to complete excavation in the release area not conflicting with equipment. Field screening will be utilized to find the horizontal and vertical extents of the impacted area. The estimated volume to be excavated is 22 cubic yards.

Confirmation sampling of the excavation base and wall areas will utilize five-point composite samples each representative of no more than 200 square feet. All confirmation samples will be submitted for laboratory analysis of all applicable parameters. Excavation is planned to be completed within 90 days of approval of this Environmental Site Remediation Work Plan.

Sample Point	Excavation Depth	Remediation Method
BH21-04	3′	Excavator/ Handcrew/ Hydrovac

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Environmental Site Remediation Work Plan



Should you have any questions or concerns, please do not hesitate to contact Project Manager Kent Stallings at 346.814.1413 or kstallings@vertexresouce.com.

Riley Arnold
Riley Arnold, B.Sc.

May 9, 2025

Date

ENVIRONMENTAL TECHNICIAN, REPORTING

Kent Stallings, P.G.

May 9,2025

Date

Kent Stallings, P.G.

PROJECT MANAGER, REPORT REVIEW

Attachments

Attachment 1. Site Sampling Schematic and Proposed Excavation Schematic

Attachment 2. Field Screening and Laboratory Results Table

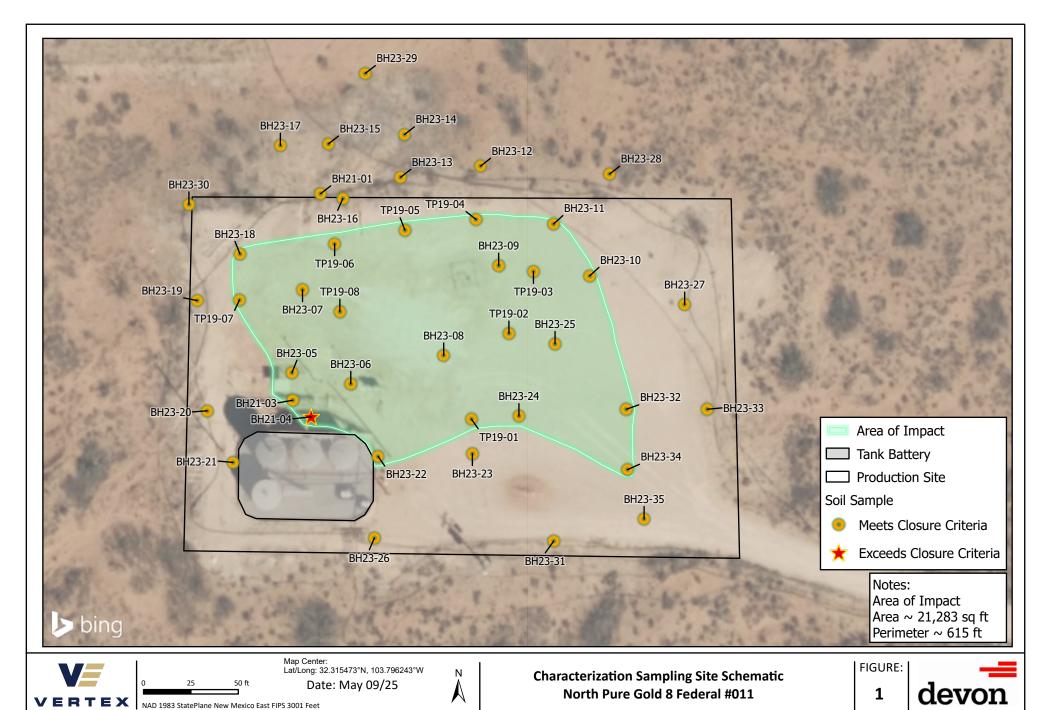
Attachment 3. Daily Field Reports with Photographs

Attachment 4. Laboratory Data Reports
Attachment 5. Closure Criteria Research



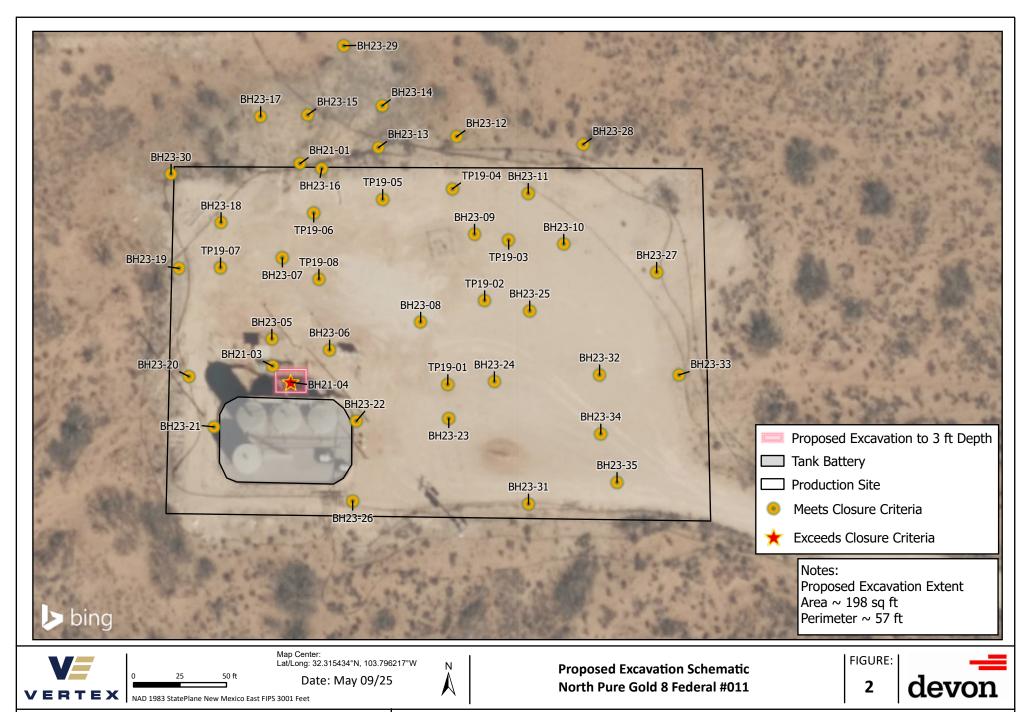
Attachment 1.

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Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.



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

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.



Attachment 2.

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Client Name: Devon Energy Production Company, LP

Site Name: North Pure Gold 8 Federal #011

NMOCD Tracking #: nAB1524531624, nAB1727057447, nAB1813442138, nMAP1826042805, nAPP2106151044

Project #: 25A-02298

Lab Report(sX): P905060, 2108E74, 2307707, 2307708, 2307747, and 2307825

		Tal	ole 2. Initia	Character	izationLabo	oratory Res	ults			
9	Sample Descrip	otion			Petrol	eum Hydroc	arbons			
	Vola	atile			Extractable			Inorganic		
Sample ID	Depth (ft)	Sample Date	Benzene	ම් මින් (නි (ස්	(GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)		(mg/kg) Depth to Gro	(mg/kg) undwater >	(mg/kg) 100	(mg/kg)	(mg/kg)
	0	May 14, 2019	ND	ND	ND	356	642	356	998	1,240
TP19-01	2	May 14, 2019	ND	ND	ND	29.4	ND	29	ND	294
TP19-02	0	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	2,810
	0	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	2,520
TP19-03	2	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	754
	0	May 14, 2019	ND	ND	ND	25.2	ND	25	ND	4,100
TP19-04	2	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	94
TD40.05	0	May 14, 2019	ND	ND	ND	37.7	ND	38	ND	6,650
TP19-05	2	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	365
TD10.00	0	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	1,440
TP19-06	2	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	1,410
TD40.07	0	May 14, 2019	ND	ND	ND	36.9	ND	37	ND	1,980
TP19-07	2	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	634
TD10 00	0	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	16,600
TP19-08	2	May 14, 2019	ND	ND	ND	ND	ND	ND	ND	54
BH21-01	0.5	August 24, 2021	ND	ND	ND	ND	ND	ND	ND	ND
BH21-03	0.5	August 24, 2021	ND	ND	ND	ND	ND	ND	ND	8,900
B1121-03	2	August 24, 2021	ND	ND	ND	ND	ND	ND	ND	1,200
	0.5	August 24, 2021	ND	ND	ND	16	84	16	100	3,500
BH21-04	2	August 24, 2021	ND	ND	ND	890	2,600	890	3,490	410
	4	August 24, 2021	ND	ND	ND	47	180	47	227	370
	0	July 13, 2023	ND	ND	ND	28	58	28	86	8,100
BH23-05	2	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	840
	4	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	720
	0	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	7,400
BH23-06	2	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	410
	4	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	460
DU22 07	0	July 13, 2023	ND 	ND	ND	ND	ND	ND	ND	13,000
BH23-07	2	July 13, 2023	ND ND	ND	ND ND	ND ND	ND	ND	ND ND	4,000
	4	July 13, 2023	ND ND	ND	ND	ND	ND	ND	ND ND	2,600
	2	July 13, 2023 July 13, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	9,000 850
BH23-08	4	July 13, 2023 July 13, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	2,400
-	6	July 13, 2023	ND ND	ND	ND ND	ND ND	ND	ND	ND ND	2,400



Sample Description			Petroleum Hydrocarbons							
			Vol	atile	Extractable					Inorganic
Sample ID	Depth (ft)	Sample Date	Benzene (mg/kg)	(mg/kg)	জি Gasoline Range Organics (GRO)	شا Diesel Range Organics (A) (DRO)	Motor Oil Range Organics (MRO)	(mg/kg)	Total Petroleum 자 Hydrocarbons (TPH)	യ്യു Chloride Concentration രീ
							undwater >			
	0	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	1,900
BH23-09	2	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	2,300
	4	July 13, 2023	ND	ND	ND	ND	ND	ND	ND	1,200
BH23-10	0	July 14, 2023	ND	ND	ND	13	ND	13	13	2,900
51120 20	2	July 14, 2023	ND	ND	ND	13	ND	13	13	550
BH23-11	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	16,000
B1125 11	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	630
BH23-12	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
B1123-12	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	71
BH23-13	0	July 14, 2023	ND	ND	ND	26	ND	26	26	110
B1123-13	2	July 14, 2023	ND	ND	ND	18	ND	18	18	200
BH23-14	0	July 14, 2023	ND	ND	ND	15	ND	15	15	ND
D1123 14	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-15	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	520
51120 20	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	360
BH23-16	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-17	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	67
BH23-18	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	7,800
	2	July 14, 2023	ND ND	ND	ND ND	ND	ND	ND	ND	1,400
BH23-19	0	July 14, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	290 ND
	2	July 14, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	170
BH23-20	2	July 14, 2023 July 14, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	160
	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	300
BH23-21	2	July 14, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	200
	0	July 14, 2023	ND	ND	ND	120	51	120	171	1,800
BH23-21	2	July 14, 2023	ND ND	ND	ND ND	ND	ND ND	ND	ND	1,800
	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	440
BH23-23	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	220
DUISC C.	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	3,600
BH23-24	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	210



Sample Description			Petroleum Hydrocarbons							
			Vol	atile	Extractable					Inorganic
Sample ID	Depth (ft)	Sample Date	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg) Depth to Gro	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
	0	July 14, 2022	ND	ND	ND	ND	ND	ND	ND	990
BH23-25	2	July 14, 2023 July 14, 2023	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	110
	0	July 14, 2023	ND	ND	ND	ND	ND	ND ND	ND	350
BH23-26	2	July 14, 2023	ND ND	ND	ND ND	ND	ND	ND ND	ND ND	150
	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	92
BH23-27	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND ND
	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-28	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
DU 22 20	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-29	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-30	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	240
БП23-30	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	89
BH23-31	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	210
01123-31	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	100
BH23-32	0	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	1,200
01123-32	2	July 14, 2023	ND	ND	ND	ND	ND	ND	ND	86
BH23-33	0	July 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
D1123-33	2	July 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-34	0	July 17, 2023	ND	ND	ND	ND	ND	ND	ND	730
51123 3 4	2	July 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND
BH23-35	0	July 17, 2023	ND	ND	ND	ND	ND	ND	ND	89
51123 33	2	July 17, 2023	ND	ND	ND	ND	ND	ND	ND	ND

[&]quot;ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed

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





Attachment 3.

VERSATILITY. EXPERTISE.



Client: Devon Energy Inspection Date: 5/14/2019

Corporation

Site Location Name: North Pure Gold 8 Federal Report Run Date: 6/24/2019 7:02 PM

11

Project Owner: Amanda Davis File (Project) #: 19E-00575

Project Manager: Dennis Williams API #: 30-015-32619

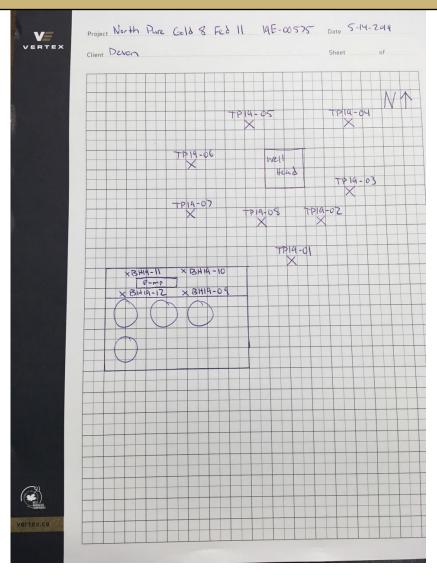
Client Contact Name: Amanda Davis Reference Historic Spills

Client Contact Phone #: (575) 748-0176

	Summary of Times
Left Office	5/14/2019 6:30 AM
Arrived at Site	5/14/2019 7:30 AM
Departed Site	5/14/2019 12:26 PM
Returned to Office	5/14/2019 1:15 PM



Site Sketch





Summary of Daily Operations

11:44 Fill out arrival, safety, and ground disturbance forms

Tailgate safety meeting

Field screen and collect samples

Take pictures

Fill out DFR

Demobilize

Next Steps & Recommendations

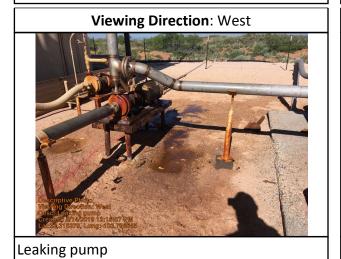
1



Site Photos



Injection line spill area



Viewing Direction: West

Descriptive Photo
Visioning Directions also
Direction

Hand dig instructions



Leaking pump





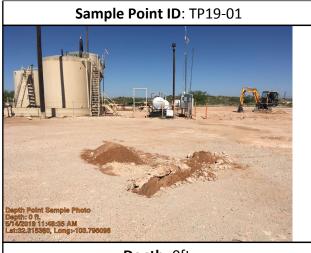




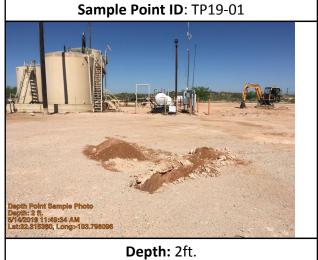
Leaking pump

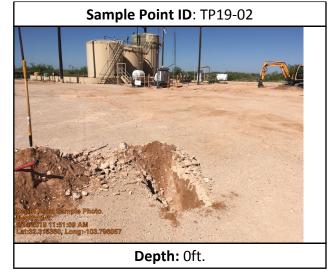


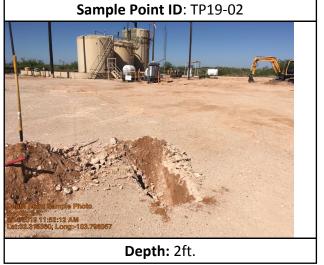
Depth Sample Photos



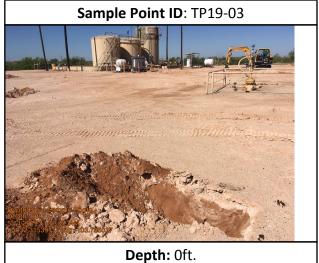
Depth: Oft.









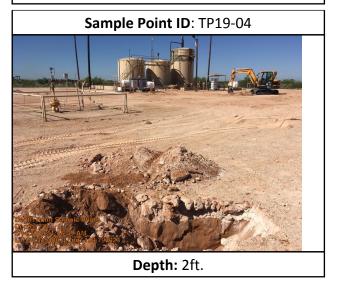


Sample Point ID: TP19-03

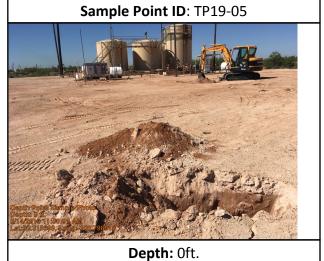
Depth: 2ft.

Sample Point ID: TP19-04

Depth: Oft.

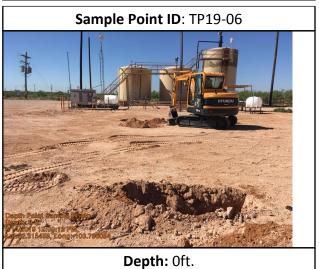


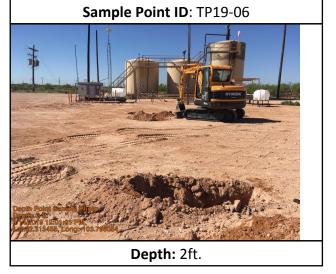




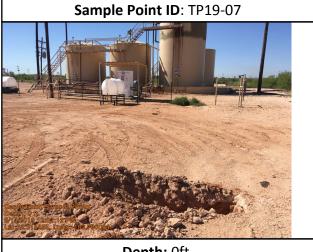
Depth: 2ft.

Sample Point ID: TP19-05

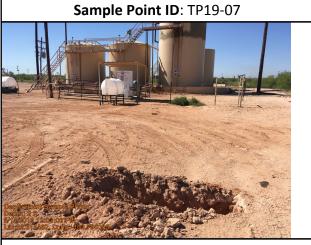




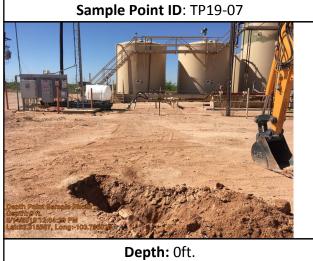




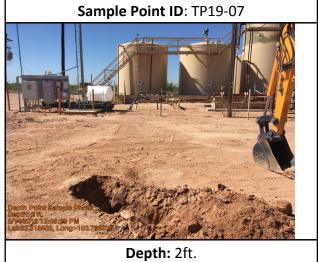
Depth: Oft.



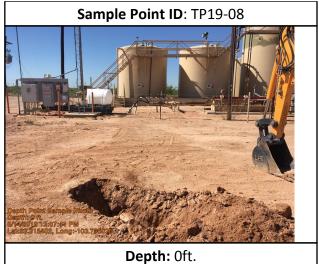
Depth: 2ft.











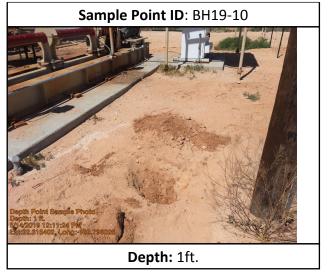
Sample Point ID: TP19-08

Dayth Point Kampie No.

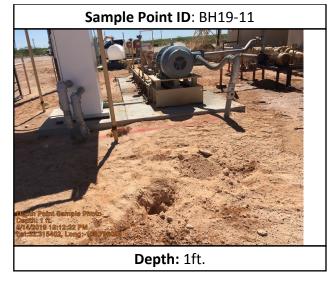
Branch of Street Stree

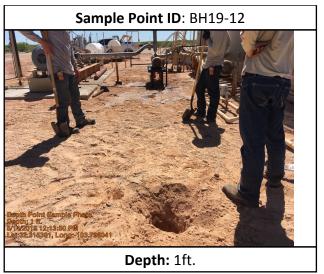
Sample Point ID: BH19-09

Septim of the sample Photo
Deptim of the sample P











Daily Site Visit Signature

Inspector: Jason Crabtree

Signature:



Client: Inspection Date: **Devon Energy** 8/24/2021

Corporation

8/24/2021 7:24 PM North Pure Gold 8 Federal Report Run Date: Site Location Name:

11

Wes Matthews Client Contact Name: API#: 30-015-32619

Client Contact Phone #: (575) 748-0176

Unique Project ID Project Owner:

Project Reference # Project Manager:

Summary of	f Times
------------	---------

Arrived at Site 8/24/2021 7:26 AM

Departed Site 8/24/2021 1:00 PM

Field Notes

7:28 Arrived on site, began dfr and filling out safety paperwork to begin horizontal delineation on spills.

8:14 Collecting sample between SSO3 and the edge of pad to check for clean.

8:47 Taking a BH02 on pad

13:22 BH21-03 and 04 maxed out at 8' and still not getting clean.

Next Steps & Recommendations

1



Site Photos



North edge of pad between SS03



Collection of BH03, inside fenced area just North of pumps.



BH21-02 on pad, finding vertical delineation



Collection of BH04



Daily Site Visit Signature

Inspector: John Ramirez

Signature:





Client: Devon Energy Inspection Date: 7/13/2023

Corporation

Site Location Name: North Pure Gold 8 Federal Report Run Date: 7/14/2023 12:43 AM

11

Client Contact Name: Dale Woodall API #: 30-015-32619

Client Contact Phone #: 405-318-4697

Unique Project ID Project Owner:

Project Reference # Project Manager:

Summary of Times

Arrived at Site 7/13/2023 12:10 PM

Departed Site 7/13/2023 3:30 PM

Field Notes

12:37 On site. Completed JSAs and line sweep of delineation area

12:37 Collecting delineation samples

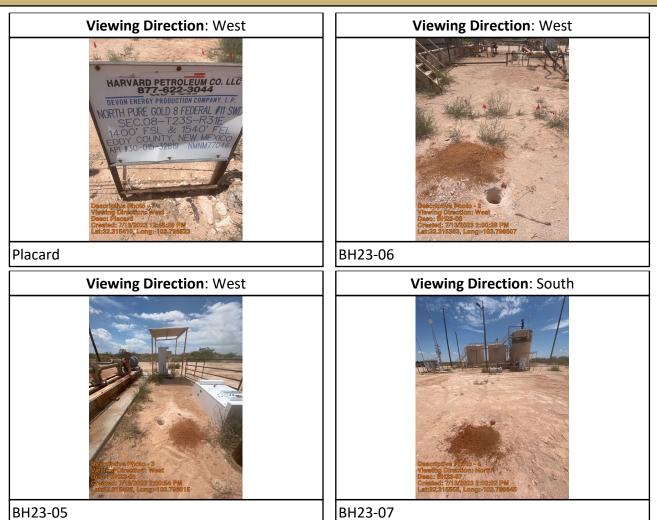
12:38 Locating and painting borehole locations for today and tomorrow

Next Steps & Recommendations

1 Continue delineation



Site Photos







SWD battery and containment



SWD battery and containment



SWD and containment



BH23-08







Daily Site Visit Signature

Inspector: Sally Carttar

Signature:



Client: Devon Energy Inspection Date: 7/14/2023

Corporation

Site Location Name: North Pure Gold 8 Federal Report Run Date: 7/14/2023 11:04 PM

11

Client Contact Name: Dale Woodall API #: 30-015-32619

Client Contact Phone #: 405-318-4697

Unique Project ID Project Owner:

Project Reference # Project Manager:

Summary of Times

Arrived at Site 7/14/2023 7:30 AM

Departed Site 7/14/2023 4:00 PM

Field Notes

7:52 On site. Completed safety meeting, beginning line sweep of borehole areas

7:56 Beginning sample collection at BH23-10 and BH23-11

Next Steps & Recommendations

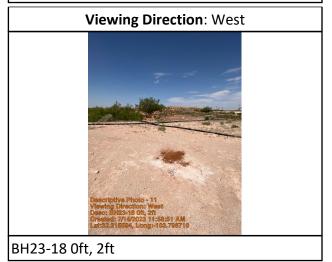
1 Complete delineation



Site Photos

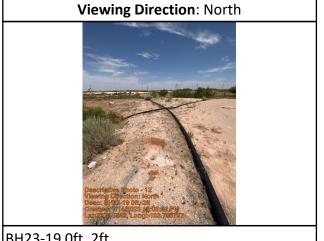


Placard



Viewing Direction: West

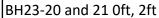
BH23-17 Oft, 2ft

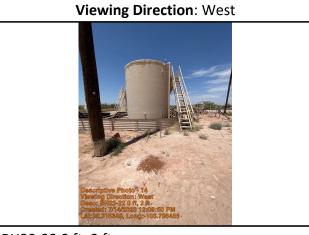


BH23-19 Oft, 2ft









BH23-22 0 ft, 2 ft

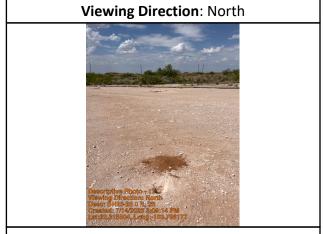


BH23-23 Oft, 2ft

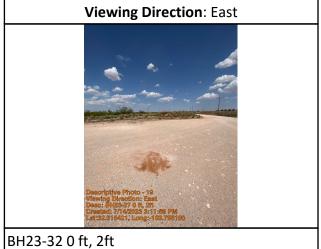


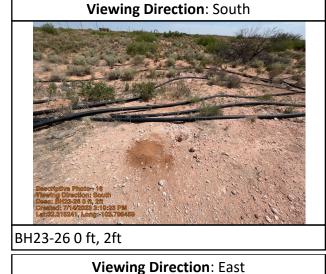
Run on 7/14/2023 11:04 PM UTC Powered by www.krinkleldar.com Page 3 of 8







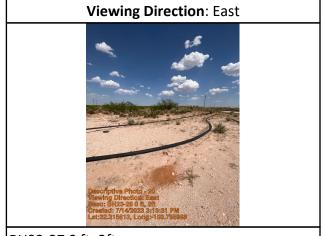


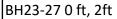


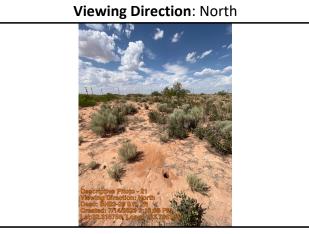


Pasture sampling area north of pad









BH23-28 0 ft, 2ft

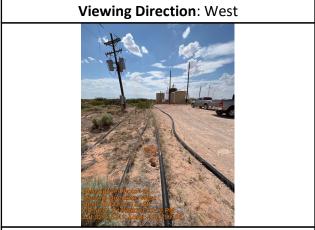


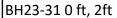


Viewing Direction: East

Run on 7/14/2023 11:04 PM UTC Powered by www.krinkleldar.com Page 5 of 8









BH23-10 Oft, 2ft



BH23-11 Oft, 2ft



BH23-12 Oft, 2ft





BH23-13 Oft, 2ft



BH23-14 Oft, 2ft



BH23-15 Oft, 2ft



BH23-16 Oft, 2ft



Daily Site Visit Signature

Inspector: Sally Carttar

Signature:



Client: Devon Energy Inspection Date: 7/17/2023

Corporation

Site Location Name: North Pure Gold 8 Federal Report Run Date: 7/17/2023 9:45 PM

11

Client Contact Name: Jim Raley API #: 30-015-32619

Client Contact Phone #: 575-748-0176

Unique Project ID -North Pure Gold 8

Federal 11

Project Reference # Historic Spills Project

Project Owner: Amanda Davis

Project Manager: Dennis Williams

Summary of Times

Arrived at Site 7/17/2023 8:30 AM

Departed Site 7/17/2023 2:33 PM

Field Notes

14:24 Completed safety paperwork and initial line locator upon arrival

14:24 On site to complete horizontal delineation of release

14:25 Obtained BH23-33, 34, 35 at 0' and 2' depths.

14:26 BH23-34 was hot at surface, so stepped out to BH23-35.

14:26 BH23-33 and 35 are extents of contamination in Southeast portion of site.

14:27 All samples jarred and will be sent to lab for analysis.

Next Steps & Recommendations

1 Send samples to lab.

Create work plan for future excavation.



Site Photos

Viewing Direction: North Oate & Time Manual 17095639/M01 2023 Position 1002-1002 views 1000 70551 Altiuse 1017m Oatum W65.86. Azmund Borring 333, N27W 5928miss frage Commo Ontonia is North

BH23-33 on far east edge of site

Viewing Direction: Northwest Date & Time Mon Jul 1769 57:00 MDT 2023 Position -002 1816 13-0 (-103 79697 Allute 1816 13-0 (-103 79697) Allute 1816 13-0 (-103 79697

BH23-34 in Southeast corner of site near access road



Viewing Direction: West

BH23-35 on far Southeast edge of site near access road



Daily Site Visit Signature

Inspector: Austin Harris

Signature:



Attachment 4.

VERSATILITY. EXPERTISE.



Analytical Report

Report Summary

Client: Devon Energy - Carlsbad

Samples Received: 5/20/2019 Job Number: 19031-0001 Work Order: P905060

Project Name/Location: North Pure Gold 8 Fed 11

Report Reviewed By:	Walter Hinkman	Date:	5/24/19	
_				·

Walter Hinchman, Laboratory Director



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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

Analyical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
TP19-01 0'	P905060-01A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-01 2'	P905060-02A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-02 0'	P905060-03A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-03 0'	P905060-04A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-03 2'	P905060-05A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-04 0'	P905060-06A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-04 2'	P905060-07A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-05 0'	P905060-08A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-05 2'	P905060-09A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-06 0'	P905060-10A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-06 2'	P905060-11A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-07 0'	P905060-12A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-07 2'	P905060-13A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-08 0'	P905060-14A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-08 2'	P905060-15A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
BH19-09 1'	P905060-16A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
BH19-10 1'	P905060-17A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
BH19-11 1'	P905060-18A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
BH19-12 1'	P905060-19A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.
TP19-02 2'	P905060-20A	Soil	05/14/19	05/20/19	Glass Jar, 4 oz.

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

TP19-01 0' P905060-01 (Solid)

P905060-01 (Solid)											
		Reporting									
Analyte	Result	Limit	Units D	ilution	Batch	Prepared	Analyzed	Method	Notes		
Volatile Organics by EPA 8021											
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Surrogate: 4-Bromochlorobenzene-PID		99.3 %	50-150		1921012	05/20/19	05/23/19	EPA 8021B			
Nonhalogenated Organics by 8015											
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D			
Diesel Range Organics (C10-C28)	356	25.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D			
Oil Range Organics (C28-C40)	642	50.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D			
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.4 %	50-150		1921012	05/20/19	05/23/19	EPA 8015D			
Surrogate: n-Nonane		117 %	50-200		1921010	05/21/19	05/21/19	EPA 8015D			
Anions by 300.0/9056A											
Chloride	1240	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A			

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-01 2' P905060-02 (Solid)

			00-02 (3011	u)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		99.6 %	50-13	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	29.4	25.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.1 %	50-13	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		118 %	50-20	00	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	294	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-02 0' P905060-03 (Solid)

		P9050	60-03 (Solid	.)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		99.1 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.2 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		87.1 %	50-20	0	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	2810	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-03 0' P905060-04 (Solid)

		1 7030	00-04 (50110	ı)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.9 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.0 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		94.7 %	50-20	0	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	2520	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-03 2' P905060-05 (Solid)

		P9050	60-05 (Sona)						
		Reporting							
Analyte	Result	Limit	Units D	ilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		99.8 %	50-150		1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.6 %	50-150		1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		119 %	50-200		1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	754	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers Hwy Project Number: 19031-0001 **Reported:**Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

TP19-04 0' P905060-06 (Solid)

			00-00 (501	iu)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		98.9 %	50-1	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	25.2	25.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.1 %	50-1	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		117 %	50-2	200	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	4100	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-04 2' P905060-07 (Solid)

		P9050	00-07 (Sona	.)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		99.9 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.4 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		117 %	50-20	0	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	93.8	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-05 0' P905060-08 (Solid)

1905000-08 (S0110)											
		Reporting				·					
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes		
Volatile Organics by EPA 8021											
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B			
Surrogate: 4-Bromochlorobenzene-PID		99.1 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8021B			
Nonhalogenated Organics by 8015											
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D			
Diesel Range Organics (C10-C28)	37.7	25.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D			
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D			
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.7 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8015D			
Surrogate: n-Nonane		117 %	50-20	0	1921010	05/21/19	05/21/19	EPA 8015D			
Anions by 300.0/9056A											
Chloride	6650	40.0	mg/kg 2	!	1921013	05/21/19	05/22/19	EPA 300.0/9056A			

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-05 2' P905060-09 (Solid)

1		P9050	60-09 (S011a)						
		Reporting							
Analyte	Result	Limit	Units D	ilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		98.7 %	50-150		1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.5 %	50-150		1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		116 %	50-200		1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	365	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-06 0' P905060-10 (Solid)

			00-10 (501	iu)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	50-1	150	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		99.2 %	50-1	150	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		116 %	50-2	200	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1440	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

TP19-06 2' P905060-11 (Solid)

		1 7030	00-11 (5011	iu)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.8 %	50-1	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.0 %	50-1	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		116 %	50-2	200	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1410	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-07 0' P905060-12 (Solid)

		P9050	60-12 (Sono	1)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	l	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	l	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	l	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	l	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	l	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	l	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.7 %	50-15	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	36.9	25.0	mg/kg	l	1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	l	1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		97.8 %	50-15	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		115 %	50-20	00	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1980	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-07 2' P905060-13 (Solid)

			00-13 (3011	u)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	50-1:	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/21/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		99.5 %	50-1.	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		118 %	50-20	00	1921010	05/21/19	05/21/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	634	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-08 0' P905060-14 (Solid)

			00-14 (501	iu)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.9 %	50-1	150	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		99.0 %	50-1	150	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		113 %	50-2	200	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	16600	100	mg/kg	5	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

TP19-08 2' P905060-15 (Solid)

			00-13 (3011	iu)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.0 %	50-1	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.4 %	50-1	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		111 %	50-2	000	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	54.4	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

BH19-09 1' P905060-16 (Solid)

		P9050	60-16 (Sona)					
		Reporting				·			
Analyte	Result	Limit	Units 1	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.9 %	50-150)	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	225	25.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	383	50.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		97.7 %	50-150)	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		122 %	50-200)	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1230	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

BH19-10 1' P905060-17 (Solid)

		P9050	60-17 (50110	1)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		97.6 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		99.7 %	50-15	0	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		124 %	50-20	0	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	1960	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

BH19-11 1' P905060-18 (Solid)

			00-10 (501	iu)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		98.3 %	50-1	150	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		97.3 %	50-1	150	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		119 %	50-2	200	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	3880	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

BH19-12 1' P905060-19 (Solid)

		P9050	00-19 (5011	a)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		100 %	50-1.	50	1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.8 %	50-1.	50	1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		117 %	50-20	00	1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	4310	20.0	mg/kg	1	1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers HwyProject Number:19031-0001Reported:Artesia NM, 88210Project Manager:Dennis Williams05/24/19 11:04

TP19-02 2' P905060-20 (Solid)

		P9050	60-20 (Sona)						
		Reporting							
Analyte	Result	Limit	Units D	ilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Toluene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		99.4 %	50-150		1921012	05/20/19	05/23/19	EPA 8021B	
Nonhalogenated Organics by 8015									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg 1		1921012	05/20/19	05/23/19	EPA 8015D	
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg 1		1921010	05/21/19	05/22/19	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		98.2 %	50-150		1921012	05/20/19	05/23/19	EPA 8015D	
Surrogate: n-Nonane		120 %	50-200		1921010	05/21/19	05/22/19	EPA 8015D	
Anions by 300.0/9056A									
Chloride	176	20.0	mg/kg 1		1921013	05/21/19	05/22/19	EPA 300.0/9056A	

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported: Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

Reporting

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Spike

Source

%REC

50-150

RPD

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1921012 - Purge and Trap EPA 50)30A									
Blank (1921012-BLK1)				Prepared: (05/20/19 1 A	Analyzed: (05/23/19 2			
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	8.00		"	8.00		100	50-150			
LCS (1921012-BS1)				Prepared: ()5/20/19 1 A	Analyzed: ()5/23/19 2			
Benzene	4.55	0.0250	mg/kg	5.00		91.0	70-130			
Toluene	4.93	0.0250	"	5.00		98.6	70-130			
Ethylbenzene	4.90	0.0250	"	5.00		98.1	70-130			
p,m-Xylene	10.1	0.0500	"	10.0		101	70-130			
o-Xylene	4.90	0.0250	"	5.00		98.1	70-130			
Total Xylenes	15.0	0.0250	"	15.0		99.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.03		"	8.00		100	50-150			
Matrix Spike (1921012-MS1)	Sour	ce: P905060-	01	Prepared: (05/20/19 1 A	Analyzed: (05/24/19 0			
Benzene	4.53	0.0250	mg/kg	5.00	ND	90.5	54.3-133			
Toluene	4.91	0.0250	"	5.00	ND	98.2	61.4-130			
Ethylbenzene	4.89	0.0250	"	5.00	ND	97.7	61.4-133			
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131			
o-Xylene	4.86	0.0250	"	5.00	ND	97.3	63.3-131			
Total Xylenes	14.9	0.0250	"	15.0	ND	99.3	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	7.99		"	8.00		99.8	50-150			
Matrix Spike Dup (1921012-MSD1)	Sour	ce: P905060-	01	Prepared: ()5/20/19 1 A	Analyzed: (05/24/19 0			
Benzene	4.65	0.0250	mg/kg	5.00	ND	93.1	54.3-133	2.75	20	
Toluene	5.05	0.0250	"	5.00	ND	101	61.4-130	2.72	20	
Ethylbenzene	5.02	0.0250	"	5.00	ND	100	61.4-133	2.76	20	
p,m-Xylene	10.3	0.0500	"	10.0	ND	103	63.3-131	2.70	20	
o-Xylene	5.00	0.0250	"	5.00	ND	100	63.3-131	2.77	20	
Total Xylenes	15.3	0.0250	"	15.0	ND	102	63.3-131	2.72	20	

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Surrogate: 4-Bromochlorobenzene-PID

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Devon Energy - Carlsbad

Project Name:

Reporting

North Pure Gold 8 Fed 11

Spike

6488 7 Rivers Hwy Project Number:
Artesia NM, 88210 Project Manager:

19031-0001 Dennis Williams

%REC

Reported: 05/24/19 11:04

RPD

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1921010 - DRO Extraction EPA 3570										
Blank (1921010-BLK1)				Prepared: (05/20/19 1 A	Analyzed: 0	5/21/19 1			
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg					<u> </u>		<u> </u>
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	56.2		"	50.0		112	50-200			
LCS (1921010-BS1)				Prepared: (05/20/19 1 A	Analyzed: 0	5/21/19 1			
Diesel Range Organics (C10-C28)	480	25.0	mg/kg	500		95.9	38-132			
Surrogate: n-Nonane	57.4		"	50.0		115	50-200			
Matrix Spike (1921010-MS1)	Source	ce: P905060-	01	Prepared: (05/20/19 1 A	Analyzed: 0	5/21/19 1			
Diesel Range Organics (C10-C28)	697	25.0	mg/kg	500	356	68.2	38-132			
Surrogate: n-Nonane	59.7		"	50.0		119	50-200			
Matrix Spike Dup (1921010-MSD1)	Sour	ce: P905060-	01	Prepared: (05/20/19 1 A	Analyzed: 0	5/21/19 1			
Diesel Range Organics (C10-C28)	654	25.0	mg/kg	500	356	59.5	38-132	6.46	20	
Surrogate: n-Nonane	60.2		"	50.0		120	50-200			

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Devon Energy - Carlsbad

Project Name:

North Pure Gold 8 Fed 11

19031-0001

Dennis Williams

6488 7 Rivers Hwy Project Number:
Artesia NM, 88210 Project Manager:

Reported: 05/24/19 11:04

Nonhalogenated Organics by 8015 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes		
Ratch 1921012 - Purge and Tran EPA 5030A												

Batch 1921012 - Purge and Trap EPA 503	0A									
Blank (1921012-BLK1)				Prepared: 0	5/20/19 1 /	Analyzed: 0	5/23/19 2			
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: I-Chloro-4-fluorobenzene-FID	7.76		"	8.00		97.0	50-150			
LCS (1921012-BS2)										
Gasoline Range Organics (C6-C10)	52.4	20.0	mg/kg	50.0		105	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.91		"	8.00		98.9	50-150			
Matrix Spike (1921012-MS2)	Source	: P905060-	01	Prepared: 0	5/20/19 1 /	Analyzed: 0	5/24/19 0			
Gasoline Range Organics (C6-C10)	53.3	20.0	mg/kg	50.0	ND	107	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.85		"	8.00		98.1	50-150			
Matrix Spike Dup (1921012-MSD2)	Source	Prepared: 0	5/20/19 1 2	Analyzed: 0	05/24/19 0					
Gasoline Range Organics (C6-C10)	52.8	20.0	mg/kg	50.0	ND	106	70-130	1.04	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		"	8.00		98.7	50-150			

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1600

6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Spike

250

Source

1240

142

%REC

80-120

4.60

RPD

SPK1

Reporting

20.0

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes				
atch 1921013 - Anion Extraction EPA 300.0/9056A														
Blank (1921013-BLK1)		Prepared: 05/21/19 0 Analyzed: 05/21/19 2												
Chloride	ND	20.0	mg/kg											
LCS (1921013-BS1)				Prepared: (05/21/19 0	Analyzed: 0	5/21/19 2							
Chloride	270	20.0	mg/kg	250		108	90-110							
Matrix Spike (1921013-MS1)	Source	e: P905060-	01	Prepared: (05/21/19 0	Analyzed: 0	5/22/19 0							
Chloride	1670	20.0	mg/kg	250	1240	172	80-120			SPK1				
Matrix Spike Dup (1921013-MSD1)	Source	: P905060-	01	Prepared: (05/21/19 0	Analyzed: 0	5/22/19 0							

mg/kg

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Chloride

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6488 7 Rivers Hwy Project Number: 19031-0001 Reported:
Artesia NM, 88210 Project Manager: Dennis Williams 05/24/19 11:04

Notes and Definitions

SPK1 The spike recovery is outside of quality control limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

** Methods marked with ** are non-accredited methods.

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Client: Deen Second Report Attention							Page of TAT FDA Drogger												of S					
																			AT EPA Program					
	North P									Lab WO# Job Number								3D	RCR.	A	CWA SDWA			
	Manager					Attention:			P905060 19031-0001															
Address: 6488 7 Rivers HWY Address:								Analysis and Method									State							
City, State, Zip Artesra, NM \$8221 City, St					City, State, Zip				15					o'	0				Ī	NM CO	UT AZ			
					Phone:					=			0.	200	3			- 1	ı					
	Permian (Email:			ا و (o	802	3260	010	300	40	26								
Time	Date		No	W 00 100 100 100 100 100 100 100 100 100				Lab	9	ğ	À	βλ	als 6	ride	13	.,		- }		ı				
Sampled	1	Matrix	Containers	Sample ID				Numbe	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418-+ GRO, DEO						Rem	arks		
10:00	5-17-19	_	1		- \					1			_		. (
10.00	.,,,,	5	1	TP19-01	0						X			X	X			l						
10. —	5-14-19	_	1	7010	- 1									.1			\neg			7				
10:05	5414	5	1	TP19-01	2			d			X			X,	X						-			
10:10	5-14-19	5		TD10 57		\		3			X			X	X									
10-10	•	7	,	TP19-0Z	_ 0					₩	^			^		\rightarrow	\perp	\dashv		•				
10:15	5-14-19	5	1	TP19-03				4			X			X	X		-							
}				1111 03					8	+						-	\dashv	\dashv		-				
10:20	5-14-19	5	(TP19-03	5 2			5		1	X			X	X									
			,	Tuesda III	100			7	No.	+	1/			V		-	+	\dashv	\dashv					
10:25	5-1419	5	(TP19 - 04	-0	2		6			X			X	X									
10:30	5-14-19	5	(TP19-04	17			7	,		X			X	X									
			1					0		\vdash	<u> </u>			W	1/		┰	\dashv	\dashv					
10:35	5-14-19	5	\	TP19-0'	5 (`		8			X			X	X									
10:40	5-14-19	5		TP19 - 0	516 /39	、 フ		0			X			X	X									
)	`	5						ļ			_			_	_	_						
10:45	5-14-19	5	1	TP19-0	6 (2,		10			X			X	X									
Addition	nal Instru	ictions:	B:11	10.1	0	eclint S	alm			W-15-														
						Name and Address of the Owner, where the Owner, which is the Own																		
l						that tampering with by	intentionally mislabel	ling the sample locati	on, date	or											he day they ar on subsequent	TO THE PROPERTY OF THE PARTY OF		
				ands for legal action				Ta .	-	I				City (IV)		-	W.1000.10		W-701					
Reinquis	ished by: (Signature) Date Time Received by: (Signature) Date 5-16-7019 S:25 pn Date						Time Lab Use Only Received on ice: Y/N																	
Relinquish	Relinquished by: (Signature) Date Time Received by: (Signature) Date						Date 5/20	1. 0	Time	•		T1			J	2				T3				
te	3FX		513	8 11 OK	.00) Jessi	WMID	21.70	AVG Temp °C															
Sample Ma	trix: S - Soil,	Sd - Solid, S	g - Sludge, A	- Aqueous, O - C	Other _			Contain	er Typ	e: g -	glass	, p -	poly/	plast	ic, ag	- aml	er g	lass,	v - VC	DA				
						ther arrangements a									client	expens	e. Th	e rep	ort for 1	the a	nalysis of th	e above		
samples is a	applicable or	nly to those	samples rec	eived by the labo	ratory	with this COC. The li	iability of the labora	otry is limited to	he amo	ount pa	id for	on the	repor	t.										

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Analytical Laboratory

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Three Springs • 65 Mercado Street, Suite 115, Durango, CO 81301

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envirotech-lac.com laboratory@envirotech-inc.com

Page 28 of 29

Project Information	Chain of Cu	istody											Pa	2 PPP 2	of Z	
Client: Devon Energy	Report Attention				La	b Us	e On	ly	,		TA		E			
Project: North Pure Gold & Fed 11	Report due by: Attention:		Lab	WO#	ŧ .	0	Job I	Num	ber		1D	3D	RCRA	CWA	SDWA	
Project Manager: Denis Williams		P	101	50	60	190	31-	000								
Address: 6488 7 Rivers HWY	Address:		Analysis and Metho											State		
City, State, Zip Arlesta, NM 8822	City, State, Zip		15	215								1		NM CO	UT AZ	
Phone: 605-350-1336	Phone:)8 ∕с	8 8	21	00	$ \cdot $	0.0		70		l				
Email: Permien @ Virtex.ca	Email:		RO I	8	8 /	826	90	e 30	8.1	Õ						
Time Date Sampled Matrix Containers Sample II	D	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	TPH 418.1	86				Rer	narks	
10:50 E-14-19 5 (TP19	-06 Z'	W								X						
10:55 5-44-19 5 1 TP4.	-07 0'	12								X						
11:00 5-14-19 S 1 TP19	-07 2'	13								X			,			
11:05 5-44-19 1 TP19	-08 0'	14					**							II. a substitute		
11:10 5-4-19 1 TP19	-08 Z'	15													957	
11:15 5-14-19 1 BH19	- 09 1'	16														
11:20 5-14-19 BH19	- 10 1'	17														
11:25 5-14-19 1 BH 19	(-1) l'	18														
11:30 5-14-19 BH19	-121	19														
5-14-19 5 1 TP19.	-02 2' Per Client 5/10/19	20														
Additional Instructions: Bill Vect	ex-Rec Chient Sam			•								•	•			
I, (field sampler), attest to the validity and authenticity of this sample time of collection is considered fraud and may be grounds for legal		sample location	Samples requiring thermal preservation must be received on ice the day they are sampled received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.									1/2/1				
Relinguished by: (Signature) Date 5-16-2019	Time Received by: (Signature)	Date 5-16.		7 Time Lab Use Only Received on ice: Y/ N												
Relinquished by: (Signature) Date 5/20 / 19	Time Received by: (Signature)	Date 5/20/	19	Time	·α	_	T1 AVG				T2			<u>T3</u>		
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous,		Container	ontainer Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA													
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis											the above					
samples is applicable only to those samples received by the	laboratory with this COC. The liability of the laboraotry i	s limited to the	amou	unt pai	id for d	on the	repor	t.								

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Ph (505) 632-0615 Fx (505) 632-1865

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

September 13, 2021

Wesley Mathews Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336

FAX

RE: North Pure Gold 8 Fed 11 OrderNo.: 2108E74

Dear Wesley Mathews:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/26/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued September 02, 2021.

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 don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 9/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy Client Sample ID: BH21-01 0.5

 Project:
 North Pure Gold 8 Fed 11
 Collection Date: 8/24/2021 8:25:00 AM

 Lab ID:
 2108E74-001
 Matrix: SOIL
 Received Date: 8/26/2021 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	8/30/2021 6:28:09 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/30/2021 6:28:09 PM
Surr: DNOP	103	70-130	%Rec	1	8/30/2021 6:28:09 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/30/2021 4:34:41 PM
Surr: BFB	108	70-130	%Rec	1	8/30/2021 4:34:41 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	8/30/2021 4:34:41 PM
Toluene	ND	0.050	mg/Kg	1	8/30/2021 4:34:41 PM
Ethylbenzene	ND	0.050	mg/Kg	1	8/30/2021 4:34:41 PM
Xylenes, Total	ND	0.10	mg/Kg	1	8/30/2021 4:34:41 PM
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	8/30/2021 4:34:41 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	8/30/2021 9:04:11 PM

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

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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 12

Date Reported: 9/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy Client Sample ID: BH21-03 0.5

 Project:
 North Pure Gold 8 Fed 11
 Collection Date: 8/24/2021 9:30:00 AM

 Lab ID:
 2108E74-002
 Matrix: SOIL
 Received Date: 8/26/2021 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	8/28/2021 10:33:43 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/28/2021 10:33:43 AM
Surr: DNOP	121	70-130	%Rec	1	8/28/2021 10:33:43 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/30/2021 4:58:34 PM
Surr: BFB	109	70-130	%Rec	1	8/30/2021 4:58:34 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	8/30/2021 4:58:34 PM
Toluene	ND	0.048	mg/Kg	1	8/30/2021 4:58:34 PM
Ethylbenzene	ND	0.048	mg/Kg	1	8/30/2021 4:58:34 PM
Xylenes, Total	ND	0.097	mg/Kg	1	8/30/2021 4:58:34 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	8/30/2021 4:58:34 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	8900	300	mg/Kg	100	8/31/2021 8:18:57 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 12

Date Reported: 9/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy Client Sample ID: BH21-04 0.5

 Project:
 North Pure Gold 8 Fed 11
 Collection Date: 8/24/2021 11:00:00 AM

 Lab ID:
 2108E74-003
 Matrix: SOIL
 Received Date: 8/26/2021 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: SB
Diesel Range Organics (DRO)	16	9.3	mg/Kg	1	8/28/2021 10:57:33 AM
Motor Oil Range Organics (MRO)	84	46	mg/Kg	1	8/28/2021 10:57:33 AM
Surr: DNOP	126	70-130	%Rec	1	8/28/2021 10:57:33 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/30/2021 5:22:24 PM
Surr: BFB	109	70-130	%Rec	1	8/30/2021 5:22:24 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	8/30/2021 5:22:24 PM
Toluene	ND	0.046	mg/Kg	1	8/30/2021 5:22:24 PM
Ethylbenzene	ND	0.046	mg/Kg	1	8/30/2021 5:22:24 PM
Xylenes, Total	ND	0.092	mg/Kg	1	8/30/2021 5:22:24 PM
Surr: 4-Bromofluorobenzene	99.6	70-130	%Rec	1	8/30/2021 5:22:24 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	3500	150	mg/Kg	50	8/31/2021 8:31:21 AM

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

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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 12

Date Reported: 9/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy Client Sample ID: BH21-03 2'

 Project:
 North Pure Gold 8 Fed 11
 Collection Date: 8/24/2021 11:05:00 AM

 Lab ID:
 2108E74-004
 Matrix: SOIL
 Received Date: 8/26/2021 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/28/2021 11:21:24 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/28/2021 11:21:24 AM
Surr: DNOP	125	70-130	%Rec	1	8/28/2021 11:21:24 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/30/2021 5:46:19 PM
Surr: BFB	109	70-130	%Rec	1	8/30/2021 5:46:19 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	8/30/2021 5:46:19 PM
Toluene	ND	0.049	mg/Kg	1	8/30/2021 5:46:19 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/30/2021 5:46:19 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/30/2021 5:46:19 PM
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	8/30/2021 5:46:19 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	1200	60	mg/Kg	20	8/30/2021 10:06:14 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 12

Date Reported: 9/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy Client Sample ID: BH21-04 2'

 Project:
 North Pure Gold 8 Fed 11
 Collection Date: 8/24/2021 11:15:00 AM

 Lab ID:
 2108E74-005
 Matrix: SOIL
 Received Date: 8/26/2021 7:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst: SB
Diesel Range Organics (DRO)	890	99		mg/Kg	10	8/28/2021 11:45:13 AM
Motor Oil Range Organics (MRO)	2600	500		mg/Kg	10	8/28/2021 11:45:13 AM
Surr: DNOP	0	70-130	S	%Rec	10	8/28/2021 11:45:13 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2021 10:31:02 PM
Surr: BFB	104	70-130		%Rec	1	8/30/2021 10:31:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	8/30/2021 10:31:02 PM
Toluene	ND	0.050		mg/Kg	1	8/30/2021 10:31:02 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/30/2021 10:31:02 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/30/2021 10:31:02 PM
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	8/30/2021 10:31:02 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	410	60		mg/Kg	20	8/30/2021 10:18:38 PM

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

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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 12

Date Reported: 9/13/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Devon Energy Client Sample ID: BH21-04 4'

 Project:
 North Pure Gold 8 Fed 11
 Collection Date: 8/24/2021 11:20:00 AM

 Lab ID:
 2108E74-006
 Matrix: SOIL
 Received Date: 8/26/2021 7:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	47	9.1	Н	mg/Kg	1	9/9/2021 7:25:05 PM
Motor Oil Range Organics (MRO)	180	46	Н	mg/Kg	1	9/9/2021 7:25:05 PM
Surr: DNOP	103	70-130	Н	%Rec	1	9/9/2021 7:25:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	Н	mg/Kg	1	9/9/2021 3:52:07 PM
Surr: BFB	102	70-130	Н	%Rec	1	9/9/2021 3:52:07 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025	Н	mg/Kg	1	9/9/2021 3:52:07 PM
Toluene	ND	0.049	Н	mg/Kg	1	9/9/2021 3:52:07 PM
Ethylbenzene	ND	0.049	Н	mg/Kg	1	9/9/2021 3:52:07 PM
Xylenes, Total	ND	0.098	Н	mg/Kg	1	9/9/2021 3:52:07 PM
Surr: 4-Bromofluorobenzene	91.5	70-130	Н	%Rec	1	9/9/2021 3:52:07 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	370	60		mg/Kg	20	9/8/2021 10:12:14 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: **2108E74**

13-Sep-21

Client: Devon Energy

Project: North Pure Gold 8 Fed 11

Sample ID: MB-62268 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 62268 RunNo: 80882

Prep Date: 8/30/2021 Analysis Date: 8/30/2021 SeqNo: 2855267 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-62268 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 62268 RunNo: 80882

Prep Date: 8/30/2021 Analysis Date: 8/30/2021 SeqNo: 2855268 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 93.6 90 110

Sample ID: MB-62447 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 62447 RunNo: 81123

Prep Date: 9/8/2021 Analysis Date: 9/8/2021 SeqNo: 2863436 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-62447 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 62447 RunNo: 81123

Prep Date: 9/8/2021 Analysis Date: 9/8/2021 SeqNo: 2863437 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 range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: **2108E74** *13-Sep-21*

Client: Devon Energy

Project: North Pure Gold 8 Fed 11

Sample ID: MB-62246 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 62246 RunNo: 80889

Prep Date: 8/27/2021 Analysis Date: 8/28/2021 SeqNo: 2854737 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO) ND 10

Diesel Range Organics (DRO) ND 10
Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 13 10.00 128 70 130

Sample ID: LCS-62246 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 62246 RunNo: 80889

Prep Date: 8/27/2021 Analysis Date: 8/28/2021 SeqNo: 2854738 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 46 50.00 92.4 68.9 141 Surr: DNOP 5.0 5.000 101 70 130

Surr: DNOP 5.0 5.000 101 70 130

Sample ID: LCS-62465 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 62465 RunNo: 81156

Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2864692 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Surr: DNOP 4.3 5.000 86.2 70 130

Sample ID: MB-62465 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 62465 RunNo: 81156 Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2864694 Units: %Rec SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual

Surr: DNOP 14 10.00 135 70 130 S

Sample ID: LCS-62445 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 62445 RunNo: 81156 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2865704 Prep Date: Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Diesel Range Organics (DRO) 42 10 50.00 84.3 68.9 135

 Diesel Range Organics (DRO)
 42
 10
 50.00
 0
 84.3
 68.9
 135

 Surr: DNOP
 3.6
 5.000
 72.6
 70
 130

Sample ID: LCS-62457 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 62457 RunNo: 81156 Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2865705 Units: %Rec Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

 Surr: DNOP
 4.3
 5.000
 85.8
 70
 130

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 range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: **2108E74** *13-Sep-21*

Client: Devon Energy

Project: North Pure Gold 8 Fed 11

Sample ID: MB-62445 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 62445 RunNo: 81156

Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2865706 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 70 130

Sample ID: MB-62457 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 62457 RunNo: 81156

Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2865707 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr DNOP 11 10.00 109 70 130

 Surr: DNOP
 11
 10.00
 109
 70
 130

Sample ID: 2108E74-006AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **BH21-04 4'** Batch ID: **62445** RunNo: **81156**

Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2865709 Units: mg/Kg

%REC SPK value SPK Ref Val HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Diesel Range Organics (DRO) 44 10 50.56 46.61 -6.08 39.3 155 SH Surr: DNOP 4.5 5.056 89.5 70 130 Н

Sample ID: 2108E74-006AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: BH21-04 4' Batch ID: 62445 RunNo: 81156

Prep Date: 9/8/2021 Analysis Date: 9/9/2021 SeqNo: 2865710 Units: mq/Kq

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Diesel Range Organics (DRO) 64 46.99 46.61 36.6 39.3 37.8 RSH 9.4 155 23.4 Surr: DNOP 5.8 4.699 124 70 130 0 0 Н

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 Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 9 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: **2108E74**

13-Sep-21

Client: Devon Energy

Project: North Pure Gold 8 Fed 11

Sample ID: mb-62243 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 62243 RunNo: 80896

Prep Date: 8/27/2021 Analysis Date: 8/30/2021 SegNo: 2855152 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 111 70 130

Sample ID: Ics-62243 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 62243 RunNo: 80896

Prep Date: 8/27/2021 Analysis Date: 8/30/2021 SeqNo: 2855153 Units: mg/Kg

RPDLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual 28 5.0 25.00 O 110 78.6 131

 Gasoline Range Organics (GRO)
 28
 5.0
 25.00
 0
 110
 78.6
 131

 Surr: BFB
 1200
 1000
 120
 70
 130

Sample ID: mb-62435 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 62435 RunNo: 81171

Prep Date: 9/7/2021 Analysis Date: 9/9/2021 SeqNo: 2865211 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 70 130

Sample ID: Ics-62435 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 62435 RunNo: 81171

Prep Date: 9/7/2021 Analysis Date: 9/9/2021 SeqNo: 2865212 Units: mq/Kq

Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** PQL LowLimit Qual 25.00 Gasoline Range Organics (GRO) 26 104 78.6 131 5.0

Sasoline Range Organics (GRO) 26 5.0 25.00 0 104 78.6 131 Surr: BFB 1100 1000 110 70 130

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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: 2108E74

13-Sep-21

Client: Devon Energy

Project: North Pure Gold 8 Fed 11

Sample ID: mb-62243 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 62243 RunNo: 80896

Prep Date: 8/27/2021 Analysis Date: 8/30/2021 SeqNo: 2855200 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit **RPDLimit** Analyte Result %RPD Qual

Benzene ND 0.025 Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 102 70 130

Sample ID: LCS-62243 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 62243 RunNo: 80896

Prep Date: 8/27/2021	Analysis L	Date: 8/	30/2021	8	seqNo: 2	855201	Units: mg/K	lg .		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	95.6	80	120			
Toluene	0.96	0.050	1.000	0	96.3	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: 2108e74-001ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: BH21-01 0.5 Batch ID: 62243 RunNo: 80896

Prep Date: 8/27/2021	Analysis [Date: 8/	30/2021	S	SeqNo: 2	855204	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9737	0	96.3	80	120			
Toluene	0.94	0.049	0.9737	0	96.9	80	120			
Ethylbenzene	0.95	0.049	0.9737	0	97.1	80	120			
Xylenes, Total	2.8	0.097	2.921	0	95.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		0.9737		103	70	130			

Sample ID: 2108e74-001amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: BH21-01 0.5 Batch ID: 62243 RunNo: 80896

Prep Date: 8/27/2021	Analysis D	Date: 8/	30/2021	5	SeqNo: 2	855205	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9794	0	92.8	80	120	3.08	20	
Toluene	0.92	0.049	0.9794	0	94.4	80	120	2.01	20	
Ethylbenzene	0.92	0.049	0.9794	0	93.5	80	120	3.21	20	
Xylenes, Total	2.7	0.098	2.938	0	92.6	80	120	2.99	20	
Surr: 4-Bromofluorobenzene	0.99		0.9794		102	70	130	0	0	

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 11 of 12

Hall Environmental Analysis Laboratory, Inc.

WO#: **2108E74** *13-Sep-21*

Client: Devon Energy

Project: North Pure Gold 8 Fed 11

Sample ID: mb-62435 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 62435 RunNo: 81171

Prep Date: 9/7/2021 Analysis Date: 9/9/2021 SeqNo: 2865252 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 0.91 1.000 91.2 70 130

Sample ID: LCS-62435 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 62435 RunNo: 81171

Prep Date: 9/7/2021 Analysis Date: 9/9/2021 SeqNo: 2865253 Units: mg/Kg

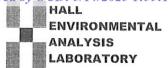
Prep Date: 9///2021	Analysis L	ate: 9/	9/2021	3	seqivo: 2	865253	Units: mg/r	.g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.88	0.025	1.000	0	88.2	80	120				
Toluene	0.90	0.050	1.000	0	90.0	80	120				
Ethylbenzene	0.90	0.050	1.000	0	89.9	80	120				
Xylenes, Total	2.7	0.10	3.000	0	89.3	80	120				
Surr: 4-Bromofluorobenzene	0.94		1.000		93.6	70	130				

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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 12



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Sample Log-In Check List

Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Client Name: Devon Energy	Work Order Numb	er: 2108I	≣74		RcptN	No: 1	
Received By: Cheyenne Cason	8/26/2021 7:30:00 A	ΔM		Chul			
Completed By: Isaiah Ortiz	8/26/2021 8:54:10 A	M		Chul	2-1		
Reviewed By: 7R 8/26/21							
Chain of Custody							
1. Is Chain of Custody complete?		Yes	✓	No 🗌	Not Present]	
2. How was the sample delivered?		Courie	<u>er</u>				
Log In							
3. Was an attempt made to cool the samples?		Yes	V	No 🗌	NA 🗆		
Were all samples received at a temperature o	f >0° C to 6.0°C	Yes [~	No 🗌	NA 🗆		
5. Sample(s) in proper container(s)?		Yes	✓	No 🗌			
S. Sufficient sample volume for indicated test(s)?	?	Yes 🖢		No 🗌			
7. Are samples (except VOA and ONG) properly	preserved?	Yes	/	No 🗌			
3. Was preservative added to bottles?		Yes		No 🗸	NA 🗌		
. Received at least 1 vial with headspace <1/4"	for AQ VOA?	Yes		No 🗌	NA 🗸		
0. Were any sample containers received broken	?	Yes		No 🗸			
					# of preserved bottles checked		/
1. Does paperwork match bottle labels?		Yes 1		No 🗌	for pH:	12	tl\
(Note discrepancies on chain of custody) 2. Are matrices correctly identified on Chain of C	ustody?	Yes		No 🗆	Adjusted?	of >12 unles	ss notea)
3. Is it clear what analyses were requested?	ustouy :	Yes	_	No 🗆			
4. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No 🗆	Checked by:	MPG	8/2
pecial Handling (if applicable)							
5. Was client notified of all discrepancies with th	is order?	Yes [No 🗌	NA 🗸		
Person Notified:	Date:	province erromerzacio	THE STREET, GOVERNO	AND DESCRIPTION OF THE PARTY.			
By Whom:	Via:	eMail	ПР	none Fax	In Person		
Regarding:	vid.	Sividii	the second	TOTAL TAX			
Client Instructions:	OCHERNANDA PRINTERNA CONTRA CO		north more used.	THE STATE OF THE S	ERSON AMERICAN SOURCE CONTROL		
6. Additional remarks:							
C. Additional femality.							
7. Cooler Information							
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	or Fax#:			Project Mana			Analysis Request					1:55									
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□ Standard □ Level 4 (Full Validation) Byan				Brando	on Str	Schafer	8) s	.0	PCB's		SSI		Q			tYAb					PM
Accreditation: Az Compliance				Sampler: 🤿	T.B		TMB's (8021)	(PH)8015D(GRO / DRO / MRO)	082	-	8270SIMS		Ş Ş			eser					
□ NEL	_AC D (Type)	□ Other		On Ice:					Pesticides/8082	<u>8</u>	'nΙ	SE	Cl.)F, Br, NO ₃ , NO ₂ , PO ₄ ,		8270 (Semi-VOA)	Coliform (Present/Absent)					
	Trype)		T	Cooler Temp(including CF): 2.5-0.1=2.4 (°C)			MTBE	5D(G	sticid	EDB (Method	PAHs by 8310	RCRA 8 Metals	<u>ک</u> ز	(A)	mi-	iform					
			8				1 1	801	Pes	(Me	s by	A 8	<u>.</u> g	3	(Se	S					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 7108 F 7 4	(ктех)		8081	EDB	Ä	SCR.		8260 (VOA)	3270	Total					
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10-10-1			mitted to Hall Environmental may be sub-	contracted to other a		Pate Time Remarks: Please hold BHY-4'/BH3-5'/BH3 8/26/u 0730 CC' Brandon Schoff atories. This serves as notice of this possibility. Any sub-contracted data will be clearly no				Le,				<u></u>	11-1	7					

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



July 24, 2023

Kent Stallings

Vertex Resources Services, Inc. 3101 Boyd Drive

Carlsbad, NM 88220 TEL: (505) 506-0040

FAX:

RE: North Pure Gold 8 Federal 011 OrderNo.: 2307707

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 7/15/2023 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2307707-001

North Pure Gold 8 Federal 011

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-05 0'

Collection Date: 7/13/2023 12:30:00 PM

Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	28	9.7	mg/Kg	1	7/18/2023 9:53:40 PM
Motor Oil Range Organics (MRO)	58	49	mg/Kg	1	7/18/2023 9:53:40 PM
Surr: DNOP	92.8	69-147	%Rec	1	7/18/2023 9:53:40 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	8100	300	mg/Kg	100	7/20/2023 12:43:36 PM
EPA METHOD 8260B: VOLATILES SHO	RT LIST				Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	7/18/2023 4:10:20 PM
Toluene	ND	0.047	mg/Kg	1	7/18/2023 4:10:20 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/18/2023 4:10:20 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/18/2023 4:10:20 PM
Surr: 1,2-Dichloroethane-d4	117	64.8-147	%Rec	1	7/18/2023 4:10:20 PM
Surr: 4-Bromofluorobenzene	89.8	62.1-144	%Rec	1	7/18/2023 4:10:20 PM
Surr: Dibromofluoromethane	120	73-145	%Rec	1	7/18/2023 4:10:20 PM
Surr: Toluene-d8	93.8	70-130	%Rec	1	7/18/2023 4:10:20 PM
EPA METHOD 8015D MOD: GASOLINE	RANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/18/2023 4:10:20 PM
Surr: BFB	85.9	70-130	%Rec	1	7/18/2023 4:10:20 PM

Matrix: SOIL

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

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 Quanitative 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 1 of 23

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-05 2'

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 12:35:00 PM

 Lab ID:
 2307707-002
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/18/2023 10:17:31 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/18/2023 10:17:31 PM
Surr: DNOP	89.4	69-147	%Rec	1	7/18/2023 10:17:31 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	840	60	mg/Kg	20	7/19/2023 4:07:47 AM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	7/18/2023 4:37:56 PM
Toluene	ND	0.047	mg/Kg	1	7/18/2023 4:37:56 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/18/2023 4:37:56 PM
Xylenes, Total	ND	0.095	mg/Kg	1	7/18/2023 4:37:56 PM
Surr: 1,2-Dichloroethane-d4	125	64.8-147	%Rec	1	7/18/2023 4:37:56 PM
Surr: 4-Bromofluorobenzene	94.0	62.1-144	%Rec	1	7/18/2023 4:37:56 PM
Surr: Dibromofluoromethane	125	73-145	%Rec	1	7/18/2023 4:37:56 PM
Surr: Toluene-d8	99.6	70-130	%Rec	1	7/18/2023 4:37:56 PM
EPA METHOD 8015D MOD: GASOLINE RANG	Ε				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/18/2023 4:37:56 PM
Surr: BFB	92.4	70-130	%Rec	1	7/18/2023 4:37:56 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 2 of 23

CLIENT: Vertex Resources Services, Inc.

Analytical Report

Lab Order 2307707

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-05 4'

Project: North Pure Gold 8 Federal 011 **Collection Date:** 7/13/2023 12:40:00 PM

Lab ID: 2307707-003 **Matrix:** SOIL **Received Date:** 7/15/2023 7:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/18/2023 10:41:22 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/18/2023 10:41:22 PM
Surr: DNOP	88.7	69-147	%Rec	1	7/18/2023 10:41:22 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	720	60	mg/Kg	20	7/19/2023 4:20:08 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	7/18/2023 5:05:31 PM
Toluene	ND	0.048	mg/Kg	1	7/18/2023 5:05:31 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/18/2023 5:05:31 PM
Xylenes, Total	ND	0.096	mg/Kg	1	7/18/2023 5:05:31 PM
Surr: 1,2-Dichloroethane-d4	112	64.8-147	%Rec	1	7/18/2023 5:05:31 PM
Surr: 4-Bromofluorobenzene	92.3	62.1-144	%Rec	1	7/18/2023 5:05:31 PM
Surr: Dibromofluoromethane	117	73-145	%Rec	1	7/18/2023 5:05:31 PM
Surr: Toluene-d8	97.9	70-130	%Rec	1	7/18/2023 5:05:31 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/18/2023 5:05:31 PM
Surr: BFB	93.2	70-130	%Rec	1	7/18/2023 5:05:31 PM

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

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 Quanitative 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 3 of 23

Project:

CLIENT: Vertex Resources Services, Inc.

North Pure Gold 8 Federal 011

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-06 0'

Collection Date: 7/13/2023 12:55:00 PM

Lab ID: 2307707-004 **Matrix:** SOIL **Received Date:** 7/15/2023 7:30:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/18/2023 11:05:08 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/18/2023 11:05:08 PM
Surr: DNOP	90.8	69-147	%Rec	1	7/18/2023 11:05:08 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	7400	300	mg/Kg	100	7/20/2023 12:56:00 PM
EPA METHOD 8260B: VOLATILES SHORT L	LIST				Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	7/18/2023 5:33:03 PM
Toluene	ND	0.047	mg/Kg	1	7/18/2023 5:33:03 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/18/2023 5:33:03 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/18/2023 5:33:03 PM
Surr: 1,2-Dichloroethane-d4	124	64.8-147	%Rec	1	7/18/2023 5:33:03 PM
Surr: 4-Bromofluorobenzene	96.2	62.1-144	%Rec	1	7/18/2023 5:33:03 PM
Surr: Dibromofluoromethane	126	73-145	%Rec	1	7/18/2023 5:33:03 PM
Surr: Toluene-d8	99.7	70-130	%Rec	1	7/18/2023 5:33:03 PM
EPA METHOD 8015D MOD: GASOLINE RAM	NGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/18/2023 5:33:03 PM
Surr: BFB	91.7	70-130	%Rec	1	7/18/2023 5:33:03 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 4 of 23

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2307707-005

North Pure Gold 8 Federal 011

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-06 2'

Collection Date: 7/13/2023 1:00:00 PM

Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	7/18/2023 11:28:50 PM
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	7/18/2023 11:28:50 PM
Surr: DNOP	88.4	69-147	%Rec	1	7/18/2023 11:28:50 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	410	60	mg/Kg	20	7/19/2023 4:44:48 AM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	7/18/2023 6:00:31 PM
Toluene	ND	0.046	mg/Kg	1	7/18/2023 6:00:31 PM
Ethylbenzene	ND	0.046	mg/Kg	1	7/18/2023 6:00:31 PM
Xylenes, Total	ND	0.093	mg/Kg	1	7/18/2023 6:00:31 PM
Surr: 1,2-Dichloroethane-d4	120	64.8-147	%Rec	1	7/18/2023 6:00:31 PM
Surr: 4-Bromofluorobenzene	93.8	62.1-144	%Rec	1	7/18/2023 6:00:31 PM
Surr: Dibromofluoromethane	123	73-145	%Rec	1	7/18/2023 6:00:31 PM
Surr: Toluene-d8	97.1	70-130	%Rec	1	7/18/2023 6:00:31 PM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/18/2023 6:00:31 PM
Surr: BFB	89.3	70-130	%Rec	1	7/18/2023 6:00:31 PM

Matrix: SOIL

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

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 Quanitative 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 23

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-06 4'

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 1:05:00 PM

 Lab ID:
 2307707-006
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses Analyst: **DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Diesel Range Organics (DRO) ND 9.3 mg/Kg 1 7/19/2023 12:16:21 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 7/19/2023 12:16:21 AM Surr: DNOP 88.2 69-147 %Rec 1 7/19/2023 12:16:21 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS Chloride 460 60 7/19/2023 4:57:09 AM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: RAA ND 7/18/2023 6:28:00 PM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 7/18/2023 6:28:00 PM Ethylbenzene ND 0.047 mg/Kg 1 7/18/2023 6:28:00 PM Xylenes, Total ND 0.094 mg/Kg 1 7/18/2023 6:28:00 PM Surr: 1,2-Dichloroethane-d4 %Rec 7/18/2023 6:28:00 PM 121 64.8-147 1 Surr: 4-Bromofluorobenzene 93.4 62.1-144 %Rec 1 7/18/2023 6:28:00 PM Surr: Dibromofluoromethane 122 73-145 %Rec 1 7/18/2023 6:28:00 PM Surr: Toluene-d8 100 70-130 %Rec 1 7/18/2023 6:28:00 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND mg/Kg 7/18/2023 6:28:00 PM 47 1 Surr: BFB 90.5 70-130 %Rec 1 7/18/2023 6:28:00 PM

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

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 Quanitative 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 23

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-07 0'

Project: North Pure Gold 8 Federal 011 **Collection Date:** 7/13/2023 1:25:00 PM

Lab ID: 2307707-007 **Matrix:** SOIL **Received Date:** 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/19/2023 12:40:06 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2023 12:40:06 AM
Surr: DNOP	91.0	69-147	%Rec	1	7/19/2023 12:40:06 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	13000	600	mg/Kg	200	7/19/2023 3:26:20 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	Т				Analyst: RAA
Benzene	ND	0.025	mg/Kg	1	7/18/2023 6:55:23 PM
Toluene	ND	0.049	mg/Kg	1	7/18/2023 6:55:23 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/18/2023 6:55:23 PM
Xylenes, Total	ND	0.098	mg/Kg	1	7/18/2023 6:55:23 PM
Surr: 1,2-Dichloroethane-d4	110	64.8-147	%Rec	1	7/18/2023 6:55:23 PM
Surr: 4-Bromofluorobenzene	93.8	62.1-144	%Rec	1	7/18/2023 6:55:23 PM
Surr: Dibromofluoromethane	121	73-145	%Rec	1	7/18/2023 6:55:23 PM
Surr: Toluene-d8	102	70-130	%Rec	1	7/18/2023 6:55:23 PM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/18/2023 6:55:23 PM
Surr: BFB	92.1	70-130	%Rec	1	7/18/2023 6:55:23 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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

porting Limit Page 7 of 23

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2307707-008

North Pure Gold 8 Federal 011

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-07 2'

Collection Date: 7/13/2023 1:30:00 PM

Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	7/19/2023 1:03:47 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/19/2023 1:03:47 AM
Surr: DNOP	90.0	69-147	%Rec	1	7/19/2023 1:03:47 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	4000	150	mg/Kg	50	7/20/2023 8:10:21 PM
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	7/18/2023 7:22:47 PM
Toluene	ND	0.046	mg/Kg	1	7/18/2023 7:22:47 PM
Ethylbenzene	ND	0.046	mg/Kg	1	7/18/2023 7:22:47 PM
Xylenes, Total	ND	0.092	mg/Kg	1	7/18/2023 7:22:47 PM
Surr: 1,2-Dichloroethane-d4	119	64.8-147	%Rec	1	7/18/2023 7:22:47 PM
Surr: 4-Bromofluorobenzene	94.5	62.1-144	%Rec	1	7/18/2023 7:22:47 PM
Surr: Dibromofluoromethane	126	73-145	%Rec	1	7/18/2023 7:22:47 PM
Surr: Toluene-d8	97.0	70-130	%Rec	1	7/18/2023 7:22:47 PM
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/18/2023 7:22:47 PM
Surr: BFB	89.4	70-130	%Rec	1	7/18/2023 7:22:47 PM

Matrix: SOIL

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

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 Quanitative 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 23

CLIENT: Vertex Resources Services, Inc.

Analytical Report

Lab Order 2307707

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-07 4'

Project: North Pure Gold 8 Federal 011 **Collection Date:** 7/13/2023 1:35:00 PM

Lab ID: 2307707-009 **Matrix:** SOIL **Received Date:** 7/15/2023 7:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	lics				Analyst: DGH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2023 1:27:33 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/19/2023 1:27:33 AM
Surr: DNOP	90.3	69-147	%Rec	1	7/19/2023 1:27:33 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	2600	150	mg/Kg	50	7/20/2023 8:22:46 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: RAA
Benzene	ND	0.025	mg/Kg	1	7/18/2023 7:50:07 PM
Toluene	ND	0.049	mg/Kg	1	7/18/2023 7:50:07 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/18/2023 7:50:07 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/18/2023 7:50:07 PM
Surr: 1,2-Dichloroethane-d4	126	64.8-147	%Rec	1	7/18/2023 7:50:07 PM
Surr: 4-Bromofluorobenzene	93.4	62.1-144	%Rec	1	7/18/2023 7:50:07 PM
Surr: Dibromofluoromethane	132	73-145	%Rec	1	7/18/2023 7:50:07 PM
Surr: Toluene-d8	99.0	70-130	%Rec	1	7/18/2023 7:50:07 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/18/2023 7:50:07 PM
Surr: BFB	90.1	70-130	%Rec	1	7/18/2023 7:50:07 PM

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

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 Quanitative 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 23

Gasoline Range Organics (GRO)

Surr: BFB

Analytical Report Lab Order 2307707

Date Reported: 7/24/2023

7/18/2023 8:17:29 PM

7/18/2023 8:17:29 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-08 0

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 2:00:00 PM

 Lab ID:
 2307707-010
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses Analyst: **DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Diesel Range Organics (DRO) ND 9.5 mg/Kg 1 7/19/2023 1:51:16 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 7/19/2023 1:51:16 AM Surr: DNOP 94.0 69-147 %Rec 1 7/19/2023 1:51:16 AM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 9000 300 7/20/2023 8:35:11 PM mg/Kg 100 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: RAA ND 0.024 7/18/2023 8:17:29 PM mg/Kg 1 Toluene ND 7/18/2023 8:17:29 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 7/18/2023 8:17:29 PM Xylenes, Total ND 0.096 mg/Kg 1 7/18/2023 8:17:29 PM Surr: 1,2-Dichloroethane-d4 %Rec 7/18/2023 8:17:29 PM 129 64.8-147 1 Surr: 4-Bromofluorobenzene 97.7 62.1-144 %Rec 1 7/18/2023 8:17:29 PM Surr: Dibromofluoromethane 73-145 %Rec 1 7/18/2023 8:17:29 PM 132 Surr: Toluene-d8 98.5 70-130 %Rec 1 7/18/2023 8:17:29 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: RAA

ND

88.5

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

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 Quanitative 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

mg/Kg

%Rec

1

1

48

70-130

- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 23

CLIENT: Vertex Resources Services, Inc.

Analytical Report

Lab Order **2307707**Date Reported: **7/24/2023**

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-08 2'

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 2:05:00 PM

 Lab ID:
 2307707-011
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	7/19/2023 2:14:59 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/19/2023 2:14:59 AM
Surr: DNOP	93.8	69-147	%Rec	1	7/19/2023 2:14:59 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	850	60	mg/Kg	20	7/19/2023 1:10:57 PM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	7/18/2023 8:44:48 PM
Toluene	ND	0.048	mg/Kg	1	7/18/2023 8:44:48 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/18/2023 8:44:48 PM
Xylenes, Total	ND	0.096	mg/Kg	1	7/18/2023 8:44:48 PM
Surr: 1,2-Dichloroethane-d4	128	64.8-147	%Rec	1	7/18/2023 8:44:48 PM
Surr: 4-Bromofluorobenzene	89.2	62.1-144	%Rec	1	7/18/2023 8:44:48 PM
Surr: Dibromofluoromethane	130	73-145	%Rec	1	7/18/2023 8:44:48 PM
Surr: Toluene-d8	102	70-130	%Rec	1	7/18/2023 8:44:48 PM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/18/2023 8:44:48 PM
Surr: BFB	87.8	70-130	%Rec	1	7/18/2023 8:44:48 PM

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

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 Quanitative 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 11 of 23

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-08 4'

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 2:10:00 PM

 Lab ID:
 2307707-012
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/19/2023 2:38:41 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2023 2:38:41 AM
Surr: DNOP	84.2	69-147	%Rec	1	7/19/2023 2:38:41 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	2400	150	mg/Kg	50	7/20/2023 8:47:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: RAA
Benzene	ND	0.025	mg/Kg	1	7/18/2023 9:12:03 PM
Toluene	ND	0.049	mg/Kg	1	7/18/2023 9:12:03 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/18/2023 9:12:03 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/18/2023 9:12:03 PM
Surr: 1,2-Dichloroethane-d4	123	64.8-147	%Rec	1	7/18/2023 9:12:03 PM
Surr: 4-Bromofluorobenzene	93.4	62.1-144	%Rec	1	7/18/2023 9:12:03 PM
Surr: Dibromofluoromethane	132	73-145	%Rec	1	7/18/2023 9:12:03 PM
Surr: Toluene-d8	103	70-130	%Rec	1	7/18/2023 9:12:03 PM
EPA METHOD 8015D MOD: GASOLINE RANG	Ε				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/18/2023 9:12:03 PM
Surr: BFB	89.6	70-130	%Rec	1	7/18/2023 9:12:03 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 12 of 23

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-08 6'

Project: North Pure Gold 8 Federal 011 **Collection Date:** 7/13/2023 2:15:00 PM

Lab ID: 2307707-013 **Matrix:** SOIL **Received Date:** 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/19/2023 3:02:25 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2023 3:02:25 AM
Surr: DNOP	84.6	69-147	%Rec	1	7/19/2023 3:02:25 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	270	60	mg/Kg	20	7/19/2023 2:00:35 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	Т				Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	7/18/2023 9:39:15 PM
Toluene	ND	0.048	mg/Kg	1	7/18/2023 9:39:15 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/18/2023 9:39:15 PM
Xylenes, Total	ND	0.096	mg/Kg	1	7/18/2023 9:39:15 PM
Surr: 1,2-Dichloroethane-d4	127	64.8-147	%Rec	1	7/18/2023 9:39:15 PM
Surr: 4-Bromofluorobenzene	95.5	62.1-144	%Rec	1	7/18/2023 9:39:15 PM
Surr: Dibromofluoromethane	135	73-145	%Rec	1	7/18/2023 9:39:15 PM
Surr: Toluene-d8	105	70-130	%Rec	1	7/18/2023 9:39:15 PM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/18/2023 9:39:15 PM
Surr: BFB	91.6	70-130	%Rec	1	7/18/2023 9:39:15 PM

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

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 Quanitative 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 13 of 23

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-09 0^o

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 2:25:00 PM

 Lab ID:
 2307707-014
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses** Analyst: **DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Diesel Range Organics (DRO) ND 9.5 mg/Kg 1 7/19/2023 3:26:09 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 7/19/2023 3:26:09 AM Surr: DNOP 84.0 69-147 %Rec 1 7/19/2023 3:26:09 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS Chloride 1900 60 7/19/2023 2:13:00 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: RAA 0.024 7/18/2023 10:06:24 PM ND mg/Kg 1 Toluene ND 7/18/2023 10:06:24 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 7/18/2023 10:06:24 PM Xylenes, Total ND 0.098 mg/Kg 1 7/18/2023 10:06:24 PM Surr: 1,2-Dichloroethane-d4 64.8-147 %Rec 7/18/2023 10:06:24 PM 124 1 Surr: 4-Bromofluorobenzene 92.0 62.1-144 %Rec 1 7/18/2023 10:06:24 PM Surr: Dibromofluoromethane 73-145 %Rec 1 7/18/2023 10:06:24 PM 129 Surr: Toluene-d8 106 70-130 %Rec 1 7/18/2023 10:06:24 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND mg/Kg 7/19/2023 1:52:16 PM 49 1 Surr: BFB 84.0 70-130 %Rec 1 7/19/2023 1:52:16 PM

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

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 Quanitative 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 14 of 23

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-09 2'

Project: North Pure Gold 8 Federal 011 **Collection Date:** 7/13/2023 2:30:00 PM

Lab ID: 2307707-015 **Matrix:** SOIL **Received Date:** 7/15/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/19/2023 3:49:51 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/19/2023 3:49:51 AM
Surr: DNOP	84.8	69-147	%Rec	1	7/19/2023 3:49:51 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	2300	60	mg/Kg	20	7/19/2023 2:25:24 PM
EPA METHOD 8260B: VOLATILES SHORT LI	IST				Analyst: RAA
Benzene	ND	0.023	mg/Kg	1	7/18/2023 10:33:35 PM
Toluene	ND	0.047	mg/Kg	1	7/18/2023 10:33:35 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/18/2023 10:33:35 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/18/2023 10:33:35 PM
Surr: 1,2-Dichloroethane-d4	125	64.8-147	%Rec	1	7/18/2023 10:33:35 PM
Surr: 4-Bromofluorobenzene	98.2	62.1-144	%Rec	1	7/18/2023 10:33:35 PM
Surr: Dibromofluoromethane	133	73-145	%Rec	1	7/18/2023 10:33:35 PM
Surr: Toluene-d8	99.1	70-130	%Rec	1	7/18/2023 10:33:35 PM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 2:19:45 PM
Surr: BFB	85.7	70-130	%Rec	1	7/19/2023 2:19:45 PM

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

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 Quanitative 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 15 of 23

Date Reported: 7/24/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-09 4'

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 2:35:00 PM

 Lab ID:
 2307707-016
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/19/2023 8:32:24 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/19/2023 8:32:24 PM
Surr: DNOP	96.2	69-147	%Rec	1	7/19/2023 8:32:24 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/19/2023 11:28:56 AM
Surr: BFB	88.8	15-244	%Rec	1	7/19/2023 11:28:56 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 11:28:56 AM
Toluene	ND	0.049	mg/Kg	1	7/19/2023 11:28:56 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/19/2023 11:28:56 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/19/2023 11:28:56 AM
Surr: 4-Bromofluorobenzene	97.4	39.1-146	%Rec	1	7/19/2023 11:28:56 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	1200	60	mg/Kg	20	7/19/2023 2:37:49 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 16 of 23

Hall Environmental Analysis Laboratory, Inc.

2307707

WO#:

24-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

 Sample ID:
 MB-76308
 SampType: mblk
 TestCode: EPA Method 300.0: Anions

 Client ID:
 PBS
 Batch ID: 76308
 RunNo: 98334

Prep Date: 7/18/2023 Analysis Date: 7/18/2023 SeqNo: 3578775 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-76308 SampType: Ics TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 76308 RunNo: 98334 Prep Date: 7/18/2023 Analysis Date: 7/18/2023 SeqNo: 3578776 Units: mg/Kg %RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Qual Chloride 14 1.5 15.00 92.3 110

 Sample ID:
 MB-76320
 SampType:
 MBLK
 TestCode:
 EPA Method 300.0:
 Anions

 Client ID:
 PBS
 Batch ID:
 76320
 RunNo:
 98352

Prep Date: 7/19/2023 Analysis Date: 7/19/2023 SeqNo: 3580011 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-76320 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 76320 RunNo: 98352

Prep Date: 7/19/2023 Analysis Date: 7/19/2023 SeqNo: 3580012 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
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 17 of 23

Hall Environmental Analysis Laboratory, Inc.

2307707 24-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

- North Tu	Te dola o read									
Sample ID: MB-76296	SampType:	MBLK	Tes	stCode: EPA Method	A Method 8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID:	76296	RunNo: 98287							
Prep Date: 7/18/2023	Analysis Date:	7/18/2023	;	SeqNo: 3577902	Units: mg/Kg					
Analyte	Result PO	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50		0.4.0	4.47					
Surr: DNOP	8.4	10.00		84.2 69	147					
Sample ID: LCS-76296	SampType:	LCS	Tes	stCode: EPA Method	8015M/D: Diese	el Range	Organics			
Client ID: LCSS	Batch ID:	76296	F	RunNo: 98287						
Prep Date: 7/18/2023	Analysis Date:	7/18/2023	;	SeqNo: 3577903	Units: mg/Kg					
Analyte	Result PO	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	44	10 50.00	0	88.2 61.9						
Surr: DNOP	4.1	5.000		81.3 69	147					
Sample ID: 2307707-015AMS	SampType:	MS	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BH23-09 2'	Batch ID:	76296	RunNo: 98287							
Prep Date: 7/18/2023	Analysis Date:	7/19/2023	SeqNo: 3577925 Units: mg/Kg							
Analyte	Result PO	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	43	9.8 48.92	0	88.1 54.2	135					
Surr: DNOP	4.1	4.892		83.9 69	147					
Sample ID: 2307707-015AMSD	SampType:	MSD	Tes	stCode: EPA Method	8015M/D: Diese	el Range	Organics			
Client ID: BH23-09 2'	Batch ID:	76296	RunNo: 98287							
Prep Date: 7/18/2023	Analysis Date:	7/19/2023	;	SeqNo: 3577926	Units: mg/Kg					
Analyte	Result PO	QL SPK value	SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	44	9.9 49.31	0	88.5 54.2	135	1.26	29.2			
Surr: DNOP	4.1	4.931		82.9 69	147	0	0			
Sample ID: MB-76297	SampType:	MBLK	Tes	stCode: EPA Method	8015M/D: Diese	el Range	Organics			
Client ID: PBS	Batch ID:	76297	97 RunNo: 98349							
Prep Date: 7/18/2023	Analysis Date:	7/19/2023	;	SeqNo: 3579967	Units: mg/Kg					
Analyte	Result PO	QL 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	9.1	10.00		90.8 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 Quanitative Limit
- 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 18 of 23

Hall Environmental Analysis Laboratory, Inc.

4.4

2307707 24-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: LCS-76297	Samp [¬]	Гуре: LC	S	Tes	PA Method	od 8015M/D: Diesel Range Organics					
Client ID: LCSS	Batc	h ID: 762	297	RunNo: 98349							
Prep Date: 7/18/2023	Analysis [Date: 7/	19/2023	SeqNo: 3579968 Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	54	10	50.00	0	109	61.9	130				
Surr: DNOP	5.1		5.000		102	69	147				
Sample ID: 2307707-016AMS	Samp	Гуре: МЅ	;	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID: BH23-09 4'	Batc	Batch ID: 76297 RunNo: 98349									
Prep Date: 7/18/2023	Analysis Date: 7/20/2023			5	SeqNo: 35	579989	Units: mg/K	g			
Analyte	Daarde	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Analyte	Result	FQL	SFR value	OI IN INCI VAI	701 NEO	LOWLIIIII	riigiiEiiriit	701 NI D	INI DEIIIII	Quai	

Sample ID: 2307707-016AMSI) SampT	ype: MS	SD.	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: BH23-09 4'	Batch	1D: 76 2	297	RunNo: 98349						
Prep Date: 7/18/2023	Analysis D	ate: 7/ 2	20/2023	SeqNo: 3579990		579990	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	9.2	45.96	0	107	54.2	135	1.17	29.2	
Surr: DNOP	4.7		4.596		102	69	147	0	0	

99.0

4.425

147

69

Qualifiers:

Surr: DNOP

- 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 Quanitative Limit
- 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 19 of 23

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307707**

24-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Project:	North Pur	e Gola 8 i	rederai	011									
Sample ID:	lcs-76285	SampT	ype: LC	s	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	LCSS	Batch	ID: 76 2	285	RunNo: 98328								
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	9	SeqNo: 3578519			Units: mg/Kg				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
_	e Organics (GRO)	23	5.0	25.00	0	92.0	70	130					
Surr: BFB		1900		1000		187	15	244					
Sample ID:	mb-76285	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range				
Client ID:	PBS	Batch	ID: 76 2	285	F	RunNo: 98	3328						
Prep Date:	7/18/2023	Analysis Date: 7/19/2023			5	SeqNo: 3	578520	Units: mg/K	(g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
	e Organics (GRO)	ND	5.0	4000		24.4	4.5	044					
Surr: BFB		910		1000		91.4	15	244					
Sample ID:	lcs-76287	SampT	ype: LC	S	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	LCSS	Batch ID: 76287			F	RunNo: 98328							
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	\$	SeqNo: 3	579552	Units: %Red	;				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		1900		1000		189	15	244					
Sample ID:	mb-76287	SampT	уре: МЕ	BLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID:	PBS	Batch	ID: 762	287	RunNo: 98328								
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	\$	SeqNo: 3	579553	Units: %Red	;				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		900		1000		89.9	15	244					
Sample ID:	2307707-016ams	SampT	ype: MS	3	Tes	tCode: EF	PA Method	8015D: Gaso	line Range				
Client ID:	BH23-09 4'	Batch	ID: 76 2	285	F	RunNo: 98	3328		J				
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	5	SeqNo: 3	579633	Units: mg/Kg					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
	e Organics (GRO)	23	4.9	24.53	0	95.4	70	130					
Surr: BFB		2000		981.4		201	15	244					
Sample ID:	2307707-016amsd	SampT	ype: MS	BD	Tes	tCode: EF	PA Method	8015D: Gaso	line Range				
Client ID:	BH23-09 4'	Batch	ID: 76 2	285	F	RunNo: 98	3328						
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	SeqNo: 3579634 Units: mg/Kg				(g				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
_	e Organics (GRO)	23	4.9	24.61	0	93.2	70	130	2.04	20			
Surr: BFB		1900		984.3		196	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 Quanitative 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 20 of 23

Hall Environmental Analysis Laboratory, Inc.

2307707 24-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: LCS-76285	SampType: LC	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Batch ID: 762	285	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis Date: 7/	19/2023	5	SeqNo: 35	578524	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84 0.025	1.000	0	83.7	70	130			
Toluene	0.86 0.050	1.000	0	86.3	70	130			
Ethylbenzene	0.88 0.050	1.000	0	87.9	70	130			
Xylenes, Total	2.7 0.10	3.000	0	88.8	70	130			
Surr: 4-Bromofluorobenzene	0.98	1.000		98.0	39.1	146			
Sample ID: mb-76285	SampType: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch ID: 762	285	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis Date: 7/	19/2023	5	SeqNo: 35	578525	Units: mg/K	g		
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	0.99	1.000		99.1	39.1	146			
Sample ID: LCS-76287	SampType: LC	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Batch ID: 762	287	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis Date: 7/	19/2023	5	SeqNo: 35	579575	Units: %Rec			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0	1.000	_	104	39.1	146	_	_	_
Sample ID: mb-76287	SampType: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		

Qualifiers:

Client ID:

Prep Date:

Analyte

PBS

Surr: 4-Bromofluorobenzene

7/18/2023

- 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 Quanitative Limit

Batch ID: 76287

Analysis Date: 7/19/2023

PQL

SPK value SPK Ref Val

1.000

Result

1.0

B Analyte detected in the associated Method Blank

RunNo: 98328

%REC

102

SeqNo: 3579576

LowLimit

39.1

Units: %Rec

HighLimit

146

%RPD

RPDLimit

Qual

- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 21 of 23

Hall Environmental Analysis Laboratory, Inc.

2307707

WO#:

24-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: Ics-76270	SampType: LCS4 TestCode: EPA Method 8260B: Volatiles Short List										
Client ID: BatchQC	Batcl	h ID: 762	270	F	RunNo: 98	3320					
Prep Date: 7/17/2023	Analysis [Date: 7/	18/2023	5	SeqNo: 3	578345	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.92	0.025	1.000	0	91.6	80	120				
Toluene	0.94	0.050	1.000	0	94.4	80	120				
Ethylbenzene	0.97	0.050	1.000	0	97.2	80	120				
Xylenes, Total	2.9	0.10	3.000	0	95.4	80	120				
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		105	64.8	147				
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	62.1	144				
Surr: Dibromofluoromethane	0.54		0.5000		108	73	145				
Surr: Toluene-d8	0.50		0.5000		99.5	70	130				

Sample ID: mb-76270	Samp	Гуре: МЕ	BLK	Tes	List					
Client ID: PBS	Batc	h ID: 76 2	270	F	RunNo: 98	3320				
Prep Date: 7/17/2023	Analysis [Date: 7/	18/2023	;	SeqNo: 3	578346	Units: mg/K	g		
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: 1,2-Dichloroethane-d4	0.54		0.5000		108	64.8	147			
Surr: 4-Bromofluorobenzene	0.50		0.5000		99.7	62.1	144			
Surr: Dibromofluoromethane	0.56		0.5000		111	73	145			
Surr: Toluene-d8	0.50		0.5000		100	70	130			

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 Quanitative Limit
- 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 22 of 23

Hall Environmental Analysis Laboratory, Inc.

2307707

WO#:

24-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: Ics-76270 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: LCSS Batch ID: 76270 RunNo: 98320 Units: mg/Kg Prep Date: 7/17/2023 Analysis Date: 7/18/2023 SeqNo: 3578322 PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Gasoline Range Organics (GRO) 25 5.0 25.00 n 98.9 70 130 Surr: BFB 490 500.0 99.0 70 130

Sample ID: mb-76270 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: PBS Batch ID: 76270 RunNo: 98320 Prep Date: 7/17/2023 Analysis Date: 7/18/2023 SeqNo: 3578323 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 470 Surr: BFB 500.0 94.4 70 130

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 Quanitative 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 23 of 23



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Released to Imaging: 6/9/2025 1:23:35 PM

Client Name: Vertex Resources Services, Inc.	Work Order Number:	2307707		RcptNo: 1	
Received By: Juan Rojas	7/15/2023 7:30:00 AM		fleaning		
Completed By: Juan Rojas	7/15/2023 8:03:26 AM		Guaran &		
	-3 @ 0734				
Chain of Custody			_	_	
1. Is Chain of Custody complete?		Yes	No 🔽	Not Present	
2. How was the sample delivered?		Courier			
<u>Log In</u>					
3. Was an attempt made to cool the sample	s?	Yes 🗸	No 🗀	NA 🗌	
4. Were all samples received at a temperatu	re of >0° C to 6.0°C	Yes 🗹	No 🗌	NA \square	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗆		
6. Sufficient sample volume for indicated tes	it(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) prop		Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
Received at least 1 vial with headspace <	1/4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
10. Were any sample containers received bro		Yes	No 🗹 🗆		-
				# of preserved bottles checked	
11. Does paperwork match bottle labels?		Yes 🗸	No 🗆	for pH:	
(Note discrepancies on chain of custody)				(<2 or >12 unless noted)
12. Are matrices correctly identified on Chain	of Custody?	Yes 🗹	No 📙	Adjusted?	
13. Is it clear what analyses were requested?		Yes 🗹	No 📙	analice.	13
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗆	Checked by: 3V + 15 / 2	
Special Handling (if applicable)			•		
15. Was client notified of all discrepancies w	ith this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date				
By Whom:	Via:	eMail	Phone 🗌 Fax	☐ In Person	
Regarding:					
Client Instructions:					
16. Additional remarks:					
Client missing mailing address, pho	one number, and email addr	ess. JR 7/15/2	23		
17. Cooler Information					
Cooler No Temp °C Condition		Seal Date	Signed By		
1 1.7 Good	No Morty				

Page 113 of 248 Turn-Around Time: Receive Chaffi-141204 stou MRecord HALL ENVIRONMENTAL Client: X Rush_3-day **ANALYSIS LABORATORY** Vertex ☐ Standard Project Name: (direct bill to Devon-Harvard Divest, see Remarks) www.hallenvironmental.com Mailing Address: North Pure Gold 8 Federal 011 4901 Hawkins NE - Albuquerque, NM 87109 Project #: Tel. 505-345-3975 Fax 505-345-4107 **Analysis Request** Phone #: 22E-02816-09 SO4 Coliform (Present/Absent) email or Fax#: Project Manager: TPH:8015D(GRO / DRO / MRO) TMB's (8021) PCB's PAHs by 8310 or 8270SIMS Kent Stallings QA/QC Package: PO4, kstallings@vertex.ca □ Standard ☐ Level 4 (Full Validation) NO_2 504.1) Accreditation: ☐ Az Compliance L.Pullman Sampler: 8270 (Semi-VOA) □ NELAC □ Other On Ice: Tes □ No BTEX / MTBE / Br, NO₃, RCRA 8 Metals Murt ☐ EDD (Type) # of Coolers: EDB (Method 8260 (VOA) Cooler Temp(including CF): 01-0-2=1. CI, F, Total Preservative Container HEAL No. Matrix Sample Name Type and # Date Time Type 7307707 BH23-05 0' Soil Χ Χ Χ 07/13/23 12:30 1, 4oz jar -001 BH23-05 2' 12:35 Soil -002 Х X X 07/13/23 1, 4oz jar BH23-05 4' Χ Х 12:40 Soil X 07/13/23 1. 4oz iar -003 BH23-06 0' Χ X Χ 12:55 Soil 07/13/23 1, 4oz jar -004 BH23-06 2' Χ Х Χ 13:00 Soil 07/13/23 1, 4oz jar -005 BH23-06 4' Χ X Χ 07/13/23 13:05 Soil 1, 4oz jar 700 G BH23-07 0' Х X 13:25 Soil 1, 4oz jar -007 X 07/13/23 BH23-07 2' -008 Χ X 13:30 Soil Χ 07/13/23 1, 4oz jar BH23-07 4' Χ 009 Х X 07/13/23 13:35 Soil 1, 4oz jar BH23-08 0' Х X Χ 07/13/23 14:00 Soil 1, 4oz jar -010

012 BH23-08 4' 07/13/23 14:10 Soil 1, 4oz jar Relinquished by Date: Time: Received by: Via: Date Time 0750 1/14/23 7-14-23 700 Date: Time: Received by: Time 1900

1, 4oz jar

BH23-08 2'

Remarks: Direct bill to Devon, Dale Woodall
Harvard Divest Site – North Pure Gold 8 Federal 011

X

GL Account 7700100

CC 1007884901

 $\mathbf{x} \mid \mathbf{x}$

20c. kstallings@vertex.ca for Final Report

1/2

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

111

Soil

07/13/23

14:05

eceived b	e o ceri	71470C	liấtੳdy Record	Turn-Aroun	d Time:		7			Į.								P	age 1	14 of 2	
Client		Vertex		☐ Standar	rd X Rus	h3-day												ME RA		AL ORY	,
Mailing	g Addres	evon-Har ss:	vard Divest, see Remarks)		Gold 8 Feder	ral 011			004	l = l					nmer						
				Project #:		a. 011	-											7109			
Phone				22E-02816-	09		100		ei. 5	05-3	45-3				Fee		5-410 st)7	NAME		
	or Fax#:	_		Project Man	ager:			6					A COLUMN TWO			Management of				and the latest services	
	Package	:		Kent Stalling			TMB's (8021)	MRC	PCB's		MS.		4, SO ₄			Sen					
□ Star			☐ Level 4 (Full Validation)	kstallings@\	vertex.ca) s	0	PC		IS(PO ₄ ,			X					
Accred	litation:	☐ Az Co☐ Othe	ompliance r	Sampler:	L.Pullman		IMB	/DR	082	=	or 8270SIMS		NO ₂ ,			esen					1
	Type)	Othe		On Ice: # of Coolers	Yes	□ No	_	8		504	ō	S			8	Pre					
	(1),50					40-2=1.7	/TBE	D(G	ficide	pou	8310	Metals	NO ₃ ,	₹	ni-V(orm					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310	RCRA 8 I	Cl, F, Br,	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)					
07/13/23	14:15	Soil	BH23-08 6'	1, 4oz jar		<u> 7307707</u> -013	X	X	8	Ш	<u>D</u>	ŭ.		_8	8	프			+	++	_
07/13/23	14:25	Soil	BH23-09 0'	1, 4oz jar		~014	Х	X				-	X					_	-	+	-
07/13/23	14:30	Soil	BH23-09 2'	1, 4oz jar		-015	X	X		_			X					_	+	++	-
07/13/23	14:35	Soil	BH23-09 4'	1, 4oz jar		-016	X	X		+			X	-			_		_	++	-
																7	+	_		++	_
																			1		-
								_	_		_										
								-	_	4	4	_	_	_		_	_		\perp		_
	-						-	_	_	_	-	-	+	-	_	\dashv	_	_			-
							-	+	-	-	+	-	\dashv	_	_	_	-	+	+-	++	_
							-+	-	-	_	+	+		+	-	-+	-		-	+	_
	Time: 0110	Relinquishe	r by	Received by:	Via:	Date Time	Rem Harv	arks ard	: Dir Dive	rect l	bill t	to De	evor	n, Da	ale V	Vood	dall Fodo	eral 01	14		_
1.1.	Гіте: 190	Relinquishe	d by:	Received by:	Yia: TOURIER	Date Time	GL A CC 1 cc. k	0078	unt 8849	7700 01	100							rai U	''	/ 2	



Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Hall Environmental Analysis Laboratory

4901 Hawkins NE

July 21, 2023

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

FAX:

RE: North Pure Gold 8 Federal 011 OrderNo.: 2307708

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 1 sample(s) on 7/15/2023 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/21/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-06 6'

 Project:
 North Pure Gold 8 Federal 011
 Collection Date: 7/13/2023 1:15:00 PM

 Lab ID:
 2307708-001
 Matrix: SOIL
 Received Date: 7/15/2023 7:30:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	7/19/2023 8:53:57 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/19/2023 8:53:57 PM
Surr: DNOP	95.6	69-147	%Rec	1	7/19/2023 8:53:57 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/19/2023 11:52:32 AM
Surr: BFB	89.8	15-244	%Rec	1	7/19/2023 11:52:32 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/19/2023 11:52:32 AM
Toluene	ND	0.048	mg/Kg	1	7/19/2023 11:52:32 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/19/2023 11:52:32 AM
Xylenes, Total	ND	0.097	mg/Kg	1	7/19/2023 11:52:32 AM
Surr: 4-Bromofluorobenzene	98.3	39.1-146	%Rec	1	7/19/2023 11:52:32 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	400	60	mg/Kg	20	7/19/2023 2:50:13 PM

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

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 Quanitative 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 1 of 5

Hall Environmental Analysis Laboratory, Inc.

2307708 21-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: MB-76320 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 76320 RunNo: 98352

Prep Date: 7/19/2023 Analysis Date: 7/19/2023 SeqNo: 3580011 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-76320 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 76320 RunNo: 98352

Prep Date: 7/19/2023 Analysis Date: 7/19/2023 SeqNo: 3580012 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.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 2 of 5

Hall Environmental Analysis Laboratory, Inc.

2307708

21-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: MB-76297 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 76297 RunNo: 98349 Prep Date: 7/18/2023 Analysis Date: 7/19/2023 SeqNo: 3579967 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.1 10.00 90.8 69 147

Sample ID: LCS-76297	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	n ID: 76 2	297	F	RunNo: 98	3349				
Prep Date: 7/18/2023	Analysis D	ate: 7/	19/2023	9	SeqNo: 3	579968	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	109	61.9	130			
Surr: DNOP	5.1		5.000		102	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 Quanitative Limit
- 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 3 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307708

21-Jul-23

Client: Vertex Resources Services, Inc. **Project:** North Pure Gold 8 Federal 011

Sample ID: Ics-76285 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 76285 RunNo: 98328 Prep Date: 7/18/2023 Analysis Date: 7/19/2023 SeqNo: 3578519 Units: mg/Kg PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Gasoline Range Organics (GRO) 23 5.0 25.00 n 92.0 70 130 Surr: BFB 1900 1000 187 15 244

Sample ID: mb-76285 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: Batch ID: 76285 PBS RunNo: 98328 Prep Date: 7/18/2023 Analysis Date: 7/19/2023 SeqNo: 3578520 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 910 15

1000

91.4

244

Qualifiers:

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

Page 4 of 5

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307708**

21-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 011

Sample ID: LCS-76285	Samp	Гуре: LC	S	Tes						
Client ID: LCSS	Batcl	h ID: 762	285	F	RunNo: 98					
Prep Date: 7/18/2023	Analysis [Date: 7/	19/2023	5	SeqNo: 3	78524	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.7	70	130			
Toluene	0.86	0.050	1.000	0	86.3	70	130			
Ethylbenzene	0.88	0.050	1.000	0	87.9	70	130			
Xylenes, Total	2.7	0.10	3.000	0	88.8	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	39.1	146			

Sample ID: mb-76285	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	n ID: 762	285	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis D	Date: 7/	19/2023	5	SeqNo: 3	578525	Units: mg/K	g		
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	0.99		1.000		99.1	39.1	146			

Sample ID: 2307708-001ams	SampT	ype: MS	i	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: BH23-06 6'	Batch	n ID: 762	285	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis D	Date: 7/	19/2023	5	SeqNo: 35	79625	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9625	0	94.0	70	130			
Toluene	0.94	0.048	0.9625	0	97.5	70	130			
Ethylbenzene	0.96	0.048	0.9625	0	100	70	130			
Xylenes, Total	2.9	0.096	2.887	0	101	70	130			
Surr: 4-Bromofluorobenzene	1.0		0.9625		105	39.1	146			

Sample ID: 2307708-001amsd	SampT	ype: MS	D	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: BH23-06 6'	Batch	n ID: 762	285	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis D)ate: 7/	19/2023	5	SeqNo: 3	579627	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9718	0	89.7	70	130	3.73	20	
Toluene	0.91	0.049	0.9718	0	93.4	70	130	3.38	20	
Ethylbenzene	0.92	0.049	0.9718	0	94.6	70	130	4.61	20	
Xylenes, Total	2.8	0.097	2.915	0	96.1	70	130	4.07	20	
Surr: 4-Bromofluorobenzene	1.0		0.9718		107	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 Quanitative 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 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

Sample Log-In Check List

Released to Imaging: 6/9/2025 1:23:35 PM

	website: wwi	v.nauenvironmentai 	.com		
Client Name: Vertex Resources Services, Inc.	Work Order Num	ber: 2307708		RcptNo:	1
Received By: Juan Rojas	7/15/2023 7:30:00	AM	Grandy Grandy		
Completed By: Juan Rojas	7/15/2023 8:18:53	AM	Glean Say		
Reviewed By: SCM 07 17	13 € 0734		ŕ		
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗌	No 🗸	Not Present	
2. How was the sample delivered?		Courier			
Log In			No 🗌	NA 🗆	
Was an attempt made to cool the same	oles?	Yes 🗹	NO L	NA 🗆	
4. Were all samples received at a tempera	ature of >0° C to 6.0°C	Yes 🗹	No 🗌	NA \square	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
6. Sufficient sample volume for indicated t	est(s)?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) p	operly preserved?	Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
Received at least 1 vial with headspace	<1/4" for AQ VOA?	Yes 🗌	No 🗆	NA 🗹	
0. Were any sample containers received	broken?	Yes 🗌	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custod	y)	Yes 🗸	No 🗌	-	>12 unless noted)
2. Are matrices correctly identified on Cha	in of Custody?	Yes 🗹	No 🗌	Adjusted?	
3. Is it clear what analyses were requested	d?	Yes 🗹	No 🗌		. 2/16
4. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 📙	Checked by:	Ja+113
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:					
Client missing mailing address,	ohone number and email a	ddress, JR 7/15/2	3		
47. O - les la formation					

17. Cooler Information

Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By

1 1.7 Good No Morty

Standard X Rush_3-day Project Name: www.hallenvironmental.com 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 Tel. 505-345-3975 Tel. 505-345-345-3975 Tel. 505-345-3975 Tel. 505-345-3975 Tel. 505-345-345-3975 Tel. 505-345-345-3975 Tel. 505-345-345-3975 Tel. 50	eceived@M&Ah5442@UStoleRMRec	Turn-Around Time:	HALL ENVIRONMENTAL
Project Name:	Client: Vertex	☐ Standard X Rush_3-day_	
Mailing Address: North Pure Gold 8 Federal 011 4901 Hawkins NE - Albuquerque, NM 87109	(direct hill to Devon-Harvard Divest, see Re	Project Name:	
Project #: Tel. 505-345-3975 Fax 505-345-4107			
Phone #: 22E-02816-09			
email or Fax#: Project Manager: QA/QC Package: Kent Stallings Standard Level 4 (Full Validation) Accreditation: Az Compliance NELAC On Ice: Police (NOA) Date Time Matrix Sample Name Type Type Type Type Type Type Type Type	Phone #:	22E-02816-09	
Standard			
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07/13/23 13:15 Soil BH23-06 6' 1, 4oz jar ~~~~~ (X X X X X X X X X X X X X X X X	Date Time Matrix Sample Na		1 Tot S2 S2 S S S S S S S
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GL Account 7700100	Jaki William	TV VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV	WANTED CONTROL
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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

July 28, 2023

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

FAX:

RE: North Pure Gold Federal 011 OrderNo.: 2307747

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 46 sample(s) on 7/18/2023 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-10 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:00:00 AM

 Lab ID:
 2307747-001
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	13	8.9	mg/Kg	1	7/19/2023 9:14:53 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	7/19/2023 9:14:53 PM
Surr: DNOP	93.7	69-147	%Rec	1	7/19/2023 9:14:53 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/19/2023 12:16:08 PM
Surr: BFB	91.8	15-244	%Rec	1	7/19/2023 12:16:08 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/19/2023 12:16:08 PM
Toluene	ND	0.048	mg/Kg	1	7/19/2023 12:16:08 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/19/2023 12:16:08 PM
Xylenes, Total	ND	0.097	mg/Kg	1	7/19/2023 12:16:08 PM
Surr: 4-Bromofluorobenzene	101	39.1-146	%Rec	1	7/19/2023 12:16:08 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	2900	150	mg/Kg	50	7/20/2023 9:00:00 PM

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

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 Quanitative 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 1 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-10 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:25:00 AM

 Lab ID:
 2307747-002
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	13	9.6	mg/Kg	1	7/19/2023 9:36:00 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2023 9:36:00 PM
Surr: DNOP	96.0	69-147	%Rec	1	7/19/2023 9:36:00 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 12:39:46 PM
Surr: BFB	96.8	15-244	%Rec	1	7/19/2023 12:39:46 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	7/19/2023 12:39:46 PM
Toluene	ND	0.047	mg/Kg	1	7/19/2023 12:39:46 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/19/2023 12:39:46 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/19/2023 12:39:46 PM
Surr: 4-Bromofluorobenzene	106	39.1-146	%Rec	1	7/19/2023 12:39:46 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	550	60	mg/Kg	20	7/19/2023 3:15:02 PM

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

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 Quanitative 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 2 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-11 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 7:55:00 AM

 Lab ID:
 2307747-003
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/19/2023 9:57:12 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/19/2023 9:57:12 PM
Surr: DNOP	92.0	69-147	%Rec	1	7/19/2023 9:57:12 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/19/2023 1:03:28 PM
Surr: BFB	93.2	15-244	%Rec	1	7/19/2023 1:03:28 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 1:03:28 PM
Toluene	ND	0.049	mg/Kg	1	7/19/2023 1:03:28 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/19/2023 1:03:28 PM
Xylenes, Total	ND	0.098	mg/Kg	1	7/19/2023 1:03:28 PM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/19/2023 1:03:28 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	16000	610	mg/Kg	200	7/20/2023 9:12:25 PM

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

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 Quanitative 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

ple pH Not In Range Page 3 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-11 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:00:00 AM

 Lab ID:
 2307747-004
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/19/2023 10:17:31 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/19/2023 10:17:31 PM
Surr: DNOP	95.3	69-147	%Rec	1	7/19/2023 10:17:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 1:27:14 PM
Surr: BFB	95.2	15-244	%Rec	1	7/19/2023 1:27:14 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	7/19/2023 1:27:14 PM
Toluene	ND	0.047	mg/Kg	1	7/19/2023 1:27:14 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/19/2023 1:27:14 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/19/2023 1:27:14 PM
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	7/19/2023 1:27:14 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	630	60	mg/Kg	20	7/19/2023 3:39:52 PM

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

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 Quanitative 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

Panorting Limit

Page 4 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-12 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:15:00 AM

 Lab ID:
 2307747-005
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: PRD Diesel Range Organics (DRO) ND 9.9 7/19/2023 10:38:27 PM mg/Kg 1 mg/Kg Motor Oil Range Organics (MRO) 1 7/19/2023 10:38:27 PM ND 50 Surr: DNOP 95.0 %Rec 1 7/19/2023 10:38:27 PM 69-147 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.8 mg/Kg 1 7/19/2023 1:50:58 PM Surr: BFB 1 7/19/2023 1:50:58 PM 96.2 15-244 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 0.024 mg/Kg 1 7/19/2023 1:50:58 PM Toluene ND 0.048 mg/Kg 1 7/19/2023 1:50:58 PM Ethylbenzene 7/19/2023 1:50:58 PM ND 0.048 mg/Kg 1 Xylenes, Total ND 0.095 mg/Kg 1 7/19/2023 1:50:58 PM %Rec Surr: 4-Bromofluorobenzene 105 39.1-146 1 7/19/2023 1:50:58 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS Chloride ND 7/19/2023 4:17:05 PM 60 mg/Kg 20

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

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 Quanitative 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 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-12 2'

Project: North Pure Gold Federal 011 Collection Date: 7/14/2023 8:20:00 AM Lab ID: 2307747-006 Matrix: SOIL Received Date: 7/18/2023 7:10:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: PRD Diesel Range Organics (DRO) ND 9.3 7/19/2023 10:59:03 PM mg/Kg 1 mg/Kg Motor Oil Range Organics (MRO) 1 7/19/2023 10:59:03 PM ND 47 Surr: DNOP 96.8 69-147 %Rec 1 7/19/2023 10:59:03 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 7/19/2023 2:14:47 PM Surr: BFB 95.3 1 7/19/2023 2:14:47 PM 15-244 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 0.025 mg/Kg 1 7/19/2023 2:14:47 PM Toluene ND 0.049 mg/Kg 1 7/19/2023 2:14:47 PM Ethylbenzene 7/19/2023 2:14:47 PM ND 0.049 mg/Kg 1 Xylenes, Total ND 0.099 mg/Kg 1 7/19/2023 2:14:47 PM %Rec Surr: 4-Bromofluorobenzene 104 39.1-146 1 7/19/2023 2:14:47 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS Chloride 71 7/19/2023 4:29:29 PM 60 mg/Kg 20

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

Qualifiers:

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

Reporting Limit

Page 6 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-13 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:30:00 AM

 Lab ID:
 2307747-007
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	26	9.7	mg/Kg	1	7/19/2023 11:20:08 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2023 11:20:08 PM
Surr: DNOP	99.1	69-147	%Rec	1	7/19/2023 11:20:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/19/2023 2:38:33 PM
Surr: BFB	96.8	15-244	%Rec	1	7/19/2023 2:38:33 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 2:38:33 PM
Toluene	ND	0.049	mg/Kg	1	7/19/2023 2:38:33 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/19/2023 2:38:33 PM
Xylenes, Total	ND	0.098	mg/Kg	1	7/19/2023 2:38:33 PM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/19/2023 2:38:33 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	110	60	mg/Kg	20	7/19/2023 4:41:54 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-13 2'

Project: North Pure Gold Federal 011 **Collection Date:** 7/14/2023 8:35:00 AM 2307747-008 Lab ID: Matrix: SOIL **Received Date:** 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: PRD
Diesel Range Organics (DRO)	18	9.6	mg/Kg	1	7/19/2023 11:40:45 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/19/2023 11:40:45 PM
Surr: DNOP	97.3	69-147	%Rec	1	7/19/2023 11:40:45 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 3:02:26 PM
Surr: BFB	95.6	15-244	%Rec	1	7/19/2023 3:02:26 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	7/19/2023 3:02:26 PM
Toluene	ND	0.047	mg/Kg	1	7/19/2023 3:02:26 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/19/2023 3:02:26 PM
Xylenes, Total	ND	0.093	mg/Kg	1	7/19/2023 3:02:26 PM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	7/19/2023 3:02:26 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	200	60	mg/Kg	20	7/19/2023 4:54:19 PM

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

Qualifiers:

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

Page 8 of 57

Analytical Report

Lab Order **2307747**Date Reported: **7/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-14 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:50:00 AM

 Lab ID:
 2307747-009
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: PRD
Diesel Range Organics (DRO)	15	9.8	mg/Kg	1	7/20/2023 12:22:44 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 12:22:44 AM
Surr: DNOP	95.5	69-147	%Rec	1	7/20/2023 12:22:44 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/19/2023 3:50:11 PM
Surr: BFB	94.4	15-244	%Rec	1	7/19/2023 3:50:11 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 3:50:11 PM
Toluene	ND	0.049	mg/Kg	1	7/19/2023 3:50:11 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/19/2023 3:50:11 PM
Xylenes, Total	ND	0.098	mg/Kg	1	7/19/2023 3:50:11 PM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/19/2023 3:50:11 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	7/19/2023 5:06:44 PM

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

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 Quanitative 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

ple pH Not In Range Page 9 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-14 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 9:00:00 AM

 Lab ID:
 2307747-010
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/20/2023 12:43:11 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/20/2023 12:43:11 AM
Surr: DNOP	100	69-147	%Rec	1	7/20/2023 12:43:11 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/19/2023 4:14:07 PM
Surr: BFB	97.9	15-244	%Rec	1	7/19/2023 4:14:07 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 4:14:07 PM
Toluene	ND	0.050	mg/Kg	1	7/19/2023 4:14:07 PM
Ethylbenzene	ND	0.050	mg/Kg	1	7/19/2023 4:14:07 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/19/2023 4:14:07 PM
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	7/19/2023 4:14:07 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	7/19/2023 5:19:08 PM

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

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 Quanitative 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

e pH Not In Range Page 10 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-15 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 8:50:00 AM

 Lab ID:
 2307747-011
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/20/2023 1:03:34 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 1:03:34 AM
Surr: DNOP	98.7	69-147	%Rec	1	7/20/2023 1:03:34 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 4:38:00 PM
Surr: BFB	96.7	15-244	%Rec	1	7/19/2023 4:38:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	7/19/2023 4:38:00 PM
Toluene	ND	0.047	mg/Kg	1	7/19/2023 4:38:00 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/19/2023 4:38:00 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/19/2023 4:38:00 PM
Surr: 4-Bromofluorobenzene	106	39.1-146	%Rec	1	7/19/2023 4:38:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	520	60	mg/Kg	20	7/20/2023 1:58:04 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 11 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-15 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 9:00:00 AM

 Lab ID:
 2307747-012
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: PRD Diesel Range Organics (DRO) ND 7/20/2023 1:23:47 AM 9.8 mg/Kg 1 mg/Kg Motor Oil Range Organics (MRO) ND 1 7/20/2023 1:23:47 AM 49 Surr: DNOP 104 69-147 %Rec 1 7/20/2023 1:23:47 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 7/19/2023 5:01:49 PM Surr: BFB 95.3 1 7/19/2023 5:01:49 PM 15-244 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 0.025 mg/Kg 1 7/19/2023 5:01:49 PM Toluene ND 0.049 mg/Kg 1 7/19/2023 5:01:49 PM Ethylbenzene 7/19/2023 5:01:49 PM ND 0.049 mg/Kg 1 Xylenes, Total ND 0.099 mg/Kg 1 7/19/2023 5:01:49 PM %Rec Surr: 4-Bromofluorobenzene 105 39.1-146 1 7/19/2023 5:01:49 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 360 7/20/2023 2:35:17 PM 60 mg/Kg 20

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

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 Quanitative 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

Limit Page 12 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-16 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 9:05:00 AM

 Lab ID:
 2307747-013
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/20/2023 1:44:09 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/20/2023 1:44:09 AM
Surr: DNOP	87.6	69-147	%Rec	1	7/20/2023 1:44:09 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 5:25:34 PM
Surr: BFB	92.5	15-244	%Rec	1	7/19/2023 5:25:34 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/19/2023 5:25:34 PM
Toluene	ND	0.047	mg/Kg	1	7/19/2023 5:25:34 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/19/2023 5:25:34 PM
Xylenes, Total	ND	0.095	mg/Kg	1	7/19/2023 5:25:34 PM
Surr: 4-Bromofluorobenzene	101	39.1-146	%Rec	1	7/19/2023 5:25:34 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	7/20/2023 3:37:20 PM

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

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 Quanitative 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 13 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-16 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 9:20:00 AM

 Lab ID:
 2307747-014
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	7/20/2023 7:46:32 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/20/2023 7:46:32 PM
Surr: DNOP	89.1	69-147	%Rec	1	7/20/2023 7:46:32 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/19/2023 5:49:21 PM
Surr: BFB	94.9	15-244	%Rec	1	7/19/2023 5:49:21 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/19/2023 5:49:21 PM
Toluene	ND	0.048	mg/Kg	1	7/19/2023 5:49:21 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/19/2023 5:49:21 PM
Xylenes, Total	ND	0.095	mg/Kg	1	7/19/2023 5:49:21 PM
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	7/19/2023 5:49:21 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	7/20/2023 3:49:44 PM

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

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 Quanitative 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 14 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-17 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 9:05:00 AM

 Lab ID:
 2307747-015
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: PRD				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/20/2023 2:24:16 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 2:24:16 AM
Surr: DNOP	96.6	69-147	%Rec	1	7/20/2023 2:24:16 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/19/2023 6:13:09 PM
Surr: BFB	95.6	15-244	%Rec	1	7/19/2023 6:13:09 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/19/2023 6:13:09 PM
Toluene	ND	0.048	mg/Kg	1	7/19/2023 6:13:09 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/19/2023 6:13:09 PM
Xylenes, Total	ND	0.096	mg/Kg	1	7/19/2023 6:13:09 PM
Surr: 4-Bromofluorobenzene	106	39.1-146	%Rec	1	7/19/2023 6:13:09 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	7/20/2023 4:02:08 PM

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

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 Quanitative 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 15 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-17 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 9:20:00 AM

 Lab ID:
 2307747-016
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: PRD				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/20/2023 2:44:10 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 2:44:10 AM
Surr: DNOP	94.5	69-147	%Rec	1	7/20/2023 2:44:10 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/19/2023 6:36:57 PM
Surr: BFB	94.2	15-244	%Rec	1	7/19/2023 6:36:57 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 6:36:57 PM
Toluene	ND	0.050	mg/Kg	1	7/19/2023 6:36:57 PM
Ethylbenzene	ND	0.050	mg/Kg	1	7/19/2023 6:36:57 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/19/2023 6:36:57 PM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/19/2023 6:36:57 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	67	60	mg/Kg	20	7/20/2023 4:14:33 PM

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

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 Quanitative 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 16 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-18 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 10:10:00 AM

 Lab ID:
 2307747-017
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: PRD				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	7/20/2023 3:03:51 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/20/2023 3:03:51 AM
Surr: DNOP	86.8	69-147	%Rec	1	7/20/2023 3:03:51 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/19/2023 7:00:47 PM
Surr: BFB	94.5	15-244	%Rec	1	7/19/2023 7:00:47 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/19/2023 7:00:47 PM
Toluene	ND	0.047	mg/Kg	1	7/19/2023 7:00:47 PM
Ethylbenzene	ND	0.047	mg/Kg	1	7/19/2023 7:00:47 PM
Xylenes, Total	ND	0.094	mg/Kg	1	7/19/2023 7:00:47 PM
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	7/19/2023 7:00:47 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	7800	300	mg/Kg	100	7/21/2023 10:37:17 AM

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

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 Quanitative Limit
- 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 17 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-18 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 10:15:00 AM

 Lab ID:
 2307747-018
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: PRD				
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	7/20/2023 3:23:41 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/20/2023 3:23:41 AM
Surr: DNOP	94.6	69-147	%Rec	1	7/20/2023 3:23:41 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/19/2023 7:24:35 PM
Surr: BFB	95.9	15-244	%Rec	1	7/19/2023 7:24:35 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/19/2023 7:24:35 PM
Toluene	ND	0.050	mg/Kg	1	7/19/2023 7:24:35 PM
Ethylbenzene	ND	0.050	mg/Kg	1	7/19/2023 7:24:35 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/19/2023 7:24:35 PM
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	7/19/2023 7:24:35 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	1400	60	mg/Kg	20	7/20/2023 4:39:22 PM

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

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 Quanitative 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 18 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-19 0'

Project: North Pure Gold Federal 011 **Collection Date:** 7/14/2023 10:25:00 AM 2307747-019 Lab ID: Matrix: SOIL **Received Date:** 7/18/2023 7:10:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	7/19/2023 5:58:37 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/19/2023 5:58:37 PM
Surr: DNOP	60.8	69-147	S	%Rec	1	7/19/2023 5:58:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/19/2023 11:20:31 PM
Surr: BFB	91.5	15-244		%Rec	1	7/19/2023 11:20:31 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.025		mg/Kg	1	7/19/2023 11:20:31 PM
Toluene	ND	0.049		mg/Kg	1	7/19/2023 11:20:31 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/19/2023 11:20:31 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/19/2023 11:20:31 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	7/19/2023 11:20:31 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	290	60		mg/Kg	20	7/20/2023 4:51:47 PM

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

Qualifiers:

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

Page 19 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-19 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 10:30:00 AM

 Lab ID:
 2307747-020
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/19/2023 6:23:24 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/19/2023 6:23:24 PM
Surr: DNOP	83.9	69-147	%Rec	1	7/19/2023 6:23:24 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 12:30:58 AM
Surr: BFB	90.0	15-244	%Rec	1	7/20/2023 12:30:58 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 12:30:58 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 12:30:58 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 12:30:58 AM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 12:30:58 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/20/2023 12:30:58 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	7/20/2023 5:04:11 PM

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

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 Quanitative 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 20 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-20 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 10:45:00 AM

 Lab ID:
 2307747-021
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/19/2023 6:48:17 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/19/2023 6:48:17 PM
Surr: DNOP	82.5	69-147	%Rec	1	7/19/2023 6:48:17 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 1:41:17 AM
Surr: BFB	89.6	15-244	%Rec	1	7/20/2023 1:41:17 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 1:41:17 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 1:41:17 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 1:41:17 AM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 1:41:17 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/20/2023 1:41:17 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	170	60	mg/Kg	20	7/20/2023 5:41:25 PM

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

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 Quanitative 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 21 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-20 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 10:55:00 AM

 Lab ID:
 2307747-022
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/19/2023 7:13:08 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/19/2023 7:13:08 PM
Surr: DNOP	85.6	69-147	%Rec	1	7/19/2023 7:13:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 2:04:38 AM
Surr: BFB	88.8	15-244	%Rec	1	7/20/2023 2:04:38 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 2:04:38 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 2:04:38 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 2:04:38 AM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 2:04:38 AM
Surr: 4-Bromofluorobenzene	102	39.1-146	%Rec	1	7/20/2023 2:04:38 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	160	60	mg/Kg	20	7/20/2023 5:53:50 PM

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

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 Quanitative 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 22 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-21 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 10:50:00 AM

 Lab ID:
 2307747-023
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/19/2023 7:37:50 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/19/2023 7:37:50 PM
Surr: DNOP	84.6	69-147	%Rec	1	7/19/2023 7:37:50 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/20/2023 2:28:02 AM
Surr: BFB	88.8	15-244	%Rec	1	7/20/2023 2:28:02 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/20/2023 2:28:02 AM
Toluene	ND	0.050	mg/Kg	1	7/20/2023 2:28:02 AM
Ethylbenzene	ND	0.050	mg/Kg	1	7/20/2023 2:28:02 AM
Xylenes, Total	ND	0.099	mg/Kg	1	7/20/2023 2:28:02 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/20/2023 2:28:02 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	300	60	mg/Kg	20	7/20/2023 6:06:15 PM

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

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 Quanitative 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 23 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-21 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 11:00:00 AM

 Lab ID:
 2307747-024
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2023 8:02:35 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/19/2023 8:02:35 PM
Surr: DNOP	84.3	69-147	%Rec	1	7/19/2023 8:02:35 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 2:51:27 AM
Surr: BFB	90.8	15-244	%Rec	1	7/20/2023 2:51:27 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 2:51:27 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 2:51:27 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 2:51:27 AM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 2:51:27 AM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	7/20/2023 2:51:27 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	200	60	mg/Kg	20	7/20/2023 6:18:40 PM

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

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 Quanitative 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 24 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-22 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 11:30:00 AM

 Lab ID:
 2307747-025
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	120	9.9	mg/Kg	1	7/19/2023 8:27:13 PM
Motor Oil Range Organics (MRO)	51	49	mg/Kg	1	7/19/2023 8:27:13 PM
Surr: DNOP	89.6	69-147	%Rec	1	7/19/2023 8:27:13 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 3:14:50 AM
Surr: BFB	88.6	15-244	%Rec	1	7/20/2023 3:14:50 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/20/2023 3:14:50 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 3:14:50 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 3:14:50 AM
Xylenes, Total	ND	0.099	mg/Kg	1	7/20/2023 3:14:50 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/20/2023 3:14:50 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	1800	60	mg/Kg	20	7/20/2023 6:31:04 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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

ple pH Not In Range
orting Limit Page 25 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-22 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 11:35:00 AM

 Lab ID:
 2307747-026
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (Analyst: mb				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/19/2023 8:51:54 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/19/2023 8:51:54 PM
Surr: DNOP	88.9	69-147	%Rec	1	7/19/2023 8:51:54 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 3:38:09 AM
Surr: BFB	89.5	15-244	%Rec	1	7/20/2023 3:38:09 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 3:38:09 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 3:38:09 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 3:38:09 AM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 3:38:09 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	7/20/2023 3:38:09 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	1800	60	mg/Kg	20	7/20/2023 6:43:28 PM

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

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 Quanitative 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 26 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-23 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 11:50:00 AM

 Lab ID:
 2307747-027
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/19/2023 9:16:36 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	7/19/2023 9:16:36 PM
Surr: DNOP	88.5	69-147	%Rec	1	7/19/2023 9:16:36 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 4:01:31 AM
Surr: BFB	90.0	15-244	%Rec	1	7/20/2023 4:01:31 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 4:01:31 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 4:01:31 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 4:01:31 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/20/2023 4:01:31 AM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	7/20/2023 4:01:31 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	440	60	mg/Kg	20	7/20/2023 6:55:53 PM

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

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 Quanitative 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

ple pH Not In Range
orting Limit Page 27 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-23 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 11:55:00 AM

 Lab ID:
 2307747-028
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2023 9:41:18 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/19/2023 9:41:18 PM
Surr: DNOP	82.0	69-147	%Rec	1	7/19/2023 9:41:18 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 4:24:55 AM
Surr: BFB	92.6	15-244	%Rec	1	7/20/2023 4:24:55 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 4:24:55 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 4:24:55 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 4:24:55 AM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 4:24:55 AM
Surr: 4-Bromofluorobenzene	108	39.1-146	%Rec	1	7/20/2023 4:24:55 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	220	60	mg/Kg	20	7/20/2023 7:08:18 PM

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

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 Quanitative 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 28 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-24 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:00:00 PM

 Lab ID:
 2307747-029
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	7/19/2023 10:30:36 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	7/19/2023 10:30:36 PM
Surr: DNOP	74.1	69-147	%Rec	1	7/19/2023 10:30:36 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 10:19:12 AM
Surr: BFB	95.0	15-244	%Rec	1	7/20/2023 10:19:12 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 10:19:12 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 10:19:12 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 10:19:12 AM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 10:19:12 AM
Surr: 4-Bromofluorobenzene	111	39.1-146	%Rec	1	7/20/2023 10:19:12 AM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	3600	150	mg/Kg	50	7/21/2023 10:49:42 AM

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

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 Quanitative 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

Not in Range Page 29 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-24 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:05:00 PM

 Lab ID:
 2307747-030
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/19/2023 10:55:08 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/19/2023 10:55:08 PM
Surr: DNOP	84.0	69-147	%Rec	1	7/19/2023 10:55:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 10:42:38 AM
Surr: BFB	91.3	15-244	%Rec	1	7/20/2023 10:42:38 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 10:42:38 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 10:42:38 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 10:42:38 AM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 10:42:38 AM
Surr: 4-Bromofluorobenzene	108	39.1-146	%Rec	1	7/20/2023 10:42:38 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	210	60	mg/Kg	20	7/20/2023 9:48:59 PM

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

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 Quanitative 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 30 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-25 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:10:00 PM

 Lab ID:
 2307747-031
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/19/2023 11:19:38 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/19/2023 11:19:38 PM
Surr: DNOP	88.5	69-147	%Rec	1	7/19/2023 11:19:38 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 11:06:08 AM
Surr: BFB	91.3	15-244	%Rec	1	7/20/2023 11:06:08 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 11:06:08 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 11:06:08 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 11:06:08 AM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 11:06:08 AM
Surr: 4-Bromofluorobenzene	109	39.1-146	%Rec	1	7/20/2023 11:06:08 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	990	60	mg/Kg	20	7/20/2023 10:01:24 PM

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

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 Quanitative 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 31 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-25 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:15:00 PM

 Lab ID:
 2307747-032
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	7/19/2023 11:44:19 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	7/19/2023 11:44:19 PM
Surr: DNOP	82.1	69-147	%Rec	1	7/19/2023 11:44:19 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 11:29:36 AM
Surr: BFB	92.7	15-244	%Rec	1	7/20/2023 11:29:36 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/20/2023 11:29:36 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 11:29:36 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 11:29:36 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/20/2023 11:29:36 AM
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	7/20/2023 11:29:36 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	110	60	mg/Kg	20	7/20/2023 10:13:48 PM

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

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 Quanitative 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 32 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-26 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:20:00 PM

 Lab ID:
 2307747-033
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/20/2023 12:08:57 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/20/2023 12:08:57 AM
Surr: DNOP	85.8	69-147	%Rec	1	7/20/2023 12:08:57 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 11:53:10 AM
Surr: BFB	95.2	15-244	%Rec	1	7/20/2023 11:53:10 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/20/2023 11:53:10 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 11:53:10 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 11:53:10 AM
Xylenes, Total	ND	0.099	mg/Kg	1	7/20/2023 11:53:10 AM
Surr: 4-Bromofluorobenzene	115	39.1-146	%Rec	1	7/20/2023 11:53:10 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	350	60	mg/Kg	20	7/20/2023 10:26:12 PM

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

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 Quanitative 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 33 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-26 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:25:00 PM

 Lab ID:
 2307747-034
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	7/20/2023 12:33:30 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/20/2023 12:33:30 AM
Surr: DNOP	91.8	69-147	%Rec	1	7/20/2023 12:33:30 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 12:16:41 PM
Surr: BFB	93.6	15-244	%Rec	1	7/20/2023 12:16:41 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 12:16:41 PM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 12:16:41 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 12:16:41 PM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 12:16:41 PM
Surr: 4-Bromofluorobenzene	112	39.1-146	%Rec	1	7/20/2023 12:16:41 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	150	60	mg/Kg	20	7/20/2023 10:38:36 PM

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

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 Quanitative 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

ple pH Not In Range Page 34 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-27 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:50:00 PM

 Lab ID:
 2307747-035
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	7/20/2023 12:58:01 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/20/2023 12:58:01 AM
Surr: DNOP	105	69-147	%Rec	1	7/20/2023 12:58:01 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 12:40:18 PM
Surr: BFB	93.0	15-244	%Rec	1	7/20/2023 12:40:18 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 12:40:18 PM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 12:40:18 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 12:40:18 PM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 12:40:18 PM
Surr: 4-Bromofluorobenzene	111	39.1-146	%Rec	1	7/20/2023 12:40:18 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	92	60	mg/Kg	20	7/20/2023 11:15:49 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 35 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-27 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 12:55:00 PM

 Lab ID:
 2307747-036
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	7/20/2023 1:22:34 AM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	7/20/2023 1:22:34 AM
Surr: DNOP	98.6	69-147	%Rec	1	7/20/2023 1:22:34 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/20/2023 1:03:57 PM
Surr: BFB	96.6	15-244	%Rec	1	7/20/2023 1:03:57 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/20/2023 1:03:57 PM
Toluene	ND	0.050	mg/Kg	1	7/20/2023 1:03:57 PM
Ethylbenzene	ND	0.050	mg/Kg	1	7/20/2023 1:03:57 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/20/2023 1:03:57 PM
Surr: 4-Bromofluorobenzene	115	39.1-146	%Rec	1	7/20/2023 1:03:57 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	59	mg/Kg	20	7/20/2023 11:28:14 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative 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 36 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-28 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:10:00 PM

 Lab ID:
 2307747-037
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/20/2023 1:47:12 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 1:47:12 AM
Surr: DNOP	101	69-147	%Rec	1	7/20/2023 1:47:12 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 1:27:36 PM
Surr: BFB	96.1	15-244	%Rec	1	7/20/2023 1:27:36 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 1:27:36 PM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 1:27:36 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 1:27:36 PM
Xylenes, Total	ND	0.097	mg/Kg	1	7/20/2023 1:27:36 PM
Surr: 4-Bromofluorobenzene	114	39.1-146	%Rec	1	7/20/2023 1:27:36 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	7/20/2023 11:40:39 PM

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

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 Quanitative 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 37 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-28 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:15:00 PM

 Lab ID:
 2307747-038
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	7/20/2023 2:11:47 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	7/20/2023 2:11:47 AM
Surr: DNOP	89.3	69-147	%Rec	1	7/20/2023 2:11:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 1:51:15 PM
Surr: BFB	93.8	15-244	%Rec	1	7/20/2023 1:51:15 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 1:51:15 PM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 1:51:15 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 1:51:15 PM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 1:51:15 PM
Surr: 4-Bromofluorobenzene	112	39.1-146	%Rec	1	7/20/2023 1:51:15 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	7/20/2023 11:53:04 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 38 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-29 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:20:00 PM

 Lab ID:
 2307747-039
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/20/2023 5:02:34 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 5:02:34 AM
Surr: DNOP	103	69-147	%Rec	1	7/20/2023 5:02:34 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 1:03:00 AM
Surr: BFB	79.3	15-244	%Rec	1	7/20/2023 1:03:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.025	mg/Kg	1	7/20/2023 1:03:00 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 1:03:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 1:03:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/20/2023 1:03:00 AM
Surr: 4-Bromofluorobenzene	76.3	39.1-146	%Rec	1	7/20/2023 1:03:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	7/21/2023 12:05:28 AM

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

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 Quanitative 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 39 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-29 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:25:00 PM

 Lab ID:
 2307747-040
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/20/2023 5:26:40 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	7/20/2023 5:26:40 AM
Surr: DNOP	97.1	69-147	%Rec	1	7/20/2023 5:26:40 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 2:08:00 AM
Surr: BFB	75.4	15-244	%Rec	1	7/20/2023 2:08:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.024	mg/Kg	1	7/20/2023 2:08:00 AM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 2:08:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 2:08:00 AM
Xylenes, Total	ND	0.096	mg/Kg	1	7/20/2023 2:08:00 AM
Surr: 4-Bromofluorobenzene	75.1	39.1-146	%Rec	1	7/20/2023 2:08:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	7/21/2023 12:17:52 AM

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

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 Quanitative 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 40 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-30 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:35:00 PM

 Lab ID:
 2307747-041
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR		Analyst: PRD			
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	7/24/2023 11:16:10 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/24/2023 11:16:10 PM
Surr: DNOP	90.6	69-147	%Rec	1	7/24/2023 11:16:10 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 3:13:00 AM
Surr: BFB	79.3	15-244	%Rec	1	7/20/2023 3:13:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.024	mg/Kg	1	7/20/2023 3:13:00 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 3:13:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 3:13:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/20/2023 3:13:00 AM
Surr: 4-Bromofluorobenzene	76.7	39.1-146	%Rec	1	7/20/2023 3:13:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	240	60	mg/Kg	20	7/21/2023 12:30:17 AM

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

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 Quanitative 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 41 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-30 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:40:00 PM

 Lab ID:
 2307747-042
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	7/20/2023 6:14:56 AM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	7/20/2023 6:14:56 AM
Surr: DNOP	80.6	69-147	%Rec	1	7/20/2023 6:14:56 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	7/20/2023 3:35:00 AM
Surr: BFB	77.2	15-244	%Rec	1	7/20/2023 3:35:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.025	mg/Kg	1	7/20/2023 3:35:00 AM
Toluene	ND	0.050	mg/Kg	1	7/20/2023 3:35:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	7/20/2023 3:35:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	7/20/2023 3:35:00 AM
Surr: 4-Bromofluorobenzene	76.6	39.1-146	%Rec	1	7/20/2023 3:35:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	89	60	mg/Kg	20	7/21/2023 12:42:42 AM

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

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 Quanitative Limit
- 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 42 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-31 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:40:00 PM

 Lab ID:
 2307747-043
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: PRD				
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	7/24/2023 11:34:35 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	7/24/2023 11:34:35 PM
Surr: DNOP	95.3	69-147	%Rec	1	7/24/2023 11:34:35 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 3:56:00 AM
Surr: BFB	78.7	15-244	%Rec	1	7/20/2023 3:56:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.025	mg/Kg	1	7/20/2023 3:56:00 AM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 3:56:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 3:56:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	7/20/2023 3:56:00 AM
Surr: 4-Bromofluorobenzene	76.1	39.1-146	%Rec	1	7/20/2023 3:56:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	210	60	mg/Kg	20	7/20/2023 9:49:38 PM

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

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 Quanitative 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 43 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-31 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:45:00 PM

 Lab ID:
 2307747-044
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: PRD				
Diesel Range Organics (DRO)	ND	8.4	mg/Kg	1	7/20/2023 4:41:51 AM
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	7/20/2023 4:41:51 AM
Surr: DNOP	106	69-147	%Rec	1	7/20/2023 4:41:51 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/20/2023 4:18:00 AM
Surr: BFB	78.9	15-244	%Rec	1	7/20/2023 4:18:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.023	mg/Kg	1	7/20/2023 4:18:00 AM
Toluene	ND	0.047	mg/Kg	1	7/20/2023 4:18:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	7/20/2023 4:18:00 AM
Xylenes, Total	ND	0.093	mg/Kg	1	7/20/2023 4:18:00 AM
Surr: 4-Bromofluorobenzene	76.5	39.1-146	%Rec	1	7/20/2023 4:18:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	100	60	mg/Kg	20	7/20/2023 10:02:02 PM

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

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 Quanitative 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 44 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH23-32 0'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 1:55:00 PM

 Lab ID:
 2307747-045
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: PRD				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	7/20/2023 5:00:46 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 5:00:46 AM
Surr: DNOP	70.0	69-147	%Rec	1	7/20/2023 5:00:46 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/20/2023 5:01:00 AM
Surr: BFB	79.2	15-244	%Rec	1	7/20/2023 5:01:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.023	mg/Kg	1	7/20/2023 5:01:00 AM
Toluene	ND	0.047	mg/Kg	1	7/20/2023 5:01:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	7/20/2023 5:01:00 AM
Xylenes, Total	ND	0.094	mg/Kg	1	7/20/2023 5:01:00 AM
Surr: 4-Bromofluorobenzene	77.6	39.1-146	%Rec	1	7/20/2023 5:01:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	1200	60	mg/Kg	20	7/20/2023 11:28:55 PM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 45 of 57

Date Reported: 7/28/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-32 2'

 Project:
 North Pure Gold Federal 011
 Collection Date: 7/14/2023 2:00:00 PM

 Lab ID:
 2307747-046
 Matrix: SOIL
 Received Date: 7/18/2023 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	7/20/2023 5:19:38 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/20/2023 5:19:38 AM
Surr: DNOP	109	69-147	%Rec	1	7/20/2023 5:19:38 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	7/20/2023 5:23:00 AM
Surr: BFB	79.3	15-244	%Rec	1	7/20/2023 5:23:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.024	mg/Kg	1	7/20/2023 5:23:00 AM
Toluene	ND	0.047	mg/Kg	1	7/20/2023 5:23:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	7/20/2023 5:23:00 AM
Xylenes, Total	ND	0.095	mg/Kg	1	7/20/2023 5:23:00 AM
Surr: 4-Bromofluorobenzene	75.8	39.1-146	%Rec	1	7/20/2023 5:23:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	86	60	mg/Kg	20	7/20/2023 11:41:21 PM

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

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 Quanitative 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 46 of 57

Hall Environmental Analysis Laboratory, Inc.

WO#: 2307747

28-Jul-23

Client: Vertex Resources Services, Inc. **Project:** North Pure Gold Federal 011

Sample ID: MB-76320 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 76320 RunNo: 98352

Prep Date: 7/19/2023 Analysis Date: 7/19/2023 SeqNo: 3580011 Units: mg/Kg

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual

Chloride ND 1.5

Sample ID: LCS-76320 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 76320 RunNo: 98352

Prep Date: 7/19/2023 Analysis Date: 7/19/2023 SeqNo: 3580012 Units: mg/Kg

RPDLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual Chloride 14 1.5 15.00 94 1 110

Sample ID: MB-76359 SampType: mblk TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 76359 RunNo: 98399 Analysis Date: 7/20/2023 Prep Date: 7/20/2023 SeqNo: 3581706 Units: mg/Kg

Result POI SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual Analyte I owl imit HighLimit Chloride ND

Sample ID: LCS-76359 SampType: Ics TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 76359 RunNo: 98399 Prep Date: Analysis Date: 7/20/2023 SeqNo: 3581707 7/20/2023 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual LowLimit

Chloride 15 1.5 15.00 97.5 90

Sample ID: MB-76371 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: Batch ID: 76371 RunNo: 98399 PRS

Prep Date: 7/20/2023 Analysis Date: 7/20/2023 SeqNo: 3581746 Units: mg/Kg

RPDLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual

Chloride ND 1.5

Sample ID: LCS-76371 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 76371 RunNo: 98399

Prep Date: 7/20/2023 Analysis Date: 7/20/2023 SeqNo: 3581747 Units: mg/Kg

SPK value Analyte Result PQL SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 14 Chloride 1.5 15.00

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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

Analyte detected in the associated Method Blank

Above Quantitation Range/Estimated Value

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 47 of 57

Hall Environmental Analysis Laboratory, Inc.

2307747 28-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Sample ID: MB-76366 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 76366 RunNo: 98371

Prep Date: 7/20/2023 Analysis Date: 7/20/2023 SeqNo: 3581841 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-76366 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 76366 RunNo: 98371

Prep Date: 7/20/2023 Analysis Date: 7/20/2023 SeqNo: 3581842 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 91.9 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

Page 48 of 57

Hall Environmental Analysis Laboratory, Inc.

2307747

WO#:

28-Jul-23

Client:	Vertex Resources Services, Inc.
Project:	North Pure Gold Federal 011

Sample ID: LCS-76306	SamnT	ype: LC	9	Tes	tCode: EE	2A Mothod	8015M/D: Die	sol Pango	Organics	
Client ID: LCSS	•	ype. LC n ID: 76 3			RunNo: 98		OUTOWIND. DIE	sei Kalige	Organics	
							Llaitar manifi	·		
Prep Date: 7/18/2023	Analysis D	oate: 77	19/2023	`	SeqNo: 3	079452	Units: mg/K	.g		
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.6	61.9	130			
Surr: DNOP	4.0		5.000		80.0	69	147			
Sample ID: 2307747-019AMS	SampT	уре: МЅ	;	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: BH23-19 0'	Batch	n ID: 76 3	306	RunNo: 98345						
Prep Date: 7/18/2023	Analysis D)ate: 7/ 2	20/2023	5	SeqNo: 3	579474	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	9.9	49.70	0	76.6	54.2	135			
Surr: DNOP	3.2		4.970		63.4	69	147			S
Sample ID: 2307747-019AMSD	SampT	уре: МЅ	SD	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: BH23-19 0'	Batch	n ID: 76 3	306	F	RunNo: 98345					
Prep Date: 7/18/2023	Analysis D)ate: 7/ 2	20/2023	SeqNo: 3579475 Units: mg/K				(g		
Analyte	D 11	DOL	CDI/ l	00140 4141	0/DEC	Landinett	I limbel imais	0/ DDD	DDDI :it	Our
Allalyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	Result 45	9.3	46.55	SPK Ref Val	96.4	54.2	135	%RPD 16.4	29.2	Quai
,										Quai
Diesel Range Organics (DRO)	45 4.0		46.55 4.655	0	96.4 85.5	54.2 69	135	16.4 0	29.2	Quai
Diesel Range Organics (DRO) Surr: DNOP	45 4.0 SampT	9.3	46.55 4.655	0 Tes	96.4 85.5	54.2 69 PA Method	135 147	16.4 0	29.2	Quai
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310	45 4.0 SampT	9.3 Type: ME	46.55 4.655 BLK	0 Tes	96.4 85.5 tCode: EF	54.2 69 PA Method 3345	135 147	16.4 0 esel Range	29.2	Quai
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS	45 4.0 SampT Batch	9.3 Type: ME	46.55 4.655 3LK 310 20/2023	0 Tes	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38	54.2 69 PA Method 3345	135 147 8015M/D: Die	16.4 0 esel Range	29.2	Qual
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023	45 4.0 SampT Batch Analysis D	9.3 Type: ME Thin ID: 763 Date: 7/2	46.55 4.655 3LK 310 20/2023	0 Tes	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38	54.2 69 PA Method 3345 579477	135 147 8015M/D: Die Units: mg/K	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte	45 4.0 SampT Batch Analysis E	9.3 Type: ME Tip: 763 PQL	46.55 4.655 3LK 310 20/2023	0 Tes	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38	54.2 69 PA Method 3345 579477	135 147 8015M/D: Die Units: mg/K	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte Diesel Range Organics (DRO)	45 4.0 SampT Batch Analysis D Result	9.3 Type: ME This is a line of the second	46.55 4.655 3LK 310 20/2023	0 Tes	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38	54.2 69 PA Method 3345 579477	135 147 8015M/D: Die Units: mg/K	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	45 4.0 SampT Batch Analysis D Result ND ND 11	9.3 Type: ME This is a line of the second	46.55 4.655 8LK 810 20/2023 SPK value	0 Tes F S SPK Ref Val	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38 %REC	54.2 69 PA Method 3345 579477 LowLimit	135 147 8015M/D: Die Units: mg/K HighLimit	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP	45 4.0 SampT Batch Analysis E Result ND ND 11 SampT	9.3 Type: ME Tip: 76: PQL 10 50	46.55 4.655 8LK 810 20/2023 SPK value	Tes	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38 %REC	54.2 69 PA Method 3345 579477 LowLimit 69	135 147 8015M/D: Die Units: mg/K HighLimit	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-76310	45 4.0 SampT Batch Analysis E Result ND ND 11 SampT	9.3 Fype: ME Di ID: 76: PQL 10 50 Type: LC	46.55 4.655 8LK 810 20/2023 SPK value 10.00 S	0 Tes F SPK Ref Val	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 38 %REC	54.2 69 PA Method 3345 579477 LowLimit 69 PA Method 3345	135 147 8015M/D: Die Units: mg/K HighLimit	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-76310 Client ID: LCSS	45 4.0 SampT Batch Analysis D Result ND ND 11 SampT Batch	9.3 Fype: ME Di ID: 76: PQL 10 50 Type: LC	46.55 4.655 3LK 310 20/2023 SPK value 10.00 S 310 20/2023	0 Tes F SPK Ref Val	96.4 85.5 tCode: EF RunNo: 98 SeqNo: 35 %REC 112 tCode: EF RunNo: 98	54.2 69 PA Method 3345 579477 LowLimit 69 PA Method 3345	135 147 8015M/D: Die Units: mg/k HighLimit 147 8015M/D: Die	16.4 0 esel Range	29.2 0 Organics	
Diesel Range Organics (DRO) Surr: DNOP Sample ID: MB-76310 Client ID: PBS Prep Date: 7/18/2023 Analyte Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) Surr: DNOP Sample ID: LCS-76310 Client ID: LCSS Prep Date: 7/18/2023	45 4.0 SampT Batch Analysis D Result ND ND 11 SampT Batch Analysis D	9.3 Fype: ME Tipe: 763 PQL 10 50 Fype: LC Tipe: 763 Pate: 7/2	46.55 4.655 3LK 310 20/2023 SPK value 10.00 S 310 20/2023	Tes SPK Ref Val Tes	96.4 85.5 ttCode: EF RunNo: 98 SeqNo: 35 %REC 112 ttCode: EF RunNo: 98 SeqNo: 35	54.2 69 PA Method 3345 579477 LowLimit 69 PA Method 3345 579478	135 147 8015M/D: Die Units: mg/K HighLimit 147 8015M/D: Die	16.4 0 seel Range %RPD	29.2 0 Organics RPDLimit Organics	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 Quanitative 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 49 of 57

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307747 28-Jul-23**

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Sample ID: MB-76306	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 76306	RunNo: 98345
Prep Date: 7/18/2023	Analysis Date: 7/20/2023	SeqNo: 3579485 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	9.8 10.00	98.4 69 147
Sample ID: MB-76297	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 76297	RunNo: 98349
Prep Date: 7/18/2023	Analysis Date: 7/19/2023	SeqNo: 3579967 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	9.1 10.00	90.8 69 147
Sample ID: LCS-76297	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 76297	RunNo: 98349
Prep Date: 7/18/2023	Analysis Date: 7/19/2023	SeqNo: 3579968 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	54 10 50.00	0 109 61.9 130
Surr: DNOP	5.1 5.000	102 69 147
Sample ID: MB-76333	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 76333	RunNo: 98368
Prep Date: 7/19/2023	Analysis Date: 7/20/2023	SeqNo: 3581346 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	10 10.00	101 69 147
Sample ID: LCS-76333	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 76333	RunNo: 98368
Prep Date: 7/19/2023	Analysis Date: 7/21/2023	SeqNo: 3581347 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
Sample ID: MB-76380	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 76380	RunNo: 98457
Prep Date: 7/21/2023	Analysis Date: 7/24/2023	SeqNo: 3584256 Units: mg/Kg
	, 510 Bato. 1/2-1/2020	one many

Qualifiers:

Analyte

- 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 Quanitative Limit

PQL

Result

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value

%REC

LowLimit

HighLimit

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

SPK value SPK Ref Val

Page 50 of 57

RPDLimit

Qual

%RPD

Hall Environmental Analysis Laboratory, Inc.

2307747

WO#:

28-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Project: North Pu	ire Gold Fe	deral 0	11							
Sample ID: MB-76380	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	ID: 76 3	380	F	RunNo: 98	3457				
Prep Date: 7/21/2023	Analysis D	ate: 7/ 2	24/2023	5	SeqNo: 35	584256	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10					<u> </u>			
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		89.2	69	147			
Sample ID: LCS-76380	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	1D: 76 3	380	F	RunNo: 98	3457				
Prep Date: 7/21/2023	Analysis D	ate: 7/ 2	24/2023	5	SeqNo: 35	584257	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.3	61.9	130			
Surr: DNOP	4.1		5.000		81.0	69	147			
Sample ID: 2307747-043AMS	SampT	ype: MS	3	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	Organics	
Client ID: BH23-31 0'	Batch	ID: 76 3	380	F	RunNo: 98	3457				
Prep Date: 7/21/2023	Analysis D	ate: 7/ 2	24/2023	9	SeqNo: 35	584260	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.6	48.22	0	105	54.2	135			
Surr: DNOP	4.7		4.822		97.7	69	147			
Sample ID: 2307747-043AMS	D SampT	ype: MS	SD	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: BH23-31 0'	Batch	ID: 76 3	380	F	RunNo: 98	3457				
Prep Date: 7/21/2023	Analysis D	ate: 7/ 2	25/2023	5	SeqNo: 35	584261	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	8.7	43.67	0	121	54.2	135	3.89	29.2	В
Surr: DNOP	4.3		4.367		99.1	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 Quanitative Limit
- 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 51 of 57

Client:

Surr: BFB

Hall Environmental Analysis Laboratory, Inc.

Vertex Resources Services, Inc.

910

WO#: **2307747**

28-Jul-23

Project: North P	ure Gold Federal 011							
Sample ID: Ics-76285	SampType: LCS	mpType: LCS TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 76285	F	RunNo: 98328					
Prep Date: 7/18/2023	Analysis Date: 7/19/202	:3	SeqNo: 3578519 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	92.0 70	130				
Surr: BFB	1900	1000	187 15	244				
Sample ID: mb-76285	SampType: MBLK	Tes	stCode: EPA Method	8015D: Gasoline Range				
Client ID: PBS	Batch ID: 76285	F	RunNo: 98328					
Prep Date: 7/18/2023	Analysis Date: 7/19/202	! 3	SeqNo: 3578520 Units: mg/Kg					
Analyte	Result PQL SPK	value SPK Ref Val	%REC LowLimit	HighLimit %RPD	RPDLimit	Qual		
Gasoline Range Organics (GRO)	ND 5.0							

Sample ID: Ics-76293	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: LCSS	Batch	1D: 762	293	F	RunNo: 98	3347				
Prep Date: 7/18/2023	Analysis D	ate: 7/ 1	19/2023	5	SeqNo: 3	579525	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.9	70	130			
Surr: BFB	1800		1000		178	15	244			

91.4

15

244

1000

Sample ID: mb-76293	SampT	ype: ME	BLK	Tes	TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch	1D: 762	293	F	RunNo: 98347					
Prep Date: 7/18/2023	Analysis D	ate: 7/ 2	20/2023	5	SeqNo: 3	579526	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.4	15	244			

Sample ID: 2307747-039ams	SampT	ype: MS	;	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	!	
Client ID: BH23-29 0'	Batch	n ID: 762	293	F	RunNo: 9	3347				
Prep Date: 7/18/2023	Analysis D	Date: 7/2	20/2023	5	SeqNo: 3	579528	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.58	0	90.2	70	130			-
Surr: BFB	1900		983.3		190	15	244			

Sample ID:	2307747-039amsd	SampType	e: MSD	Tes	stCode: El	PA Method	8015D: Gasol	ine Range	!	
Client ID:	BH23-29 0'	Batch ID	76293	F	RunNo: 9	8347				
Prep Date:	7/18/2023	Analysis Date	e: 7/20/2023	;	SeqNo: 3	579529	Units: mg/K	g		
Analyte		Result F	QL 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 Quanitative 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 52 of 57

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307747 28-Jul-23**

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Troject.	1,0101111		ucrur o								
Sample ID:	2307747-039amsd	SampT	уре: м .	SD	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	1	
Client ID:	BH23-29 0'	Batch	ID: 76 2	293	F	RunNo: 98	3347				
Prep Date:	7/18/2023	Analysis D	ate: 7/	20/2023	9	SeqNo: 3	579529	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
_	e Organics (GRO)	22	4.9	24.70	0	91.0	70	130	1.33	20	
Surr: BFB		1900		988.1		194	15	244	0	0	
Sample ID:	lcs-76287	SampT	ype: LC	s	TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	LCSS	Batch	ID: 76 2	287	RunNo: 98328						
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	5	SeqNo: 3	579552	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	22	5.0	25.00	0	88.2	70	130			
Surr: BFB		1900		1000		189	15	244			
Sample ID:	mb-76287	SampT	SampType: MBLK TestCode: EPA Method 80					8015D: Gaso	line Range		
Client ID:	PBS	Batch ID: 76287				RunNo: 98	3328				
Prep Date:	7/18/2023	Analysis Date: 7/19/2023			SeqNo: 3579553			Units: mg/Kg			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Surr: BFB		900		1000		89.9	15	244			
Sample ID:	2307747-019ams	SampT	уре: М S	3	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	BH23-19 0'	Batch	ID: 76 2	287	F	RunNo: 98	3328				
Prep Date:	7/18/2023	Analysis D	ate: 7/	19/2023	5	SeqNo: 3	579564	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	21	5.0	24.93	0	85.5	70	130			
Surr: BFB		1800		997.0		184	15	244			
Sample ID:	2307747-019amsd	SampT	уре: м .	SD	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	BH23-19 0'	Batch	ID: 76 2	287	F	RunNo: 98	3328				
Prep Date:	7/18/2023	Analysis D	ate: 7/	20/2023	9	SeqNo: 3	579565	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	22	5.0	24.83	0	89.2	70	130	3.82	20	
Surr: BFB		1900		993.0		189	15	244	0	0	
Sample ID:	lcs-76322	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	LCSS	Batch	ID: 76 :	322	RunNo: 98353						
Prep Date:	7/19/2023	Analysis D	ate: 7/	20/2023	5	SeqNo: 3	580780	Units: %Red	;		

Qualifiers:

Analyte

- 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 Quanitative Limit

Result

PQL

- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value

%REC

LowLimit

HighLimit

- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

SPK value SPK Ref Val

Page 53 of 57

RPDLimit

Qual

%RPD

Hall Environmental Analysis Laboratory, Inc.

2307747 28-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Sample ID: Ics-76322 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 76322 RunNo: 98353

Prep Date: 7/19/2023 Analysis Date: 7/20/2023 SeqNo: 3580780 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Surr: BFB
 2000
 1000
 197
 15
 244

Sample ID: mb-76322 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 76322 RunNo: 98353

Prep Date: 7/19/2023 Analysis Date: 7/20/2023 SeqNo: 3580811 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 980 1000 98.4 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 Quanitative 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 54 of 57

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307747 28-Jul-23**

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Sample ID: LCS-76285	SampT	ype: LC :	S	Tes	tCode: EF						
Client ID: LCSS	Batch	n ID: 762	285	F	RunNo: 98						
Prep Date: 7/18/2023	Analysis D	Date: 7/1	19/2023	5	SeqNo: 3	78524	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	83.7	70	130				
Toluene	0.86	0.050	1.000	0	86.3	70	130				
Ethylbenzene	0.88	0.050	1.000	0	87.9	70	130				
Xylenes, Total	2.7	0.10	3.000	0	88.8	70	130				
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	39.1	146				

Sample ID: mb-76285	Samp1	уре: МЕ	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	n ID: 762	285	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis D	Date: 7/	19/2023	5	SeqNo: 3578525 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	0.99		1.000		99.1	39.1	146			

Sample ID: LCS-76287	Samp	ype: LC	S	Tes						
Client ID: LCSS	Batcl	n ID: 762	287	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis [Date: 7/	19/2023	5	SeqNo: 3	79575	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.1	70	130			
Toluene	0.87	0.050	1.000	0	86.6	70	130			
Ethylbenzene	0.88	0.050	1.000	0	87.8	70	130			
Xylenes, Total	2.7	0.10	3.000	0	89.1	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	39.1	146			

Sample ID: mb-76287	SampT	уре: МЕ	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch	n ID: 762	287	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis D)ate: 7/	19/2023	5	SeqNo: 3	579576	Units: mg/K	g		
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		102	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 Quanitative 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 55 of 57

2307747

28-Jul-23

WO#:

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

Client: Vertex Resources Services, Inc. **Project:** North Pure Gold Federal 011

Sample ID: 2307747-020ams	Samp ⁻	Гуре: МЅ	3	Tes	les					
Client ID: BH23-19 2'	Batc	h ID: 76 2	287	F	RunNo: 98	3328				
Prep Date: 7/18/2023	Analysis [Date: 7/ 2	20/2023	5	SeqNo: 3	579588	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9643	0	85.7	70	130			
Toluene	0.87	0.048	0.9643	0	90.4	70	130			
Ethylbenzene	0.89	0.048	0.9643	0	92.6	70	130			
Xylenes, Total	2.7	0.096	2.893	0	93.3	70	130			
Surr: 4-Bromofluorobenzene	1.0		0.9643		107	39.1	146			

Sample ID: 2307747-020amsd	SampT	SampType: MSD TestCode: EPA Method 8021B: Volatiles								
Client ID: BH23-19 2'	Batch	n ID: 762	287	F	RunNo: 98					
Prep Date: 7/18/2023	Analysis D	Date: 7/2	20/2023	5	SeqNo: 3	579589	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9718	0	88.8	70	130	4.27	20	
Toluene	0.91	0.049	0.9718	0	94.1	70	130	4.79	20	
Ethylbenzene	0.94	0.049	0.9718	0	96.3	70	130	4.67	20	
Xylenes, Total	2.8	0.097	2.915	0	97.2	70	130	4.87	20	
Surr: 4-Bromofluorobenzene	1.0		0.9718		104	39.1	146	0	0	

Sample ID: Ics-76293	SampT	ype: LC	S	TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch	n ID: 762	293	F	RunNo: 98	3347				
Prep Date: 7/18/2023	Analysis D	Date: 7/2	20/2023	5	SeqNo: 35	579615	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	81.5	70	130			
Toluene	0.84	0.050	1.000	0	84.1	70	130			
Ethylbenzene	0.85	0.050	1.000	0	85.3	70	130			
Xylenes, Total	2.6	0.10	3.000	0	85.2	70	130			
Surr: 4-Bromofluorobenzene	0.78		1.000		78.2	39.1	146			

Sample ID: mb-76293	Samp1	Гуре: МЕ	BLK	Tes	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batcl	h ID: 76 2	293	F	RunNo: 98	3347					
Prep Date: 7/18/2023	Analysis [analysis Date: 7/20/2023			SeqNo: 3579616			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	0.77	0.77 1.000			76.7	39.1	146				

Qualifiers:

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

Page 56 of 57

Hall Environmental Analysis Laboratory, Inc.

2307747 28-Jul-23

WO#:

Client: Vertex Resources Services, Inc.

Project: North Pure Gold Federal 011

Sample ID: 2307747-040ams	SampT	SampType: MS			TestCode: EPA Method 8021B: Volatiles					
Client ID: BH23-29 2'	Batch	n ID: 762	293	F	RunNo: 98	3347				
Prep Date: 7/18/2023	Analysis D	Date: 7/2	20/2023	9	SeqNo: 3	79619	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val %REC LowLimit			HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.024	0.9625	0	88.0	70	130			
Toluene	0.88	0.048	0.9625	0	91.5	70	130			
Ethylbenzene	0.90	0.048	0.9625	0	93.4	70	130			
Xylenes, Total	2.7	0.096	2.887	0	93.2	70	130			
Surr: 4-Bromofluorobenzene	0.74		0.9625		77.4	39.1	146			

Sample ID: 2307747-040amsd	Samp	ype: MS	SD .	TestCode: EPA Method 8021B: Volatiles						
Client ID: BH23-29 2'	Batcl	n ID: 762	293	F	RunNo: 98	3347				
Prep Date: 7/18/2023	Analysis [Date: 7/2	20/2023	5	SeqNo: 3	579620	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9579	0	85.1	70	130	3.86	20	
Toluene	0.85	0.048	0.9579	0	89.1	70	130	3.14	20	
Ethylbenzene	0.87	0.048	0.9579	0	91.0	70	130	3.06	20	
Xylenes, Total	2.6	0.096	2.874	0	90.9	70	130	3.01	20	
Surr: 4-Bromofluorobenzene	0.73		0.9579		76.4	39.1	146	0	0	

Sample ID: LCS-76322	SampT	ype: LC	s	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch	n ID: 76 :	322	F	RunNo: 9	8353				
Prep Date: 7/19/2023	Analysis D	ate: 7/	20/2023	5	SeqNo: 3580804 Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000	<u> </u>	114	39.1	146			

Sample ID: mb-76322	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	ID: 76	322	F	RunNo: 98	3353				
Prep Date: 7/19/2023	Analysis D	ate: 7/	20/2023	5	580812	Units: %Rec	;			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	12		1 000		117	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 Quanitative 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 57 of 57



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque. NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Released to Imaging: 6/9/2025 1:23:35 PM

	Vertex Resources Services, Inc.	Work Order Number	: 2307	7747			RcptNo: 1
Received By:	Tracy Casarrubias	7/18/2023 7:10:00 AM					
Completed By:	Tracy Casarrubias	7/18/2023 7:22:37 AM					
Reviewed By:	W7/18/23						
Chain of Cust							
1. Is Chain of Cu	stody complete?		Yes		No	V	Not Present
2. How was the s	ample delivered?		Cou	rier			
<u>Log In</u>							
	ot made to cool the sample	es?	Yes	V	No		NA \square
4. Were all sample	les received at a temperate	ure of >0° C to 6.0°C	Yes	V	No		NA 🗌
5. Sample(s) in p	roper container(s)?		Yes	V	No		
6. Sufficient samp	ole volume for indicated tes	st(s)?	Yes	V	No		
7. Are samples (e	except VOA and ONG) proj	perly preserved?	Yes	V	No		
8. Was preservati	ive added to bottles?		Yes		No	V	NA 🗆
9. Received at lea	ast 1 vial with headspace <	:1/4" for AQ VOA?	Yes		No		NA ☑,
10. Were any sam	ple containers received br	oken?	Yes		No	V	# of preserved
	rk match bottle labels? ncies on chain of custody)		Yes	V	No		bottles checked for pH: (<2 or >12 unless noted)
	orrectly identified on Chain	of Custody?	Yes	V	No		Adjusted?
13. Is it clear what	analyses were requested?		Yes	V	No		GCM onlink
	g times able to be met? stomer for authorization.)		Yes	V	No		Checked by:) (11)
	ng (if applicable)						1
	ified of all discrepancies w	ith this order?	Yes		No		NA 🗹
Person i	Notified:	Date:				-	
By Who	m:	Via: [eM	ail [] Phone [Fax	☐ In Person
Regardir	ng:					- Contract - Contract	The product of the state of the
Client In	structions: Mailing address	ss.phone number and Email	/Fax a	re mis	sing on CO	C - TN	MC 7/18/23
16. Additional ren	narks:						
17. <u>Cooler Inform</u> Cooler No	Temp °C Condition	Seal Intact Seal No S	Seal D	ate	Signed	Ву	

eceived	418 FP	5f4@12	rstody Record	Turn-Around	Time:				71110	ш	IAI		F	W.	TD	20	NM	le:	Page	182 d	of 248
Client:		Vertex		□ Standard	X Rusl	h3-day				A	N	AL	YS	SIS	L	AE	OF	RA	ТО	RY	,
direct k	oill to De	von-Harv	ard Divest, see Remarks)	Project Name	e:					,	www	/.hall	lenvi	ironr	nent	al.co	m				
	Address			North Pure (Gold 8 Feder	al 011		490)1 Ha	awki	ns N	IE -	Alb	uque	erque	e, Ni	M 871	09			
333.0	<u> </u>			Project #:					l. 50								4107				
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email o	r Fax#:			Project Mana	ager:		=	(Q)					SO ₄			art)				1	
QA/QC I	Package:			Kent Stalling			(8021)	/ MRO)	PCB's		8270SIMS		PO ₄ , §			Abse					
□ Stan	dard		☐ Level 4 (Full Validation)	kstallings@v	ertex.ca		B's	DRO			202					ant/					
Accredi			ompliance	Sampler:	L.Pullman	N	Σ	_	Pesticides/8082	1.7			NO ₂ ,		2	(Present/Absent)					
□ NEL		□ Other		On Ice:	¥ Yes	□ No yoqi	BE/	380	les/	22	0	als	ကို		0		-				
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				Occide Temp			2	3015	Pes	Re	þ	18		3	(Semi-VOA)	S					
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2307747	ВТЕХ	TPH:8015D(GRO	8081	EDB (Method 504.1)	PAHs by 8310 or	RCRA 8 Metals	Cl, F,	8260 (VOA)	8270	otal					
7/14/23		Soil	BH23-10 0'	1, 4oz jar		01	Х	X					х	$\overset{\sim}{}$	$\ddot{}$	<u>, </u>		\top	\top	+	\Box
7/14/23		Soil	BH23-10 2'	1, 4oz jar		007	Х	Х					х								\Box
7/14/23		Soil	BH23-11 0'	1, 4oz jar		003	х	Х					х								
7/14/23		Soil	BH23-11 2'	1, 4oz jar		004	Х	х					Х								
7/14/23	08:15	Soil	BH23-12 0'	1, 4oz jar		005	Х	х			_		Х				_	\perp	\perp		Ш
7/14/23	08:20	Soil	BH23-12 2'	1, 4oz jar		006	Х	Х					Х								
7/14/23	08:30	Soil	BH23-13 0'	1, 4oz jar		F00	Х	х					Х								
7/14/23	08:35	Soil	BH23-13 2'	1, 4oz jar		008	X	х					х				\perp	\perp			Ш
7/14/23	08:50	Soil	BH23-14 0'	1, 4oz jar		009	Х	х					х								
7/14/23	09:00	Soil	BH23-14 2'	1, 4oz jar		010	х	х					Х				_	\perp	\bot	\perp	Ш
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If necessary, samples submitted to Hall Environmental may be eubcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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email or	Fax#:			Project Mana	_		21)	/ MRO)	_o		S		, SO ₄			ser					
QA/QC F	Package:			Kent Stallings			8	2	PCB's		NS		PO ₄ ,			VAE					
☐ Stan	dard		☐ Level 4 (Full Validation)	kstallings@ve			TMB's (8021)	DRO			8270SIMS		NO ₂ ,			sen		Ì			
Accredi			mpliance		L.Pullman ☐ Yes	□ No	-	_	Pesticides/8082	504.1)	9 10				(A)	Total Coliform (Present/Absent)					
□ NEL		□ Other		On Ice: # of Coolers:		140	닒	GR	ides	2d 5	8310	stals	NO ₃ ,		<u>-</u> -	E					
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D = 4 =	T:	Materia	Sample Name	Container Type and #		HEAL No. 2307747	BTEX / MTBE	TPH:8015D(GRO	8081	EDB	PAHs	RCRA	Cl, F,	826	827	Tot					
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07/14/23		Soil	BH23-20 2'	1, 4oz jar		022	X	X		-		-	X	-	-	-	-		-		_
07/14/23		Soil	BH23-21 0'	1, 4oz jar		023	X	X	-	-	-	-	X	-	-	 	-		-	+	+
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

eceived	masa:	8F4@2	istody Record	Turn-Around	Time:					НА		F	NV	TR	201	NIM	IE.	Page	184	of 248
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(direct b	oill to De	von-Harva	ard Divest, see Remarks)	Project Name	9:					ww	w.ha	llenv	ironr	nent	al.co	m				
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□ Stan	dard		☐ Level 4 (Full Validation)	kstallings@v	ertex.ca		TMB's (DRO		.1) 8270SIMS					/Jue					
Accredi			mpliance	Sampler:	L.Pullman		Σ	_	Pesticides/8082			NO ₂ ,		7	Coliform (Present/Absent)					
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Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2307747	ВТЕХ	TPH:8015D(GRO	8081	EDB (Method 5 PAHs by 8310	RCRA 8 Metals	Cl, F, Br, NO ₃ ,	8260 (VOA)	8270 (Semi-VOA)	Total					
	11:30	Soil	BH23-22 0'	1, 4oz jar		025	х	х				Х								
07/14/23		Soil	BH23-22 2'	1, 4oz jar		026	х	х				Х								
07/14/23		Soil	BH23-23 0'	1, 4oz jar		027	х	х				Х								
07/14/23	11:55	Soil	BH23-23 2'	1, 4oz jar		028	х	х				Х					_	\perp		
07/14/23	12:00	Soil	BH23-24 0'	1, 4oz jar		029	х	х	_			Х				_	\perp			
07/14/23	12:05	Soil	BH23-24 2'	1, 4oz jar		030	х	х			_	Х					\perp			\perp
07/14/23	12:10	Soil	BH23-25 0'	1, 4oz jar		031	х	х				х					\rightarrow			\perp
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07/14/23	12:25	Soil	BH23-26 2'	1, 4oz jar		034	x	х				X								\perp
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07/14/23		Soil	BH23-27 2'	1, 4oz jar		036	X	Х				X	<u> </u>		\	-1-11				Щ
Date: 7-17-23	Time: 07.00	Relinquish	ed by	Received by:	Via:	Date Time	Har	vard	Dive	ect bi	e – N						eral ()11		
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

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Client:		Vertex		□ Standard		n3-day				1/1/10	10070 C 100V						OF			
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☐ Stan	dard		☐ Level 4 (Full Validation)	kstallings@v	ertex.ca		TMB's (DRO,			8270SIMS					aut/				
Accredi			mpliance	Sampler:	L.Pullman		. ₹	~	Pesticides/8082	504.1)			NO ₂ ,		اج	(Present/Absent)				
□ NEL		□ Other		On Ice: # of Coolers:	□ Yes	□ No	<u>,</u>	GRC	des/	d 50	10 or	als	NO ₃ ,		0	m F)				
	(1900)	1			(including CF):50	e Checklist	MTBE	2D(stici	(Method	/ 83	Me	Z	OA)	emi-	Coliform				
				Container	Preservative			TPH:8015D(GRO		Š	PAHs by 8310	RCRA 8 Metals	F, Br,	8260 (VOA)	8270 (Semi-VOA)	္ခို				
Date	Time	Matrix	Sample Name	Type and #	Type	HEAL No.	ВТЕХ	핕	8081	EDB	PAF	RCF	C, F	826	827	Total				
07/14/23	13:10	Soil	BH23-28 0'	1, 4oz jar		037	х	Х					Х							
07/14/23	13:15	Soil	BH23-28 2'	1, 4oz jar		038	х	Х					х							
07/14/23	13:20	Soil	BH23-29 0'	1, 4oz jar		039	Х	Х					х							
07/14/23	13:25	Soil	BH23-29 2'	1, 4oz jar		040	х	х					Х							
07/14/23	13:35	Soil	BH23-30 0'	1, 4oz jar		041	X	Х					х							
07/14/23	13:40	Soil	BH23-30 2'	1, 4oz jar		042	Х	х					Х							
07/14/23	13:40	Soil	BH23-31 0'	1, 4oz jar		043	Х	х					Х							
07/14/23	13:45	Soil	BH23-31 2'	1, 4oz jar		044	Х	х					х							
07/14/23	13:55	Soil	BH23-32 0'	1, 4oz jar		045	Х	х					Х							
07/14/23	14:00	Soil	BH23-32 2'	1, 4oz jar		046	Х	Х					Х							
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117/23	Pipo	L acu	MMD			7/18/23 7:10	cc.	ksta	lling	s@v	erte	ex.ca	for	Fin	al Re	eport				41

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

OrderNo.: 2307825

4901 Hawkins NE

Albuquerque, NM 87109



July 25, 2023

Kent Stallings

Vertex Resources Services, Inc. 3101 Boyd Drive

Carlsbad, NM 88220 TEL: (505) 506-0040

FAX:

RE: North Pure Gold 8 Federal 001

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/19/2023 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 don't hesitate to contact HEAL for any additional information or clarifications.

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report Lab Order 2307825

Date Reported: 7/25/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-33 0.0'

 Project:
 North Pure Gold 8 Federal 001
 Collection Date: 7/17/2023 9:00:00 AM

 Lab ID:
 2307825-001
 Matrix: SOIL
 Received Date: 7/19/2023 7:30:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	7/21/2023 2:58:08 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	7/21/2023 2:58:08 AM
Surr: DNOP	76.6	69-147	%Rec	1	7/21/2023 2:58:08 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	7/20/2023 3:49:48 PM
Surr: BFB	97.3	15-244	%Rec	1	7/20/2023 3:49:48 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	7/20/2023 3:49:48 PM
Toluene	ND	0.049	mg/Kg	1	7/20/2023 3:49:48 PM
Ethylbenzene	ND	0.049	mg/Kg	1	7/20/2023 3:49:48 PM
Xylenes, Total	ND	0.099	mg/Kg	1	7/20/2023 3:49:48 PM
Surr: 4-Bromofluorobenzene	116	39.1-146	%Rec	1	7/20/2023 3:49:48 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	7/21/2023 12:06:10 AM

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

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 Quanitative 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

ting Limit Page 1 of 10

Analytical Report Lab Order 2307825

Date Reported: 7/25/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-33 2.0'

 Project:
 North Pure Gold 8 Federal 001
 Collection Date: 7/17/2023 9:10:00 AM

 Lab ID:
 2307825-002
 Matrix: SOIL
 Received Date: 7/19/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	7/21/2023 3:22:00 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	7/21/2023 3:22:00 AM
Surr: DNOP	93.7	69-147	%Rec	1	7/21/2023 3:22:00 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	7/20/2023 4:13:36 PM
Surr: BFB	97.5	15-244	%Rec	1	7/20/2023 4:13:36 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	7/20/2023 4:13:36 PM
Toluene	ND	0.048	mg/Kg	1	7/20/2023 4:13:36 PM
Ethylbenzene	ND	0.048	mg/Kg	1	7/20/2023 4:13:36 PM
Xylenes, Total	ND	0.095	mg/Kg	1	7/20/2023 4:13:36 PM
Surr: 4-Bromofluorobenzene	115	39.1-146	%Rec	1	7/20/2023 4:13:36 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	7/21/2023 12:18:35 AM

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

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 Quanitative 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

porting Limit Page 2 of 10

2307825-003

EPA METHOD 300.0: ANIONS

Chloride

Lab ID:

Analytical Report Lab Order 2307825

Received Date: 7/19/2023 7:30:00 AM

Date Reported: 7/25/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-34 0.0'

Matrix: SOIL

Project: North Pure Gold 8 Federal 001 **Collection Date:** 7/17/2023 9:50:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: PRD Diesel Range Organics (DRO) ND 9.6 7/21/2023 3:45:48 AM mg/Kg 1 mg/Kg Motor Oil Range Organics (MRO) 1 7/21/2023 3:45:48 AM ND 48 Surr: DNOP 89.1 %Rec 1 7/21/2023 3:45:48 AM 69-147 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.9 mg/Kg 1 7/20/2023 4:37:21 PM Surr: BFB 1 7/20/2023 4:37:21 PM 98.3 15-244 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 0.024 mg/Kg 1 7/20/2023 4:37:21 PM Toluene ND 0.049 mg/Kg 1 7/20/2023 4:37:21 PM Ethylbenzene 7/20/2023 4:37:21 PM ND 0.049 mg/Kg 1 Xylenes, Total ND 0.098 mg/Kg 1 7/20/2023 4:37:21 PM Surr: 4-Bromofluorobenzene 117 39.1-146 %Rec 1 7/20/2023 4:37:21 PM

730

60

mg/Kg

20

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

 $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$

PQL Practical Quanitative 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 3 of 10

Analyst: JMT

7/21/2023 12:30:59 AM

Analytical Report Lab Order 2307825

Date Reported: 7/25/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-34 2.0'

 Project:
 North Pure Gold 8 Federal 001
 Collection Date: 7/17/2023 10:00:00 AM

 Lab ID:
 2307825-004
 Matrix: SOIL
 Received Date: 7/19/2023 7:30:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: PRD Diesel Range Organics (DRO) ND 8.6 7/21/2023 4:33:10 AM mg/Kg 1 mg/Kg Motor Oil Range Organics (MRO) ND 1 7/21/2023 4:33:10 AM 43 Surr: DNOP 96.2 69-147 %Rec 1 7/21/2023 4:33:10 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 5.0 mg/Kg 1 7/20/2023 5:01:13 PM Surr: BFB 1 7/20/2023 5:01:13 PM 96.6 15-244 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 0.025 mg/Kg 1 7/20/2023 5:01:13 PM Toluene ND 0.050 mg/Kg 1 7/20/2023 5:01:13 PM Ethylbenzene 7/20/2023 5:01:13 PM ND 0.050 mg/Kg 1 Xylenes, Total ND mg/Kg 1 7/20/2023 5:01:13 PM 0.10 %Rec Surr: 4-Bromofluorobenzene 115 39.1-146 1 7/20/2023 5:01:13 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride ND 7/21/2023 1:08:13 AM 60 mg/Kg 20

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

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 Quanitative 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 4 of 10

Analytical Report Lab Order 2307825

Date Reported: 7/25/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-35 0.0'

Project: North Pure Gold 8 Federal 001 **Collection Date:** 7/17/2023 9:30:00 AM

Lab ID: 2307825-005 **Matrix:** SOIL **Received Date:** 7/19/2023 7:30:00 AM

Analyses	Result	RL (Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: PRD
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	7/21/2023 6:56:45 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/21/2023 6:56:45 PM
Surr: DNOP	56.2	69-147	S	%Rec	1	7/21/2023 6:56:45 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/20/2023 5:25:01 PM
Surr: BFB	97.0	15-244		%Rec	1	7/20/2023 5:25:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	7/20/2023 5:25:01 PM
Toluene	ND	0.048		mg/Kg	1	7/20/2023 5:25:01 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/20/2023 5:25:01 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/20/2023 5:25:01 PM
Surr: 4-Bromofluorobenzene	116	39.1-146		%Rec	1	7/20/2023 5:25:01 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	89	60		mg/Kg	20	7/21/2023 1:20:38 AM

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

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 Quanitative 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 10

Xylenes, Total

Chloride

Surr: 4-Bromofluorobenzene

EPA METHOD 300.0: ANIONS

Analytical Report Lab Order 2307825

Date Reported: 7/25/2023

7/20/2023 5:48:48 PM

7/20/2023 5:48:48 PM

7/21/2023 1:33:02 AM

Analyst: JMT

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-35 2.0'

 Project:
 North Pure Gold 8 Federal 001
 Collection Date: 7/17/2023 9:40:00 AM

 Lab ID:
 2307825-006
 Matrix: SOIL
 Received Date: 7/19/2023 7:30:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: PRD Diesel Range Organics (DRO) ND 9.4 7/21/2023 5:20:33 AM mg/Kg 1 mg/Kg Motor Oil Range Organics (MRO) 1 7/21/2023 5:20:33 AM ND 47 Surr: DNOP 91.0 %Rec 1 7/21/2023 5:20:33 AM 69-147 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.8 mg/Kg 1 7/20/2023 5:48:48 PM Surr: BFB 1 7/20/2023 5:48:48 PM 97.2 15-244 %Rec **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 0.024 mg/Kg 1 7/20/2023 5:48:48 PM Toluene ND 0.048 mg/Kg 1 7/20/2023 5:48:48 PM Ethylbenzene 7/20/2023 5:48:48 PM ND 0.048 mg/Kg 1

ND

116

ND

0.097

60

39.1-146

mg/Kg

%Rec

mg/Kg

1

1

20

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

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

QL Practical Quanitative 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 10

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307825**

25-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 001

Sample ID: MB-76371 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **76371** RunNo: **98399**

Prep Date: 7/20/2023 Analysis Date: 7/20/2023 SeqNo: 3581746 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-76371 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 76371 RunNo: 98399

Prep Date: 7/20/2023 Analysis Date: 7/20/2023 SeqNo: 3581747 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.2 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

Page 7 of 10

Hall Environmental Analysis Laboratory, Inc.

PQL

10

SPK value

50.00

5.000

Result

43

4.4

WO#: **2307825**

25-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 001

Sample ID: MB-76333	SampT	уре: МЕ	BLK	Tes	stCode: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	ID: 76 3	333	F	RunNo: 9	8368				
Prep Date: 7/19/2023	Analysis D	ate: 7/ 2	20/2023	Ş	SeqNo: 3	581346	Units: mg/K	g		
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			
Sample ID: LCS-76333	SampT	ype: LC	s	Tes	stCode: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	ID: 76 3	333	F	RunNo: 9	8368				
Prep Date: 7/19/2023	Analysis D	ate: 7/ 2	21/2023		SeqNo: 3	581347	Units: mg/K	(q		

SPK Ref Val

0

%REC

86.6

88.4

LowLimit

61.9

69

HighLimit

130

147

%RPD

RPDLimit

Qual

Qualifiers:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

- 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 Quanitative 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 10

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307825**

25-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 001

Project:	North Pur	e Gold 8 l	Federal	001							
Sample ID:	lcs-76322	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	!	
Client ID:	LCSS	Batch	n ID: 76 3	322	F	RunNo: 98	3353				
Prep Date:	7/19/2023	Analysis D	ate: 7/ 2	20/2023	\$	SeqNo: 3	580780	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	23	5.0	25.00	0	91.0	70	130			
Surr: BFB		2000		1000		197	15	244			
Sample ID:	mb-76322	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	!	
Client ID:	PBS	Batch	n ID: 76 3	322	F	RunNo: 98	3353				
Prep Date:	7/19/2023	Analysis D	ate: 7/ 2	20/2023	9	SeqNo: 3	580811	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	ND	5.0								
Surr: BFB		980		1000		98.4	15	244			
Sample ID:	2307825-001ams	SampT	уре: МS	3	Tes	tCode: EF	PA Method	8015D: Gaso	line Range	!	
Client ID:	BH23-33 0.0'	Batch	n ID: 76 3	322	F	RunNo: 98	3353				
Prep Date:	7/19/2023	Analysis D	ate: 7/ 2	20/2023	9	SeqNo: 3	581479	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	e Organics (GRO)	23	5.0	24.75	0	94.3	70	130			
Surr: BFB		2000		990.1		202	15	244			
Sample ID:	2307825-001amsd	SampT	ype: MS	SD	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID:	BH23-33 0.0'	Batch	1D: 76 3	322	F	RunNo: 98	3353				
Prep Date:	7/19/2023	Analysis D	ate: 7/ 2	20/2023	5	SeqNo: 3	581480	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	4.9	24.58	0	94.9	70	130	0.0563	20	
Surr: BFB		2000		983.3		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 Quanitative Limit
- 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 10

Hall Environmental Analysis Laboratory, Inc.

WO#: **2307825**

25-Jul-23

Client: Vertex Resources Services, Inc.

Project: North Pure Gold 8 Federal 001

Sample ID: LCS-76322	SampT	PA Method	8021B: Volati	iles						
Client ID: LCSS	Batch	h ID: 763	322	F	RunNo: 98	3353				
Prep Date: 7/19/2023										
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	70	130			
Toluene	1.0	0.050	1.000	0	104	70	130			
Ethylbenzene	1.1	0.050	1.000	0	105	70	130			
Xylenes, Total	3.2	0.10	3.000	0	107	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	39.1	146			

Sample ID: mb-76322	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	h ID: 76 3	322	F	RunNo: 98	3353				
Prep Date: 7/19/2023	Analysis D	Date: 7/ 2	20/2023	9	SeqNo: 3	580812	Units: mg/K	g		
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	1.2		1.000		117	39.1	146			

Sample ID: 2307825-002ams	3	TestCode: EPA Method 8021B: Volatiles												
Client ID: BH23-33 2.0'	Batc	Batch ID: 76322 RunNo: 98353												
Prep Date: 7/19/2023	Analysis I	nalysis Date: 7/20/2023 SeqNo: 3581517 Units: m							g/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual				
Benzene	1.1	0.024	0.9497	0	114	70	130							
Toluene	1.1	0.047	0.9497	0	115	70	130							
Ethylbenzene	1.1	0.047	0.9497	0	117	70	130							
Xylenes, Total	3.4	0.095	2.849	0	118	70	130							
Surr: 4-Bromofluorobenzene	1.1		0.9497		118	39.1	146							

Sample ID: 2307825-002amsd	Samp1	ype: MS	D	Tes	8021B: Volati	les					
Client ID: BH23-33 2.0'	Batcl	Batch ID: 76322 RunNo: 98353									
Prep Date: 7/19/2023	Analysis [Date: 7/2	20/2023	5	SeqNo: 3	Units: mg/K	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.024	0.9488	0	113	70	130	0.695	20		
Toluene	1.1	0.047	0.9488	0	114	70	130	0.971	20		
Ethylbenzene	1.1	0.047	0.9488	0	117	70	130	0.591	20		
Xylenes, Total	3.4	0.095	2.846	0	118	70	130	0.399	20		
Surr: 4-Bromofluorobenzene	1.1		0.9488		116	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 Quanitative 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 10 of 10

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Sample Log-In Check List

Released to Imaging: 6/9/2025 1:23:35 PM

Client Name:	Vertex Resou Services, Inc.		Work Order Numbe	r: 2307825		RcptNo	1
Received By:	Juan Rojas		7/19/2023 7:30:00 AM	Λ	(lend		
Completed By:	Cheyenne C	ason	7/19/2023 7:42:58 AM	Λ	Chul		
Reviewed By:		i i					
Chain of Cus	tody						
1. Is Chain of C	ustody complet	e?		Yes 🗹	No 🗌	Not Present	
2. How was the	sample deliver	ed?		Courier			
<u>Log In</u> 3. Was an atten	npt made to co	of the samples?		Yes 🗹	No 🗌	na 🗆	
4. Were all samp	ples received a	t a temperature	of >0° C to 6.0°C	Yes 🗹	No 🗌	NA \square	
5. Sample(s) in	proper contain	er(s)?		Yes 🗹	No 🗌		
6. Sufficient sam	nple volume for	indicated test(s)	?	Yes 🗹	No 🗌		
7. Are samples				Yes 🗹	No 🗌		
8. Was preserva			•	Yes 🗌	No 🗹	NA 🗌	
9. Received at le	east 1 vial with	headspace <1/4	for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	1
10. Were any sai	mple containers	s received broke	n?	Yes	No 🗹	# of preserved	
11. Does paperw	ork match bottl ancies on chair			Yes 🗹	No 🗆	bottles checked for pH:	r >12 unless noted)
12. Are matrices			Custody?	Yes 🗹	No 🗆	Adjusted?	20.00.000.000
13. Is it clear wha	at analyses wer	e requested?		Yes 🗹	No 🗌	/	CCM molia
14. Were all hold	ling times able to			Yes 🗹	No 🗆	Checked by	29110 1119
Special Hand		,					
15. Was client n			this order?	Yes 🗌	No 🗌	NA 🗹	
	n Notified:		Date:				
By Wh	500	THE RESERVE OF THE PARTY OF THE PARTY.	Via:	eMail] Phone [] Fax	∐ In Person	
Regard Client	Instructions:			NEW PROCESSION AND ADDRESS OF THE PARTY OF T		CONTRACTOR OF STREET	
16. Additional re							
17. Cooler Info	matian						
Cooler No			eal Intact Seal No t Present Morty	Seal Date	Signed By		
Page 1 o	of 1						

C	Chain-of-Custody Record					-Around			HALL ENVIRONMENTAL													
Client:	1	erte	*			Standard	Rush	3 DAY				A	N	AL	YS	IS	L	AB	OR	TAS	OF	ŁΥ
Direc	1 Bill		even-Howard	Divest	Proje	ect Name	vre bolo	18				١	ww	.halle	envir	onm	nenta	al.cor	n			
	Address:		See Rena		F	cder	1 001			490)1 H	awkii	ns N	E -	Albı	ıque	rque	e, NIV	1 8710	09		
		×			Proje	ect#:	02816-	09		Te	l. 50	5-34	5-39			con a true		345-4	107	Committee of the		
Phone :	# :									Analysis Request												
email o	Fax#:				Project Manager:)21)	(RO)	اير	İ	S		, SO ₄			sen				
	Package:				Project Manager: Kent Stellings Kstallings@vertex, ca			TMB's (8021)	N/	PCB's		8270SIMS		PO4,	3401		₩.					
☐ Stan			□ Level 4 (Full V	alidation)	Sampler: Aft			WB.	DR(982	=	3270		NO ₂ ,			eseu					
Accredi		☐ Az Co ☐ Other ☐	mpliance		On I		Yes	□ No	II ~	TPH 8015D(GRO / DRO / MRO)	8081 Pesticides/8082	504.1)	5	8	3, N		(A)	Total Coliform (Present/Absent)	14			
	☐ EDD (Type)					Coolers:		Morty	MTBE	D(G	icide	EDB (Method	PAHs by 8310	RCRA 8 Metals	CI F, Br, NO3,	8	8270 (Semi-VOA)	form				
					Coo	ler Temp	(including CF):	3.6.0.1= 3.5°C)		015	Pest	Met	þ	18	Ä,	8	(Ser	S				
					Con	tainer	Preservative		BTEX	景	381	DB (AR	CR/	L	8260 (VOA)	270	otal				
Date	Time	Matrix	Sample Name			e and #	Туре	2307875	19/	5	8	Ш	-	~	94	80		-	e 1 21	Que e	+	\vdash
7-17-23	0900	50,1	BH23-33	0.0	4	02	ICE	oci	-	+			-	\dashv	\mathcal{H}	-		\vdash	_	_	10 10 10	
101	0910		BH23-33	2.0			1	002	1	1					+		1			111	+-	++-
	0950		B1423-34	0.0				003	4	11	_		1287	3 (3 (4)	\mathbb{H}		- 17			244	-	
	1000		31+23-34	2.0'				ocy	11	1		12 1			\perp					-	+-	
	0930		DH23-35	6.0		1		œ5	1.1/	11	1		F		W		m 34		\dashv	_	+	┼┼
1	0940	V	BH23-35	2.0		A	V	006	V	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			100	1000	V	w I		100	41.0		+-	++
		3.1								_		100									+	
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		F				0				_	ļ				D STORE				_		_	+
						- at 130 (0-	1			1	_			100	10 19	11.2	191	A1 11		di in la) i	+
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Date:	Date: Time: Relinquished by:						Via:	Date Time	R€	mar	(S: '	$\tilde{\mathcal{D}^{'}}$	-e c	1	15,1	ļ, .	, L	2	e	V00	dal	0
		<u> </u>			Pos	eived by:_	Wia:	11013 915 Date Time	-14	-\v	rol	D	ive:	54	SIT	c -	/ Vo	10-	In	011	101	U
Date:	Time:	Relinquis					2/	-101-	10L account 7700/00													
	71		<u> </u>		\angle	atad to ather	arcredited laborate	ories. This serves as notice of	this pos	ssibility	Any	979 sub-co	ntraçt	796 ed data	Wijl,b	e clea	arly not	tated or	n the an	nalytical	report.	_/_
Released i	If necessar o Imagin	/, samples s g: 6/9/20	ubmitted to Hall Environments 1:23:35 PM	entai may be su	oconua	cied to other	accieditor iapolate	······································	•	Ċ	1	: Ke	nt	5/		195	-	K21	talle	V2.	DVE	TECT, C



Attachment 5.

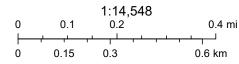
VERSATILITY. EXPERTISE.

will Care	e: North Pure Gold 8 Federal #011	V. C12204	V. 2576040
-	dinates: 32.315451,-103.796570	X: 613304	Y: 3576049
ite Spec	fic Conditions	Value	Unit
	Depth to Groundwater (nearest reference)	>100	feet
1	Distance between release and nearest DTGW reference	2,541	feet
	2	0.48	miles
	Date of nearest DTGW reference measurement		1.25.24
2	Within 300 feet of any continuously flowing watercourse	5,650	feet
	or any other significant watercourse	-,	
3	Within 200 feet of any lakebed, sinkhole or playa lake	6,891	feet
	(measured from the ordinary high-water mark)	0,031	1000
4	Within 300 feet from an occupied residence, school,	5,429	feet
-T	hospital, institution or church	5,723	1000
	i) Within 500 feet of a spring or a private, domestic fresh		
	water well used by less than five households for	5,246	feet
5	domestic or stock watering purposes, or		
	ii) Within 1000 feet of any fresh water well or spring	5,246	feet
	Within incorporated municipal boundaries or within a		
	defined municipal fresh water field covered under a		
6	municipal ordinance adopted pursuant to Section 3-27-3	No	(Y/N)
U	NMSA 1978 as amended, unless the municipality	INO	(1/14)
	specifically approves		
7	Within 300 feet of a wetland	6,386	feet
	Within the area overlying a subsurface mine	No	(Y/N)
8	Within the drea overlying a subsurface mine	140	(1/14)
	Distance between release and nearest registered mine	9,562	feet
			Critical
	Within an unstable area (Karst Map)	Low	High
9	within an unstable area (Karst Wap)	LOW	Medium
			Low
	Distance between release and nearest High Karst	10,109	feet
	Within a 100-year Floodplain	>500	year
10	Distance between release and nearest FEMA Zone A (100-	36,298	foot
	year Floodplain)	30,298	feet
11	Soil Type	Fine sand,	fine sandy loam
		_	<u> </u>
12	Ecological Classification	De	eep Sand
13	Geology	Eolian and p	iedmont deposits
			<50'
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	>100'	51-100'
		ĺ	>100'

North Pure Gold 8 Fed 11 - 0.48 miles away from DTGW



1/25/2024, 8:42:03 AM



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



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 \mathbf{X}

C 04776 POD1 NA

23S 31E

613953 3575651

Driller License: 1833 **Driller Company:**

VISION RESOURCES, INC

Driller Name:

JASON MALEY

12/13/2023

Drill Finish Date:

12/13/2023

Plug Date:

12/18/2023

Drill Start Date: Log File Date:

01/12/2024

PCW Rcv Date:

Pipe Discharge Size:

Source:

Estimated Yield:

Pump Type: Casing Size:

2.00 Depth Well: Depth Water:

105 feet

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.

1/25/24 8:42 AM

POINT OF DIVERSION SUMMARY



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													
		Sub-		_	Q	_	_	_	_						Vater
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	DistanceDe	pthWellDe _l	oth Water Co	lumn
C 04712 POD6		CUB	ED	3	3	4	08	23S	31E	613147	3575740	346	55		
C 04776 POD1		CUB	ED	3	3	3	09	23S	31E	613953	3575651	760		105	
C 04712 POD5		CUB	ED	4	4	3	09	23S	31E	614393	3575754	1128	55		
<u>C 02492</u>		CUB	ED	4	4	4	06	23S	31E	612056	3577320*	1781	135	85	50
<u>C 02865</u>		CUB	ED	4	4	4	06	23S	31E	612056	3577320*	1781	174		
<u>C 02774</u>		CUB	ED	3	1	3	04	23S	31E	613857	3577745*	1783	1660		
C 02492 POD2		C	ED	3	2	2	07	23S	31E	611767	3576996	1805	400	125	275

Average Depth to Water:

105 feet

Minimum Depth:

85 feet

Maximum Depth:

125 feet

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 613304 **Northing (Y):** 3576049 **Radius:** 2000

*UTM location was derived from PLSS - see Help

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1/25/24 8:35 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

PISH A WILDLIPE SERVICE

U.S. Fish and Wildlife Service

National Wetlands Inventory

NPG 8 Fed 011, Intermittent 5650 ft



July 28, 2021

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

Lake Other

Freshwater Forested/Shrub Wetland

Riverine

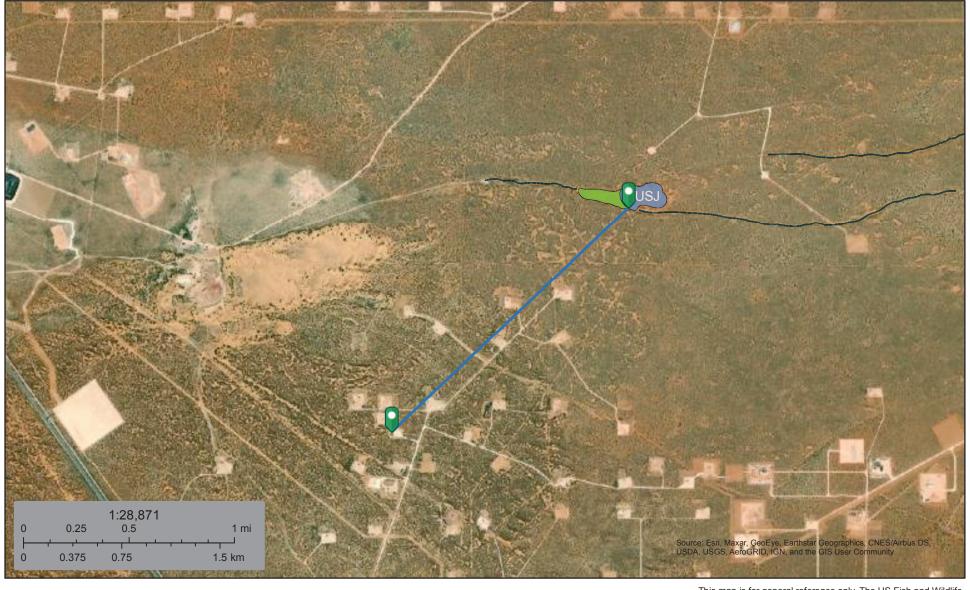
Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



U.S. Fish and Wildlife Service

National Wetlands Inventory

NPG 8 Fed 011, Pond 6891 ft



July 28, 2021

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Lake Freshwater Forested/Shrub Wetland

Other

Freshwater Pond



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.





NA

New Mexico Office of the State Engineer

Point of Diversion Summary

23S 31E

(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

612130

3577147

C 04200 POD3

Driller Company:

Driller License: Driller Name:

Drill Start Date: Drill Finish Date: Plug Date: Log File Date: **PCW Rcv Date:** Source:

Pump Type: Pipe Discharge Size: **Estimated Yield: Casing Size: Depth Well: Depth Water:**

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.

8/3/23 6:31 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Water Right Summary



WR File Number: C 04200 Subbasin: CUB Cross Reference: -

Primary Purpose: EXP EXPLORATION

Primary Status: PMT PERMIT

Contact:

Total Acres: Subfile: - Header: -

Total Diversion: 0 Cause/Case: -

Agent: ATKINS ENGR ASSOC INC

Contact: CHRIS CORTEZ (STACY MILLS)

Owner: JIMMY MILLS 2005 GST TRUST

Contact: FRANKIE JO MILLS, TRUSTEE

Owner: JIMMY MILLS GST TRUST

FRANKIE JO MILLS, TRUSTEE

Documents on File

				Sta	itus		From/			
	Trn#	Doc	File/Act	1	2	Transaction Desc.	To	Acres	Diversion	Consumptive
get images		EXPL	2018-01-30	PMT	APR	C 04200 POD1-5	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number C 04200 POD1	Well Tag Source NA	64Q16Q4Sec Tws Rng 2 2 07 23S 31E	X Y 611803 3577058	Other Location Desc
<u>C 04200 POD2</u>	NA	2 2 07 23S 31E	611893 3577123	
C 04200 POD3	NA	2 2 07 23S 31E	612130 3577147	
<u>C 04200 POD4</u>	NA	4 4 06 23S 31E	611996 3577521	
C 04200 POD5	NA	4 4 06 23S 31E	612139 3577393	

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.

8/3/23 6:22 PM WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

		(acre ft per ann	um)				(R=POD has been replaced and no longer serves this file, C=the file is closed)		rs are 1=N			=SW 4=SE)	(NAD	83 UTM in me
	Sub					Well			q q q		_			
WR File Nbr C 04712	basin CUB		on Owner 0 VERTEX RESOURCES	County ED	POD Number C 04712 POD6	Tag NA	Code Grant	Source	6416 4 3 3 4	Sec 08	Tws 23S		X 613146	Y 3575740
				ED	C 04712 POD5				4 4 3	09	23S	31E	614392	3575754
<u>C 04200</u>	CUB	EXP	0 JIMMY MILLS 2005 GST TRUST	ED	C 04200 POD3	NA			2 2	07	23S	31E	612130	3577147
<u>C 03389</u>	C	STK	3 JIMMY MILLS 2005 GST TRUST	ED	<u>C 03389</u>				1 1 3	17	23S	31E	612316	3574683
<u>C 03394</u>	C	PUB	0 JAMES HAMILTON CONSTRUCTION CO	ED	<u>C 03389</u>				1 1 3	17	23S	31E	612316	3574683
<u>C 04200</u>	CUB	EXP	0 JIMMY MILLS GST TRUST	ED	C 04200 POD2	NA			2 2	07	23S	31E	611893	3577123
				ED	C 04200 POD5				4 4	06	23S	31E	612138	3577393
<u>C 02492</u>	CUB	COM 1	05 THE JIMMY MILLS GST TRUST	ED	<u>C 02492</u>			Shallow	4 4 4	06	23S	31E	612056	3577320*
<u>C 02865</u>	CUB	EXP	0 STACY MILLS	ED	<u>C 02865</u>				4 4 4	06	23S	31E	612056	3577320*
<u>C 03668</u>	C	STK	3 JT MILLS 2005 GST TRUST	ED	C 02492 POD2			Shallow	3 2 2	07	23S	31E	611767	3576996
<u>C 04200</u>	CUB	EXP	0 JIMMY MILLS 2005 GST TRUST	ED	C 04200 POD1	NA			2 2	07	23S	31E	611802	3577058
<u>C 02774</u>	CUB	MON	0 U.S. DEPT. OF ENERGY - WIPP	ED	<u>C 02774</u>				3 1 3	04	23S	31E	613857	3577745*
C 04200	CUB	EXP	0 JIMMY MILLS 2005 GST TRUST	ED	C 04200 POD4	NA			4 4	06	23S	31E	611996	3577521

Record Count: 13

<u>UTMNAD83 Radius Search (in meters):</u>

Easting (X): 613283 **Northing (Y):** 3576038 **Radius:** 2000

Sorted by: Distance

UTM location was derived from PLSS - see Help

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

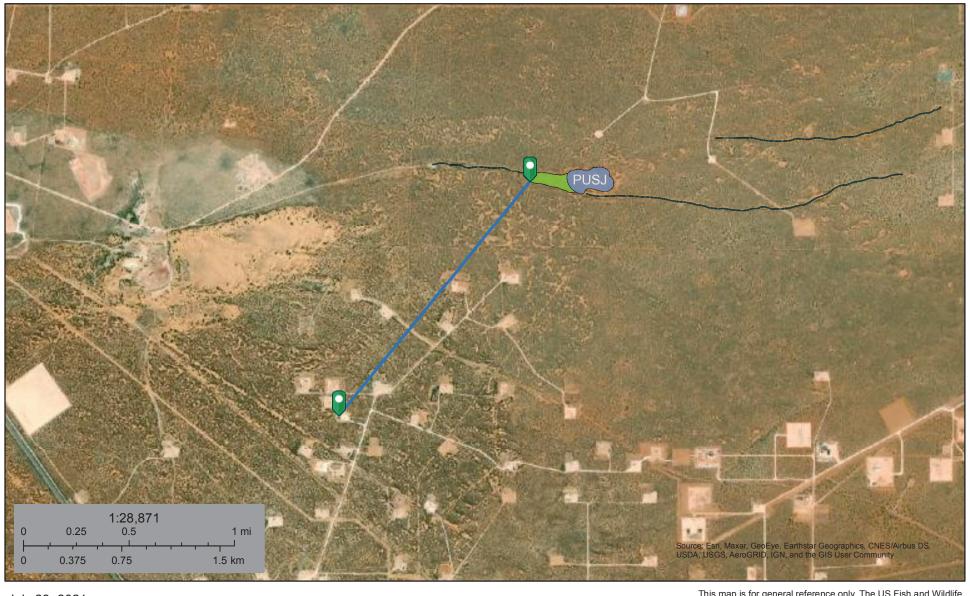
8/3/23 6:16 PM ACTIVE & INACTIVE POINTS OF D



U.S. Fish and Wildlife Service

National Wetlands Inventory

NPG 8 Fed 011, Wetland 6386 ft



July 28, 2021

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

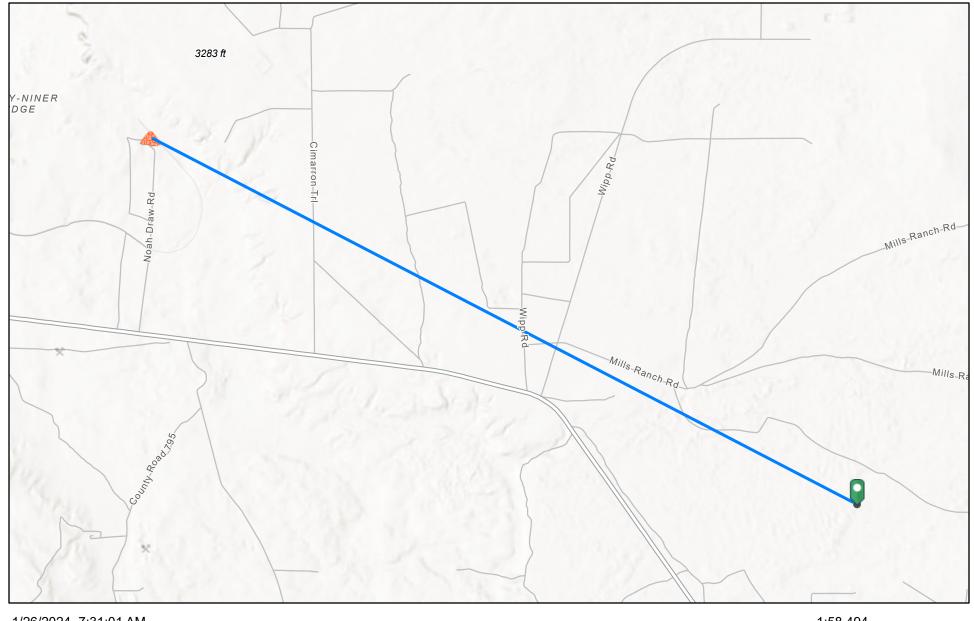


Riverine

Other

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.

North Pure Gold 9 Federal #001 - 34,074 feet from mine



1/26/2024, 7:31:01 AM

Registered Mines



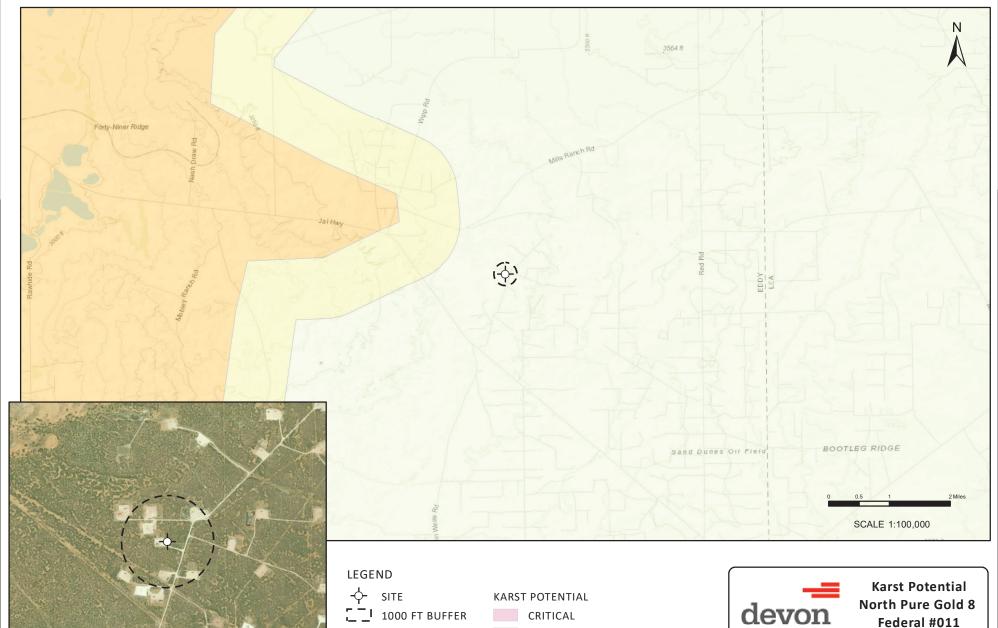
Potash

Aggregate, Stone etc.

1:58,494 0 0.42 0.85 1.7 mi 0 0.5 1 2 km

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

Notes: Aerial Image from ESRI Digital Globe 2017



HIGH MEDIUM

LOW

VERSATILITY. EXPERTISE.

APR 15/19

DRAWN:

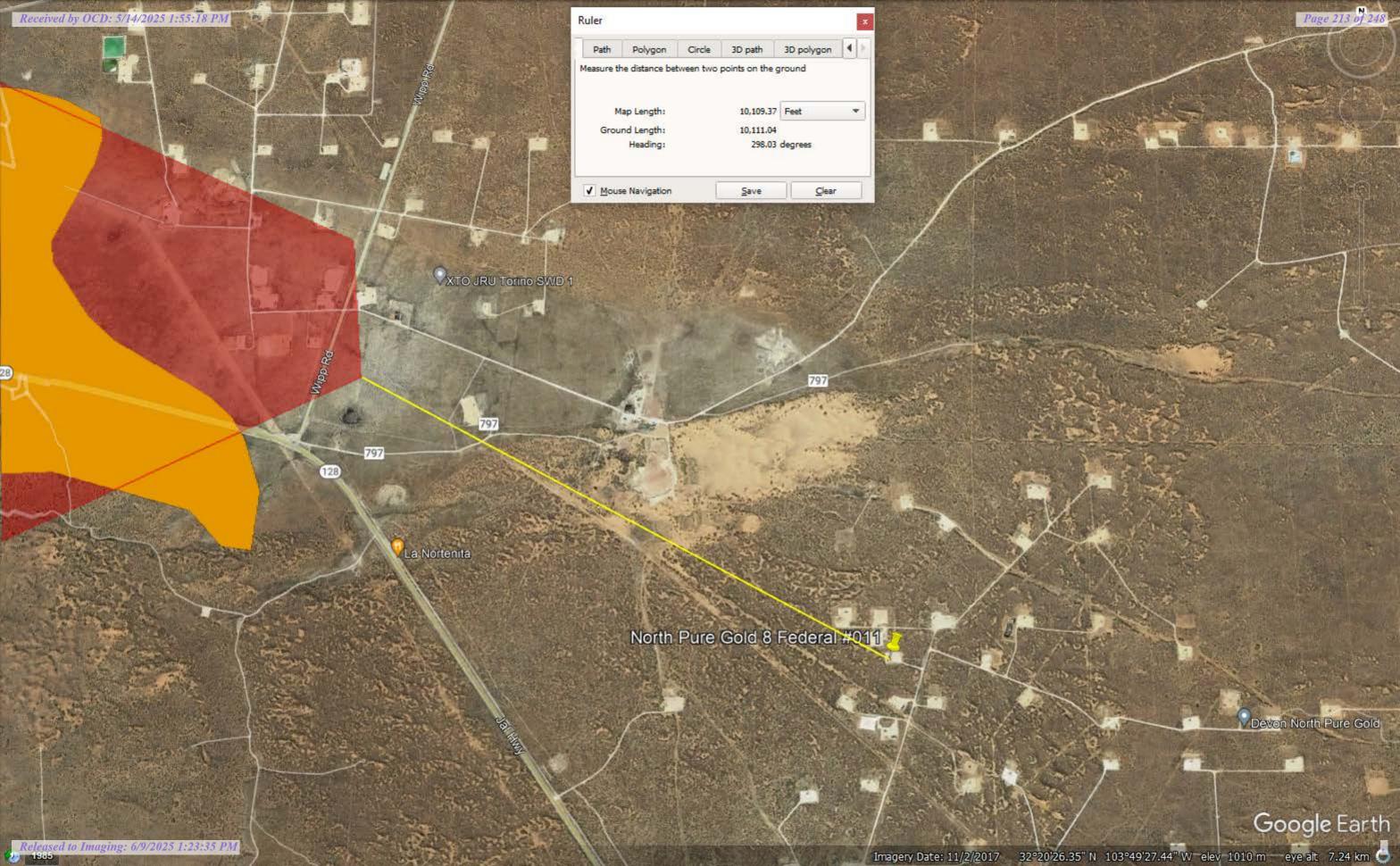
APPROVED: KM

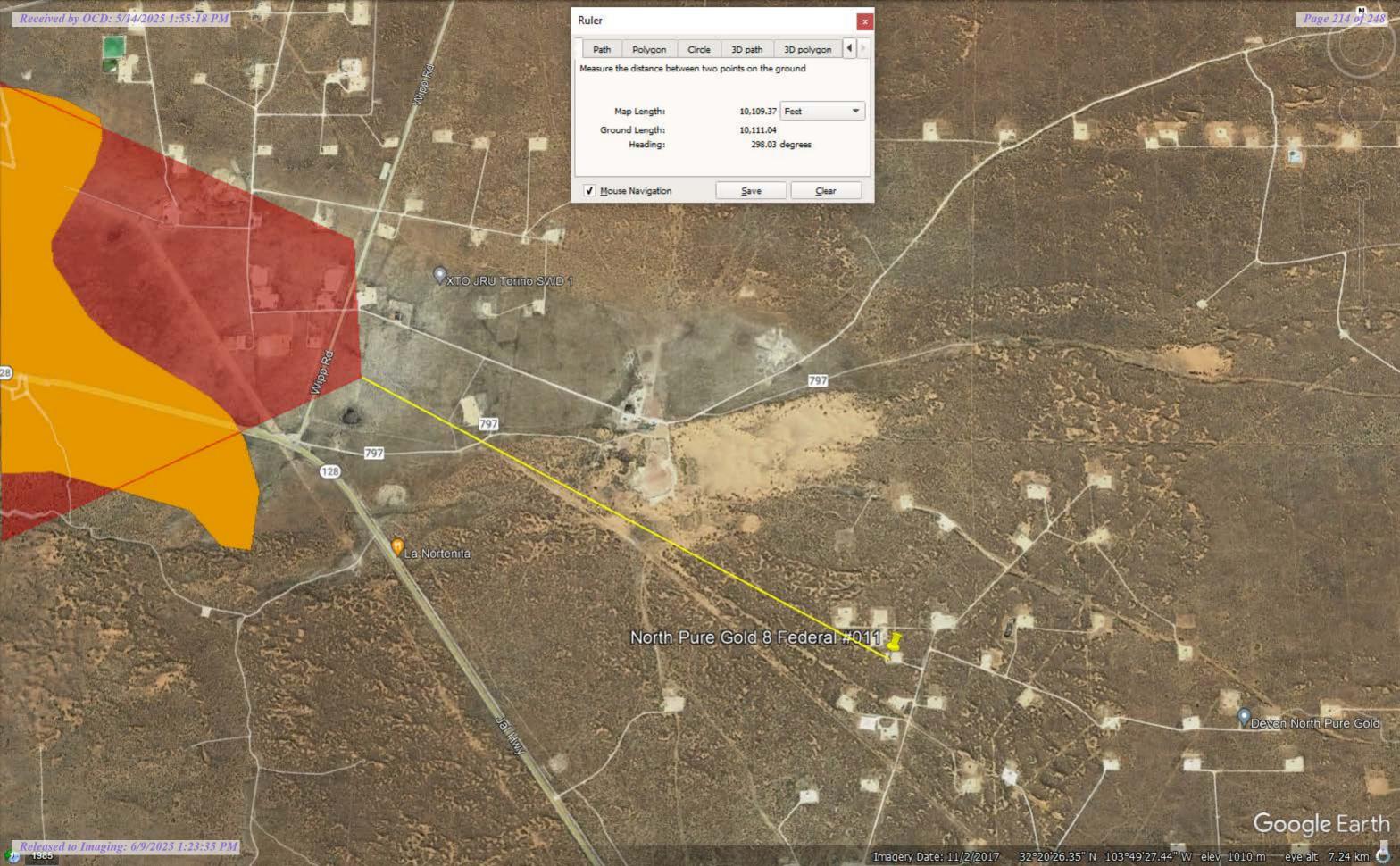
V

VERTEX

FIGURE:

1

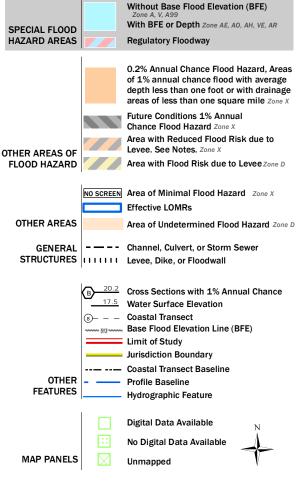




FEMA

Legend

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



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/15/2019 at 12:28:49 AM 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.



OReleas 24 to Imaging: 6/9/2025 1.229.35 PM



Department of Agriculture

Natural Resources Conservation Service

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

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



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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

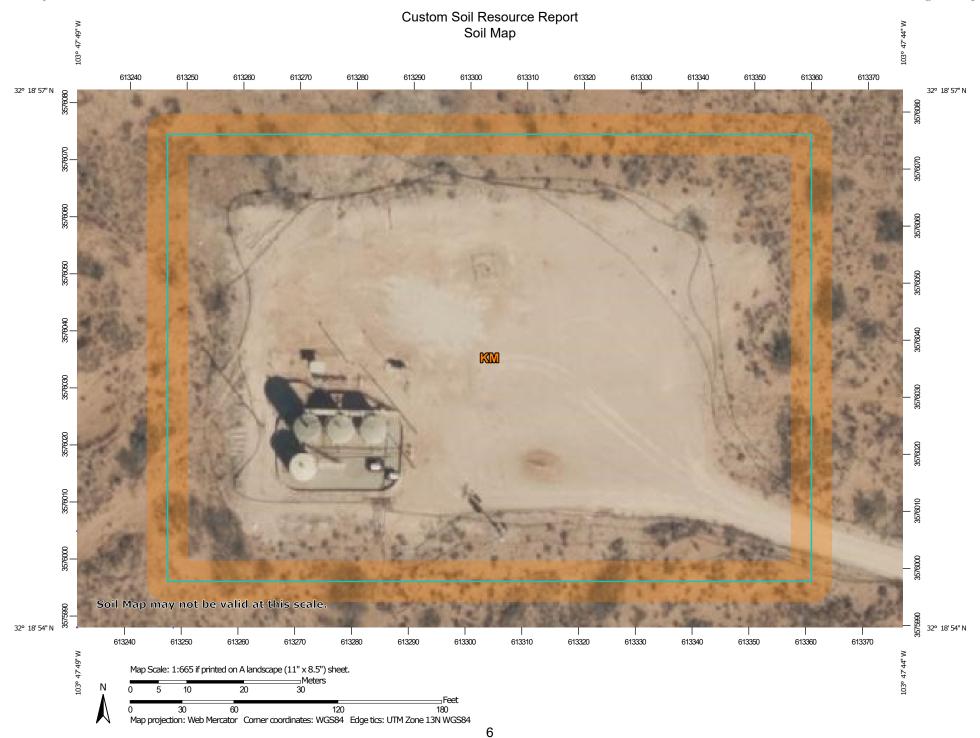
alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
Soil Map	
Soil Map	
Legend	
Map Unit Legend	
Map Unit Descriptions	
Eddy Area, New Mexico	
KM—Kermit-Berino fine sands, 0 to 3 percent slopes	
References	

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.



MAP LEGEND

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Water Features

Transportation

00

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

-

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

pecia

Blowout

 \boxtimes

Borrow Pit

Ж

Clay Spot

 \Diamond

Closed Depression

Š

Gravel Pit

.

Gravelly Spot

0

Landfill

٨.

Lava Flow

Marsh or swamp

2

Mine or Quarry

W.

Miscellaneous Water

0

Perennial Water

.

Rock Outcrop

~

Saline Spot Sandy Spot

000

Severely Eroded Spot

0

Sinkhole

24

Slide or Slip

Ø

Sodic Spot

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

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

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

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

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 16, Jun 8, 2020

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI				
KM Kermit-Berino fine sands, 0 to 3 percent slopes		2.2	100.0%				
Totals for Area of Interest		2.2	100.0%				

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

Eddy Area, New Mexico

KM—Kermit-Berino fine sands, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w4q Elevation: 3,100 to 4,200 feet

Mean annual precipitation: 10 to 14 inches Mean annual air temperature: 60 to 64 degrees F

Frost-free period: 190 to 230 days

Farmland classification: Not prime farmland

Map Unit Composition

Kermit and similar soils: 50 percent Berino and similar soils: 35 percent Minor components: 15 percent

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

Description of Kermit

Setting

Landform: Alluvial fans, plains

Landform position (three-dimensional): Rise, talf

Down-slope shape: Linear, convex

Across-slope shape: Linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 7 inches: fine sand H2 - 7 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Excessively drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

Ecological site: R042XC005NM - Deep Sand

Hydric soil rating: No

Description of Berino

Setting

Landform: Fan piedmonts, plains

Landform position (three-dimensional): Riser

Down-slope shape: Convex Across-slope shape: Linear

Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 17 inches: fine sand

H2 - 17 to 50 inches: fine sandy loam H3 - 50 to 58 inches: loamy sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water capacity: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: B

Ecological site: R042XC003NM - Loamy Sand

Hydric soil rating: No

Minor Components

Active dune land

Percent of map unit: 15 percent

tradica a all matterns. No

Hydric soil rating: No

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Ecological site R042XC005NM Deep Sand

Accessed: 07/28/2021

General information

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



Figure 1. Mapped extent

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

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on terraces, Piedmonts, dunes fields, or upland plains. Parent material consists of eolian deposits and alluvium derived from sandstone. Slopes range from 0 to 15 percent, usually less than 5 percent. Low, stabilized hummocks or dunes frequently occur. Elevations range from 2,842 to 4,500 feet.

Table 2. Representative physiographic features

Landforms	(1) Dune(2) Parna dune(3) Terrace
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–4,500 ft

Slope	0–15%
Aspect	Aspect is not a significant factor

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity – short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November.

Both temperature and moisture favor warm season perennial plant growth. During years of abundant winter and early spring moisture, cool season growth and annual forbs, make up an important component of this site. Strong winds blow from the west from January through June, which accelerates soil drying during a critical period for cool season plant growth.

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

Table 3. Representative climatic features

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

Influencing water features

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

Soil features

Soils are deep or very deep. Surface textures are sand loam, fine sand or loamy fine sand, Underlying material textures are loamy fine sand, fine sand, sand or fine sandy loam. Because of the coarse textures and rapid drying of the surface, the soil, if unprotected by plant cover and organic residue, becomes windblown and low hummocks or dunes are formed around shrubs.

Characteristic soils are:

Anthony

Aguena

Kermit

Likes

Pintura

Bluepoint

Table 4. Representative soil features

Surface texture	(1) Sand (2) Fine sand (3) Loamy fine sand
Family particle size	(1) Sandy
Drainage class	Well drained to excessively drained

Permeability class	Moderate to very rapid	
Soil depth	60–72 in	
Surface fragment cover <=3"	0–5%	
Surface fragment cover >3"	0%	
Available water capacity (0-40in)	3–5 in	
Calcium carbonate equivalent (0-40in)	5–15%	
Electrical conductivity (0-40in)	0–4 mmhos/cm	
Sodium adsorption ratio (0-40in)	0–2	
Soil reaction (1:1 water) (0-40in)	6.6–7.8	
Subsurface fragment volume <=3" (Depth not specified)	5–10%	
Subsurface fragment volume >3" (Depth not specified)	0%	

Ecological dynamics

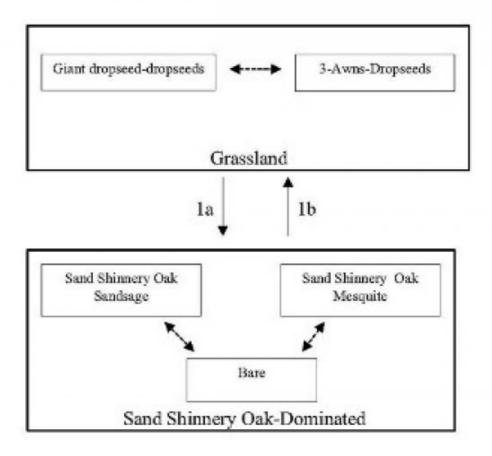
Overview

The Deep Sand site occurs adjacent to and/or intergraded with the Sandhills and Sandy sites (SD-3). The Deep Sand site can be distinguished by slopes less than eight percent (approximately five percent) and textural changes at depths greater than 40 inches. The Deep Sand site has well drained soils with a surface texture of sand or loamy fine sand. The Sandhills site has slopes greater than eight percent and textural depths greater than 60 inches. Conversely, the Sandy site has slopes less than five percent and depths to textural change commonly around 20 inches. The historic plant community of the Deep Sand site is dominated primarily by giant dropseed (*Sporobolus giganteus*) and other dropseeds (*S. flexuosus*, *S. contractus*, *S. cryptandrus*), with scattered shinnery oak (*Quercus havardii*) and soapweed yucca (*Yucca glauca*). Other herbaceous species include threeawns (Aristida spp.), bluestems (*Schizachyrium scoparium* and *Andropogon hallii*), and annual and perennial forbs distributed relative to precipitation occurrences. Bare ground and litter compose a significant proportion of ground cover while grasses are the remainder. Shinnery oak will increase with an associated decrease in dropseed and bluestem abundance possibly due to climatic change, fire suppression, interspecific competition, and excessive grazing. Continued grass cover loss may result in a transition to a shinnery oak dominated state with increases in sand sage (*Artemisia fillifolia*) and honey mesquite (*Prosopis glandulosa*). However, brush management may restore the grassland component and reverse the shinnery oak state back toward the historic plant community.

State and transition model

Plant Communities and Transitional Pathways (diagram)

MLRA-42, SD-3, Deep Sand



 a Climate, fire suppression, competition, over grazing

1.b Brush control, Prescribed grazing

Figure 4.

State 1

Historic Climax Plant Community

Community 1.1 Historic Climax Plant Community

State Containing Historic Plant Community

Grassland: The historic plant community is dominated by giant dropseed, other dropseeds, threeawns, and bluestems. Dominant woody plants include shinnery oak and soapweed yucca. Forb abundance and distribution varies and is dependent on annual rainfall. The Deep Sand site typically exists in sandy plains and dunes (Sosebee 1983). Grass dominance stabilizes the potentially erosive sandy soils. Historical fire suppression, however, may have contributed to increased woody plant abundance, which has reduced grass species. Further, drought conditions compounded with excessive grazing likely has driven most grass species out of competition with shrubs which has resulted in a shinnery oak dominated state with sand sage and mesquite (Young et al. 1948).

Diagnosis: Grassland dominated by dropseeds, threeawns, and bluestems. Small shrubs, such as shinnery oak and soapweed yucca, and subshrubs are dispersed throughout the grassland.

Other grasses that could appear on this site would include: flatsedge, almejita signalgrass, big bluestem, Indiangrass, fall witchgrass, hairy grama and red lovegrass

Other shrubs include: fourwing saltbush, mesquite, ephedra and broom snakeweed.

Other forbs include: wooly and scarlet gaura, wooly dalea, phlox heliotrope, scorpionweed, deerstongue, fleabane, nama, hoffmanseggia, lemon beebalm and stickleaf.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	396	858	1320
Shrub/Vine	108	234	360
Forb	96	208	320
Total	600	1300	2000

Table 6. Ground cover

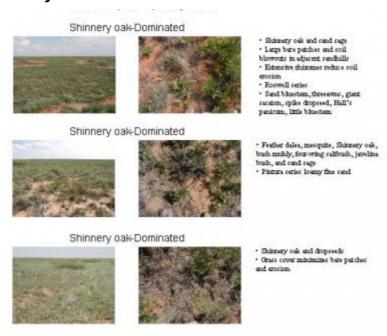
Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-20%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	35-40%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	35-40%

Figure 6. Plant community growth curve (percent production by month). NM2805, HCPC. SD-3 Deep Sand - Warm season plant community.

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

State 2 Shinnery Oak Dominated

Community 2.1 Shinnery Oak Dominated



Shinnery Oak Dominated: This state is dominated by shinnery oak with subdominants of sand sage or mesquite. Bare ground is a significant component in this state as well. shinnery oak is characterized by dense stands in sandy soils; however, as clay percentage increases, shinnery oak decreases. Shinnery oak abundance and distribution increase with disturbances, such as excessive grazing and fire, due to an aggressive rhizome system. As shinnery oak abundance increases, an associated increase of mesquite, sand sage, and soapweed yucca also occurs. Shinnery oak's extensive root system allows the oak to competitively exclude grasses and forbs. Sand sage, however, stabilizes light sandy soils from wind erosion and can co-exist with herbaceous species by protecting them in heavily grazed conditions (Davis and Bonham 1979). Shinnery oak has been found primarily in very deep, excessively drained, and rapidly permeable soils. Shinnery oak is associated with landforms which are gently undulating to rolling uplands, very gently sloping to moderately steep slopes, and upland plains, alluvial fans and valley sideslopes. Shinnery oak and sand sage can be controlled with herbicide if applied in the spring with a subsequent rest from grazing (Herbel et al. 1979, Pettit 1986). In addition, repetitive seasons of goat browsing can also reduce shinnery oak abundance. Patches should be maintained during brush control, however, to prevent erosion and to provide wildlife cover and forage. Further, as shinnery oak and other shrubs increase, bare patches and erosion will increase due to a lack of herbaceous ground cover.

Diagnosis: Shinnery oak dominated with subdominant sand sage, honey mesquite, and soapweed yucca with increasing frequency and size of bare patches.

Transition to Shinnery oak dominated state (1a): The historic plant community begins to shift toward the shinnery oak dominated state as drivers such as climate change, fire suppression, interspecific competition, and excessive grazing contribute to alterations in soil properties and herbaceous cover. Cover loss and surface soil erosion are initial indicators of transition followed by an increase of shrub species abundance and bare patch expansion.

Key indicators of approach to transition:

- · Loss of grass and forb cover
- Surface soil erosion
- Bare patch expansion
- Increased shrub species abundance and composition

Transition to Historic Plant Community (1b): The shinnery oak dominated state may transition back toward the historic plant community as new drivers are introduced such as prescribed grazing, brush control, and discontinued drought conditions.

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass	/Grasslike				
1	Warm Season			450–585	
	spike dropseed	SPCO4	Sporobolus contractus	450–585	_
	sand dropseed	SPCR	Sporobolus cryptandrus	450–585	_
	mesa dropseed	SPFL2	Sporobolus flexuosus	450–585	_
	giant dropseed	SPGI	Sporobolus giganteus	450–585	_
2	Warm Season		•	65–104	
	sand bluestem	ANHA	Andropogon hallii	65–104	_
	little bluestem	SCSC	Schizachyrium scoparium	65–104	_
3	Warm Season	•	•	39–91	
	threeawn	ARIST	Aristida	39–91	_
4	Warm Season		•	13–39	
	thin paspalum	PASE5	Paspalum setaceum	13–39	_
5	Warm Season			13–39	
	black grama	BOER4	Bouteloua eriopoda	13–39	_
6	Warm Season	13–39			
	mat sandbur	CELO3	Cenchrus longispinus	13–39	_
7	Warm Season	13–39			
	Havard's panicgrass	PAHA2	Panicum havardii	13–39	_
8	Warm Season		•	13–65	
	plains bristlegrass	SEVU2	Setaria vulpiseta	13–65	_
9	Other Annual Grasses			13–65	
	Grass, annual	2GA	Grass, annual	13–65	_
Shrub	/Vine				
10	Shrub	65–130			
	Havard oak	QUHA3	Quercus havardii	65–130	_
11	Shrub	•		13–39	

	sand sagebrush	ARFI2	Artemisia filifolia	13–39	_
12	12 Shrub		65–130		
	yucca	YUCCA	Yucca	65–130	_
13	Shrub			13–39	
	rabbitbrush	CHRYS9	Chrysothamnus	13–39	-
14	Other Shrubs	-		13–39	
	Shrub (>.5m)	2SHRUB	Shrub (>.5m)	13–39	_
Forb		-			
15	Forb			39–91	
	croton	CROTO	Croton	39–91	_
	Indian blanket	GAPU	Gaillardia pulchella	39–91	_
16	Forb		39–91		
	aster	ASTER	Aster	39–91	_
	whitest evening primrose	OEAL	Oenothera albicaulis	39–91	_
	beardtongue	PENST	Penstemon	39–91	I
17	17 Forb			39–91	
	touristplant	DIWI2	Dimorphocarpa wislizeni	39–91	I
	buckwheat	ERIOG	Eriogonum	39–91	_
	sunflower	HELIA3	Helianthus	39–91	_
	spiny false fiddleleaf	HYSP	Hydrolea spinosa	39–91	_
	threadleaf ragwort	SEFLF	Senecio flaccidus var. flaccidus	39–91	_
18	Other Forbs		13–65		
	Forb (herbaceous, not grass nor grass-like)	2FORB	Forb (herbaceous, not grass nor grass-like)	13–65	_

Animal community

This site provides habitat which supports a resident animal population characterized by pronghorn, antelope, black-tailed jackrabbit, spotted ground squirrel, Ord's kangaroo rat, northern grasshopper mouse, southern plains woodrat, badger, meadowlark, roadrunner, white-necked raven, cactus wren, lesser prairie chicken, morning dove, scaled quail, Harris hawk, side blotched lizard, marbled whiptail, Texas horned lizard, western diamondback rattlesnake and ornate box turtle. In the area called Mescalero Sands, there are white-tailed and mule deer.

Hydrological functions

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

Hydrologic Interpretations

Soil Series Hydrologic Group

Anthony B

Bluepoint A

Kermit A

Aguena A

Likes A

Pintura A

Recreational uses

This site offers limited recreation potential for hiking, horseback riding, nature observation and photography; game bird, predator, antelope, and deer hunting.

Wood products

This site has no potential for wood products.

Other products

This site is suitable for grazing by all kinds and classes of livestock during all seasons of the year. Shinnery oak is toxic in the late bud or early leaf stage. Shinnery oak will increase, as will sand sagebrush following drought. Changes in the fire return interval have also favored an increase in shrub cover. The dropseeds and bluestem will decrease. This site responds very well to brush manangement and deferment. This site is well suited to a grazing system that rotates the season of use. Nesting habitat for lesser prairie chicken can be improved by providing residual cover that is at least 14 inches high.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM 100 - 76 2.0 - 3.8 75 - 51 3.0 - 6.0 50 - 26 5.0 - 10.0 25 - 0 10.1 +

Inventory data references

Other References:

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

Other references

Literature Cited

Davis, Joseph H., III and Bonham, Charles D. 1979. Interference of sand sagebrush canopy with needleandthread. Journal of Range Management 32(5):384-386.

Herbel, C. H, Steger, R, Gould, W. L. 1974. Managing semidesert ranges of the Southwest. Circular 456. Las Cruces, NM: New Mexico State University, Cooperative Extension Service. 48 p.

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Sosebee, Ronald E. 1983. Physiological, phenological, and environmental considerations in brush and weed control. In: McDaniel, Kirk C., ed. Proceedings--brush management symposium; 1983 February 16; Albuquerque, NM. Denver, CO: Society for Range Management: 27-43.

Young, Vernon A., Anderwald, Frank R., McCully, Wayne G. 1948. Brush problems on Texas ranges. Miscellaneous Publication 21. College Station, TX: Texas Agricultural Experiment Station. 19 p.

Contributors

Don Sylvester Quinn Hodgson

Rangeland health reference sheet

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

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

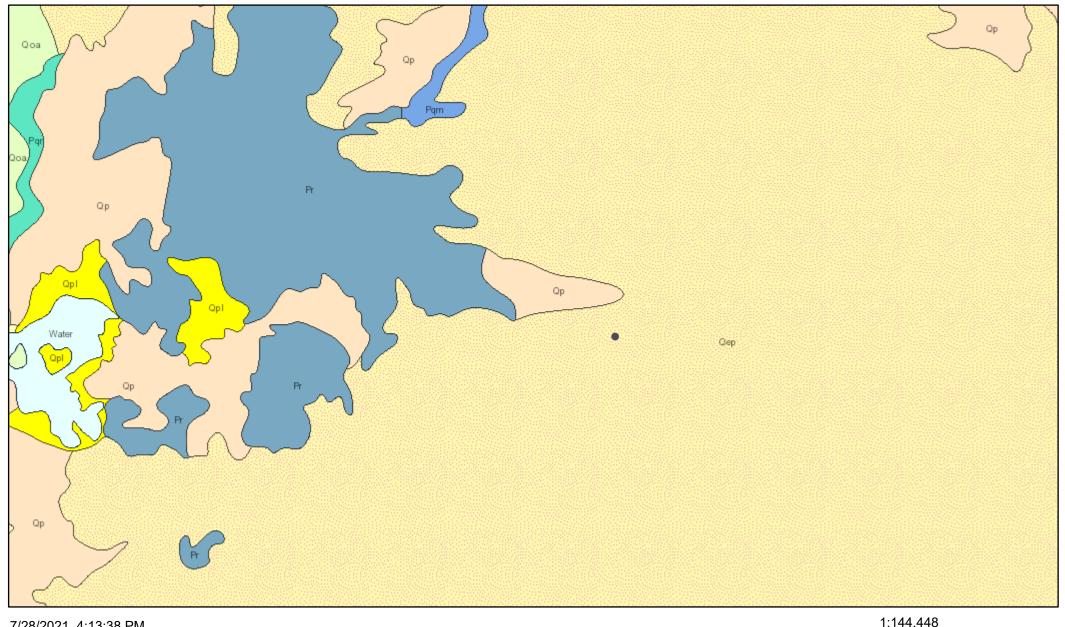
Indicators

Number and extent of rills: Presence of water flow patterns:
Presence of water flow patterns:
Number and height of erosional pedestals or terracettes:
Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):
Number of gullies and erosion associated with gullies:
Extent of wind scoured, blowouts and/or depositional areas:
Amount of litter movement (describe size and distance expected to travel):
Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):
Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):

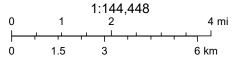
10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:

Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):
Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):
Dominant:
Sub-dominant:
Other:
Additional:
Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):
Average percent litter cover (%) and depth (in):
Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):
Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:
Perennial plant reproductive capability:

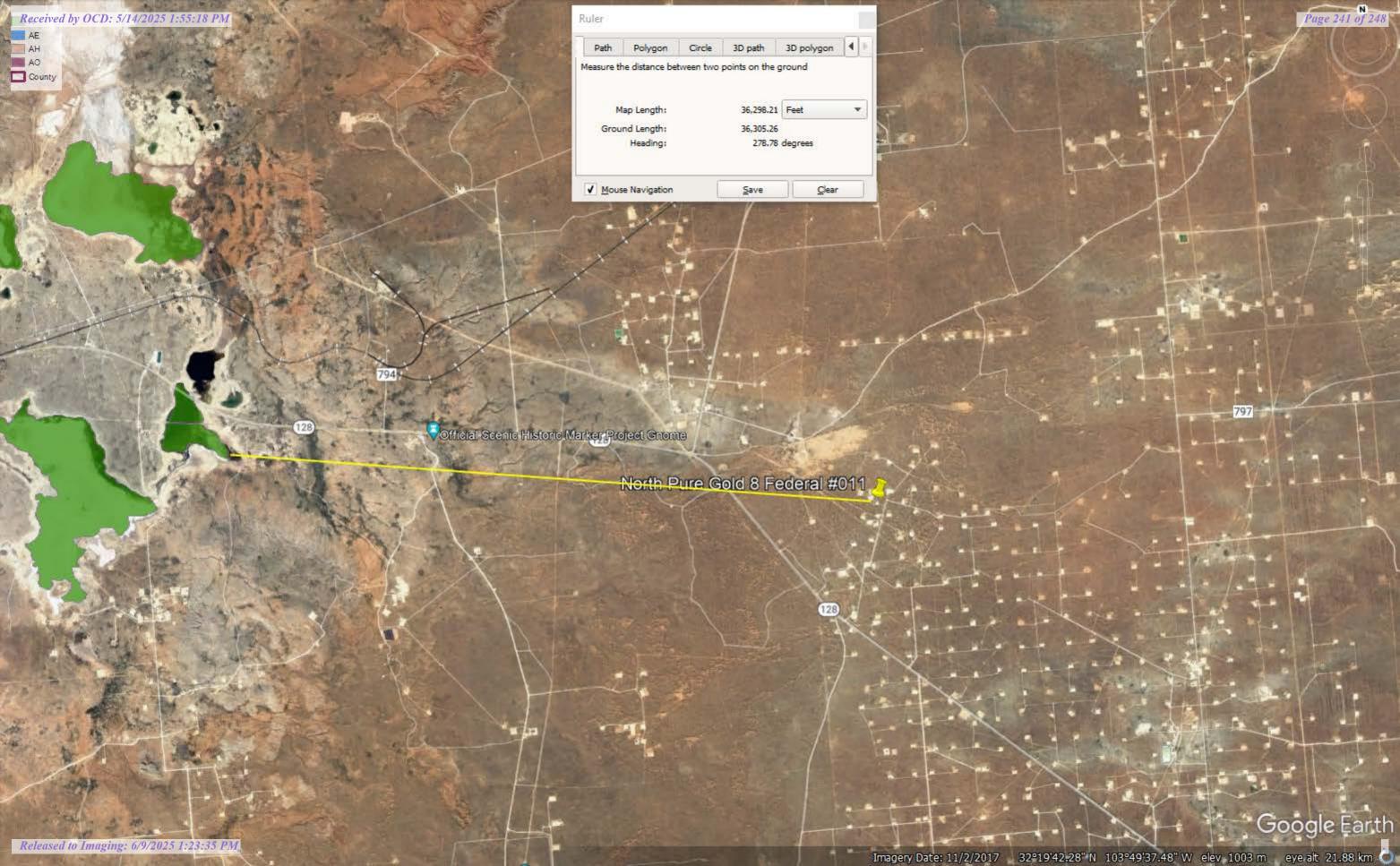
ArcGIS Web Map







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



Sante Fe Main Office Phone: (505) 476-3441 General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 460384

QUESTIONS

Operator:	OGRID:
HARVARD PETROLEUM COMPANY, LLC	10155
P.O. Box 936	Action Number:
Roswell, NM 88202	460384
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2106151044
Incident Name	NAPP2106151044 NORTH PURE GOLD 8 FED #11 SWD @ 30-015-32619
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Well	[30-015-32619] NORTH PURE GOLD 8 FEDERAL #011

Location of Release Source		
Please answer all the questions in this group.		
Site Name	NORTH PURE GOLD 8 FED #11 SWD	
Date Release Discovered	02/21/2021	
Surface Owner	Federal	

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

Nature and Volume of Release		
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.		
Crude Oil Released (bbls) Details	Not answered.	
Produced Water Released (bbls) Details	Cause: Other Other (Specify) Produced Water Released: 6 BBL Recovered: 5 BBL Lost: 1 BBL.	
Is the concentration of chloride in the produced water >10,000 mg/l	Yes	
Condensate Released (bbls) Details	Not answered.	
Natural Gas Vented (Mcf) Details	Not answered.	
Natural Gas Flared (Mcf) Details	Not answered.	
Other Released Details	Not answered.	
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.	

Phone: (505) 629-6116 Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS, Page 2

Action 460384

QUESTIONS (continued)		
Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936	OGRID: 10155 Action Number:	
Roswell, NM 88202	460384	
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	
QUESTIONS		
Nature and Volume of Release (continued)		
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.	
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No	
Reasons why this would be considered a submission for a notification of a major release	Unavailable.	
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	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 s	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	False	
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	Spill was not in containment.	
	iation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative ted or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of evaluation in the follow-up C-141 submission.	
to report and/or file certain release notifications and perform corrective actions for releathe OCD does not relieve the operator of liability should their operations have failed to a	knowledge and understand that pursuant to OCD rules and regulations all operators are required asses which may endanger public health or the environment. The acceptance of a C-141 report by adequately investigate and remediate contamination that pose a threat to groundwater, surface to does not relieve the operator of responsibility for compliance with any other federal, state, or	
I hereby agree and sign off to the above statement	Name: Roni Kidd Title: Business Manager Email: rkidd@buckhornproduction.com Date: 05/11/2025	

Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS, Page 3

Action 460384

QUESTIONS (continued)

Operator:	OGRID:
HARVARD PETROLEUM COMPANY, LLC	10155
P.O. Box 936	Action Number:
Roswell, NM 88202	460384
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization		
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)	
What method was used to determine the depth to ground water	NM OSE iWaters Database Search	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:		
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)	
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)	
Any other fresh water well or spring	Between ½ and 1 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
A wetland	Between 1 and 5 (mi.)	
A subsurface mine	Greater than 5 (mi.)	
An (non-karst) unstable area	Greater than 5 (mi.)	
Categorize the risk of this well / site being in a karst geology	Low	
A 100-year floodplain	Greater than 5 (mi.)	
Did the release impact areas not on an exploration, development, production, or storage site	No	

Remediation Plan		
Please answer all the questions that apply or a	are indicated. This information must be provided to the	e 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 t	the lateral and vertical extents of soil contamination as	ssociated 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	f 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 millig	grams per kilograms.)
Chloride (EP)	A 300.0 or SM4500 Cl B)	16600
TPH (GRO+DRO+MRO) (EPA	SW-846 Method 8015M)	3490
GRO+DRO (EP	A SW-846 Method 8015M)	890
BTEX (EP.	A SW-846 Method 8021B or 8260B)	0
Benzene (EP	PA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless which includes the anticipated timelines for be		fforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
On what estimated date will the remed	diation commence	05/12/2025
On what date will (or did) the final sampling or liner inspection occur		07/14/2025
On what date will (or was) the remediation complete(d)		07/14/2025
What is the estimated surface area (in square feet) that will be reclaimed		36918
What is the estimated volume (in cubic yards) that will be reclaimed		6300
What is the estimated surface area (in square feet) that will be remediated		198
What is the estimated volume (in cubic yards) that will be remediated		22
These estimated dates and measurements are	recognized to be the best guess or calculation at the til	me of submission and may (be) change(d) over time as more remediation efforts are completed.
		ordance with the physical realities encountered during remediation. If the responsible party has any need to

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr.

State of New Mexico

QUESTIONS, Page 4

Action 460384

QUESTIONS (continued)

Santa Fe, NM 87505

Operator		OGRID:
	HARVARD PETROLEUM COMPANY, LLC	10155
	P.O. Box 936	Action Number:
	Roswell, NM 88202	460384
		Action Type:
		[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

appropriate district office no later than 90 days after the release discovery date.
/ reduce contaminants:
Yes
OWL LANDFILL JAL [fJEG1635837366]
Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Name: Roni Kidd Title: Business Manager I hereby agree and sign off to the above statement Email: rkidd@buckhornproduction.com

Date: 05/11/2025

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.

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

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

QUESTIONS, Page 5

Action 460384

QUESTIONS (continued)

Operator:	OGRID:
HARVARD PETROLEUM COMPANY, LLC	10155
P.O. Box 936	Action Number:
Roswell, NM 88202	460384
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.

State of New Mexico

QUESTIONS, Page 6

Action 460384

QUESTIONS (continued)

Santa Fe, NM 87505

Operator: HARVARD PETROLEUM COMPANY, LLC P.O. Box 936 Roswell, NM 88202	OGRID:			
QUESTIONS				
Sampling Event Information				
Last sampling notification (C-141N) recorded	{Unavailable.}			
Remediation Closure Request				
Only answer the questions in this group if seeking remediation closure for this release because all re	mediation steps have been completed.			
Requesting a remediation closure approval with this submission	No			

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

CONDITIONS

Action 460384

CONDITIONS

Operator:	OGRID:
HARVARD PETROLEUM COMPANY, LLC	10155
P.O. Box 936	Action Number:
Roswell, NM 88202	460384
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

(Created By	Condition	Condition Date	
	rhamlet	The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please, make sure sidewall samples are taken up against the edge of the tank battery to ensure fluids didn't go under the tank battery. The release area will need confirmation samples representing no more than 200 ft2. All off-pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.	6/9/2025	