Page 6

Oil Conservation Division

	Page 1 of 433
Incident ID	nAPP22116441032
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11 NMAC
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rule and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name:Dale Woodall Title: Environment Professional
Signature: <i>Dale Woodall</i> Date:10/19/2022
email:dale.wodall@dvn.com Telephone:575-7481838
OCD Only
Received by: <u>Robert Hamlet</u> Date: <u>11/22/2022</u>
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate ar remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsib party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: <u>Robert Hamlet</u> Date: <u>11/22/2022</u>
Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

Page 6

Oil Conservation Division

	<b>Page 2 of 433</b>
Incident ID	nAPP22116441032
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## Closure

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DCD Only
Received by: Date:
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Closure Approved by: Date:
Printed Name: Title:



September 26, 2022,

Vertex Project #: 22E-01720

Prenared For	Devon Energy Production Company		
	Incident ID: nAPP2213024415, nAPP2116441032		
	County: Eddy		
	API: N/A		
	Unit E, Section 29, Township 19 South, Range 29 East		
Spill Closure Report:	Onyx 29 CTB 1		

 Prepared For:
 Devon Energy Production Company

 6488 Seven Rivers Highway
 Artesia, New Mexico 88210

New Mexico Oil Conservation Division - District 2 - Artesia 811 S. 1<sup>st</sup> Street Artesia, New Mexico 88210

Devon Energy Production Company (Devon) retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment and Closure for multiple produced water releases at Onyx 29 CTB 1 (hereafter referred to as "Onyx"). Devon submitted an initial C-141 Release Notification (Attachment 1) for both releases to the New Mexico Oil Conservation Division (NMOCD) District 2 on June 30, 2021, and June 2, 2022. Incident ID numbers nAPP2213024415 and nAPP2116441032 were assigned to the incidents.

This letter provides a description of each release assessment and remediation activities that demonstrates that closure criteria established in Table I of 19.15.29.12 *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) are being met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for the closure of these releases. This is with the understanding that restoration of the release sites will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed per 19.15.29.13 of NMAC.

### **Incident Descriptions**

#### nAPP2113024415

The release for nAPP2113024415 occurred on the south side of the location when a recirculating line on the oil tanks developed a leak. The fluid traveled southeast and southwest of the oil tanks and stopped on the pad. The horizontal extent of the release was approximately 300 feet long. 28.3 barrels of oil and produced water were released. After the release, a hydrovac was brought on-site to recover the fluids. Approximately eight barrels of the fluids were recovered. No oil or produced water was released into waterways.

#### nAPP2116441032

The release for nAPP2116441032 occurred on the north side of Onyx when a water line near the heater treaters developed a leak. The fluid traveled west approximately 125 feet and stopped at the middle of the pad. The leak resulted in the release of nine and a half barrels of produced water. After the release, a hydrovac was brought on-site to recover vertex.ca

the fluids. Approximately one barrel of the fluids was recovered. No produced water was released into waterways.

### **Site Characterization**

The releases at Devon's Onyx site occurred on state land at 32.634740° N, 104.102030° W, approximately 16.4 miles northeast of Carlsbad, New Mexico The legal description for the site is Unit E, Section 29, Township 19 South, Range 29 East in Eddy County, New Mexico. This location is within the Permian Basin in southeast New Mexico and has historically been used for oil and gas exploration and production, and rangeland.

Onyx is typical of oil and gas exploration and production sites on the western portion of the Permian Basin and is currently used for oil and gas production and storage. The following sections specifically describe the release areas on the east side of the constructed pad where the heater treaters and separators are located (Attachment 2).

The nearest active well to Onyx is a New Mexico Office of the State Engineer (NMOSE) monitoring well located approximately 1.62 miles southwest of the site (United States Department of the Interior, United States Geological Survey, 2021). Data from 2013 shows the NMOSE well had a depth to groundwater of 75 feet below the ground surface (bgs). Information pertaining to the depth to groundwater determination is included in Attachment 3.

The surrounding landscape is associated with ridges, plains, and hills with elevations ranging between 1,250 and 5,000 feet. The climate is semiarid with average annual precipitation ranging between 10 and 25 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be tobosa, black grama, and blue grama. Grasses with shrubs and half-shrubs dominate the historic plant community (United States Department of Agriculture, 2021). Limited to no vegetation is allowed to grow on the compacted production pad, right of way, and access road.

*The Geological Map of New Mexico* indicates the surface geology at Onyx is comprised primarily of Qp – Piedmont alluvial deposits from the Holocene to lower Pleistocene ages (The New Mexico Bureau of Geology and Mineral Resources, 2022). The United States Department of Agriculture Web Soil Survey characterizes the soil at the site as Reeves and Gypsum Land Complex. The soil is well-drained with a high runoff. The karst geology potential for Onyx is high (United States Department of the Interior, Bureau of Land Management, 2022).

There is no surface water located at Onyx. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is the Pecos River located approximately 12.9 miles west of the site. At Onyx, there are no continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

### **Closure Criteria Determination**

Using site characterization information, a closure criteria determination worksheet (Attachment 3) was completed to determine if the release was subject to any of the special case scenarios outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Based on the data included in the closure criteria determination worksheet, the releases at Onyx are subject to the

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requirements of Paragraph (4) of Subsection C of 19.15.29.12 NMAC. The release areas are within a high potential for karst geology; therefore, the closure criteria for the incident will assume NMOCD's strictest criteria and are determined to be associated with the following constituent concentration limits.

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

### **Remedial Actions**

On May 23, 2022, Devon contracted Vertex to complete release delineation and remediation at Onyx through field screening procedures, oversight of the remediation fieldwork, and final confirmatory sampling. The initial spill inspection and site characterization activities at Onyx were completed by Vertex between May 23 and May 25, 2022. The Daily Field Reports and Daily Soil Sampling Reports associated with the visits are included in Attachment 4. The extent of the south release near the separators and oil tanks (nAPP2116441032) was determined to be approximately 9,705 square feet. The extent of the north release near the heater treaters (nAPP2213024415) was determined to be approximately 1,775 square feet. Initial characterization sample locations for both releases are presented in Figure 1 and Figure 4 (Attachment 2) and laboratory results are presented in Table 1 and Table 4 (Attachment 6).

During excavation and following the completion of excavation activities from August 4 to August 31, 2022, Vertex provided three 48-hour notifications of continuous confirmation sampling to NMOCD (Attachment 5), as required by Subparagraph (a) of Paragraph (1) of Subsection D 19.15.29.12 NMAC. The releases were remediated horizontally and vertically with a Vertex representative on-site to conduct field screening procedures. The final square footage for the south excavation was 9,222 square feet. The final square footage for the north release near the heater treaters was 4,224 square feet. On August 31, 2022, excavation was completed with approximately 3,520 total cubic yards excavated and hauled to R360.

On August 9 through August 26, 2022, Vertex collected a total of 65 five-point composite confirmatory samples from the base and the sidewalls of the south excavation, at depths ranging between 1 and 8 feet bgs. On August 29 through August 31, 2022, Vertex collected a total of 33 five-point composite confirmatory samples from the base and sidewalls of the north excavation, at depths ranging between 1 and 4 feet bgs. Each composite sample was representative of no more than 200 square feet per the alternate sampling method outlined in Subparagraph (c) of Paragraph (1) of Subsection D 19.15.29.12 NMAC, which does not require prior NMOCD approval. The composite samples were placed into laboratory-provided containers, preserved on ice, and submitted to a National Environmental Laboratory Accreditation Program-approved laboratory for chemical analysis. Confirmation sample locations for both releases are presented in Figure 2 and Figure 5 (Attachment 2) and laboratory results are presented in Table 3 and Table 6 (Attachment 6).

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Laboratory analyses included Method 300.0 for chlorides, Method 8021B for volatile organics, including BTEX, and EPA Method 8015 for TPH, including MRO, DRO, and GRO. Confirmatory sample analytical data are summarized in Attachment 6. Laboratory data reports and chain of custody forms are included in Attachment 7.

A GeoExplorer 7000 Series Trimble global positioning system unit was used to map the approximate center of each of the five-point composite samples.

On September 7, 2022, backfill was completed for both releases. Approximately 3,520 cubic yards of clean, uncontaminated soil were obtained from Devon and the landowner for this purpose.

### **Closure Request**

Vertex recommends no additional remediation action to address the releases at Onyx. Laboratory analyses of confirmatory samples collected at Onyx show final values below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs as presented in Table 1. There are no anticipated risks to human, ecological or hydrological receptors at the release site.

The excavation was backfilled with non-waste-containing, uncontaminated, earthen material, sourced locally, and placed to meet the site's existing grade to prevent water ponding and erosion.

Vertex requests that these incidents (nAPP2213024415 and nAPP2116441032) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Devon certifies that all information in this report and the attachments are correct and that they have complied with all applicable closure requirements and conditions specified in division rules and directives to meet NMOCD requirements to obtain closure on the releases at Onyx.

Should you have any questions or concerns, please do not hesitate to contact Kent Stallings at 346.814.1413 or KStallings@vertex.ca.

Chance Dixon

9/26/2022

Chance Dixon, B.Sc. SR. ENVIRONMENTAL TECHNICIAN, REPORTING

Date

Kent Stallings

9/26/2022

Kent Stallings, P.G. PROJECT MANAGER, REPORT REVIEW

Date

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### Attachments

- Attachment 2. Figures
- Attachment 3. Closure Criteria for Soils Impacted by a Release Research Determination Documentation
- Attachment 4. Daily Field Reports with Photographs and Daily Soil Sampling Reports
- Attachment 5. Required 48-Hour Notification of Confirmatory Sampling to Regulatory Agencies
- Attachment 6. Summarized Lab Data Tables
- Attachment 7. Laboratory Data Reports and Chain of Custody Forms

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### References

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#### Limitations

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

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

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## ATTACHMENT 1

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Page 11 of 433

Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

)

Incident ID	
District RP	
Facility ID	
Application ID	

## **Release Notification**

### **Responsible Party**

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### **Location of Release Source**

Latitude	
Laulude	

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: \_

## Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)	
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)	
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	Yes No	
Condensate	Volume Released (bbls)	Volume Recovered (bbls)	
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)	
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)	
Cause of Release		I	

### Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
Yes No	
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

### **Initial Response**

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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.

Printed Name:	Title:
Signature: Kendra Ruiz	Date:
email:	Telephone:
OCD Only Received by:	Date:

Page 1	3 of	433
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Spil	Volume(Bl	bls) Calculator		
Inputs in blue, Outputs in red				
Con	Contaminated Soil measurement			
Area (squa	re feet)	Depth(inches)		
1971.3	<u>68</u>	0.500		
Cubic Feet of S	oil Impacted	82.232		
Barrels of Soi	I Impacted	14.66		
Soil T		Clay/Sand		
Barrels of Oil 100% Sat		2.20		
Saturation	Fluid prese	nt with shovel/backhoe		
Estimated Ba Relea	rrels of Oil	2.20		
	Free Standing	g Fluid Only		
Area (squa	are feet)	Depth(inches)		
1973.568		0.250		
Standin	gfluid	7.329		
Total fluid	is spilled	9.528		

District I 1625 N. French Dr., Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 **Page 14 of 433** 

Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

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Incident ID	
District RP	
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Application ID	

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### **Responsible Party**

Responsible Party	OGRID	
Contact Name	Contact Telephone	
Contact email	Incident # (assigned by OCD)	
Contact mailing address		

### **Location of Release Source**

T atita da	
Latitude	

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type	
Date Release Discovered	API# (if applicable)	

Unit Letter	Section	Township	Range	County

Surface Owner: State Federal Tribal Private (Name: \_

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)	
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)	
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	Yes No	
Condensate	Volume Released (bbls)	Volume Recovered (bbls)	
Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)	
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)	
Cause of Release			

Page 2

Incident ID

District RP

	Facility ID
	Application ID
Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the responsible party consider this a major release?
🗌 Yes 🗌 No	
If YES, was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

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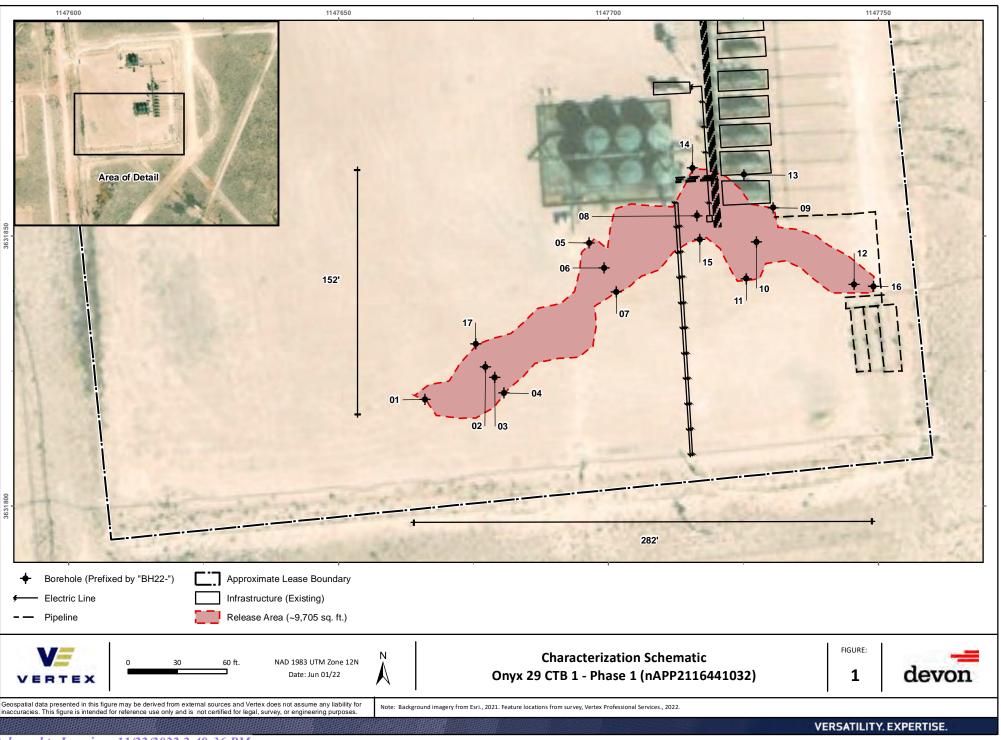
Printed Name:	Title:
Signature: <u>Kendra DeHoyos</u>	Date:
email:	Telephone:
OCD Only	
Received by: Ramona Marcus	Date: <u>7/6/2021</u>

### NAPP2116441032

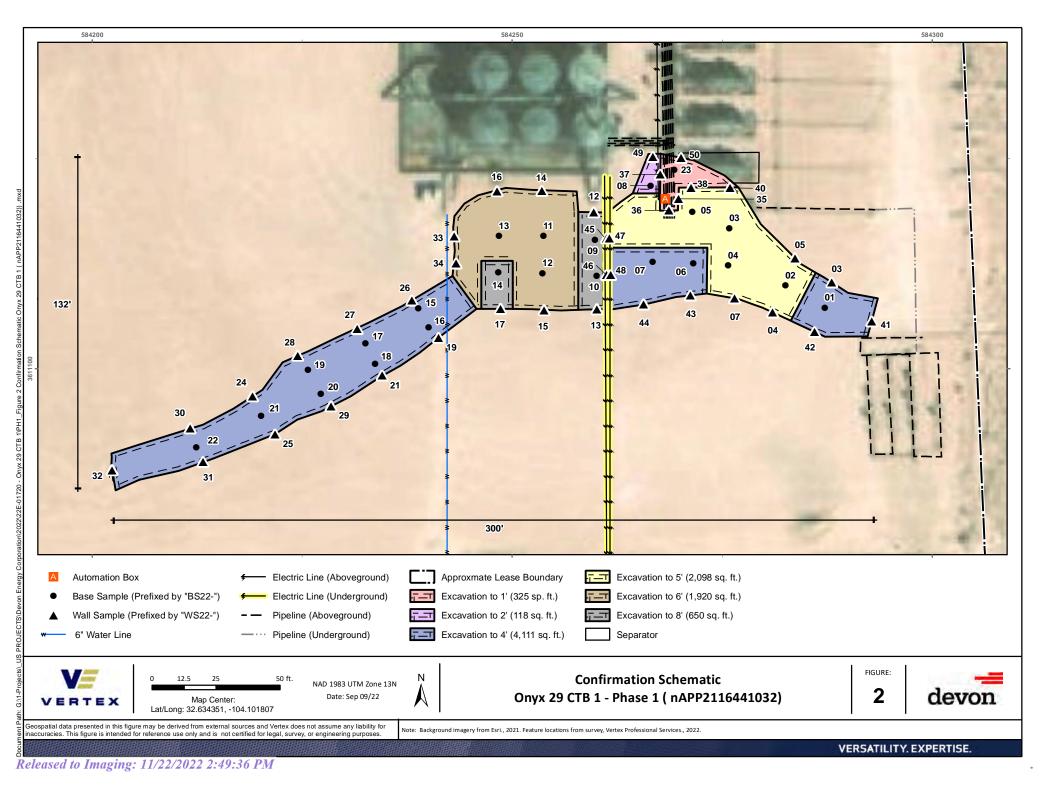
Spill	Volume(E	Bbls) Calculator
Inpl	uts in blue	Outputs in red
Cont	aminated S	Soil measurement
Area (square	e feet)	Depth(inches)
<u>9167</u>		<u>0.250</u>
Cubic Feet of So	il Impacted	<u>190.979</u>
Barrels of Soil	Impacted	<u>34.04</u>
Soil Typ	be	Clay/Sand
Barrels of Oil / 100% Satur	-	<u>5.11</u>
Saturation	Fluid present with shovel/backhoe	
Estimated Barr Release	200 - 20 - 20 - 20 - 20 - 20 - 20 - 20	5.11
	Free Standi	ng Fluid Only
Area (squar	e feet)	Depth(inches)
<u>6271.836</u>		0.250
Standing	fluid	<u>23.291</u>
Total fluids	<u>spilled</u>	<u>28.398</u>

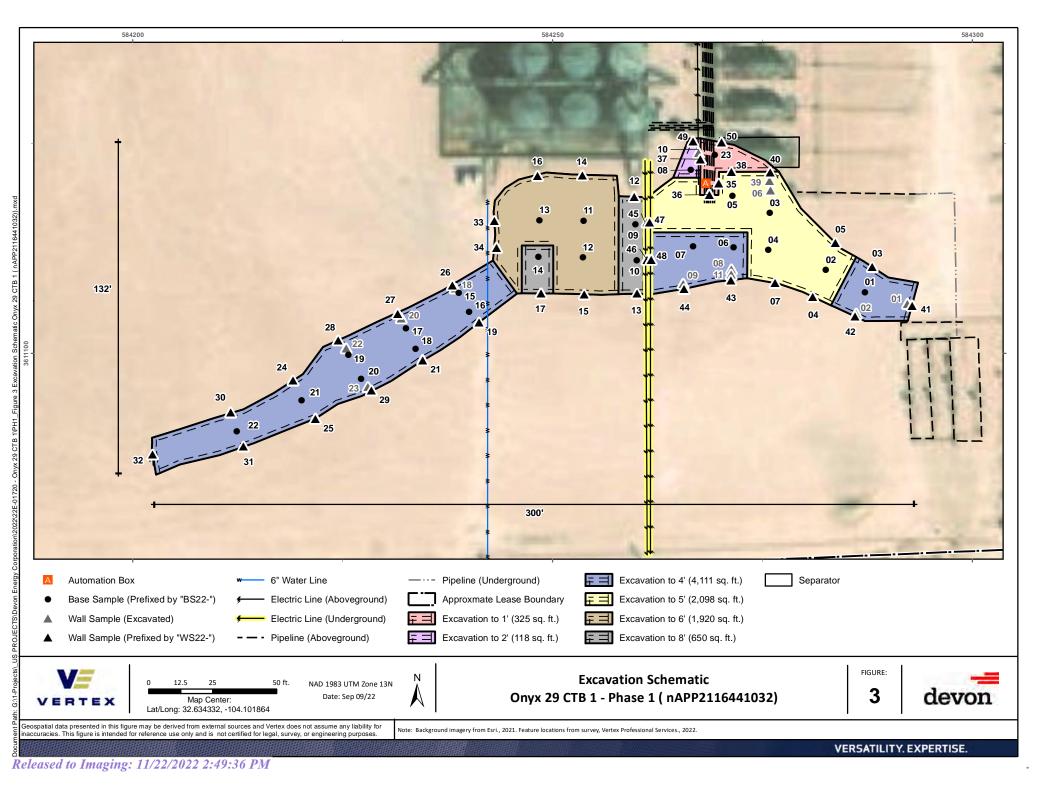
## ATTACHMENT 2

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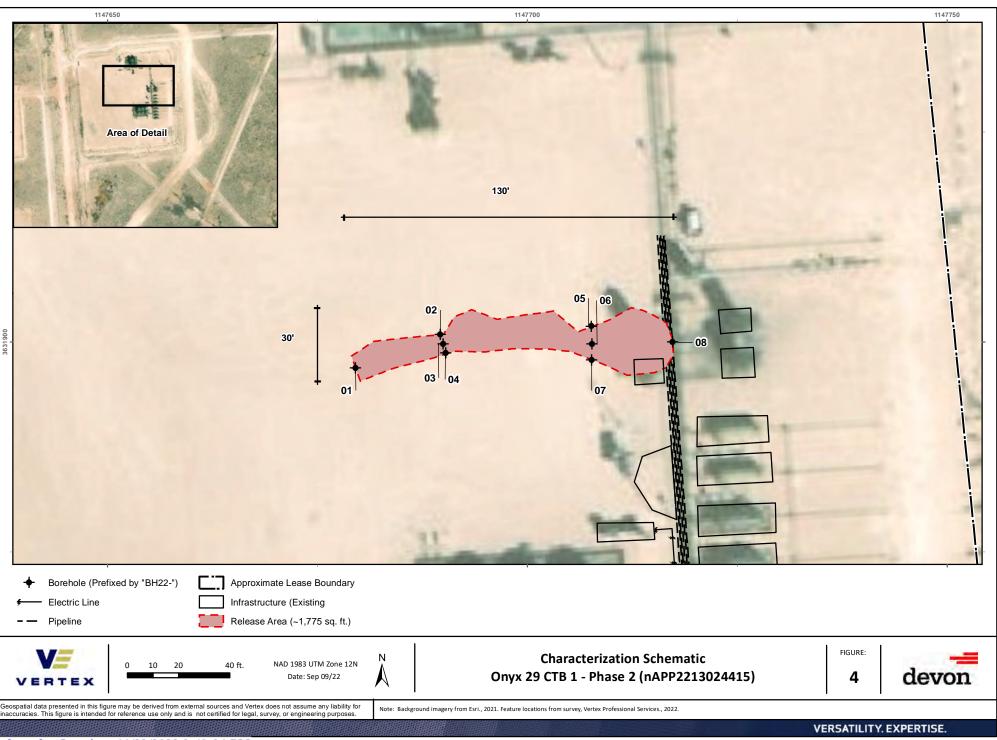


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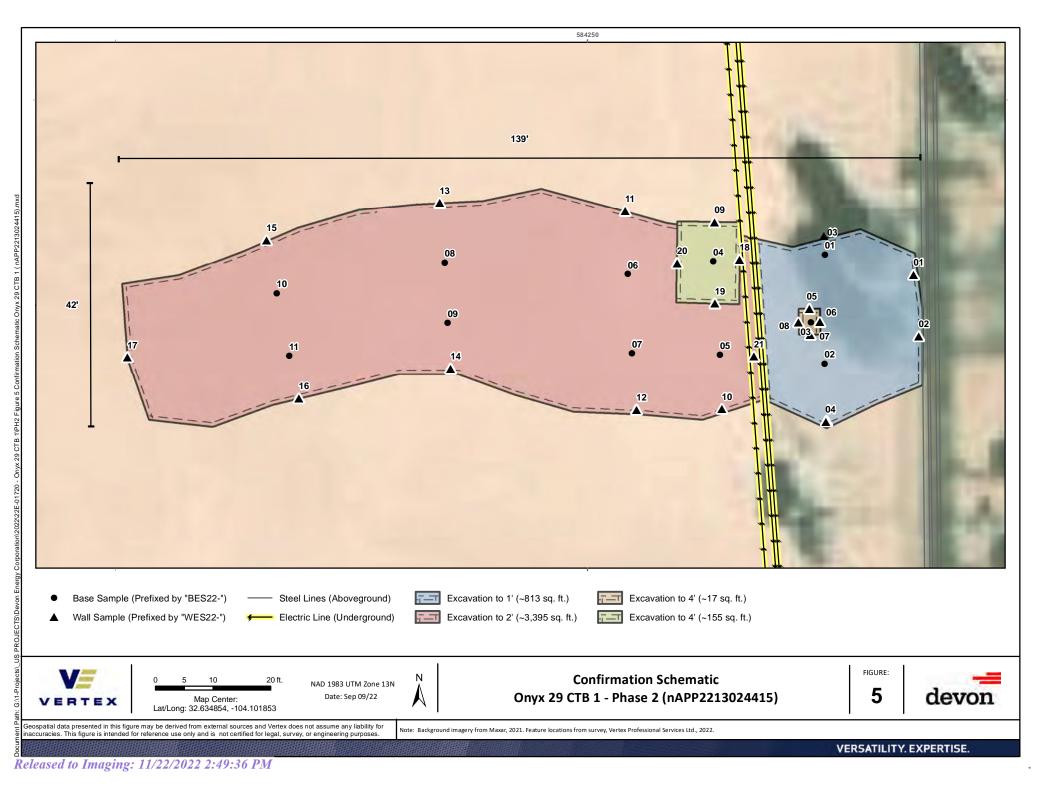




29 CTB 1.mxd



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## ATTACHMENT 3

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	riteria Worksheet		
	e: Onyx 29 CTB 1	×. 22 (24722	V. 104 102005
Spill Coor	ific Conditions	X: 32.634723 Value	Y: -104.102095 Unit
1	Depth to Groundwater	75	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	67,944	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	33,422	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	13,726	feet
5	<ul> <li>i) Within 500 feet of a spring or a private, domestic</li> <li>fresh water well used by less than five households for</li> <li>domestic or stock watering purposes, or</li> </ul>	13,532	feet
	ii) Within 1000 feet of any fresh water well or spring	13,532	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	6,468	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
10	Within a 100-year Floodplain	Area of Minimal Flood Hazard	year
11	Soil Type	Reeves- Gypsum land Complex	
12	Ecological Classification	Loamy	
13	Geology	Qp	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

# Onyx PWU 29 CTB 1



### 5/17/2022, 9:48:30 AM

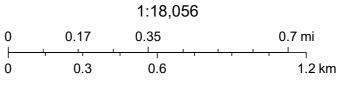
OSE District Boundary Override 1

GIS WATERS PODs New Mexico State Trust Lands SiteBoundaries

Both Estates

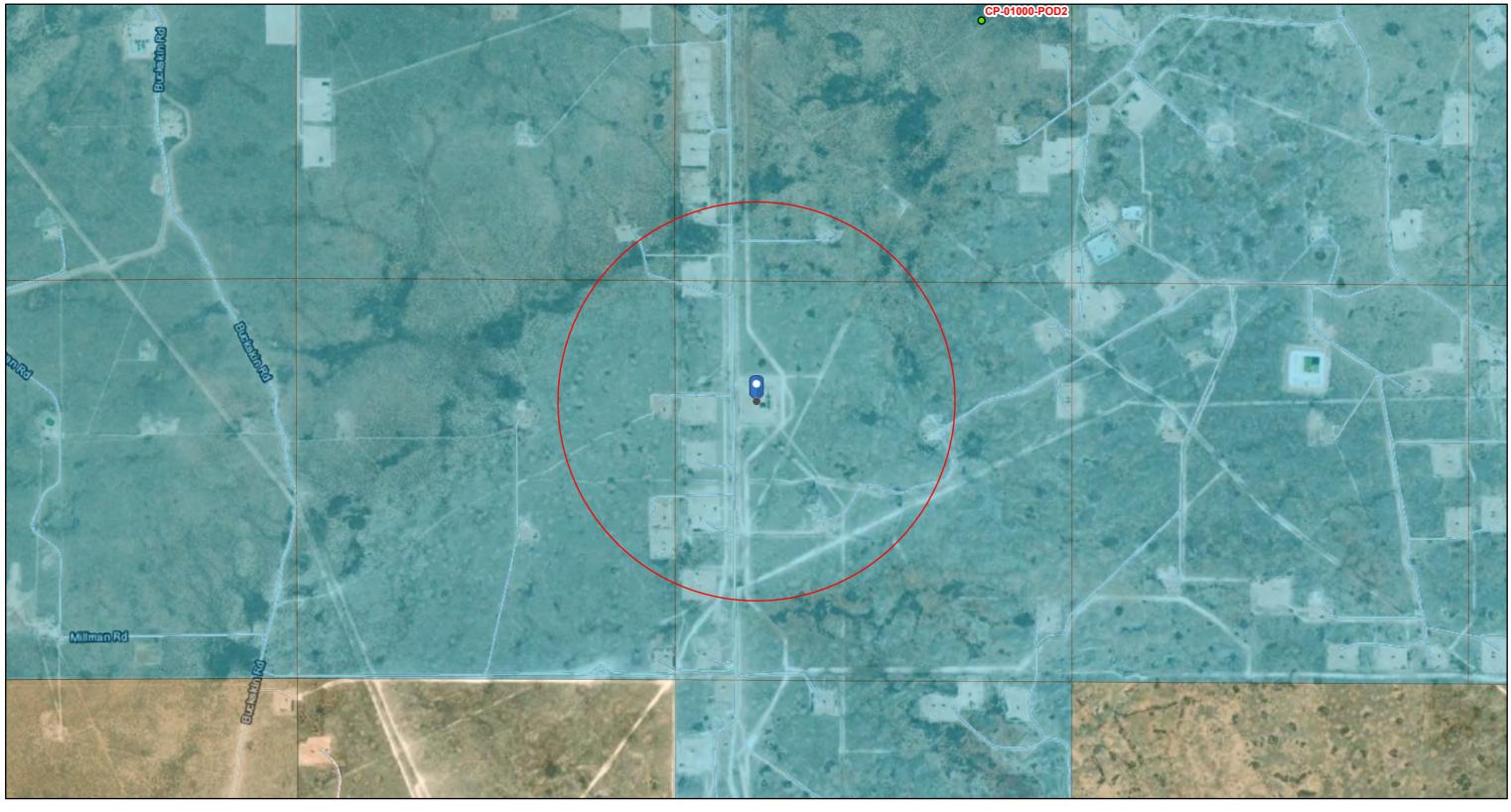
• Active Subsurface Estate

**Released to Imaging: 11/22/2022 2:49:36 PM** 

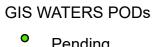


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# Onyx PWU 29 CTB 1



## 5/17/2022, 9:44:57 AM



Subsurface Estate

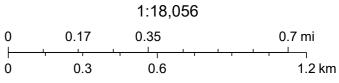
New Mexico State Trust Lands SiteBoundaries

Pending

OSE District Boundary

Both Estates

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# New Mexico Office of the State Engineer **Point of Diversion Summary**

			(quarter	s are 1=N	W 2=	NE 3=SV	W 4=SE)			
		(quarters are smallest to largest)				t)	(NAD83 UT	(NAD83 UTM in meters)		
Well Tag	POD	Number	Q64 Q	216 Q4	Sec	Tws	Rng	Х	Y	
	CP 0	1231 POD1	4	4 2	36	19S	28E	582311	3609372 🌍	
Driller Lic Driller Nai		1654	Driller	Compa	ny:			RKING FOR ISTRUC	HIRESIRMA	N DRILLINC
Drill Start	Date:	10/21/2013	Drill Fi	nish Da	te:	10	0/21/20	13 Plu	g Date:	
Log File D	ate:	10/29/2013	PCW R	cv Date	e:			Sou	irce:	Shallow
Pump Typ	e:		Pipe Dis	scharge	Size	:		Est	imated Yield:	80 GPM
Casing Siz	e:	8.00	Depth V	Vell:		30	00 feet	Dej	pth Water:	75 feet
X	Wate	r Bearing Stratif	fications:	Та	op E	Bottom	Desci	ription		
				20	00	300	Lime	stone/Dolom	ite/Chalk	
X		Casing Per	forations:	To	p E	Bottom	l			

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.

5/17/22 9:52 AM

POINT OF DIVERSION SUMMARY

Resained by OGP: 11/1/2022r3:45:31 AM.us/ReportDispatcher?type=WRHTML&name=WaterRightSummaryHTML.jrxml&basin=CP&nbr=8982&80ffff=433

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	<b>Total Diversion:</b>	0	Cause/Case: -		
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	Contact:	SCOTT GREGORY			
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5/17/22 9:51 AM

WATER RIGHT SUMMARY

.

Received by OCD- 11/1/2022 7:45:31 AM Onyx PWU 29 CIB 1

0.5 mile radius Nearest USGS Well: 323845104075601 DTGW: 124 feet Distance: 1.96 miles Latest Reading: 1999

-

LegendPage 29 of 433SolutionCircle MeasureFeature 1Onyx PWU 29 CTB 1

323845104075601

Onyx PWU 29 CTB 1 🥰

Google Earth1/22/2022 2:49:36 PM

3000 ft



USGS Home Contact USGS Search USGS

### **National Water Information System: Web Interface**

USGS	Water	<b>Resources</b>	

Data	category.	
Gro	undwater	

Data Category

Geographic Area: United States

GO

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- Full News 🔊

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

## Search Results -- 1 sites found

site\_no list =

• 323845104075601

### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

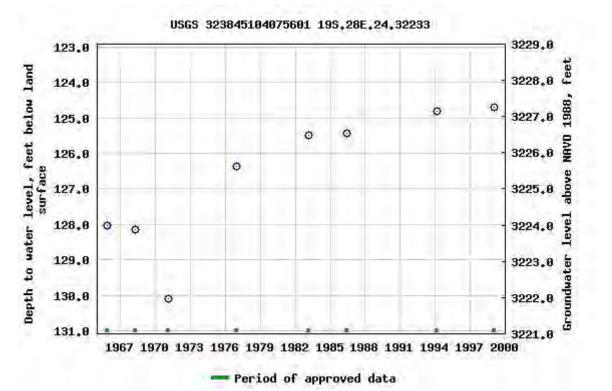
## USGS 323845104075601 19S.28E.24.32233

Available data for this site Groundwater: Field measurements 🗸 GO

Eddy County, New Mexico Hydrologic Unit Code 13060011 Latitude 32°38'45", Longitude 104°07'56" NAD27 Land-surface elevation 3,352 feet above NAVD88 This well is completed in the Other aquifers (N99990THER) national aquifer. This well is completed in the Rustler Formation (312RSLR) local aquifer.

### **Output formats**

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



Breaks in the plot represent a gap of at least one year between field measurements. Download a presentation-quality graph

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-05-17 11:57:58 EDT 0.58 0.49 nadww01



# National Wetlands Inventory

## Onyx PWU 29 CTB 1 Watercourse



Lake

Other

Riverine

Freshwater Emergent Wetland

**Freshwater Pond** 

Freshwater Forested/Shrub Wetland

### May 17, 2022

#### Wetlands

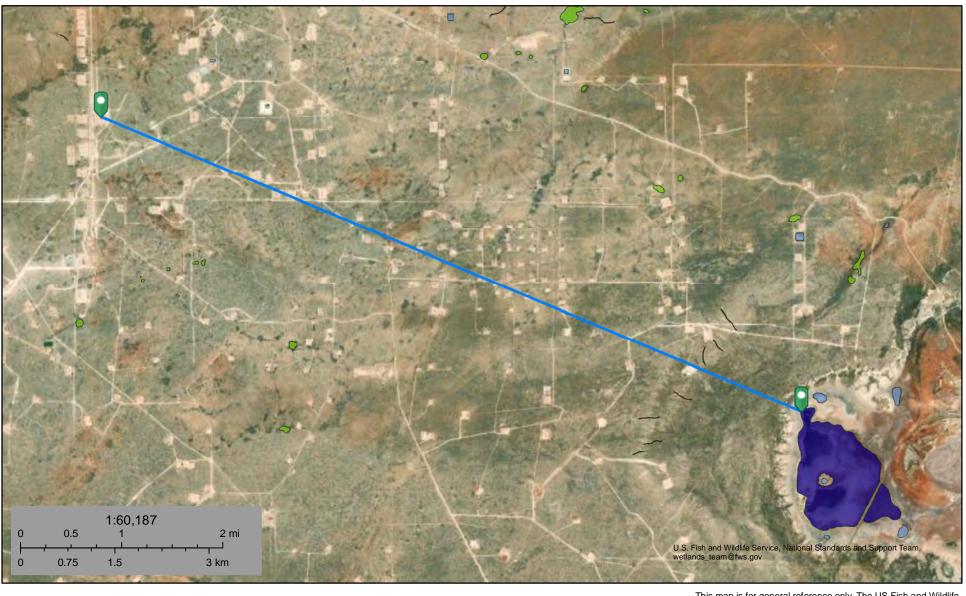
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Released to Imaging: 11/22/2022 2:49:36 PM

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

# National Wetlands Inventory

## Onyx PWU 29 CTB 1 Lakebed



### May 17, 2022

#### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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- **Freshwater Pond**

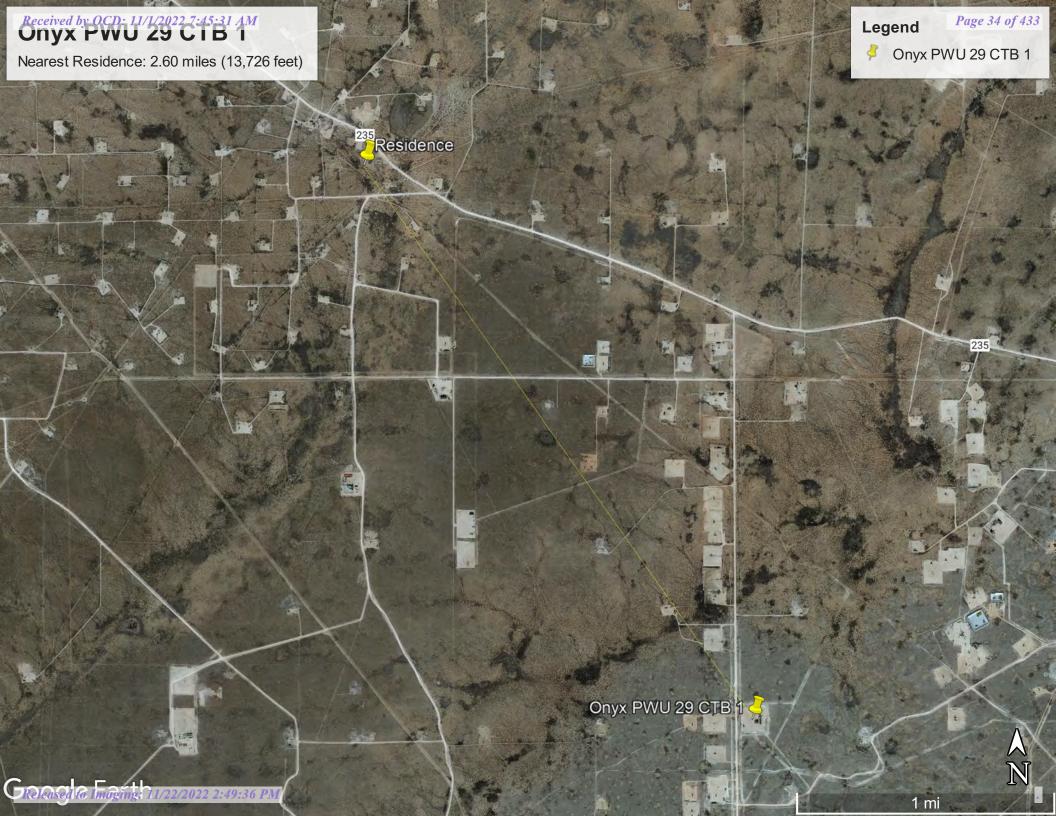
Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Lake Other Riverine

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

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





USGS Home Contact USGS Search USGS

### **National Water Information System: Web Interface**

USGS	Water	Resources	

Data	category.	
Gro	undwater	

Data Category

Geographic Area: United States

GO

GO

### Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News 🔊

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

## Search Results -- 1 sites found

site\_no list =

• 324000104073601

### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

## USGS 324000104073601 19S.28E.13.214411

Available data for this site Groundwater: Field measurements 🗸

Eddy County, New Mexico Hydrologic Unit Code 13060011

Latitude 32°39'56.2", Longitude 104°07'35.9" NAD83

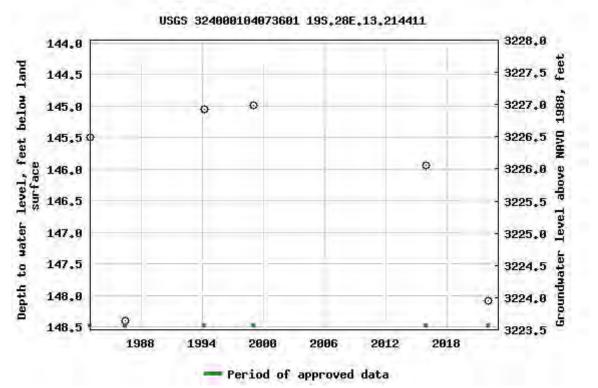
Land-surface elevation 3,372 feet above NAVD88

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

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

### **Output formats**

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



Breaks in the plot represent a gap of at least one year between field measurements. <u>Download a presentation-quality graph</u>

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U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-05-17 12:23:40 EDT 0.56 0.46 nadww01





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 Legend
 Page 37 of 433

 Onyx PWU 29 CTB 1

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Onyx PWU 29 CTB 1

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Nearest Town: Carlsbad, NM Distance: 16.49 miles (87,049 feet)

Onyx PWU 29 CTB 1

62

 Legend
 Page 38 of 433

 Image 38 of 433
 Image 38 of 433

 Image 38 of 433
 Image 38 of 433

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216

U.S. Fish and Wildlife Service

# National Wetlands Inventory

# Onyx PWU 29 CTB 1 Wetlands



# May 17, 2022

#### Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland Freshwater Forested/Shrub Wetland
- **Freshwater Pond**

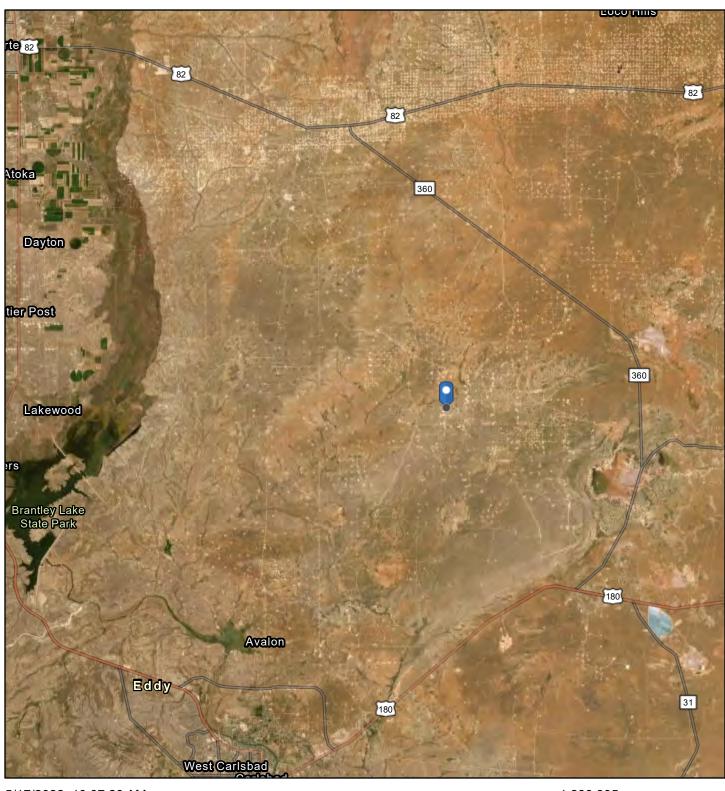
Lake Other Riverine

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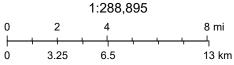
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National Wetlands Inventory (NWI) This page was produced by the NWI mapper

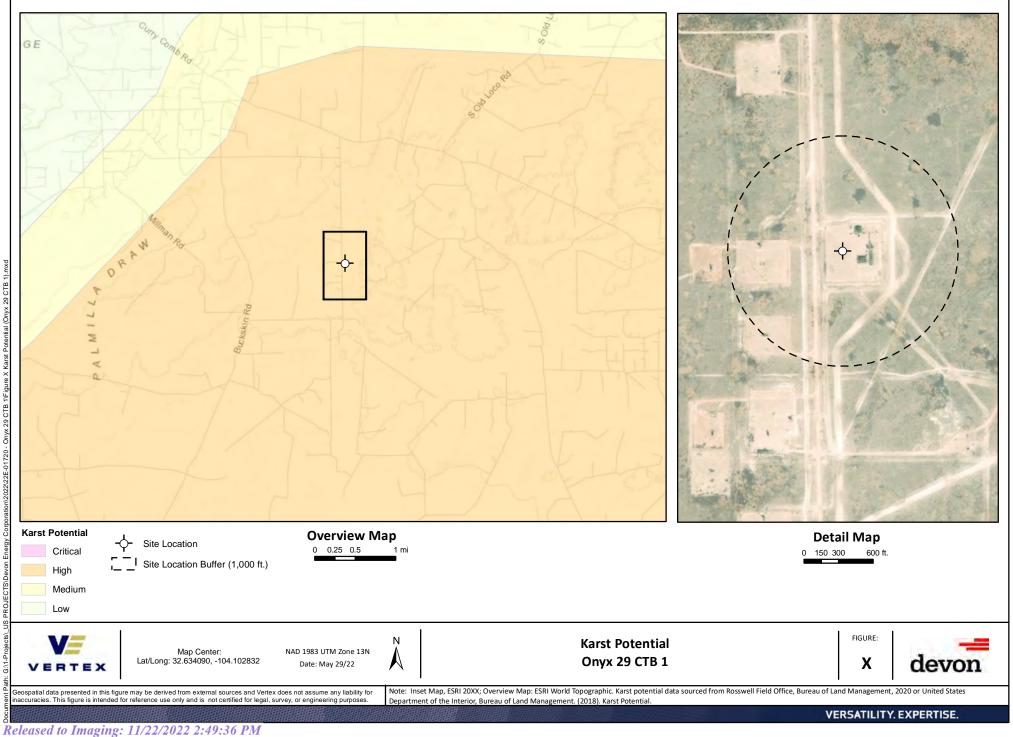
# Coal Mines in New Mexico



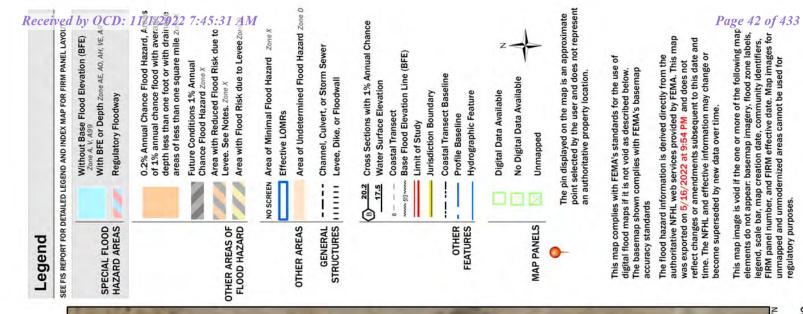




Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community



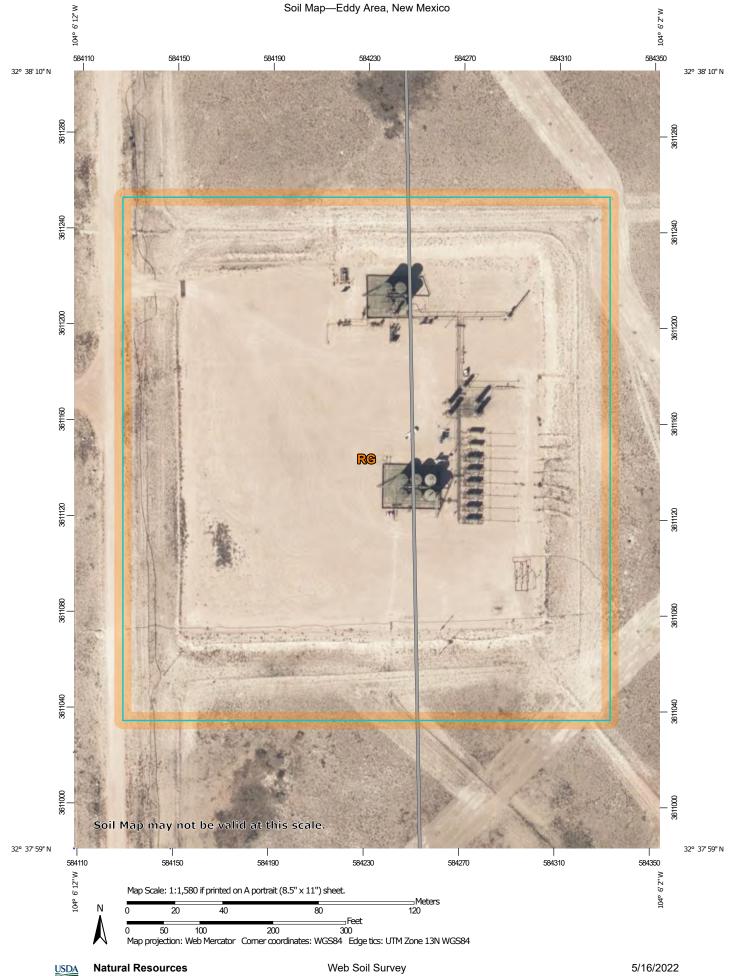




Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

104°5'49"W 32°37'50"N Additional Flood Hazard Layer FIRMette 1:6,000 AREA OF MINIMAL FLOOD HAZARD Feet 35015C0625D eff.6/4/2010 2,000 Zdoe 1,500 1,000 Eddy County 350120 500 250

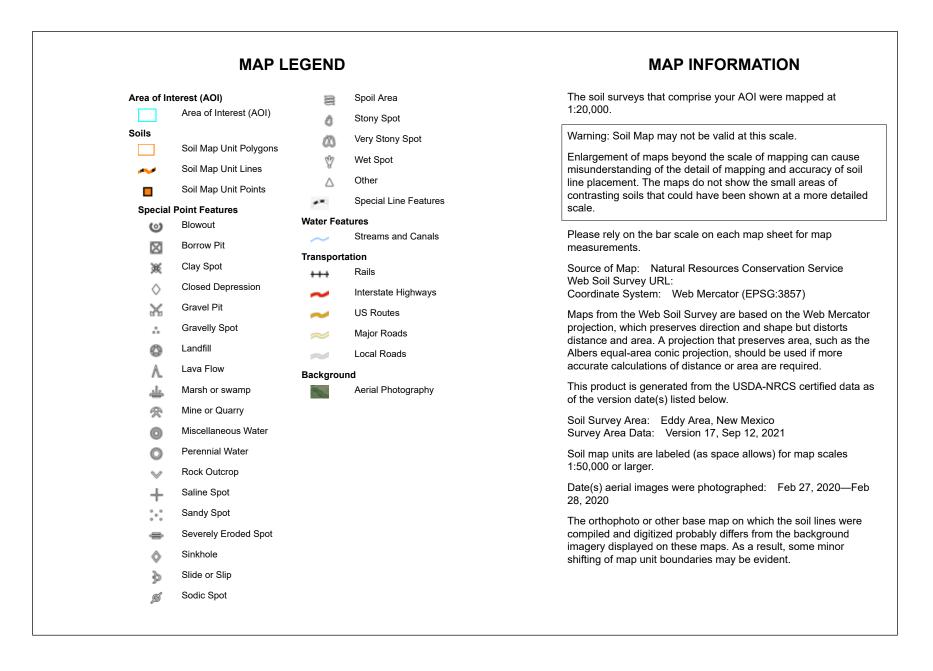
## Received by OCD: 11/1/2022 7:45:31 AM



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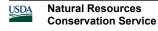
National Cooperative Soil Survey

5/16/2022 Page 1 of 3



# Map Unit Legend

Map Unit Symbol Map Unit Name		Acres in AOI	Percent of AOI
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	11.1	100.0%
Totals for Area of Interest	•	11.1	100.0%



# Eddy Area, New Mexico

# RG—Reeves-Gypsum land complex, 0 to 3 percent slopes

# Map Unit Setting

National map unit symbol: 1w5f Elevation: 1,250 to 5,000 feet Mean annual precipitation: 10 to 25 inches Mean annual air temperature: 57 to 70 degrees F Frost-free period: 190 to 235 days Farmland classification: Not prime farmland

# **Map Unit Composition**

Reeves and similar soils: 55 percent Gypsum land: 30 percent Minor components: 15 percent Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Reeves**

## Setting

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

# **Typical profile**

H1 - 0 to 8 inches: loam
H2 - 8 to 32 inches: clay loam
H3 - 32 to 60 inches: gypsiferous material

# **Properties and qualities**

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Gypsum, maximum content: 80 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

# Interpretive groups

Land capability classification (irrigated): 3s Land capability classification (nonirrigated): 7s Hydrologic Soil Group: B Ecological site: R042XC007NM - Loamy Hydric soil rating: No

# **Description of Gypsum Land**

#### Setting

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

#### Interpretive groups

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

## **Minor Components**

#### Largo

Percent of map unit: 5 percent Ecological site: R042XC007NM - Loamy Hydric soil rating: No

# Cottonwood

Percent of map unit: 5 percent Ecological site: R042XC033NM - Salty Bottomland Hydric soil rating: No

# Reagan

Percent of map unit: 5 percent Ecological site: R042XC007NM - Loamy Hydric soil rating: No

# **Data Source Information**

Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 17, Sep 12, 2021



USDA Natural Resources Conservation Service

# Ecological site R042XC007NM Loamy

Accessed: 04/12/2022

# **General information**



#### 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 uplands landforms, mainly on hill slopes, ridges, plains, terraces and some fan remnants. Slopes range from 1 to 5 percent and average about 3 percent. Average annual precipitation is about 8 to 14 inches. Elevations range from 2,842 to 5,000 feet.

Landforms	<ul><li>(1) Plain</li><li>(2) Terrace</li><li>(3) Fan piedmont</li></ul>
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–5,000 ft
Slope	0–5%
Aspect	E, S, W

## Table 2. Representative physiographic features

# **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.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest in January through June rapidly drying out the soil during a critical time 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 by wetland or streams.

# **Soil features**

The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches.

Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate. The Atoka, Reeves, Russler, Milner soils may have highr amounts of CaC03, ranging as high as 40 percent in the subsoil. Rock fragments range fro 5 to 50 percent in the subsoil. Reeves, Rusler, Milner, Holloman soils will have 40 to 80 percent gypsum in the underlying material.

Maximum and minimum values listed below represent the characteristic soils for this site.

Characteristic Soils:

Atoka (petrocalcic) Bigetty Reagan Reakor Reeves (gypsum) Russler (gypsum) Largo Russler (gypsum) Largo Berino Tinney Midessa Ratliff Holloman (gypsum) Milner (gypsum)

#### Table 4. Representative soil features

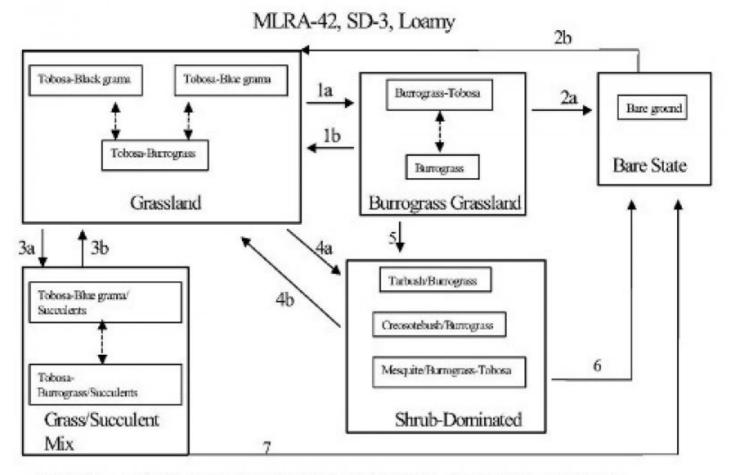
Surface texture	<ul><li>(1) Loam</li><li>(2) Very fine sandy loam</li><li>(3) Silt loam</li></ul>
Family particle size	(1) Loamy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to slow
Soil depth	30–72 in
Surface fragment cover <=3"	0–5%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–12 in
Calcium carbonate equivalent (0-40in)	0–10%
Electrical conductivity (0-40in)	0–8 mmhos/cm
Sodium adsorption ratio (0-40in)	0–6
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	0–5%
Subsurface fragment volume >3" (Depth not specified)	0%

# **Ecological dynamics**

Overview: The Loamy site is associated with the Gyp Upland ecological site with which it intergrades. There is a pronounced increase in alkali sacaton along this interface. The loamy site is also associated with the Gravelly and Shallow ecological sites from which it receives run-on water. The Draw site often dissects Loamy sites and is distinguished from the Loamy site by increased production or greater densities of woody species. The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Tobosa, black grama and blue grama are the dominant species. Retrogression within this state is characterized by a decrease in black and blue grama and an increase in burrograss. Continuous overgrazing and drought can initiate a transition to a Burrograss- Grassland state. Continued reduction in grass cover and resulting infiltration problems may eventually effect a change to a Bare State, with very little or no remaining grass cover. Alternatively, creosotebush, tarbush or mesquite may expand or invade. Transitions back to a Grassland State from a Bare or Shrub-Dominated state are costly and may not be economically feasible. Decreased fire frequency may play a part in the transition to the Grass/Succulent Mix state with increased amounts of cholla and prickly pear.

# State and transition model

Plant Communities and Transitional Pathways (diagram)



Ia. Soil drying, overgrazing, drought, soil surface sealing. Ib. Restore natural overland flow, increase infiltration, prescribed grazing.

2a. Severe reduction in cover, soil surface sealing, decreased infiltration, erosion. 2b. Restore hydrology, break up physical crust, range seeding, prescribed grazing.

3a. Lack of fire, overgrazing, hall storms or other physical disturbance, drought. 3b. Prescribed fire, brush control, prescribed grazing.

4a. Seed dispersal of shrubs, persistent loss of grass cover, competition by shrubs, lack of fire. 4b. Brush control, range seeding -dependent on amount of grass (seed bank) remaining.

5. Loss of grass cover, seed dispersal of shrubs, competition by shrubs.

6. & 7. Brush control with continued loss of grass cover, soil sealing, erosion.

Figure 4.

# State 1 Historic Climax Plant Community

# Community 1.1 Historic Climax Plant Community

State Containing Historic Climax Plant Community Grassland:

The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Black grama, blue grama, and tobosa are the dominant grass species. There are a variety of

#### Received by OCD: 11/1/2022 7:45:31 AM

perennial forbs and their production varies widely by season and year. Globemallow, verbena, groundsels, croton and filaree are forbs commonly found on this site. Fourwing saltbush and winterfat are two of the more palatable shrubs. The Loamy ecological site encompasses a wide variety of soils, with surface textures ranging from sandy loams to clay loams. Soil depths range from shallow to very deep and can include sub surface features such as calcic, petrocalcic, and gypsic horizons. These variations cause differences in plant community composition and dynamics. Black grama is found at highest densities on coarser textured sandy loams, with blue grama preferring finer textured loam and silt loam, and tobosa favoring lower landscape positions and loam to clay loam surface textures. Burrograss may often be the dominant grass species on silty soils, perhaps in part due to the seedlings ability to auger into and establish on physically crusted soils. Gypsum influenced soils typically have greater amounts of tobosa, burrograss, and ephedra. There is greater representation of sideoats and vine mesquite within the tobosa-blue grama community. Retrogression under continuous heavy grazing results in a decrease of black grama, blue grama, sideoats grama, plains bristlegrass, bush muhly, cane bluestem, vine mesquite, winterfat, and fourwing saltbush. Species such as burrograss, threeawns, sand dropseed, sand muhly, and broom snakeweed increase under continuous heavy grazing or prolonged periods of drought. Under continued retrogression burrograss can completely dominate the site. Creosotebush, tarbush, and mesquite, can also dominate. Cholla and prickly pear can increase on areas that are disturbed or overgrazed.

Diagnosis: Tobosa, black grama, and blue grama are the dominant species. Grass cover is uniformly distributed with few large bare areas. Shrubs are sparse and evenly distributed. Slopes range from level to gently sloping and usually display limited evidence of active rills and gully formation if plant cover remains intact. Litter movement associated with overland flow is limited to smaller size class litter and short distances.

Other shrubs include: yucca, mesquite, tarbush, cholla and creosote bush.

Other forbs include: desert holly, scorpionweed, bladderpod, flax, nama, fleabane, Indianwheat, Indian blanket flower, groundcherry, deerstongue, and rayless goldenrod.

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	585	833	1080
Forb	39	55	72
Shrub/Vine	26	37	48
Total	650	925	1200

## Table 5. Annual production by plant type

## Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-30%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	25-30%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	40-50%

Figure 6. Plant community growth curve (percent production by month).

NM2807, R042XC007NM Loamy HCPC. R042XC007NM Loamy HCPC Warm Season Plant Community..

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ſ	0	0	0	5	10	10	25	30	15	5	0	0

# State 2 Burrograss-Grassland

# Community 2.1 Burrograss-Grassland

Burrograss-Grassland: Changes in hydrology resulting in decreased available soil moisture, reduces grass cover and increases bare ground. Burrograss is the dominant grass. Tobosa cover is variable and can range from sizeable areas to small patches occupying only depressions or the lowest and wettest positions within the site. Threeawns, ear muhly, sand muhly, and fluffgrass occur at increased densities compared to the grassland state. Shrub densities may increase especially mesquite, creosotebush or tarbush. Retrogression within this state is characterized by a further decrease in grass cover and increased bare ground. Further deterioration of this site can result in the transition to a bare state or becoming shrub dominated.

Diagnosis: Burrograss is the dominant species. Grass cover is no longer uniformly distributed, instead tending to be patchy with large areas of bare ground present. Physical crusts are present in bare areas reducing infiltration and suppressing seedling establishment by any grass species other than burrograss.

Transition to Burrograss-Grassland (1a): Transitions from grassland to a burrograss-grassland state may occur due to changes in hydrology. Gullies, roads or obstructions that alter natural water flow patterns may cause this transition. Changes in surface hydrology may also occur due to overgrazing or drought. The reduction in grass cover promotes increased soil physical crusts and reduces infiltration. 5

Key indicators of approach to transition:

- ? Diversion of overland flow resulting in decreased soil moisture.
- ? Increase in amount of burrograss cover
- ? Reduction in grass cover and increase in size and frequency of bare patches.
- ? Formation of physical crusts-indicating reduced infiltration.
- ? Evidence of litter movement—indicating loss or redistribution of organic matter.

Transition back to Grassland (1b) The natural hydrology of the site must be returned. Culverts, turnouts, or rerouting roads may help re-establish natural overland flow, if roads or trails have altered the hydrology. Erosion control structures or shaping and filling gullies may help regain natural flow patterns and establish vegetation if the flow has been channeled. Breaking up physical crusts by soil disturbance may promote infiltration and seedling emergence. Allow natural revegetation to take place. Prescribed grazing will help ensure proper forage utilization and reduce grass loss due to grazing.

# State 3 Bare State

# Community 3.1 Bare State

Bare State: Extremely low ground cover, soil degradation and erosion characterize this state. Very little vegetation remains. Burrograss is the dominant grass and cover is extremely patchy. Physical soil crusts are extensive. Erosion and resource depletion increase as site degrades.

Diagnosis: Very little cover remains. Erosion is evident by soil sealing, water flow patterns, pedestals or terracettes. Rills and gullies may be present and active.

Transition to Bare State (2a): Extended drought, continuous heavy grazing, or other disturbance that severely

depletes grass cover can effect this transition. As grass cover decreases, sheet flow and erosion increase, and physical soil crusts form, thereby further reducing infiltration.

Key indicators of approach to transition:

- ? Continued reduction in grass cover.
- ? Increased soil surface sealing.
- ? Increased erosion.
- ? Reduced aggregate stability in bare areas.

Transition back to Grassland (2b) Restore the hydrology, see (1a). With the extent of grass loss range seeding may be necessary. Utilizing livestock or mechanical means to break up the physical crusts may increase infiltration and aid seedling establishment. Prescribed grazing will help ensure adequate deferment period following seeding, and proper forage utilization once the grass stand is well established. The degree to which this site is capable of recovery depends on the restoration of hydrology, extent of degradation to soil resources, and adequate rainfall necessary to establish grasses.

# State 4 Grass/Succulent Mix

# Community 4.1 Grass/Succulent Mix

Grass / Succulent Mix: Increased representations of succulents characterize this site. Increased densities of cholla or pricklypear is recognized as a management concern, but their impact on grass production is unclear. Light to medium cholla or prickly pear infestation doesn't seem to greatly reduce grass production, however it limits access to palatable grasses and interferes with livestock movement and handling. Tobosa and blue grama are the dominant species on this site. Retrogression within this site is characterized by a decrease in blue grama and an increase in succulents, tobosa and burrograss.

Diagnosis: Cholla or prickly pear is found at increased densities. Grass cover is variable ranging from uniformly distributed to patchy with frequent areas of bare ground present. Tobosa or blue grama is the dominant grass species.

Transition to Grass/Succulent Mix (3a): If fire was historically a part of desert grassland ecosystem and played a role in suppressing seedlings of shrubs and succulents, then fire suppression may favor the increase of succulents.1 Heavy grazing by livestock or other physical disturbances may help disseminate seed and increase the establishment of succulents. Areas historically overgrazed by sheep are sometimes associated with higher densities of Succulents. Intense hailstorms can spread pricklypear by breaking off joints causing new plants to take root.3 During severe drought perennial grass cover can decline significantly, leaving resources available for use by more drought tolerant succulents. Cholla and pricklypear are both adapted to and favored by drought due to the ability of their shallow, wide spreading root systems to absorb and store water.4

Key indicators of approach to transition:

- ? Decrease or change in distribution of grass cover.
- ? Increase in amount of succulent seedlings.
- ? Increased cover of succulents.

Transition back to Grassland (3b) Fire is an effective means of controlling cholla and prickly pear if adequate grass cover remains to carry fire.2 Cholla greater than two feet tall or pricklypear with a large amount of pads (>15-20) are harder to kill. Chemical control is effective in controlling prickly pear and cholla; apply when growth starts in May. Hand grubbing is also effective if cholla or pricklypear is severed 2-4 inches below ground and care is taken not to let broken joints or pads take root. Stacking and burning piles and grubbing during winter or drought help keeps broken joints and pads from rooting. Prescribed grazing will help ensure proper forage utilization and sustain grass cover.

# State 5 Shrub Dominated

# Community 5.1 Shrub Dominated

Shrub Dominated: Increased shrub cover characterizes this state. Mesquite, creosotebush, and/or tarbush are the dominant shrub species. Burrograss or tobosa is the dominant grass species. Grass cover is decreased, typically patchy with large bare areas present; however, sometimes grass cover can remain relatively high for extended periods when associated with light to moderate infestations of mesquite. Variations in soil characteristics play a part in determining which shrub species increase. Mesquite is well adapted to a wide range of soil types, but increases more often on deep soils low in carbonates, that have a sandy surface overlying finer textured soils. Tarbush prefers finer textured, calcareous soils, usually in lower positions that receive some extra water. Creosotebush is less tolerant of fine textured soils, preferring sandy, calcareous soils that have some gravel. Creosotebush also does well on soils that are shallow over caliche. Retrogression within this state is characterized by a decrease in tobosa, and an increase in burrograss. As the site continues to degrade shrub cover continues to increase and grass cover is severely reduced.

Diagnosis: Mesquite, Creosotebush, and/or tarbush are the dominant shrubs. Blue grama and black grama cover is low or absent. Burrograss or tobosa are the dominant grasses. Typically grass cover is patchy with large interconnected bare areas present. Physical soil crusts are present, especially on silt loam surface soils.

Transition to Shrub Dominated (4a): Wildlife and livestock consume and disperse mesquite seeds. Flood events may wash creosote or tarbush seeds off adjacent gravelly sites onto the loamy site and supply adequate moisture for germination. Persistent loss of grass cover due to overgrazing or drought can cause large bare patches, providing competition free areas for shrub seedling establishment. As shrub cover increases, competition for soil resources, especially water, becomes a major factor in further reducing grass cover. Reduction of fire, due to either fire suppression policy or loss of adequate fine fuels may increase the probability of shrub encroachment. Increased soil surface physical crusts and associated decreased infiltration, may prevent the establishment of grass seedlings.

Transition to Shrub Dominated (5): The dispersal of creosotebush, tarbush or mesquite seed, combined with loss of grass cover and resource competition by shrubs may cause this transition.

Key indicators of approach to transition:

- ? Decreased grass and litter cover.
- ? Increased bare patch size.
- ? Increased physical soil crusts.
- ? Increased amount of mesquite, creosotebush, or tarbush seedlings.
- ? Increased shrub cover.

Transition back to Grassland (4b) Brush control will be necessary to remove shrubs and eliminate competition for resources necessary for grass establishment or reproduction. Seeding may be necessary on those sites where desired grass species are absent or very limited. Pitting and seeding may increase the chances of successful grass establishment. Prescribed grazing will help ensure adequate time is elapsed before grazing seeded area is allowed and proper forage utilization following seeding establishment.

Transition to Bare State (6): If grass cover on the shrub-dominated state is severely limited and shrubs are removed a bare state may result. This transition will depend on amount of grasses or seed remaining, whether site is seeded, or if seeding is successful.

Transition to Bare State (7): Removal of succulents and continued overgrazing or drought may cause loss of remaining grasses and erosion. Soil surface physical crusting may also be an important factor in inhibiting grass seedling establishment

# Additional community tables

Table 7. Community 1.1 plant community composition

0						
Group	Common Name	Symbol	Scientific Name	(Lb/Acre)	Cover (%)	
				Annual Production	Foliar	

0-----

1	Warm Season			278–324	
	tobosagrass	PLMU3	Pleuraphis mutica	278–324	
2	Warm Season	•		9–46	
	burrograss	SCBR2	Scleropogon brevifolius	9–46	-
3	Warm Season	•	•	231–278	
	black grama	BOER4	Bouteloua eriopoda	231–278	-
	blue grama	BOGR2	Bouteloua gracilis	231–278	-
4	Warm Season	<u>.</u>	ł	28–46	
	sideoats grama	BOCU	Bouteloua curtipendula	28–46	-
5	Warm Season	•	•	46–93	
	bush muhly	MUPO2	Muhlenbergia porteri	46–93	-
	plains bristlegrass	SEVU2	Setaria vulpiseta	46–93	-
6	Warm Season	•		9–28	
	Arizona cottontop	DICA8	Digitaria californica	9–28	-
7	Warm Season		•	46–93	
	threeawn	ARIST	Aristida	46–93	
	muhly	MUHLE	Muhlenbergia	46–93	-
	sand dropseed	SPCR	Sporobolus cryptandrus	46–93	
3	Warm Season	•		28–46	
	Graminoid (grass or grass-like)	2GRAM	Graminoid (grass or grass-like)	28–46	-
Shru	b/Vine	<u> </u>	•	- 1 1	
9	Shrub			9–28	
	fourwing saltbush	ATCA2	Atriplex canescens	9–28	-
	jointfir	EPHED	Ephedra	9–28	-
	winterfat	KRLA2	Krascheninnikovia lanata	9–28	-
	cane bluestem	BOBA3	Bothriochloa barbinodis	5–24	-
	Arizona cottontop	DICA8	Digitaria californica	5–24	-
	plains bristlegrass	SEVU2	Setaria vulpiseta	5–24	
10	Shrub			9–28	
	javelina bush	COER5	Condalia ericoides	9–28	
	broom snakeweed	GUSA2	Gutierrezia sarothrae	9–28	
	Grass, annual	2GA	Grass, annual	5–15	
11	Shrubs	<b></b>	•	9–28	
	Shrub (>.5m)	2SHRUB	Shrub (>.5m)	9–28	
Forb		<b>I</b>	•	1	
12	Forb			9–46	
	threadleaf ragwort	SEFLF	Senecio flaccidus var. flaccidus	9–46	
	globemallow	SPHAE	Sphaeralcea	9–46	
	verbena	VEPO4	Verbena polystachya	9–46	
	broom snakeweed	GUSA2	Gutierrezia sarothrae	5–15	
	pricklypear	OPUNT	Opuntia	5–15	
13	Forb	1	1	9–28	
	1				

**Released to Imaging: 11/22/2022 2:49:36 PM** 

#### Received by OCD: 11/1/2022 7:45:31 AM

	woolly groundsel	PACA15	Packera cana	9–28	_
14	Forb			9–28	
	Goodding's tansyaster	MAPIG2	Machaeranthera pinnatifida ssp. gooddingii var. gooddingii	9–28	_
	woolly paperflower	PSTA	Psilostrophe tagetina	9–28	_
15	Forb			9–28	
	redstem stork's bill	ERCI6	Erodium cicutarium	9–28	_
	Texas stork's bill	ERTE13	Erodium texanum	9–28	_
16	Forb			9–28	
	Forb (herbaceous, not grass nor grass-like)	2FORB	Forb (herbaceous, not grass nor grass- like)	9–28	_

# **Animal community**

This site provides habitats which support a resident animal community that is characterized by pronghorn antelope, black-tailed jackrabbit, black tailed prairie dog, yellow-faced pocket gopher, banner-tailed kangaroo rat, hispid cotton rat, swift fox, burrowing owl, horned lark, mockingbird, meadowlark, mourning dove, scaled quail, Great Plains toad, plains spadefoot toad, prairie rattlesnake and western coachwhip shake.

# 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 Atoka C Bigetty B Ratliff B Reyab B Holloman B Largo B Holloman B Bigetty B Berino B Reagan B Reakor B Reeves B Russler C

# **Recreational uses**

This site offers limited potential for hiking, horseback riding, nature observation and photography. Game bird, antelope and predator hunting are also limited.

# 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. Under retrogression, such plants as black grama, blue grama, sideoats grama, bush muhly, plains bristlegrass, Arizona cottontop, fourwing saltbush and winterfat decrease and there is an increase in burrograss, threeawns, sand dropseed, muhlys, broom snakeweed and javilinabush. Under continued retrogression, burrograss can completely

dominate the site. Creosotebush, mesquite, and tarbush can also dominate. Grazing management alone will not improve the site in the above situation. This site is well suited to a system of management that rotates the season of use.

# **Other information**

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM 100 - 76 3.0 - 4.2

75 - 51 4.1 - 5.5 50 - 26 5.3 - 7.0 25 - 0 7.1 +

# 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 Chavez County.

# **Other references**

Literature References:

1. Brooks, M.L., AND D.A. Pyke. 2001. Invasive plants and fire in the deserts of North America. Pages 1–14 in K.E.M. Galley and T.P. Wilson (eds.). Proceedings of the Invasive Species Workshop: the Role of Fire in the Control and Spread of Invasive Species.

2. Bunting, S.C., H.A. Wright, and L.F. Neuenschwander. 1980. Long-term effects of fire on cactus in the Southern Mixed Prairie of Texas. J. Range. Manage. 33: 85-88.

3. Laycock, W.A. 1982. Hail as an ecological factor in the increase of prickly pear cactus. p. 359-361. In: J.A. Smith and V.W. Hays (eds.) Proc. XIV Int. Grassland Congr. Westview Press, Boulder, Colo.

4. Vallentine, J.F. 1989. Range Developments and Improvements. 3rd Edition. Academic Press. San Diego, California.

5. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheet. Rangeland Soil Quality—Physical and Biological Soil Crusts. Rangeland Sheet 6, [Online]. Available: http://www.statlab.iastate.edu/survey/SQI/range.html

# Contributors

David Trujillo Don Sylvester

# Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

# Indicators

- 1. Number and extent of rills:
- 2. Presence of water flow patterns:
- 3. Number and height of erosional pedestals or terracettes:
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):
- 5. Number of gullies and erosion associated with gullies:
- 6. Extent of wind scoured, blowouts and/or depositional areas:
- 7. Amount of litter movement (describe size and distance expected to travel):
- 8. Soil surface (top few mm) resistance to erosion (stability values are averages most sites will show a range of values):
- 9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):
- 10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:
- 11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):

Received by OCD: 11/1/2022 7:45:31 AM

12. Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant:

Sub-dominant:

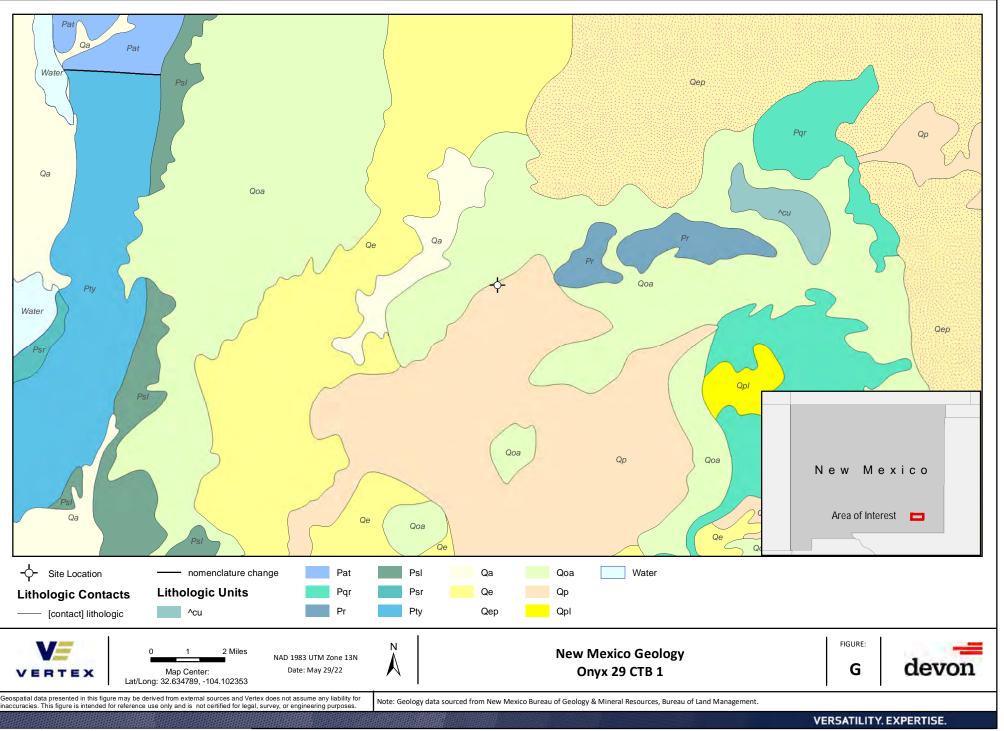
Other:

Additional:

- 13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):
- 14. Average percent litter cover (%) and depth ( in):
- 15. Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annualproduction):
- 16. Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:
- 17. Perennial plant reproductive capability:

Onyx 29 CTB 1/Figure G Geology (Onyx 29 CTB 1).mxd

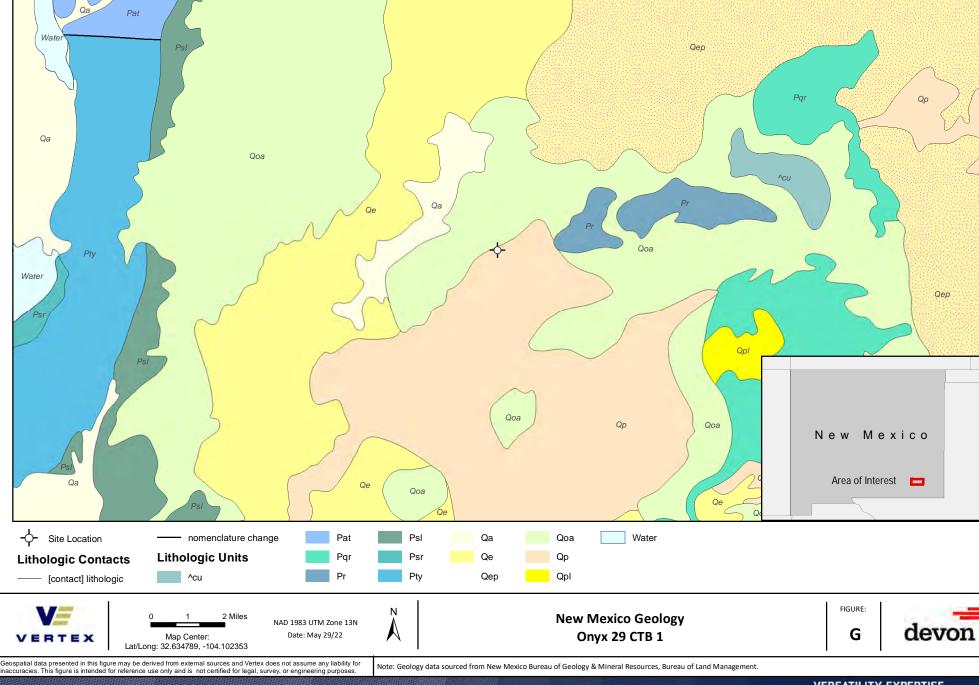
-01720 -



Pat

Onyx 29 CTB 1/Figure G Geology (Onyx 29 CTB 1).mxd

-01720 -



# ATTACHMENT 4



Client:	Devon Energy Corporation	Inspection Date:	5/24/2022			
Site Location Name:	Onyx 29 CTB 1	Report Run Date:	5/24/2022 10:13 PM			
Client Contact Name:	Wes Matthews	API #:				
Client Contact Phone #:	(575) 748-0176					
Unique Project ID		Project Owner:				
Project Reference #		Project Manager:				
Summary of Times						
Arrived at Site	5/24/2022 8:20 AM					
Departed Site	5/24/2022 3:00 PM					

# Field Notes

8:41 Arrived on site to delineate release near the separators (nAPP2116441032)

**11:34** Collected BH22-01 through BH22-12 at surface and 2' for horizontal and vertical delineation.

**11:35** BH22-02, BH22-03, BH22-06, BH22-08, and BH22-10 are above criteria at 2' and require further vertical delineation. BH22-02, BH22-10, and BH22-12 need to be stepped out.

**13:58** BH22-02 and BH22-10 are vertically delineated at 4'.

BH22-03 and BH22-08 hit refusal at 5'. BH22-08 is vertically delineated there.

BH22-06 is vertically delineated at 6'

Next Steps & Recommendations

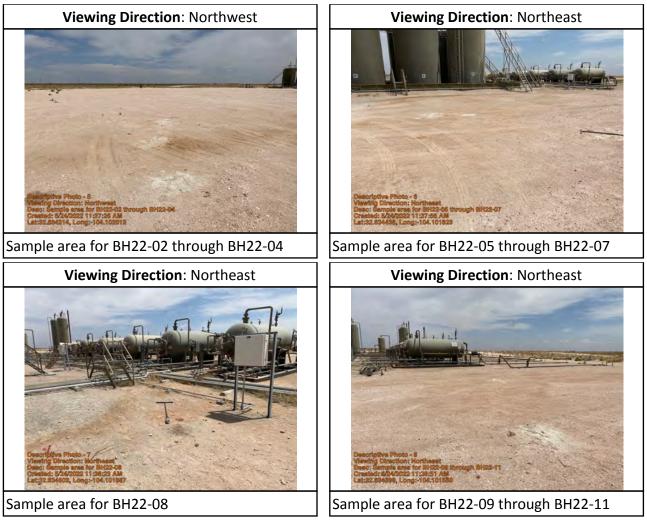
1 Continue delineation tomorrow



# **Site Photos** Viewing Direction: Northwest Viewing Direction: Northeast R. 5. 15. 1 5. Release area Release area Viewing Direction: Northeast Viewing Direction: Northeast Sample area for BH22-01 Release area



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Sample area for BH22-12



# **Daily Site Visit Signature**

<b>nspector:</b> Chance Dixon	
Signature:	$C_{IZ}$
6	Signature

Run on 5/24/2022 10:13 PM UTC

•

Client:	Devon Energy Corporation	Inspection Date:	8/15/2022				
Site Location Name:	Onyx 29 CTB 1	Report Run Date:	8/15/2022 10:06 PM				
Client Contact Name:	Wes Matthews	API #:					
Client Contact Phone #:	(575) 748-0176	_					
Unique Project ID		– Project Owner:					
Project Reference #		Project Manager:					
Summary of Times							
Arrived at Site	8/15/2022 8:15 AM						
Departed Site	8/15/2022 2:30 PM						

# Field Notes

- 11:21 Arrived on site to continue excavation and confirmation sampling.
- **11:22** Collected BES22-15 through BES22-22 and WES22-26 through WES22-32 on the west trench. All are clean on all field screening and will be sent to lab for analysis.
- **11:47** Contractors are beginning to connect the excavations where the underground lines are. They are marking 2' away with the excavator. The rest will need to be done by hand
- 12:25 Brice with Devon was on site earlier.
  - We discussed how to address the wall against the separator that is still hot.
  - He said it was okay to scratch at it by hand when the hand crew is able to get out here and get more samples.
- **12:26** Collected WES22-33 and WES22-34 at the west side of the 6' excavation near the underground water line. Samples are clean on all field screening at 2' and 4'
- 12:29 All clean samples will be sent to lab for analysis
- 13:57 BES22-14 was collected at 8'. Clean on all field screening.

# **Next Steps & Recommendations**

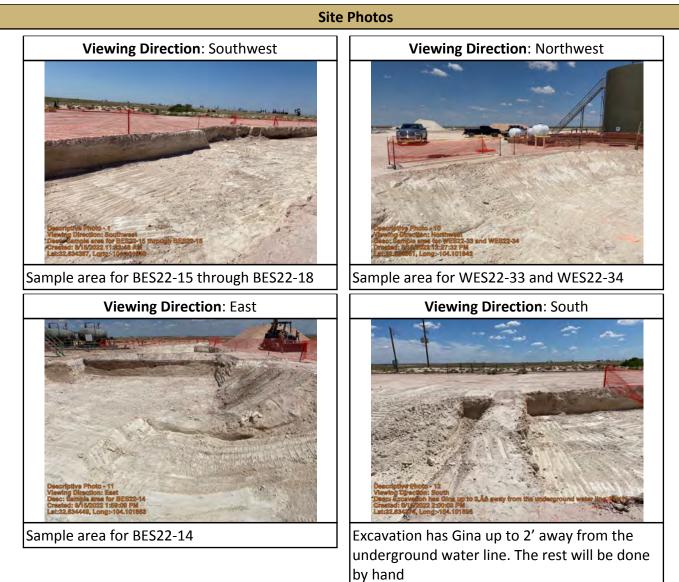
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1 Send samples to lab for analysis



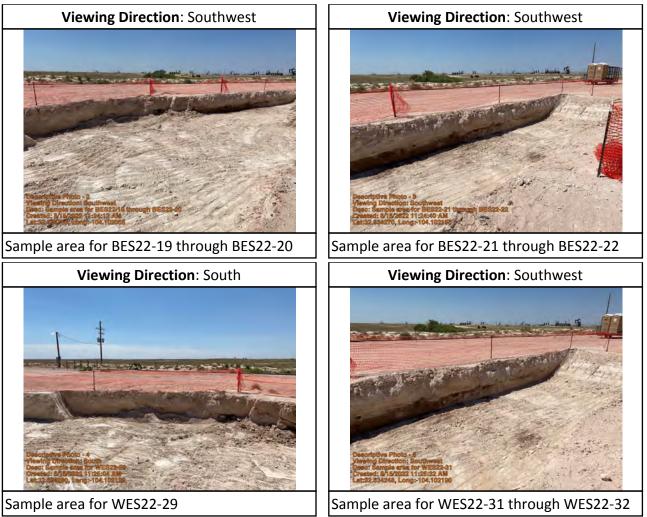
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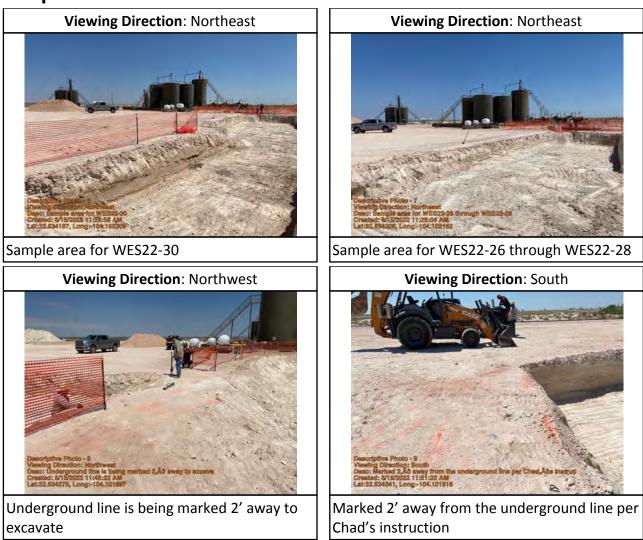


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#### **Daily Site Visit Signature**

Signature:

Signature

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Client:	Devon Energy Corporation	Inspection Date:	9/8/2022
Site Location Name:	Onyx 29 CTB 1	Report Run Date:	9/8/2022 5:16 PM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	9/8/2022 8:45 AM		
Departed Site	9/8/2022 10:00 AM		

**Field Notes** 

**8:53** Arrived on site to record backfill for phase 1.

8:53 Phase 1 is completely backfilled and should be ready for closure.

#### **Next Steps & Recommendations**

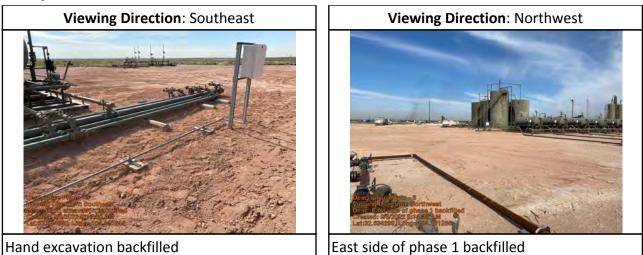
**1** Complete closure report and submit to client



# **Site Photos** Viewing Direction: Northeast Viewing Direction: North Phase 1 backfilled. Southwest side Middle of phase 1 backfilled Viewing Direction: Northeast Viewing Direction: East Hand excavation of phase 1 between the oil Hand excavation backfilled tanks and separator backfilled

Run on 9/8/2022 5:16 PM UTC







#### **Daily Site Visit Signature**

Inspector: Chance Dixon	$\sim$
Signature:	Signature

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Client:	Devon Energy Corporation	Inspection Date:	8/29/2022
Site Location Name:	Onyx 29 CTB 1	Report Run Date:	8/29/2022 9:06 PM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176	_	
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	8/29/2022 9:30 AM		
Departed Site	8/29/2022 1:30 PM		

#### **Field Notes**

11:40 Arrived on site to begin confirmation sampling for phase 2

**11:41** Collected BES22-01 through BES22-03 and WES22-01 through WES22-08 in the 1' hand excavation around the heater treater. All were clean on all field screening and will be sent to lab.

**11:42** BES22-03 and WES22-05 through WES22-08 were collected in the small 4' excavation that was hot during delineation.

#### **Next Steps & Recommendations**

1 Continue confirmation tomorrow when the excavation is further



## **Site Photos** Viewing Direction: Northeast Viewing Direction: Northeast Sample area for WES22-01 and WES22-02 Sample area for WES22-03 under pipelines Viewing Direction: Southeast Viewing Direction: Northeast Sample area for WES22-04 Sample area for BES22-01





Sample area for BES22-02



Sample area for BES22-03 and WES22-05 through WES22-08



Current excavation and sample area

Run on 8/29/2022 9:06 PM UTC



**Daily Site Visit Signature** 

Inspector: Chance Dixon

Signature: Signature

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Client:	Devon Energy Corporation	Inspection Date:	8/30/2022
Site Location Name:	Onyx 29 CTB 1	Report Run Date:	8/30/2022 10:32 PM
Client Contact Name:	Wes Matthews	API #:	
Client Contact Phone #:	(575) 748-0176		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	8/30/2022 10:00 AM		
Departed Site	8/30/2022 3:00 PM		

#### **Field Notes**

**12:56** Arrived on site to continue confirmation for phase 2.

10:21 Operator is still working to excavate the marked area. Will wait to grab samples when he is further ahead and I can get in safely

**11:35** Another 480v line was discovered during excavation.

It was just west of the lines that were marked. This one was not marked. It was not struck, just uncovered. One call is up to date and Devon rep has been notified.

Line is sleeved with 3" schedule 80 PVC

- **13:33** Brice with Devon is on site to check the status of the excavation
- **13:37** Collected WES22-09 through WES22-12 and BES22-04 through BES22-07 in the 2' excavation west of the heater treater. All except BES22-04 are clean on all field screening. It will be excavated down to 4'

13:45 All clean samples have been jarred and put on ice to send to lab

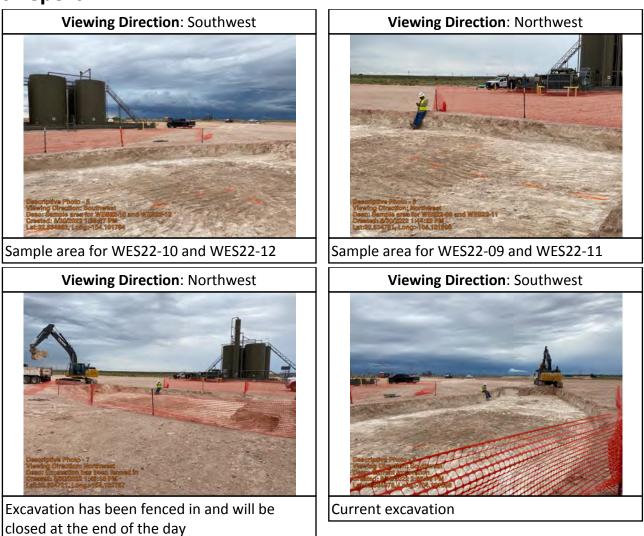
#### **Next Steps & Recommendations**

1 Continue excavation and confirmation sampling tomorrow



# **Site Photos** Viewing Direction: West Viewing Direction: North Electric line discovered Electric line discovered Viewing Direction: Southwest Viewing Direction: Southwest Sample area for BES22-04 through BES22-07 Sample area for BES22-04 to be excavated down







**Daily Site Visit Signature** 

Inspector: Chance Dixon

Signature: Signature

Run on 8/30/2022 10:32 PM UTC

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Devon Energy Corporation	Inspection Date:	8/31/2022
Onyx 29 CTB 1	Report Run Date:	8/31/2022 8:17 PM
Wes Matthews	API #:	
(575) 748-0176		
	Project Owner:	
	Project Manager:	
	Summary of	Times
8/31/2022 8:50 AM		
8/31/2022 12:00 PM		
	Corporation Onyx 29 CTB 1 Wes Matthews (575) 748-0176 8/31/2022 8:50 AM	CorporationReport Run Date:Onyx 29 CTB 1Report Run Date:Wes MatthewsAPI #:(575) 748-0176Project Owner:Project Owner:Project Manager:Summary of 8/31/2022 8:50 AM

#### **Field Notes**

**10:30** Arrived on site to continue confirmation sampling.

**10:31** Collected WES22-13 through WES22-17 and BES22-08 through BES22-11 in the trench trending to the west. All are clean on all field screening and ready to send to lab

10:32 Collected BES22-04 at 4', WES22-09, and WES22-18 through WES22-21 for the walls inside the excavation near the heater treater. This was to ensure contaminants did not migrate from BES22-04.All samples are clean on all field screening.

**Next Steps & Recommendations** 

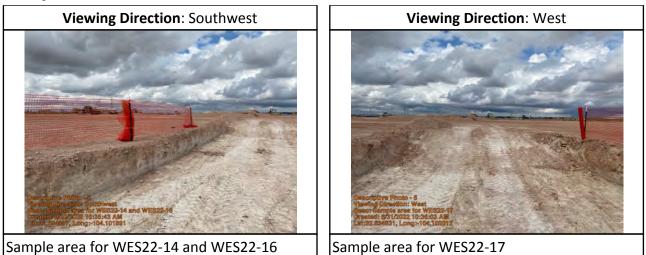
1 Send samples to lab for analysis



# **Site Photos** Viewing Direction: East Viewing Direction: Northeast Sample area for BES22-04, WES22-09, and Sample area for WES22-21 WES22-18 through WES22-20 Viewing Direction: West Viewing Direction: Northwest Sample area for BES22-08 through BES22-11 Sample area for WES22-13 and WES22-15

Run on 8/31/2022 8:17 PM UTC







**Daily Site Visit Signature** 

Inspector: Chance Dixon

Signature:	CD
	Signature

•



Client:	Devon Energy Corporation	Inspection Date:	9/8/2022						
Site Location Name:	Onyx 29 CTB 1	- Report Run Date:	9/8/2022 5:15 PM						
Client Contact Name:	Wes Matthews	- API #:							
Client Contact Phone #:	(575) 748-0176	-							
Unique Project ID		- Project Owner:							
Project Reference #		- Project Manager: -							
		Summary of	Times						
Arrived at Site	9/8/2022 8:45 AM								
Departed Site	9/8/2022 10:00 AM								
	Field Notes								

**9:16** On site to record backfill for phase 2

9:16 Site is completely backfilled and ready for closure

#### **Next Steps & Recommendations**

**1** Complete closure report and submit to client



## **Site Photos** Viewing Direction: Northeast Viewing Direction: North Hand excavation around heater treaters East side of heater treaters backfilled backfilled Viewing Direction: Southeast Viewing Direction: West Hand excavation around heater treaters Phase 2 backfilled completely backfilled





Phase 2 backfilled



#### **Daily Site Visit Signature**

Inspector: Chance Dixon

Signature: Signature

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## **ATTACHMENT 5**



Dhugal Hanton <vertexresourcegroupusa@gmail.com>

#### Onyx 29 CTB 1

4 messages

**Dhugal Hanton** <vertexresourcegroupusa@gmail.com> To: "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@state.nm.us> Cc: dale.woodall@dvn.com Mon, Aug 8, 2022 at 1:36 PM

All,

Please accept this email as notification that Vertex Resource Services has scheduled a sampling event to be conducted at the following releases:

nAPP2116441032 ONYX 29 CTB 1 and nAPP2213024415 ONYX 29 CTB 1

On Wednesday, August 9, 2022, at approximately 2:00 p.m., Chance Dixon will be on-site to conduct confirmation sampling. The sampling will continue through Friday August 19, 2022. He can be reached at 575-988-1472. If you need directions to the site, please do not hesitate to contact him. If you have any questions regarding this notification, please call Kent Stallings at 346-814-1413.

Thank you,

#### Kent Stallings P.G.

Project Manager Vertex Resource Services Inc. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 C 346.814.1413

Dhugal Hanton <vertexresourcegroupusa@gmail.com> To: "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@state.nm.us> Fri, Aug 19, 2022 at 8:58 AM

All,

Vertex respectfully requests that confirmation sampling for this location be extended to Friday, August 26, 2022.

If you have any questions or concerns regarding this notification, please call Kent Stallings at 346-814-1413.

Thank you,

**Chance Dixon** B.Sc. Senior Environmental Technician

Vertex Resource Services Inc. 3101 Boyd Drive, Carlsbad, NM 88220 **C 575.988.1472** [Quoted text hidden]

 Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>
 Fri, Aug 19, 2022 at 9:06 AM

 To: Dhugal Hanton <vertexresourcegroupusa@gmail.com>
 Cc: "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, "Hamlet, Robert, EMNRD" <Robert.Hamlet@state.nm.us>, "Harimon, Jocelyn, EMNRD" <Jocelyn.Harimon@state.nm.us>

Chance

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,

Jennifer Nobui

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com> Sent: Friday, August 19, 2022 8:58 AM To: Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us> Subject: [EXTERNAL] Re: Onyx 29 CTB 1

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

[Quoted text hidden]

**Dhugal Hanton** <vertexresourcegroupusa@gmail.com> To: "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@state.nm.us> Fri, Aug 26, 2022 at 7:38 AM

All,

Vertex respectfully requests that confirmation sampling for both of these releases be extended to Friday, September 2, 2022. If you have any questions or concerns, please do not hesitate to contact us.

Thank you,

**Chance Dixon** B.Sc. Senior Environmental Technician

Vertex Resource Services Inc. 3101 Boyd Drive, Carlsbad, NM 88220

C 575.988.1472

[Quoted text hidden]

## **ATTACHMENT 6**

Client Name: Devon Energy Production Company Site Name: Onyx 29 CTB 1 NMOCD Tracking #: nAPP2213024415 Project #: 22E-01720-01 Lab Report: 2205A92

	Table	e 2. Initial Charac	terization	Sample Fi	eld Screer	n and Labo	ratory Res	sults - Dep	th to Grou	undwater ·	<50 feet b	gs	
Si	ample Descri	ption	Fi	eld Screeni	ng			Petrole	eum Hydrod	arbons			
			s			Vol	Volatile Extractable						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
	0	F /22 /2022	(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH22-01	0	5/23/2022	0	23 20	540 202	ND	ND	ND	ND	ND	ND	ND	ND
BH22-01		5/23/2022	-		-	-	-	-	-	-		-	-
BH22-02	0	5/23/2022	0	<b>101</b> 24	537 320	ND	ND -	ND	ND	ND -	ND -	ND	200
BH22-02		5/23/2022	÷			-		-	-			-	-
BH22-03	0	5/23/2022	0	104	6,795	ND	ND	ND	ND	ND	ND	ND	45000
BH22-03	2	5/23/2022	0	80	537	ND	ND	ND	ND	ND	ND	ND	550
BH22-03	4	5/23/2022	0	35	195	-	-	-	-	-	-	-	-
BH22-04	0	5/23/2022	0	35	542	ND	ND	ND	ND	ND	ND	ND	110
BH22-04	2	5/23/2022	0	41	292	-	-	-	-	-	-	-	-
BH22-05	0	5/23/2022	0	41	542	ND	ND	ND	ND	ND	ND	ND	1400
BH22-05	2	5/23/2022	0	14	280	-	-	-	-	-	-	-	-
BH22-06	0	5/23/2022	0	55	5,298	ND	ND	ND	ND	ND	ND	ND	7700
BH22-06	2	5/23/2022	0	47	550	ND	ND	ND	ND	ND	ND	ND	730
BH22-06	4	5/23/2022	0	30	312	-	-	-	-	-	-	-	-
BH22-07	0	5/23/2022	0	38	397	ND	ND	ND	ND	ND	ND	ND	89
BH22-07	2	5/23/2022	0	31	490	-	-	-	-	-	-	-	-
BH22-08	0	5/23/2022	0	102	590	ND	ND	ND	15	ND	15	15	ND
BH22-08	2	5/23/2022	0	33	295	-	-	-	-	-	-	-	-

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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

Client Name: Devon Energy Production Company Site Name: Onyx 29 CTB 1 (Phase 1) NM OCD Tracking #: nAPP2213024415 Project #: 22E-01720-001 Lab Report(sX): 2208802, 2208875, 2208917, 2208A05, 2208A84, 2208A82, 2208C61

	T	able 3. Confirma	tory Samp	le Field So	reen and	Laborator	y Results -	Depth to	Groundwa	ater <50 fe	et bgs		
S	ample Descrip	otion	Fi	eld Screeni	ng			Petrole	eum Hydro				
			ds			Vol	atile			Extractable	5		Inorganic
Sample ID	Depth (ft)	Sample Date	(PID) (PID) (PID)	Extractable Organic Compounds (PetroFlag)	(mage)	euezueg Beuzeue (mg/kg)	(mg/kg)	영제 Gasoline Range Organics (GRO)	월 Diesel Range Organics (DRO)	a) Motor Oil Range Organics (MRO)	(GRO + DRO) (mg/kg)	편 편 전 Hydrocarbons (TPH)	표) (ak) (ak) (ak)
BES22-01	4	8/17/2022	0	-	540	ND	ND	ND	ND	ND	ND	ND	ND
BES22-02	5	8/17/2022	0	-	410	ND	ND	ND	ND	ND	ND	ND	ND
BES22-03	4	8/10/2022	0	-	-	ND	ND	ND	ND	ND	ND	ND	210
BES22-04	4	8/9/2022	0	50	290	ND	ND	ND	ND	ND	ND	ND	130
BES22-05	5	8/17/2022	0	-	421	ND	ND	ND	ND	ND	ND	ND	ND
BES22-06	4	8/17/2022	0	-	473	ND	ND	ND	ND	ND	ND	ND	ND
BES22-07	4	8/17/2022	0	-	398	ND	ND	ND	ND	ND	ND	ND	ND
BES22-08	2	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	89 ND
BES22-09	8	8/18/2022	0	-	378	ND	ND	ND	ND	ND	ND	ND	ND
BES22-10	8	8/18/2022	0	-	243	ND	ND	ND	ND	ND	ND	ND	ND
BES22-11	6	8/11/2022	0	<b>103</b> 96	382 475	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	110 ND
BES22-12 BES22-13	6 6	8/11/2022	0	96 46	330	ND	ND	ND	ND	ND	ND	ND	97
BES22-13 BES22-14	8	8/11/2022 8/15/2022	0	88	456	ND	ND	ND	ND	ND	ND	ND	80
BES22-14 BES22-15	4	8/15/2022	0	26	405	ND	ND	ND	ND	ND	ND	ND	200
BES22-15 BES22-16	4	8/15/2022	0	41	355	ND	ND	ND	ND	ND	ND	ND	460
BES22-17	4	8/15/2022	0	63	257	ND	ND	ND	ND	ND	ND	ND	83
BES22-18	4	8/15/2022	0	28	280	ND	ND	ND	ND	ND	ND	ND	64
BES22-19	4	8/15/2022	0	30	637	ND	ND	ND	ND	ND	ND	ND	260
BES22-20	4	8/15/2022	0	34	347	ND	ND	ND	ND	ND	ND	ND	130
BES22-21	4	8/15/2022	0	18	345	ND	ND	ND	ND	ND	ND	ND	85
BES22-22	4	8/15/2022	0	10	342	ND	ND	ND	ND	ND	ND	ND	110
BES22-23	1	8/26/2022	0	55	550	ND	ND	ND	ND	ND	ND	ND	ND
WES22-03	1	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	520
WES22-04	2	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	450
WES22-05	2	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	87
WES22-12	2	8/11/2022	0	28	550	ND	ND	ND	ND	ND	ND	ND	ND
WES22-12	4	8/11/2022	0	46	512	ND	ND	ND	ND	ND	ND	ND	190
WES22-13	2	8/11/2022	0	28 16	335 307	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
WES22-13 WES22-14	4	8/11/2022	0	74	602	ND	ND	ND	ND	ND	ND	ND	160
WES22-14 WES22-14	4	8/11/2022 8/11/2022	0	33	545	ND	ND	ND	ND	ND	ND	ND	170
WES22-14 WES22-15	2	8/11/2022	0	39	435	ND	ND	ND	ND	ND	ND	ND	ND
WES22-15	4	8/11/2022	0	46	205	ND	ND	ND	ND	ND	ND	ND	ND
WES22-16	2	8/11/2022	0	60	479	ND	ND	ND	ND	ND	ND	ND	ND
WES22-16	4	8/11/2022	0	70	591	ND	ND	ND	ND	ND	ND	ND	100
WES22-17	2	8/11/2022	0	95	281	ND	ND	ND	ND	ND	ND	ND	ND
WES22-17	4	8/11/2022	0	110	270	ND	ND	ND	ND	ND	ND	ND	ND
WES22-19	2	8/12/2022	0	49	467	ND	ND	ND	ND	ND	ND	ND	140
WES22-21	2	8/12/2022	0	93	350	ND	ND	ND	ND	ND	ND	ND	100
WES22-25	2	8/12/2022	0	39	275	ND	ND	ND	ND	ND	ND	ND	120
WES22-26	2	8/15/2022	0	-	322	ND	ND	ND	ND	ND	ND	ND	140
WES22-27	2	8/15/2022	0	-	565	ND	ND	ND	ND	ND	ND	ND	68 ND
WES22-28	2	8/15/2022	0	-	397	ND	ND	ND	ND	ND	ND	ND	ND
WES22-29	2	8/15/2022	0	-	375 395	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 150
WES22-30	2	8/15/2022 8/15/2022	0	-	395	ND ND	ND	ND ND	ND	ND	ND ND	ND ND	71
WES22-31 WES22-32	2	8/15/2022 8/15/2022	0	-	377	ND ND	ND	ND	ND	ND	ND	ND	120
WES22-32 WES22-33	2	8/15/2022 8/15/2022	0	-	462	ND	ND	ND	ND	ND	ND	ND	120 ND
WES22-33 WES22-33	4	8/15/2022	0	-	462	ND	ND	ND	ND	ND	ND	ND	ND
WES22-33 WES22-34	2	8/15/2022	0	-	395	ND	ND	ND	ND	ND	ND	ND	ND
WES22-34 WES22-34	4	8/15/2022	0	-	355	ND	ND	ND	ND	ND	ND	ND	ND
**L322 JT	-7	0/ 10/ 2022											



WES22-35	2	8/16/2022	0	-	428	ND	
WES22-36	1	8/16/2022	0	-	582	ND	
WES22-37	1	8/16/2022	0	-	572	ND	
WES22-38	2	8/16/2022	0	-	1,258	ND	190
WES22-40	2	8/16/2022	0	-	385	ND	220
WES22-41	2	8/17/2022	0	-	272	ND	
WES22-42	2	8/17/2022	0	-	482	ND	
WES22-43	2	8/17/2022	0	-	395	ND	
WES22-44	2	8/17/2022	0	-	214	ND	
WES22-45	3	8/26/2022	0	29	345	ND	
WES22-46	3	8/26/2022	0	74	310	ND	
WES22-47	3	8/26/2022	0	9	315	ND	
WES22-48	3	8/26/2022	0	33	361	ND	
WES22-49	1	8/26/2022	0	23	425	ND	
WES22-50	0.5	8/26/2022	0	93	452	ND	

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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



Client Name: Devon Energy Production Company Site Name: Onyx 29 CTB 1 (Phase 1) NM OCD Tracking #: nAPP2213024415 Project #: 22E-01720-001 Lab Report(sX): 2208802, 2208875, 2208917, 2208A05, 2208A84, 2208A82, 2208C61

		Table 4. Exca	vation Fie	ld Screen	and Labo	ratory Res	ults - Dept	th to Grou	ndwater <	50 feet bg	s		
9	ample Descrip	otion	Fi	eld Screeni	ng			Petrole	eum Hydro	carbons			
			ds			Vol	atile			Extractable	9		Inorganic
Sample ID	Depth (ft)	Sample Date	(PID) (PID) (PID)	Extractable Organic Compounds (PetroFlag)	(mighting)	euezue Beuzeue (mg/kg)	(bay) (ba) (bay) (	ଇଥି Gasoline Range Organics ଅନୁ (GRO)	a) b) b) b) b) b) b) b) b) b) b) b) b) b)	a) Motor Oil Range Organics (MRO)	(OXO + DKO) (mg/kg)	ଞ୍ଚି Total Petroleum କ୍ରି Hydrocarbons (TPH)	ଅ) Chloride Concentration (ସିନ୍ନ
BES22-01	2	8/4/2022	0	27	587	-	-	-	-	-	-	-	-
BES22-01	2	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	760
BES22-01	4	8/17/2022	0	-	540	ND	ND	ND	ND	ND	ND	ND	ND
BES22-02	2	8/4/2022	0	32	480	-	-	-	-	-	-	-	-
BES22-02	4	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	620
BES22-02	5	8/17/2022	0	-	410	ND	ND	ND	ND	ND	ND	ND	ND
BES22-03	2	8/8/2022	0	-	3,940	-	-	-	-	-	-	-	-
BES22-03	4	8/8/2022	0	37	155	-	-	-	-	-	-	-	-
BES22-03	4	8/10/2022	0	-	-	ND	ND	ND	ND	ND	ND	ND	210
BES22-04	2	8/8/2022	0	-	2,367	-	-	-	-	-	-	-	-
BES22-04	4	8/9/2022	0	50	290	ND	ND	ND	ND	ND	ND	ND	130
BES22-05	2	8/8/2022	0	-	2,613	-	-	-	-	-	-	-	-
BES22-05 BES22-05	4	8/8/2022 8/10/2022	0	83	477	-	-	-	-	-	-	-	-
	4		- 0	-	- 421	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	1200 ND
BES22-05	5	8/17/2022	0	- 64	362	ND	ND	ND	ND	ND	ND	ND	ND
BES22-06 BES22-06	2	8/8/2022 8/10/2022	-	- 04		ND	ND	ND	ND	ND	ND	ND	810
BES22-06 BES22-06	4	8/17/2022	0	-	473	ND	ND	ND	ND	ND	ND	ND	ND
BES22-00 BES22-07	2	8/8/2022	0	66	125		-	-		-	-		-
BES22-07 BES22-07	2	8/10/2022	-		-	ND	ND	ND	ND	ND	ND	ND	970
BES22-07 BES22-07	4	8/17/2022	0	-	398	ND	ND	ND	ND	ND	ND	ND	ND
BES22-08	2	8/8/2022	0	25	508	-	-	-	-	-	-	-	
BES22-08	2	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	89
BES22-09	6	8/11/2022	0	29	595	ND	ND	ND	25	ND	25	25	1600
BES22-09	8	8/18/2022	0	-	378	ND	ND	ND	ND	ND	ND	ND	ND
BES22-10	6	8/11/2022	0	51	610	ND	ND	ND	100	62	100	162	1800
BES22-10	8	8/18/2022	0	-	243	ND	ND	ND	ND	ND	ND	ND	ND
BES22-11	6	8/11/2022	0	103	382	ND	ND	ND	ND	ND	ND	ND	110
BES22-12	6	8/11/2022	0	96	475	ND	ND	ND	ND	ND	ND	ND	ND
BES22-13	6	8/11/2022	0	46	330	ND	ND	ND	ND	ND	ND	ND	97
BES22-14	6	8/11/2022	0	-	2,170	-	-	-	-	-	-	-	-
BES22-14	8	8/15/2022	0	88	456	ND	ND	ND	ND	ND	ND	ND	80
BES22-15	4	8/15/2022	0	26	405	ND	ND	ND	ND	ND	ND	ND	200
BES22-16	4	8/15/2022	0	41	355	ND	ND	ND	ND	ND	ND	ND	460
BES22-17	4	8/15/2022	0	63	257	ND	ND	ND	ND	ND	ND	ND	83
BES22-18	4	8/15/2022	0	28	280	ND	ND	ND	ND	ND	ND	ND	64
BES22-19	4	8/15/2022	0	30	637	ND	ND	ND	ND	ND	ND	ND	260
BES22-20	4	8/15/2022	0	34	347	ND	ND	ND	ND	ND	ND	ND	130
BES22-21	4	8/15/2022	0	18	345	ND	ND	ND	ND	ND	ND	ND	85
BES22-22	4	8/15/2022	0	10	342	ND	ND	ND	ND	ND	ND	ND	110
BES22-23	1	8/26/2022	0	55	550	ND	ND	ND	ND	ND	ND	ND	ND
WES22-01	1	8/4/2022	0	- 88	220	- ND	- ND	- ND	- ND	- ND	- ND	- ND	- 1300
WES22-01 WES22-02	1	8/10/2022	- 0		- 225			ND -			ND -		
WES22-02 WES22-02	1	8/4/2022	-	41	225	- ND	- ND	- ND	- ND	- ND	- ND	- ND	- 760
WES22-02 WES22-03	1	8/10/2022	0	- 68	280	ND -	-	ND -	-	-	-	ND -	-
WES22-03 WES22-03	1	8/4/2022 8/10/2022	-	- 00	- 280	- ND	- ND	- ND	- ND	- ND	- ND	- ND	- 520
WES22-03 WES22-04	1	8/4/2022	0	55	277		-			-	-	-	
WES22-04 WES22-04	2	8/10/2022	-	-	-	- ND	- ND	- ND	- ND	- ND	- ND	- ND	450
WES22-04	1	8/4/2022	0	35	346	-	-	-	-	-	-	-	
WES22-05	2	8/10/2022	-	-	-	ND	ND	ND	ND	ND	ND	ND	87
WES22-06	1	8/8/2022	0	-	8,345	-	-	-	-	-	-	-	-
		0, 0, 2022	-	I	.,,,,,,		I		I	I	I	ı 1	ı I



WES22-07	1	8/8/2022	0	76	45	_	_	_	_	_	_	_	_
WES22-07	2		-	-	45	ND	ND	ND	ND	ND	- ND	- ND	2800
WES22-07 WES22-08	1	8/10/2022	0		1,380	ND		ND	ND	ND	ND	ND	2800
WES22-08		8/8/2022 8/8/2022	0	90	445	-	-	-	-	-	-	-	_
	1		-	- 90	445	- ND	760						
WES22-09 WES22-10	1	8/10/2022 8/8/2022	0		7,292	ND				ND	ND	ND	700
	1	, ,	0	0	263	-	-	-	-	-	-	-	-
WES22-11	1	8/8/2022	0	0	205	- ND	1100						
WES22-11 WES22-12	1	8/10/2022	-		-			ND					ND
	2	8/11/2022	0	28 46	550 512	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	190
WES22-12	4	8/11/2022			-								
WES22-13	2	8/11/2022	0	28 16	335 307	ND ND							
WES22-13	4	8/11/2022	-										
WES22-14	2	8/11/2022	0	74 33	602 545	ND ND	160 170						
WES22-14	4	8/11/2022											-
WES22-15	2	8/11/2022	0	39	435 205	ND	ND ND						
WES22-15	4	8/11/2022	-	46		ND							
WES22-16	2	8/11/2022	0	60 70	479 591	ND ND	ND 100						
WES22-16	4	8/11/2022		-									
WES22-17	2	8/11/2022	0	95	281 270	ND							
WES22-17	4	8/11/2022	0	110	270 1,487	ND							
WES22-18	2	8/12/2022	0	- 49	467	-	-	-	-	-	-	-	-
WES22-19	2	8/12/2022	0	-	-	ND	140						
WES22-20	2	8/12/2022	-	-	1,357	-	-	-	-	-	-	-	-
WES22-21	2	8/12/2022	0	93	350	ND	100						
WES22-22	2	8/12/2022	0	-	1,505	-	-	-	-	-	-	-	-
WES22-23	2	8/12/2022	0	-	925	-	-	-	-	-	-	-	-
WES22-24	2	8/12/2022	0	-	1,147	-	-	-	-	-	-	-	-
WES22-25	2	8/12/2022	0	39	275	ND	120						
WES22-26	2	8/15/2022	0	-	322 565	ND	ND	ND	ND	ND	ND	ND ND	140 68
WES22-27	2	8/15/2022	0		397	ND	ND	ND	ND ND	ND	ND	ND	ND
WES22-28	2	8/15/2022	0	-		ND	ND	ND		ND	ND		
WES22-29	2	8/15/2022	0	-	375 395	ND ND	ND	ND	ND ND	ND	ND	ND ND	ND 150
WES22-30	2	8/15/2022	0	-			ND	ND		ND	ND		
WES22-31	2	8/15/2022	0	-	377	ND	71						
WES22-32	2	8/15/2022	0	-	370	ND	120						
WES22-33	2	8/15/2022	0	-	462	ND							
WES22-33	4	8/15/2022	0	-	409	ND							
WES22-34	2	8/15/2022	0	-	395	ND							
WES22-34	4	8/15/2022	0	-	356	ND							
WES22-35	2	8/16/2022	0	-	428	ND							
WES22-36	1	8/16/2022	0	-	582	ND	ND	ND	ND 10	ND	ND 10	ND	ND
WES22-37	1	8/16/2022	0	-	572	ND	ND	ND	19 ND	ND	19 ND	19 ND	ND
WES22-38	2	8/16/2022	0	-	1,258	ND	190						
WES22-39	2	8/16/2022	0	-	1,595	-	-	-	-	-	-	-	-
WES22-40	2	8/16/2022	0	-	385	ND	220						
WES22-41	2	8/17/2022	0	-	272	ND							
WES22-42	2	8/17/2022	0	-	482	ND							
WES22-43	2	8/17/2022	0	-	395	ND							
WES22-44	2	8/17/2022	0	-	214	ND							
WES22-45	3	8/26/2022	0	29	345	ND							
WES22-46	3	8/26/2022	0	74	310	ND							
WES22-47	3	8/26/2022	0	9	315	ND							
WES22-48	3	8/26/2022	0	33	361	ND							
WES22-49	1	8/26/2022	0	23	425	ND							
WES22-50	0.5	8/26/2022	0	93	452	ND							

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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



Client Name: Devon Energy Production Company Site Name: Onyx 29 CTB 1 NMOCD Tracking #: nAPP2116441032 Project #: 22E-01720-02 Lab Reports: 2205B74, 2205C48

	Table	e 5. Initial Charact	erization	rization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs								ogs	
Sa	Fie	eld Screeni	ng										
			sbi			Volatile			Inorganic				
Sample ID	Depth (ft)	Sample Date	(PID) (PID)	Extractable Organic 3 Compounds (PetroFlag)	(mdd) (mdd) (mdd)	eus Beuzeue (mg/kg)	(bg) (bg/grex (Total)	ଇଥି Gasoline Range Organics ଅନୁ (GRO)	a) biesel Range Organics (8) (DRO)	a) Motor Oil Range Organics (형) (MRO)	(OXO + OXO) (mg/kg)	ଞ୍ଚି Total Petroleum କ୍ରୁ Hydrocarbons (TPH)	u) Chloride Concentration (8)
BH22-01	0	5/24/2022	0	34	325	ND	ND	ND	20	ND	20	20	ND
BH22-01	2	5/24/2022	0	18	317	-	-	-	-	-	-	-	-
BH22-02	0	5/24/2022	0	37	3,362	ND	ND	ND	ND	ND	ND	ND	5400
BH22-02	2	5/24/2022	0	24	2,637	ND	ND	ND	ND	ND	ND	ND	2700
BH22-02	4	5/24/2022	0	36	360	ND	ND	ND	ND	ND	ND	ND	260
BH22-03	0	5/24/2022	0	2,000	4,560	ND	ND	ND	4100	2400	4100	6500	5500
BH22-03	2	5/24/2022	0	112	4,032	ND	ND	ND	240	140	240	380	3700
BH22-03	4	5/24/2022	0	488	1,467	-	-	-	-	-	-	-	-
BH22-03	5	5/24/2022	0	220	600	ND	ND	ND	480	460	480	940	640
BH22-04	0	5/24/2022	0	37	395	ND	ND	ND	12	ND	12	12	98
BH22-04	2	5/24/2022	0	13	300	-	-	-	-	-	-	-	-
BH22-05	0	5/24/2022	0	11	232	ND	ND	ND	29	ND	29	29	73
BH22-05	2	5/24/2022	0	19	387	-	-	-	-	-	-	-	-
BH22-06	0	5/24/2022	0	68	3,781	ND	ND	ND	17	ND	17	17	5000
BH22-06	2	5/24/2022	0	76	2,337	ND	ND	ND	ND	ND	ND	ND	4500
BH22-06	4	5/24/2022	0	66	817	-	-	-	-	-	-	-	-
BH22-06	6	5/24/2022	0	29	525	ND	ND	ND	ND	ND	ND	ND	120
BH22-07	0	5/24/2022	0	43	480	ND	ND	ND	ND	ND	ND	ND	100
BH22-07	2	5/24/2022	0	67	495	-	-	-	-	-	-	-	-
BH22-08	0	5/24/2022	0	2,000	1,125	ND	ND	ND	7100	4700	7100	11800	1300
BH22-08	2	5/24/2022	0	105	3,855	ND	ND	ND	76	72	76	148	4700
BH22-08	4	5/24/2022	0	102	977	-	-	-	-	-	-	-	-
BH22-08	5	5/24/2022	0	50	600	ND	ND	ND	120	120	120	240	720
BH22-09	0	5/24/2022	0	96	572	ND	ND	ND	16	ND	16	16	370
BH22-09	2	5/24/2022	0	58	477	-	-	-	-	-	-	-	-
BH22-10	0	5/24/2022	0	343	4,280	ND	ND	ND	390	370	390	760	20000
BH22-10	2	5/24/2022	0	123	4,400	ND	ND	ND	49	ND	49	49	7200
BH22-10	3	5/24/2022	0	48	585	ND	ND	ND	ND	ND	ND	ND	430
BH22-11	0	5/24/2022	0	25	370	ND	ND	ND	ND	ND	ND	ND	230
BH22-11	2	5/24/2022	0	14	310	-	-	-	-	-	-	-	-
BH22-12	0	5/24/2022	0	111	2,098	ND	ND	ND	ND	ND	ND	ND	17000
BH22-12	2	5/24/2022	0	17	585	ND	ND	ND	ND	ND	ND	ND	230
BH22-13	0	5/25/2022	0	146	328	ND	ND	ND	31	52	31	83	250
BH22-13	2	5/25/2022	0	28	440	ND	ND	ND	ND	ND	ND	ND	250
BH22-14	0	5/25/2022	0	114	160	ND	ND	ND	23	ND	23	23	70
BH22-14	2	5/25/2022	0	31	415	-	-	-	-	-	-	-	-
BH22-15	0	5/25/2022	0	56	158	ND	ND	ND	ND	ND	ND	ND	120
BH22-15	2	5/25/2022	0	21	180	-	-	-	-	-	-	-	-
BH22-16	0	5/25/2022	0	25	93	ND	ND	ND	ND	ND	ND	ND	ND
BH22-16	2	5/25/2022	0	38	135	-	-	-	-	-	-	-	-
BH22-17	0	5/25/2022	0	38	118	ND	ND	ND	ND	ND	ND	ND	ND
BH22-17	2	5/25/2022	0	6	78	-	-	-	-	-	-	-	-

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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



Client Name: Devon Energy Production Company Site Name: Onyx 29 CTB 1 Phase 2 NM OCD Tracking #: nAPP2116441032 Project #: 22E-01720-001 Lab Report(sX): 2208102, 2208167, 2209087

							Laboratory Results - Depth to Groundwater <50 feet bgs							
S	Field Screening			Petroleum Hydrocarbons										
			ds			Vola	atile			Extractable	9		Inorganic	
Sample ID	Depth (ft)	Sample Date	(PID) (PID)	Extractable Organic 3 Compounds (PetroFlag)	() (mdd) (md	euezue Beuzeu (mg/kg)	ୁଅ ଅନୁ ଅନୁ	ଞ୍ଚ Gasoline Range Organics ଅନ୍ଧ (GRO)	ଞ୍ଚି Diesel Range Organics ଅନ୍ଧି (DRO)	a) Motor Oil Range Organics ((MRO)	(GRO + DRO) (mg/kg)	편 Total Petroleum (중 Hydrocarbons (TPH)	(mg/kg)	
BES22-01	1	8/29/2022	0	56	529	ND	ND	ND	ND	ND	ND	ND	97	
BES22-02	1	8/29/2022	0	69	228	ND	ND	ND	ND	ND	ND	ND	77	
BES22-03	4	8/29/2022	0	72	472	ND	ND	ND	ND	ND	ND	ND	110	
BES22-04	2	8/30/2022	0	31	3,552	-	-	-	-	-	-	-	-	
BES22-04	4	8/31/2022	0	92	372	ND	ND	ND	ND	ND	ND	ND	ND	
BES22-05	2	8/30/2022	0	48	547	ND	ND	ND	ND	ND	ND	ND	110	
BES22-06	2	8/30/2022	0	27	437	ND	ND	ND	ND	ND	ND	ND	120	
BES22-07	2	8/30/2022	0	60	470	ND	ND	ND	ND	ND	ND	ND	110	
BES22-08	2	8/31/2022	0	71	480	ND	ND	ND	ND	ND	ND	ND	ND	
BES22-09	2	8/31/2022	0	110	375	ND	ND	ND	ND	ND	ND	ND	62	
BES22-10	2	8/31/2022	0	102	280	ND	ND	ND	ND	ND	ND	ND	ND	
BES22-11	2	8/31/2022	0	34	71	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-01	0.5	8/29/2022	0	56	346	ND	ND	ND	ND	ND	ND	ND	110	
WES22-02	0.5	8/29/2022	0	41	510	ND	ND	ND	ND	ND	ND	ND	110	
WES22-03	0.5	8/29/2022	0	28	469	ND	ND	ND	ND	ND	ND	ND	190	
WES22-04	0.5	8/29/2022	0	26	425	ND	ND	ND	ND	ND	ND	ND	170	
WES22-05	2	8/29/2022	0	61	367	ND	ND	ND	ND	ND	ND	ND	150	
WES22-06	2	8/29/2022	0	90	257	ND	ND	ND	ND	ND	ND	ND	180	
WES22-07	2	8/29/2022	0	80	402	ND	ND	ND	ND	ND	ND	ND	290	
WES22-08	2	8/29/2022	0	50	380	ND	ND	ND	ND	ND	ND	ND	270	
WES22-09	1	8/30/2022	0	74	532	ND	ND	ND	ND	ND	ND	ND	180	
WES22-09	2	8/31/2022	0	28	321	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-10	1	8/30/2022	0	72	430	ND	ND	ND	ND	ND	ND	ND	130	
WES22-11	1	8/30/2022	0	10	452	ND	ND	ND	ND	ND	ND	ND	110	
WES22-12	1	8/30/2022	0	18	360	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-13	1	8/31/2022	0	20	395	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-14	1	8/31/2022	0	18	437	ND	ND	ND	ND	ND	ND	ND	65	
WES22-15	1	8/31/2022	0	25	317	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-16	1	8/31/2022	0	55	225	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-17	1	8/31/2022	0	48	280	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-18	2	8/31/2022	0	99	389	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-19	3	8/31/2022	0	55	345	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-20	3	8/31/2022	0	72	456	ND	ND	ND	ND	ND	ND	ND	ND	
WES22-21	1.5	8/31/2022	0	43	220	ND	ND	ND	ND	ND	ND	ND	ND	

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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



## **ATTACHMENT 7**



June 06, 2022

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

RE: Onyx 29 CTB 1

OrderNo.: 2205A92

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 10 sample(s) on 5/25/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-01 0' **Project:** Onyx 29 CTB 1 Collection Date: 5/23/2022 9:00:00 AM Lab ID: 2205A92-001 Matrix: SOIL Received Date: 5/25/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME **Diesel Range Organics (DRO)** ND 8.9 mg/Kg 1 5/27/2022 4:51:36 PM Motor Oil Range Organics (MRO) ND 44 mg/Kg 1 5/27/2022 4:51:36 PM Surr: DNOP 82.5 51.1-141 %Rec 1 5/27/2022 4:51:36 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride ND 60 5/31/2022 9:09:06 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 5/26/2022 9:46:31 PM Benzene mg/Kg 1 Toluene ND 5/26/2022 9:46:31 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 5/26/2022 9:46:31 PM Xylenes, Total ND 0.10 mg/Kg 1 5/26/2022 9:46:31 PM Surr: 1,2-Dichloroethane-d4 105 %Rec 5/26/2022 9:46:31 PM 70-130 1 Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 5/26/2022 9:46:31 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/26/2022 9:46:31 PM 113 Surr: Toluene-d8 101 70-130 %Rec 1 5/26/2022 9:46:31 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/26/2022 9:46:31 PM 5.0 1 Surr: BFB 108 70-130 %Rec 1 5/26/2022 9:46:31 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 1 of 14

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-02 0' **Project:** Onyx 29 CTB 1 Collection Date: 5/23/2022 9:10:00 AM Lab ID: 2205A92-002 Matrix: SOIL Received Date: 5/25/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 10 mg/Kg 1 5/27/2022 5:02:29 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 5/27/2022 5:02:29 PM Surr: DNOP 71.6 51.1-141 %Rec 1 5/27/2022 5:02:29 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 200 60 5/31/2022 9:46:20 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 5/26/2022 10:15:00 PM Benzene mg/Kg 1 Toluene ND 5/26/2022 10:15:00 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 5/26/2022 10:15:00 PM Xylenes, Total ND 0.095 mg/Kg 1 5/26/2022 10:15:00 PM Surr: 1,2-Dichloroethane-d4 101 70-130 %Rec 5/26/2022 10:15:00 PM 1 Surr: 4-Bromofluorobenzene 97.8 70-130 %Rec 1 5/26/2022 10:15:00 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/26/2022 10:15:00 PM 112 Surr: Toluene-d8 99.5 70-130 %Rec 1 5/26/2022 10:15:00 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/26/2022 10:15:00 PM 48 1

108

70-130

%Rec

1

5/26/2022 10:15:00 PM

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

**Qualifiers:** 

Surr: BFB

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 14

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB 1

2205A92-003

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-03 0' Collection Date: 5/23/2022 9:20:00 AM Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed						
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>JME</b>						
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	5/27/2022 5:13:19 PM						
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/27/2022 5:13:19 PM						
Surr: DNOP	92.8	51.1-141	%Rec	1	5/27/2022 5:13:19 PM						
EPA METHOD 300.0: ANIONS					Analyst: NAI						
Chloride	45000	1500	mg/Kg	500	6/2/2022 11:54:14 AM						
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: <b>JR</b>						
Benzene	ND	0.025	mg/Kg	1	5/26/2022 10:43:31 PM						
Toluene	ND	0.050	mg/Kg	1	5/26/2022 10:43:31 PM						
Ethylbenzene	ND	0.050	mg/Kg	1	5/26/2022 10:43:31 PM						
Xylenes, Total	ND	0.10	mg/Kg	1	5/26/2022 10:43:31 PM						
Surr: 1,2-Dichloroethane-d4	98.5	70-130	%Rec	1	5/26/2022 10:43:31 PM						
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	5/26/2022 10:43:31 PM						
Surr: Dibromofluoromethane	111	70-130	%Rec	1	5/26/2022 10:43:31 PM						
Surr: Toluene-d8	101	70-130	%Rec	1	5/26/2022 10:43:31 PM						
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JR</b>						
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/26/2022 10:43:31 PM						
Surr: BFB	109	70-130	%Rec	1	5/26/2022 10:43:31 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-03 2' **Project:** Onyx 29 CTB 1 Collection Date: 5/23/2022 9:30:00 AM Lab ID: 2205A92-004 Matrix: SOIL Received Date: 5/25/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.3 mg/Kg 1 5/27/2022 5:24:09 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 5/27/2022 5:24:09 PM Surr: DNOP 104 51.1-141 %Rec 1 5/27/2022 5:24:09 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 550 60 5/31/2022 10:11:09 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 5/27/2022 1:06:40 AM Benzene mg/Kg 1 Toluene ND 5/27/2022 1:06:40 AM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 5/27/2022 1:06:40 AM Xylenes, Total ND 0.10 mg/Kg 1 5/27/2022 1:06:40 AM Surr: 1,2-Dichloroethane-d4 96.0 %Rec 5/27/2022 1:06:40 AM 70-130 1 Surr: 4-Bromofluorobenzene 96.0 70-130 %Rec 1 5/27/2022 1:06:40 AM Surr: Dibromofluoromethane 108 70-130 %Rec 1 5/27/2022 1:06:40 AM Surr: Toluene-d8 99.7 70-130 %Rec 1 5/27/2022 1:06:40 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 1:06:40 AM 5.0 1 Surr: BFB 107 70-130 %Rec 1 5/27/2022 1:06:40 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB 1

2205A92-005

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-04 0' Collection Date: 5/23/2022 9:40:00 AM Received Date: 5/25/2022 7:15:00 AM

<b>Eab ID</b> . 2205/1/2 005	Julia, DOIL	<b>Accelved Date:</b> 5/25/2022 1.15.00 1401									
Analyses	Result	RL Q	ual Units	DF	Date Analyzed						
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>JME</b>						
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/27/2022 5:34:57 PM						
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/27/2022 5:34:57 PM						
Surr: DNOP	81.7	51.1-141	%Rec	1	5/27/2022 5:34:57 PM						
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>						
Chloride	110	60	mg/Kg	20	5/31/2022 10:23:34 PM						
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: JR						
Benzene	ND	0.024	mg/Kg	1	5/27/2022 1:35:23 AM						
Toluene	ND	0.049	mg/Kg	1	5/27/2022 1:35:23 AM						
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 1:35:23 AM						
Xylenes, Total	ND	0.097	mg/Kg	1	5/27/2022 1:35:23 AM						
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	5/27/2022 1:35:23 AM						
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	5/27/2022 1:35:23 AM						
Surr: Dibromofluoromethane	109	70-130	%Rec	1	5/27/2022 1:35:23 AM						
Surr: Toluene-d8	100	70-130	%Rec	1	5/27/2022 1:35:23 AM						
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: JR						
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 1:35:23 AM						
Surr: BFB	110	70-130	%Rec	1	5/27/2022 1:35:23 AM						

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

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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H Holding times for preparation or analysis exceeded

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-05 0 **Project:** Onyx 29 CTB 1 Collection Date: 5/23/2022 9:50:00 AM Lab ID: 2205A92-006 Matrix: SOIL Received Date: 5/25/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: JME Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 5/27/2022 5:45:51 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 5/27/2022 5:45:51 PM Surr: DNOP 82.5 51.1-141 %Rec 1 5/27/2022 5:45:51 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 1400 60 5/31/2022 10:35:58 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 5/27/2022 2:03:54 AM Benzene ND mg/Kg 1 Toluene ND 5/27/2022 2:03:54 AM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 5/27/2022 2:03:54 AM Xylenes, Total ND 0.098 mg/Kg 1 5/27/2022 2:03:54 AM Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 5/27/2022 2:03:54 AM 1 Surr: 4-Bromofluorobenzene 97.8 70-130 %Rec 1 5/27/2022 2:03:54 AM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 2:03:54 AM 110 Surr: Toluene-d8 100 70-130 %Rec 1 5/27/2022 2:03:54 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 2:03:54 AM 49 1 Surr: BFB 109 70-130 %Rec 1 5/27/2022 2:03:54 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB 1

2205A92-007

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

### Hall Environmental Analysis Laboratory, Inc.

 Client Sample ID: BH22-06 0'

 Collection Date: 5/23/2022 10:00:00 AM

 Matrix: SOIL

 Received Date: 5/25/2022 7:15:00 AM

 Description

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/27/2022 5:56:48 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/27/2022 5:56:48 PM
Surr: DNOP	92.5	51.1-141	%Rec	1	5/27/2022 5:56:48 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	7700	300	mg/Kg	100	6/2/2022 5:35:08 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.025	mg/Kg	1	5/27/2022 2:32:20 AM
Toluene	ND	0.049	mg/Kg	1	5/27/2022 2:32:20 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 2:32:20 AM
Xylenes, Total	ND	0.099	mg/Kg	1	5/27/2022 2:32:20 AM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	5/27/2022 2:32:20 AM
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	5/27/2022 2:32:20 AM
Surr: Dibromofluoromethane	113	70-130	%Rec	1	5/27/2022 2:32:20 AM
Surr: Toluene-d8	99.3	70-130	%Rec	1	5/27/2022 2:32:20 AM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 2:32:20 AM
Surr: BFB	106	70-130	%Rec	1	5/27/2022 2:32:20 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-06 2' **Project:** Onyx 29 CTB 1 Collection Date: 5/23/2022 10:10:00 AM Lab ID: 2205A92-008 Matrix: SOIL Received Date: 5/25/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 5/27/2022 6:07:50 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 5/27/2022 6:07:50 PM Surr: DNOP 51.1-141 %Rec 1 5/27/2022 6:07:50 PM 113 **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 730 60 5/31/2022 11:25:34 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 5/27/2022 3:00:45 AM Benzene ND mg/Kg 1 Toluene ND 5/27/2022 3:00:45 AM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 5/27/2022 3:00:45 AM Xylenes, Total ND 0.096 mg/Kg 1 5/27/2022 3:00:45 AM Surr: 1,2-Dichloroethane-d4 100 70-130 %Rec 5/27/2022 3:00:45 AM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 5/27/2022 3:00:45 AM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 3:00:45 AM 115 Surr: Toluene-d8 99.6 70-130 %Rec 1 5/27/2022 3:00:45 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 3:00:45 AM 48 1 Surr: BFB 113 70-130 %Rec 1 5/27/2022 3:00:45 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-07 0' **Project:** Onyx 29 CTB 1 Collection Date: 5/23/2022 10:20:00 AM Lab ID: 2205A92-009 Matrix: SOIL Received Date: 5/25/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME Diesel Range Organics (DRO) ND 9.2 mg/Kg 1 5/27/2022 6:18:52 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 5/27/2022 6:18:52 PM Surr: DNOP 75.9 51.1-141 %Rec 1 5/27/2022 6:18:52 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 59 5/31/2022 11:37:58 PM 89 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 5/27/2022 3:29:26 AM Benzene ND 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 5/27/2022 3:29:26 AM Ethylbenzene ND 0.047 mg/Kg 1 5/27/2022 3:29:26 AM Xylenes, Total ND 0.094 mg/Kg 1 5/27/2022 3:29:26 AM Surr: 1,2-Dichloroethane-d4 105 70-130 %Rec 5/27/2022 3:29:26 AM 1 Surr: 4-Bromofluorobenzene 100 70-130 %Rec 1 5/27/2022 3:29:26 AM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 3:29:26 AM 114 Surr: Toluene-d8 100 70-130 %Rec 1 5/27/2022 3:29:26 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 3:29:26 AM 47 1 Surr: BFB 107 70-130 %Rec 1 5/27/2022 3:29:26 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB 1

2205A92-010

Analytical Report Lab Order 2205A92

Date Reported: 6/6/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-08 0' Collection Date: 5/23/2022 10:30:00 AM Received Date: 5/25/2022 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: JME
Diesel Range Organics (DRO)	15	8.8	mg/Kg	1	5/27/2022 6:29:54 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	5/27/2022 6:29:54 PM
Surr: DNOP	82.3	51.1-141	%Rec	1	5/27/2022 6:29:54 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	60	mg/Kg	20	5/31/2022 1:19:34 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	т				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 3:57:57 AM
Toluene	ND	0.047	mg/Kg	1	5/27/2022 3:57:57 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/27/2022 3:57:57 AM
Xylenes, Total	ND	0.094	mg/Kg	1	5/27/2022 3:57:57 AM
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	5/27/2022 3:57:57 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	5/27/2022 3:57:57 AM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	5/27/2022 3:57:57 AM
Surr: Toluene-d8	101	70-130	%Rec	1	5/27/2022 3:57:57 AM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/27/2022 3:57:57 AM
Surr: BFB	110	70-130	%Rec	1	5/27/2022 3:57:57 AM

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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Client: Project:	Vertex R Onyx 29	Resources Services CTB 1	, Inc.							
Sample ID:	MB-67791	SampType: m	blk	Tes	300.0: Anions					
Client ID:	PBS	Batch ID: 67	791	F	RunNo: <b>88</b>	3375				
Prep Date:	5/31/2022	Analysis Date: 5	/31/2022	S	SeqNo: 31	35632	Units: mg/Kg	9		
Analyte Chloride		Result PQL ND 1.5		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	LCS-67791	SampType: Ic		Tes	tCode: EP	PA Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 67	791	F	RunNo: <b>88</b>	3375				
Prep Date:	5/31/2022	Analysis Date: 5	/31/2022	S	SeqNo: 31	35633	Units: mg/Kg	9		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	95.1	90	110			
Sample ID:	MB-67792	SampType: <b>m</b>	blk	Tes	tCode: EP	PA Method	300.0: Anions			
Client ID:	PBS	Batch ID: 67	792	F	RunNo: <b>88</b>	3387				
Prep Date:	5/31/2022	Analysis Date: 5	/31/2022	S	SeqNo: 31	35739	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5					-			
Sample ID:	LCS-67792	SampType: Ic	S	Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 67	792	F	RunNo: <b>88</b>	3387				
Prep Date:	5/31/2022	Analysis Date: 5	/31/2022	S	SeqNo: 31	35740	Units: mg/Kg	9		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	93.7	90	110			

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

2205A92

06-Jun-22

WO#:

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Client:Vertex RProject:Onyx 29	esources S CTB 1	ervices,	Inc.							
Sample ID: MB-67713		Гуре: МЕ					8015M/D: Die:	sel Range	Organics	
Client ID: <b>PBS</b> Prep Date: <b>5/26/2022</b>	Batc Analysis [	h ID: <b>677</b> Date: <b>5/</b> 2	-		RunNo: <b>88</b> SeqNo: <b>3</b> 1		Units: <b>mg/K</b> g	9		
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	9.2		10.00		92.2	51.1	141			
Sample ID: LCS-67713	Samp	Гуре: <b>LC</b>	s	Tes	tCode: EF	A Method	8015M/D: Die:	sel Range	Organics	
Client ID: LCSS	Batc	h ID: 677	/13	F	RunNo: <b>88</b>	3321				
Prep Date: 5/26/2022	Analysis [	Date: 5/2	27/2022	S	SeqNo: 31	33779	Units: mg/K	9		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	99.1	64.4	127			
Surr: DNOP	4.1		5.000		82.4	51.1	141			

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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06-Jun-22

WO#:

Client: Vertex	Resources S	Services,	Inc.									
Project: Onyx 2	9 CTB 1											
Sample ID: Ics-67701	Samp	Type: LC	S4	Tes	stCode: El	PA Method	8260B: Volati	les Short	List			
Client ID: BatchQC	Batc	h ID: 677	701	F	RunNo: <b>8</b>	8322						
Prep Date: 5/25/2022	Analysis I	Date: 5/2	26/2022	:	SeqNo: 3	132369	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.93	0.025	1.000	0	92.9	80	120					
Toluene	0.98	0.050	1.000	0	97.8	80	120					
Ethylbenzene	1.0	0.050	1.000	0	101	80	120					
Xylenes, Total	3.0	0.10	3.000	0	101	80	120					
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130					
Surr: 4-Bromofluorobenzene	0.48		0.5000		95.1	70	130					
Surr: Dibromofluoromethane	0.56		0.5000		113	70	130					
Surr: Toluene-d8	0.49		0.5000		97.2	70	130					
Sample ID: mb-67701	Samp	Туре: МЕ	BLK	Tes	stCode: El	PA Method	8260B: Volati	les Short	List			
Client ID: PBS	Batc	h ID: 677	701	F	RunNo: <b>8</b>	8322						
Prep Date: 5/25/2022	Analysis I	Date: 5/2	26/2022	Ş	SeqNo: 3	132370	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	0.52		0.5000		103	70	130					
Surr: 4-Bromofluorobenzene	0.50		0.5000		100	70	130					
Surr: Dibromofluoromethane	0.58		0.5000		115	70	130					
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
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2205A92

06-Jun-22

	Resources Se 9 CTB 1	ervices,	Inc.							
Sample ID: Ics-67701	SampT	ype: LC	s	Tes	tCode: EF	A Method	8015D Mod: (	Gasoline R	ange	
Client ID: LCSS	Batch	ID: 677	/01	F	RunNo: <b>88</b>	322				
Prep Date: 5/25/2022	Analysis D	ate: 5/2	26/2022	S	SeqNo: 31	32396	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.6	70	130			
Surr: BFB	510		500.0		102	70	130			
Sample ID: mb-67701	SampT	уре: <b>МВ</b>	LK	Tes	tCode: EF	A Method	8015D Mod: (	Gasoline R	ange	
Client ID: PBS	Batch	ID: 677	<b>'</b> 01	F	RunNo: <b>88</b>	322				
Prep Date: 5/25/2022	Analysis D	ate: 5/2	26/2022	S	SeqNo: 31	32397	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	550		500.0		109	70	130			

**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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

2205A92

06-Jun-22

WO#:

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ENVIRONMENTAL ANALYSIS LABORATORY	Alb TEL: 505-345-3975 Website: www.hc	uquerq FAX:		09 07	Sample Log-In Check List					
Client Name: Vertex Resources Services, Inc.	Work Order Number	220	5A92			RcptNo: 1				
Received By: Juan Rojas	5/25/2022 7:15:00 AM			Hunn	En g					
Completed By: Sean Livingston	5/25/2022 8:44:36 AM			5	1	in the				
Reviewed By: 31 5/25/22						1 Joi-				
Chain of Custody										
1. Is Chain of Custody complete?		Yes	~	No		Not Present				
2. How was the sample delivered?		Cou	rier							
Log In										
3. Was an attempt made to cool the samples?		Yes		No						
A More all complex reasined at a terrareture				No						
<ol> <li>Were all samples received at a temperature</li> </ol>		Yes		NO	-					
5. Sample(s) in proper container(s)?		Yes		No						
6. Sufficient sample volume for indicated test(s)	?	Yes		No						
7. Are samples (except VOA and ONG) properl	y preserved?	Yes		No						
8. Was preservative added to bottles?		Yes		No						
9. Received at least 1 vial with headspace <1/4	' for AQ VOA?	Yes		No		NA 🗹				
0, Were any sample containers received broke		Yes		No	V					
						# of preserved bottles checked				
1. Does paperwork match bottle labels?		Yes	$\checkmark$	No		for pH:				
(Note discrepancies on chain of custody)					_	(<2 or >12 unless noted)				
2. Are matrices correctly identified on Chain of	Custody?			No		Adjusted?				
3. Is it clear what analyses were requested?				No						
4. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No	Ц	Checked by: 5-25-22				
Special Handling (if applicable)										
15. Was client notified of all discrepancies with t	his order?	Yes		No		NA 🗹				
Person Notified:	Date:	-		_	-					
By Whom:	Via: [	eM	ail 🗌 Pho	one 🗌	Fav	In Person				
Regarding:	via. [				] . ux					
Client Instructions:				-						
16. Additional remarks:				-						
17. <u>Cooler Information</u>										

Page 1 of 1

Acces							:31 AM																r ug	<del>e 123 o</del>	
	HALL ENVIRONMENTAL		www.rialierivirorintental.com ns NF - Alburgherdie NM 87100		Analysis	t()	DO4, S	y) YON <sup>2,</sup>	۰۶O slb;	teM , r, U (AC)	RCRA 8 CI,F, B 8270 (V 8270 (S 70tal Co	>												Bill deven	If necessary, samples submitted to hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this necessary, any cub contracted data will be cloud, extended to the serves as notice of this necessary.
1	Ì		4901 Hawkins NF	Tel. 505-345-3975		1.00	PCB's	Я О / С /8082 (1.40	9 20 Səp	etho	87EX/ (08:Н9Т 8081 Ре М) 803 ВОВ (М	//									1	Remarks:	WORK Order	to direct	anthe Any sub-contract
	SOW		_		0			C Dixon		-0=0.3 (°C)	HEAL No. 2205 Ag2	00	202	100	100	205	<i>201</i> 6	607	2008	600	010	Time	Slatlan 1030	Date Time	This carvas as notice of this not
d Time:	d Z Rush		29 CTB	(	01+10	ager:	ica Peppin	Cartter	-	Cooler Temp(including CF): 0.3	Preservative Type		-								-			Via: **	CUUVENV C
Turn-Around Time:	也 Standard	Project Name:	DMMX	Project #:	776	Project Manager:	Monie	Sampler: S	# of Coolers:	Cooler Temp	Container Type and #	Ix403 Jar	-									Received by:	MUMUUN	Received by	contracted for there a
brd	5				٦		lidation)					Ć.	0	0	2	0	0	0'	12	0,	,0,				and he subo
Chain-of-Custody Record				le			Level 4 (Full Validation)	mpliance			Sample Name	BH122-01	BH22-02	BH22-03	BH 22-03	BH122 - 04	BH22 - 05	BH 22 - 06	BH 22-06	BH 22 - 07	BH 22-08	5	1 Cantter	ď by:	aited to Hall Environmental
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Chair	1/4	1)	Mailing Address:		:# 0	email or Fax#:	QA/QC Package:	Accreditation:	EDD (Type)		Time		9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	Time:	ch: + 57/c	Salar Min	If nonsecond
Dala	Client:		Mailin	11/2	Phone #:	email	aavac D Sta	Accreditati			Date	5/23	-				-				-	Date:	71/6	5 Nr	うごと



August 18, 2022

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

RE: Onyx 29 CTB1 Separator

OrderNo.: 2208802

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/12/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-01 1' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:00:00 PM Lab ID: 2208802-001 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: mb Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/16/2022 1:38:25 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/16/2022 1:38:25 PM Surr: DNOP 97.7 21-129 %Rec 1 8/16/2022 1:38:25 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 6:33:00 PM 4.9 mg/Kg 1 Surr: BFB 99.5 37.7-212 %Rec 1 8/15/2022 6:33:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 0.024 8/15/2022 6:33:00 PM mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/15/2022 6:33:00 PM Ethylbenzene ND 0.049 mg/Kg 1 8/15/2022 6:33:00 PM Xylenes, Total ND 0.098 mg/Kg 1 8/15/2022 6:33:00 PM Surr: 4-Bromofluorobenzene 96.6 70-130 %Rec 1 8/15/2022 6:33:00 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride mg/Kg 8/15/2022 11:14:26 PM 1300 60 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

POL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- в Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-02 1' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:05:00 PM Lab ID: 2208802-002 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/16/2022 7:34:12 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/16/2022 7:34:12 AM Surr: DNOP 90.9 21-129 %Rec 1 8/16/2022 7:34:12 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 6:53:00 PM 4.9 mg/Kg 1 Surr: BFB 101 37.7-212 %Rec 1 8/15/2022 6:53:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 0.024 8/15/2022 6:53:00 PM mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/15/2022 6:53:00 PM Ethylbenzene ND 0.049 mg/Kg 1 8/15/2022 6:53:00 PM Xylenes, Total ND 0.098 mg/Kg 1 8/15/2022 6:53:00 PM Surr: 4-Bromofluorobenzene 95.7 70-130 %Rec 1 8/15/2022 6:53:00 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride mg/Kg 8/15/2022 11:51:27 PM 760 60 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 POL

Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 2 of 23

Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-03 1' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:10:00 PM Lab ID: 2208802-003 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 13 mg/Kg 1 8/16/2022 7:48:07 AM Motor Oil Range Organics (MRO) ND 43 mg/Kg 1 8/16/2022 7:48:07 AM Surr: DNOP 87.2 21-129 %Rec 1 8/16/2022 7:48:07 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 7:13:00 PM 4.9 mg/Kg 1 Surr: BFB 99.3 37.7-212 %Rec 1 8/15/2022 7:13:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 8/15/2022 7:13:00 PM 0.025 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/15/2022 7:13:00 PM Ethylbenzene ND 0.049 mg/Kg 1 8/15/2022 7:13:00 PM Xylenes, Total ND 0.099 mg/Kg 8/15/2022 7:13:00 PM 1 Surr: 4-Bromofluorobenzene 96.6 70-130 %Rec 1 8/15/2022 7:13:00 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride mg/Kg 8/15/2022 10:08:26 PM 520 60 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-04 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:15:00 PM Lab ID: 2208802-004 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/16/2022 8:02:06 AM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/16/2022 8:02:06 AM 21-129 Surr: DNOP 88.2 %Rec 1 8/16/2022 8:02:06 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 7:33:00 PM 4.9 mg/Kg 1 Surr: BFB 102 37.7-212 %Rec 1 8/15/2022 7:33:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 0.024 8/15/2022 7:33:00 PM mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/15/2022 7:33:00 PM Ethylbenzene ND 0.049 mg/Kg 1 8/15/2022 7:33:00 PM Xylenes, Total ND 0.098 mg/Kg 8/15/2022 7:33:00 PM 1 Surr: 4-Bromofluorobenzene 96.3 70-130 %Rec 1 8/15/2022 7:33:00 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride mg/Kg 8/15/2022 10:20:50 PM 450 60 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 POL

Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 4 of 23

Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-05 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:20:00 PM Lab ID: 2208802-005 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/16/2022 8:15:31 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/16/2022 8:15:31 AM Surr: DNOP 90.2 21-129 %Rec 1 8/16/2022 8:15:31 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 7:52:00 PM 4.9 mg/Kg 1 Surr: BFB 99.2 37.7-212 %Rec 1 8/15/2022 7:52:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 8/15/2022 7:52:00 PM 0.025 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/15/2022 7:52:00 PM Ethylbenzene ND 0.049 mg/Kg 1 8/15/2022 7:52:00 PM Xylenes, Total ND 0.099 mg/Kg 8/15/2022 7:52:00 PM 1 Surr: 4-Bromofluorobenzene 96.7 70-130 %Rec 1 8/15/2022 7:52:00 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride mg/Kg 8/15/2022 10:33:14 PM 87 60 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-07 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:25:00 PM Lab ID: 2208802-006 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Analyses Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/16/2022 8:29:29 AM Motor Oil Range Organics (MRO) 8/16/2022 8:29:29 AM ND 47 mg/Kg 1 Surr: DNOP 93.4 21-129 %Rec 1 8/16/2022 8:29:29 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 8:12:00 PM 5.0 mg/Kg 1 Surr: BFB 97.3 37.7-212 %Rec 1 8/15/2022 8:12:00 PM Analyst: BRM 

EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	8/15/2022 8:12:00 PM
Toluene	ND	0.050	mg/Kg	1	8/15/2022 8:12:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	8/15/2022 8:12:00 PM
Xylenes, Total	ND	0.10	mg/Kg	1	8/15/2022 8:12:00 PM
Surr: 4-Bromofluorobenzene	95.8	70-130	%Rec	1	8/15/2022 8:12:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	71	60	mg/Kg	20	8/15/2022 11:10:27 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208802-007

**Project:** 

Lab ID:

Analyses

**Analytical Report** Lab Order 2208802

Date Reported: 8/18/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES22-09 1' Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:30:00 PM Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: **DGH** 

Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/16/2022 8:43:34 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/16/2022 8:43:34 AM
Surr: DNOP	93.6	21-129	%Rec	1	8/16/2022 8:43:34 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/15/2022 8:32:00 PM
Surr: BFB	99.6	37.7-212	%Rec	1	8/15/2022 8:32:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	8/15/2022 8:32:00 PM
Toluene	ND	0.049	mg/Kg	1	8/15/2022 8:32:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/15/2022 8:32:00 PM
Xylenes, Total	ND	0.097	mg/Kg	1	8/15/2022 8:32:00 PM
Surr: 4-Bromofluorobenzene	98.1	70-130	%Rec	1	8/15/2022 8:32:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	2800	150	mg/Kg	50	8/16/2022 7:57:24 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-11 1' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:35:00 PM Lab ID: 2208802-008 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/16/2022 8:57:38 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/16/2022 8:57:38 AM Surr: DNOP 91.4 21-129 %Rec 1 8/16/2022 8:57:38 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 8:52:00 PM 5.0 mg/Kg 1 Surr: BFB 102 37.7-212 %Rec 1 8/15/2022 8:52:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 8/15/2022 8:52:00 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/15/2022 8:52:00 PM Ethylbenzene ND 0.050 mg/Kg 1 8/15/2022 8:52:00 PM Xylenes, Total ND mg/Kg 8/15/2022 8:52:00 PM 0.099 1 Surr: 4-Bromofluorobenzene 97.6 70-130 %Rec 1 8/15/2022 8:52:00 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride mg/Kg 8/15/2022 11:35:16 PM 1100 60 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 POL

Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 8 of 23

Date Reported: 8/18/2022

8/15/2022 11:47:40 PM

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-01 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:40:00 PM Lab ID: 2208802-009 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/16/2022 9:11:16 AM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 8/16/2022 9:11:16 AM Surr: DNOP 87.9 21-129 %Rec 1 8/16/2022 9:11:16 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/15/2022 9:12:00 PM 4.8 mg/Kg 1 Surr: BFB 98.6 37.7-212 %Rec 1 8/15/2022 9:12:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 0.024 8/15/2022 9:12:00 PM mg/Kg 1 Toluene ND 0.048 mg/Kg 1 8/15/2022 9:12:00 PM Ethylbenzene ND 0.048 mg/Kg 1 8/15/2022 9:12:00 PM Xylenes, Total ND 0.096 mg/Kg 8/15/2022 9:12:00 PM 1 Surr: 4-Bromofluorobenzene 95.7 70-130 %Rec 1 8/15/2022 9:12:00 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI

760

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

**Qualifiers:** 

Chloride

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 POL

Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

mg/Kg

20

60

Р Sample pH Not In Range

RL Reporting Limit Page 9 of 23

Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-02 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:45:00 PM Lab ID: 2208802-010 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Analyses Result **RL** Qual Units DF **Date Analyzed** Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/15/2022 10:20:06 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/15/2022 10:20:06 PM Surr: DNOP 84.9 21-129 %Rec 1 8/15/2022 10:20:06 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 8/16/2022 10:08:00 AM 4.8 mg/Kg 1 Surr: BFB 100 37.7-212 %Rec 1 8/16/2022 10:08:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 8/16/2022 10:08:00 AM mg/Kg 1 Toluene ND 0.048 mg/Kg 1 8/16/2022 10:08:00 AM Ethylbenzene ND 0.048 mg/Kg 1 8/16/2022 10:08:00 AM Xylenes, Total ND 0.096 mg/Kg 1 8/16/2022 10:08:00 AM Surr: 4-Bromofluorobenzene 97.1 70-130 %Rec 1 8/16/2022 10:08:00 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride mg/Kg 8/16/2022 12:00:04 AM 620 60 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/18/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-03 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 1:50:00 PM Lab ID: 2208802-011 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Analyses Result **RL** Qual Units DF **Date Analyzed** Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS 8/15/2022 11:08:33 PM Diesel Range Organics (DRO) ND 15 mg/Kg 1 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/15/2022 11:08:33 PM Surr: DNOP 83.1 21-129 %Rec 1 8/15/2022 11:08:33 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 8/16/2022 10:28:00 AM 5.0 mg/Kg 1 Surr: BFB 101 37.7-212 %Rec 1 8/16/2022 10:28:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 8/16/2022 10:28:00 AM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/16/2022 10:28:00 AM Ethylbenzene ND 0.050 mg/Kg 1 8/16/2022 10:28:00 AM Xylenes, Total ND mg/Kg 8/16/2022 10:28:00 AM 0.099 1 Surr: 4-Bromofluorobenzene 99.7 70-130 %Rec 1 8/16/2022 10:28:00 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride mg/Kg 8/16/2022 12:12:28 AM 210 60 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 11/22/2022 2:49:36 PM

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208802

Date Reported: 8/18/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-04 4' Collection Date: 8/10/2022 1:55:00 PM Received Date: 8/12/2022 7:20:00 AM

Lab ID: 2208802-012	Matrix: SOIL	Rece	ived Date:	8/12/2	022 7:20:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/15/2022 11:24:37 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/15/2022 11:24:37 PM
Surr: DNOP	89.2	21-129	%Rec	1	8/15/2022 11:24:37 PM
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/16/2022 10:48:00 AM
Surr: BFB	101	37.7-212	%Rec	1	8/16/2022 10:48:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	8/16/2022 10:48:00 AM
Toluene	ND	0.048	mg/Kg	1	8/16/2022 10:48:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	8/16/2022 10:48:00 AM
Xylenes, Total	ND	0.096	mg/Kg	1	8/16/2022 10:48:00 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	8/16/2022 10:48:00 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	130	60	mg/Kg	20	8/16/2022 12:24:52 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Surr: 4-Bromofluorobenzene

Analytical Report Lab Order 2208802

Date Reported: 8/18/2022

8/16/2022 11:08:00 AM

8/16/2022 12:37:17 AM

Analyst: NAI

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-05 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/10/2022 2:00:00 PM Lab ID: 2208802-013 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/15/2022 11:40:33 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/15/2022 11:40:33 PM Surr: DNOP 93.5 21-129 %Rec 1 8/15/2022 11:40:33 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4.7 8/16/2022 11:08:00 AM mg/Kg 1 Surr: BFB 104 37.7-212 %Rec 1 8/16/2022 11:08:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 8/16/2022 11:08:00 AM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 8/16/2022 11:08:00 AM Ethylbenzene ND 0.047 mg/Kg 1 8/16/2022 11:08:00 AM Xylenes, Total ND 0.094 mg/Kg 8/16/2022 11:08:00 AM 1

 EPA METHOD 300.0: ANIONS
 1200
 60
 mg/Kg
 20

102

70-130

%Rec

1

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208802-014

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208802

Date Reported: 8/18/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-06 2' Collection Date: 8/10/2022 2:05:00 PM Received Date: 8/12/2022 7:20:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/15/2022 11:56:23 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/15/2022 11:56:23 PM
Surr: DNOP	91.6	21-129	%Rec	1	8/15/2022 11:56:23 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/16/2022 11:27:00 AM
Surr: BFB	102	37.7-212	%Rec	1	8/16/2022 11:27:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	8/16/2022 11:27:00 AM
Toluene	ND	0.047	mg/Kg	1	8/16/2022 11:27:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	8/16/2022 11:27:00 AM
Xylenes, Total	ND	0.095	mg/Kg	1	8/16/2022 11:27:00 AM
Surr: 4-Bromofluorobenzene	97.7	70-130	%Rec	1	8/16/2022 11:27:00 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	810	60	mg/Kg	20	8/16/2022 12:49:41 AM

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208802

Date Reported: 8/18/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-07 2' Collection Date: 8/10/2022 2:10:00 PM Received Date: 8/12/2022 7:20:00 AM

Lab ID: 2208802-015	Matrix: SOIL	Received Date: 8/12/2022 7:20:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: DGH			
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/16/2022 12:11:58 AM			
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/16/2022 12:11:58 AM			
Surr: DNOP	88.3	21-129	%Rec	1	8/16/2022 12:11:58 AM			
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: CCM			
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/16/2022 11:47:00 AM			
Surr: BFB	104	37.7-212	%Rec	1	8/16/2022 11:47:00 AM			
EPA METHOD 8021B: VOLATILES					Analyst: CCM			
Benzene	ND	0.024	mg/Kg	1	8/16/2022 11:47:00 AM			
Toluene	ND	0.048	mg/Kg	1	8/16/2022 11:47:00 AM			
Ethylbenzene	ND	0.048	mg/Kg	1	8/16/2022 11:47:00 AM			
Xylenes, Total	ND	0.097	mg/Kg	1	8/16/2022 11:47:00 AM			
Surr: 4-Bromofluorobenzene	99.0	70-130	%Rec	1	8/16/2022 11:47:00 AM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	970	60	mg/Kg	20	8/16/2022 1:02:05 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Analyses

Toluene

Ethylbenzene

Xylenes, Total

**Analytical Report** Lab Order 2208802

Date Reported: 8/18/2022

8/16/2022 12:07:00 PM

8/16/2022 12:07:00 PM

8/16/2022 12:07:00 PM

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-08 2' Onyx 29 CTB1 Separator Collection Date: 8/10/2022 2:15:00 PM 2208802-016 Matrix: SOIL Received Date: 8/12/2022 7:20:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyst: DGH **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/16/2022 12:27:56 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/16/2022 12:27:56 AM Surr: DNOP 84.7 21-129 %Rec 1 8/16/2022 12:27:56 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 8/16/2022 12:07:00 PM 4.9 mg/Kg 1 Surr: BFB 104 37.7-212 %Rec 1 8/16/2022 12:07:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 8/16/2022 12:07:00 PM 0.025 mg/Kg 1

0.049

0.049

0.099

mg/Kg

mg/Kg

mg/Kg

1

1

1

Surr: 4-Bromofluorobenzene	98.2	70-130	%Rec	1	8/16/2022 12:07:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	89	60	mg/Kg	20	8/16/2022 1:39:18 AM

ND

ND

ND

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

POL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 16 of 23

Client:		ex Resources Services, Inc.		
Project:	Onyx	x 29 CTB1 Separator		
Sample ID:	MB-69500	SampType: mblk	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 69500	RunNo: 90282	
Prep Date:	8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220689 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Q	ual
Chloride		ND 1.5		
Sample ID:	LCS-69500	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 69500	RunNo: 90282	
Prep Date:	8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220690 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Q	ual
Chloride		15 1.5 15.00	0 97.7 90 110	
Sample ID:	MB-69515	SampType: mblk	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 69515	RunNo: 90298	
Prep Date:	8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220931 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Q	ual
Chloride		ND 1.5		
Sample ID:	LCS-69515	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 69515	RunNo: 90298	
Prep Date:	8/15/2022	Analysis Date: 8/15/2022	SeqNo: 3220932 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Q	ual

14 1.5 15.00 0 93.2 90 110

Qualifiers:

Chloride

- \* 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208802

18-Aug-22

WO#:

Client: Project:	Vertex Re Onyx 29 (			, Inc.								
Sample ID:	MB-69511	SampT	уре: МЕ	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID:	PBS	Batcl	n ID: 69	511	RunNo: <b>90276</b>							
Prep Date:	8/15/2022	Analysis E	Date: <b>8/</b>	15/2022	S	SeqNo: 32	221158	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range C	Organics (DRO)	ND	15									
-	e Organics (MRO)	ND	50									
Surr: DNOP		9.2		10.00		92.4	21	129				
Sample ID:	LCS-69511	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID:	LCSS	Batcl	n ID: 69	511	F	RunNo: <b>9(</b>	0276					
Prep Date:	8/15/2022	Analysis E	Date: <b>8/</b>	15/2022	S	SeqNo: 32	221159	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range C	Organics (DRO)	43	15	50.00	0	85.4	64.4	127				
Surr: DNOP		4.4		5.000		88.7	21	129				
Sample ID:	2208802-010AMS	SampT	ype: MS	6	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID:	BES22-02 4'	Batcl	n ID: 69	511	RunNo: 90276							
Prep Date:	8/15/2022	Analysis E	Date: <b>8/</b>	15/2022	S	SeqNo: 32	221161	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
-	Organics (DRO)	43	15	48.92	0	87.4	36.1	154				
Surr: DNOP		3.4		4.892		69.2	21	129				
Sample ID:	2208802-010AMSD	SampT	уре: М	SD	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID:	BES22-02 4'	Batcl	n ID: 69	511	F	RunNo: <b>9(</b>	0276					
Prep Date:	8/15/2022	Analysis E	Date: <b>8/</b>	15/2022	S	SeqNo: 32	221162	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range C	Organics (DRO)	42	15	48.69	0	86.5	36.1	154	1.51	33.9		
Surr: DNOP		3.5		4.869		71.9	21	129	0	0		
Sample ID:	MB-69473	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics		
Client ID:	PBS	Batcl	n ID: 694	473	F	RunNo: <b>9(</b>	0276					
Prep Date:	8/12/2022	Analysis E	Date: <b>8/</b>	16/2022	S	SeqNo: 32	221171	Units: %Rec	;			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		8.3		10.00		83.1	21	129				
Sample ID:	LCS-69473	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Rance	Organics		
	LCSS		n ID: 694			RunNo: <b>9(</b>		-	5	-		
			-									

Qualifiers:

Prep Date:

Analyte

\* Value exceeds Maximum Contaminant Level.

8/12/2022

- 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 interference

Analysis Date: 8/16/2022

Result

PQL

B Analyte detected in the associated Method Blank

%REC

SeqNo: 3221173

LowLimit

Units: %Rec

HighLimit

%RPD

E Estimated value

SPK value SPK Ref Val

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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RPDLimit

Qual

2208802

18-Aug-22

WO#:

v, Inc.		18-Aug-22
-	WO#:	2208802

Client: Project:		Resources Se 9 CTB1 Sepa		Inc.							
,				_							
Sample ID:	LCS-69473	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die:	sel Range	Organics	
Client ID:	LCSS	Batch	ID: 694	473	F	RunNo: <b>9(</b>	0276				
Prep Date:	8/12/2022	Analysis D	ate: <b>8/</b> *	16/2022	S	SeqNo: 32	221173	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.3		5.000		86.6	21	129			
Sample ID:	MB-69507     SampType: MBLK     TestCode: EPA Method 8015M/D: Diesel Range Organics										
Client ID:	PBS	Batch	ID: 695	507	RunNo: 90304						
Prep Date:	8/15/2022	Analysis D	ate: <b>8/</b> '	16/2022	S	SeqNo: 32	221327	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	ND	15								
Motor Oil Rang	e Organics (MRO)	ND	50								
Surr: DNOP		9.7		10.00		97.0	21	129			
Sample ID:	LCS-69507	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	LCSS	Batch	ID: 695	507	F	RunNo: <b>9(</b>	)304				
Prep Date:	8/15/2022	Analysis D	ate: <b>8/</b> '	16/2022	S	SeqNo: 32	221328	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	43	15	50.00	0	86.2	64.4	127			
Surr: DNOP		4.2		5.000		84.1	21	129			

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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	esources Services CTB1 Separator	, Inc.							
Sample ID: Ics-69502	SampType: L(	cs	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 69	502	F	RunNo: <b>9(</b>	0302				
Prep Date: 8/15/2022	Analysis Date: 8	/16/2022	S	SeqNo: 32	221186	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	26 5.0 2200	25.00 1000	0	104 219	72.3 37.7	137 212			S
Sample ID: mb-69502	SampType: <b>M</b>	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: PBS	Batch ID: 69	502	F	RunNo: <b>9(</b>	0302				
Prep Date: 8/15/2022	Analysis Date: 8	/16/2022	S	SeqNo: 32	221188	Units: <b>mg/K</b>	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 1000	1000		102	37.7	212			
Sample ID: Ics-69476	SampType: L(	cs	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 69	476	F	RunNo: <b>9(</b>	0314				
Prep Date: 8/12/2022	Analysis Date: 8	/15/2022	S	SeqNo: 32	221639	Units: <b>mg/K</b>	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26 5.0	25.00	0	106	72.3	137			
Surr: BFB	2300	1000		228	37.7	212			S
Sample ID: mb-69476	SampType: M	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: PBS	Batch ID: 69	476	F	RunNo: <b>9(</b>	0314				
Prep Date: 8/12/2022	Analysis Date: 8	/15/2022	S	SeqNo: 32	221640	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 1000	1000		104	37.7	212			
Sample ID: 2208802-010ams	SampType: M	s	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: BES22-02 4'	Batch ID: 69	502	F	RunNo: <b>9(</b>	0302				
Prep Date: 8/15/2022	Analysis Date: 8	/16/2022	Ş	SeqNo: 32	222275	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28 4.9	24.49	0	114	70	130			
Surr: BFB	2300	979.4		236	37.7	212			S
Sample ID: 2208802-010amsd	SampType: M	SD	Tes	tCode: EF	PA Method	8015D: Gaso	line Range		
Client ID: BES22-02 4'	Batch ID: 69	502	F	RunNo: <b>9(</b>	0302				
Prep Date: 8/15/2022	Analysis Date: 8	/16/2022	S	SeqNo: 32	222276	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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2208802

18-Aug-22

WO#:

Client: Project:	Vertex Re Onyx 29 (	csources Se CTB1 Sep	,	Inc.							
Sample ID:	2208802-010amsd	SampT	ype: MS	D	Tes	tCode: EF	A Method	8015D: Gasol	ine Range	!	
Client ID:	BES22-02 4'	Batch	n ID: 695	502	F	RunNo: <b>90</b>	302				
Prep Date:	8/15/2022	Analysis D	ate: <b>8/</b>	16/2022	S	SeqNo: 32	22276	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	29	4.9	24.63	0	117	70	130	3.25	20	
Surr: BFB		2300		985.2		237	37.7	212	0	0	S

#### 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2208802

18-Aug-22

WO#:

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## **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Client: Project:		esources S CTB1 Sep	· · · · · ·	Inc.							
Sample ID: 1	cs-69502	Samp	Гуре: <b>LC</b>	s	Tes	tCode: EF	A Method	8021B: Volati	les		
Client ID:	LCSS	Batc	h ID: 69	502	F	RunNo: <b>9(</b>	302				
Prep Date:	8/15/2022	Analysis [	Date: <b>8/</b> *	16/2022	S	SeqNo: 32	221187	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	- %RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000		90.1	80	11911211111	70111 D		Quai
Toluene		0.92	0.050	1.000	0	92.5	80	120			
Ethylbenzene		0.94	0.050	1.000	0	93.8	80	120			
Xylenes, Total		2.8	0.10	3.000	0	94.1	80	120			
Surr: 4-Bromo	fluorobenzene	0.99		1.000		98.5	70	130			
Sample ID: r	nb-69502	Samp	Гуре: МЕ	BLK	Tes	tCode: EF	A Method	8021B: Volati	les		
Client ID:	PBS	Batc	h ID: 69	502	F	RunNo: <b>90</b>	302				
Prep Date:	8/15/2022	Analysis [	Date: <b>8/</b> *	16/2022	S	SeqNo: 32	221192	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-Bromo	fluorobenzene	0.99		1.000		98.8	70	130			
Sample ID: I	cs-69476	Samp	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID:	LCSS	Batc	h ID: 694	176	F	RunNo: <b>9(</b>	314				
Prep Date:	8/12/2022	Analysis [	Date: <b>8/</b> *	15/2022	S	SeqNo: 32	221663	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		0.90	0.025	1.000	0	90.2	80	120			
Toluene		0.92	0.050	1.000	0	92.0	80	120			
Ethylbenzene		0.94	0.050	1.000	0	93.8	80	120			
Xylenes, Total		2.8	0.10	3.000	0	93.6	80	120			
Surr: 4-Bromo	fluorobenzene	1.0		1.000		103	70	130			
Sample ID: r	nb-69476	Samp	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID:	PBS	Batc	h ID: 694	176	F	RunNo: <b>9(</b>	314				
Prep Date:	8/12/2022	Analysis [	Date: <b>8/</b> *	15/2022	S	SeqNo: 32	221664	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-Bromo	fluorobenzene	1.0		1.000		102	70	130			

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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2208802

18-Aug-22

WO#:

Client: Project:

## QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Separator

Vertex Resources Services, Inc.	
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Sample ID: 2208802-011ams	Samp	Гуре: <b>МS</b>	;	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: BES22-03 4'	Batc	h ID: 695	502	F	RunNo: <b>9(</b>	0302				
Prep Date: 8/15/2022	Analysis [	Date: <b>8/</b> *	16/2022	S	SeqNo: 32	222283	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.024	0.9497	0	92.5	68.8	120			
Toluene	0.90	0.047	0.9497	0	94.9	73.6	124			
Ethylbenzene	0.93	0.047	0.9497	0	98.1	72.7	129			
Xylenes, Total	2.8	0.095	2.849	0	97.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.95		0.9497		100	70	130			
Sample ID: 2208802-011amsd	Samp	Гуре: <b>МS</b>	D	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: BES22-03 4'	Batc	h ID: 695	502	F	RunNo: <b>9(</b>	0302				
Prep Date: 8/15/2022	Analysis [	Date: <b>8/</b> *	16/2022	S	SeqNo: 32	222284	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9443	0	92.2	68.8	120	0.914	20	

Analyte	Result	ΤQL			/orceo	LOWLINI	Tigneinin			
Benzene	0.87	0.024	0.9443	0	92.2	68.8	120	0.914	20	
Toluene	0.90	0.047	0.9443	0	95.0	73.6	124	0.439	20	
Ethylbenzene	0.92	0.047	0.9443	0	97.8	72.7	129	0.864	20	
Xylenes, Total	2.8	0.094	2.833	0	97.6	75.7	126	0.516	20	
Surr: 4-Bromofluorobenzene	0.94		0.9443		99.6	70	130	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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: **2208802** 

18-Aug-22

ANAL	ONMENTAL /Sis Ratory	Hall Environmental Alb TEL: 505-345-3973 Website: www.ha	49( uquerq FAX:	)1 Hawkin. pue, NM 87 505-345	NE 7109 Sa 1107	mple Log-In Check List	
Client Name:	Vertex Resources Services, Inc.	Work Order Number	220	8802		RcptNo: 1	
Received By:	Juan Rojas	8/12/2022 7:20:00 AM			Juanang	1	
Completed By:	Cheyenne Cason	8/12/2022 8:07:50 AM			Juan ang		
Reviewed By:	TMC	8/12/22					
Chain of Cus	tody						
1. Is Chain of Co	ustody complete?		Yes		No 🗌	Not Present	
2. How was the	sample delivered?		Cou	rier			
Log In 3. Was an attem	pt made to cool the sam	bles?	Yes	~	No 🗌		
4 10/200				-			
4. were all samp	les received at a tempera	ature of >0° C to 6.0°C	Yes		No 🗌		
5. Sample(s) in p	proper container(s)?		Yes		No 🗌		
6. Sufficient sam	ple volume for indicated t	est(s)?	Yes		No 🗌		
7. Are samples (	except VOA and ONG) pr	operly preserved?	Yes	~	No 🗌		
8. Was preservat	ive added to bottles?		Yes		No 🗹	NA 🗌	
9. Received at le	ast 1 vial with headspace	<1/4" for AQ VOA?	Yes		No 🗌	NA 🗹	
10. Were any san	ple containers received t	proken?	Yes		No 🗹	# of preserved bottles checked	
	rk match bottle labels?	2	Yes	~	No 🗌	for pH:	
	ncies on chain of custody orrectly identified on Cha		Yes		No 🗌	(<2 or >12 unless noted) Adjusted?	-
	analyses were requested		Yes				
14. Were all holdir	ig times able to be met? stomer for authorization.		Yes			Cheeked by: JAS/12/2	2
	ng (if applicable)				-		
	ified of all discrepancies	with this order?	Yes		No 🗌		
Person	Notified:	Date:	_				
By Who		Via:	eMa	ail 🗆 P	none 🗌 Fax	n Person	
Regardi	A	diam. T		· •	, a/		
Client In	structions:						
16. Additional rer	narks:						
17. <u>Cooler Inforr</u> Cooler No	nation Temp ºC Condition	Seal Intact Seal No S	eal D	ate	Signed By		

Page 1 of 1

Address:       A01 Hawkins NE -         A01 Hawkins NE -         Tol colspan="2">A01 Hawkins NE -         Tol colspan="2">Tol colspan="2">A01 Hawkins NE -         Tol colspan="2">Tol colspan="2">Tol colspan="2">A01 Hawkins NE -         Tol colspan="2">Tol colspan="2">Tol colspan="2">Tol colspan="2">Tol colspan="2"         MOC Package:       Tol colspan="2"         Sample Compliance       Sample:       CO         Time       Matrix       Sample Name       Tope and #       Type and #	Page 149 of Chain-of	Chain-of-Custody Record	Project Name:	Z-DGY Rush		HALL ENVIRONMENTAL ANALYSIS LABORATORY
Prone #:         Project #:         Project #:         Tel. s05-345-3975           MACC Package:         □ Level 4 (Full Validation)         Sampler:	failing Address:		~	9 CTB / /scranorr/	4901 Hawkin	www.nallenvironmental.com
mail or Fax#:         Project Manager:         Project Manager:         Amager:         Amager:           J Standard         I Level 4 (Full Validation)         Earre \$ 2000 C         MOC Package:         I Level 4 (Full Validation)         Earre \$ 2000 C         MOC Package:         I Level 4 (Full Validation)         Earre \$ 2000 C         MOC Package:         I Level 4 (Full Validation)         Earre \$ 2000 C         Mot Package:         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Full Validation)         Earre \$ 2000 C         I Level 4 (Fu			Project #:		Tel. 505-345	
mail or Fax#         Project Manager:         Project Manager:           JSandard         I Level 4 (Full Validation)         Sampler: C / Sample C / Sampler: C / Sample C	Phone #:		225-017	200-02		Anal
Mode Package:         Level 4 (Full Validation)         Lane S zamings           1 Standard         I Level 4 (Full Validation)         Sampler:         C/           1 NELAC         Other         On loce:         Dress         Inc.           1 NELAC         Other         On loce:         Dress         Inc.         No           1 NELAC         Other         On loce:         Dress         Inc.         No           1 NELAC         Other         Time         Matrix         Sample Name         Type and #         Type           1 NELAC         Cooler:         Type and #         Type and #         Type         Type         No         EDD (Type)           1 NELAC         Sample Name         Type and #         Type         T	email or Fax#:		Project Manager:		-	
$ \begin{array}{c} \text{correlitation:} & \square A \ \text{Compliance} & \text{Sampler: } \\ \hline \text{IED} \ (Type) & \square Ver & \square$	QA/QC Package:	□ Level 4 (Full Validation)	Kent St	Sburne	O / MRO PCB's	
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ale       Time       Matrix       Sample Name       Cooler Temploreneng CF; ( $(-f_1)^{-1}C^{-1$	EDD (Type)		1		GR ides od 5	tals IO <sub>3</sub> , ·VO
Time       Matrix       Sample Name       Container       Preservative       HEAL No.       Exc Preservative $31/0$ $1:00$ $5057$ $4.25522-02$ $1$ $4.02$ $2CC$ $2C$ $BD$			Cooler Temp(including	0.5-0-2.0°	MT 5D( estic	Me r, N OA) emi-
Interme       Matrix       Sample Name       Type       Type       Type       Type $31/0/: 0 \le 50^{-7}$ $4/5527-0/$ $4/02$ $2C_{-0}$ $a/F_{-0}$		_			РН:80 081 Ре ОВ (М	CRA 8 ,)F, E 260 (V 270 (S
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		-	_	LUXBUL	8 E	R C 8
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1:10	WE522-03 1'		CX3		
$i:ZO$ $i:ZSZ2-OSZ^2$ $i:ZSZ2-OSZ^2$ $i:ZSZ2-OTZ^2$ $i:ZSZ^2-OTZ^2$ $i:ZZ^2-OTZ^2$ $i:ZZ^2-OTZ^2-OTZ^2$ $i:ZZ^2-OTZ^2-OTZ^2$ $i:ZZ^2-OTZ^2-OTZ^2-OTZ^2$ $i:ZZ^2-OTZ^2-OTZ^2-OTZ^2-OTZ^2$ $i:ZZ^2-OTZ^2-O$	1:15			OCH		
$1:25$ $1 \in S = 2 = 0, 7 \in 1$ $006$ $006$ $1:30$ $1 \in S = 2 = 0, 7 \in 1$ $007$ $007$ $007$ $1:35$ $1 \in S = 2 = 0, 7 \in 1$ $007$ $009$ $009$ $1:40$ $3 \in S = 2 = 0, 7 \in 2$ $009$ $010$ $010$ $1:40$ $3 \in S = 2 = 0, 7 \in 2$ $010$ $010$ $010$ $1:45$ $3 \in S = 2 = 0, 7 \in 4$ $010$ $010$ $010$ $1:45$ $3 \in S = 2 = 0, 7 \in 4$ $010$ $010$ $010$ $010$ $1:55$ $3 \in S = 2 = 0, 7 \in 4$ $010$ $010$ $010$ $010$ $010$ $1:55$ $3 \in S = 2, 2 = 0, 7 \in 4$ $100$ $010$ $010$ $010$ $010$ $1:55$ $3 \in S = 2, 2 = 0, 7 \in 4$ $100$ $010$ <t< td=""><td>02:1</td><td></td><td></td><td>2005</td><td></td><td></td></t<>	02:1			2005		
1:30 $UESZZ-09$ $007$ $007$ $1:35$ $UESZZ-01$ $009$ $009$ $1:40$ $BESZZ-01$ $009$ $010$ $1:45$ $BESZZ-02$ $010$ $010$ $1:50$ $BESZZ-03$ $010$ $010$ $1:55$ $BESZZ-03$ $012$ $010$ $1:55$ $BESZZ-03$ $012$ $012$ $1:55$ $BESZZ-04$ $012$	1:25			006		
$1:35$ $1 \in S_{22} = 11$ $1'$ $009$ $009$ $1:45$ $B \in S_{22} = 01$ $2'$ $009$ $110$ $1:45$ $B \in S_{22} = 02$ $2'$ $010$ $010$ $1:45$ $B \in S_{22} = 02$ $2'$ $010$ $010$ $1:50$ $B \in S_{22} = 02$ $2'$ $010$ $011$ $1:50$ $B \in S_{22} = 02$ $2'$ $010$ $011$ $1:50$ $B \in S_{22} = 02$ $2'$ $012$ $011$ $1:50$ $B \in S_{22} = 02$ $4'$ $012$ $011$ $1:50$ $B \in S_{22} = 02$ $4'$ $012$ $011$ $1:50$ $B \in S_{22} = 02$ $4'$ $012$ $012$ $1:50$ $B \in S_{22} = 02$ $4'$ $012$ $110$ $1:50$ $B \in S_{22} = 02$ $4'$ $012$ $110$ $1:50$ $B \in S_{22} = 02$ $012$ $110$ $110$ $1:50$ $B \in S_{22} = 02$ $012$ $110$ $1:50$ $B \in S_{22} = 02$ $012$ $110$ $1:50$ $B \in S_{22} = 02$ $012$ $110$ $1:50$ $012$ $110$ $110$ $1:50$ $012$ $110$ $1:50$ $012$ $110$ $1:50$ $012$ $110$ $1:50$ $012$ $110$ $1:50$ $012$ $110$ $1:50$ $012$ $012$ $1:50$ $012$ $012$ $1:50$ $012$ $012$ $1:50$ $012$ $012$ $1:50$ $012$ $012$ $1:50$ $012$	1:30	WESZZ-09 1'		007		
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$1:45$ $B \in z \in -0.2$ $2'$ $010$ $010$ $1:50$ $B \in z \in -0.2$ $2'$ $011$ $011$ $1:55$ $B \in z \in -0.2$ $2'$ $011$ $012$ ate:Time:Relinquished by: $Via:$ $012$ ate:Time:Relinquished by:Via: $010$ ate:Time:Relinquished by: $Via:$ $012$ ate:Time:Relinquished by: $Via:$ $010$ ate:Time:Relinquished by: $Via:$ $010$ ate:Time:Relinquished by: $Via:$ $010$ $102$ $110$ $110$ $110$ $102$ $110$ $110$ $110$ $102$ $110$ $110$ $110$ $102$ $110$ $110$ $110$ $102$ $110$ $110$ $110$ $102$ $110$ $110$ $110$	5:31			009		
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Date Tir	WWWWAAAAA Shu 22 Mas		1 1 016	210		402 200 013	Cooler I emp(induding CF):     ()-() = ()-() (')       Container     Preservative     HEAL No.       Type and #     Type     72088-02	Ĩ	Sampler: ∠∆ On Ice: _□Yes □ No	) kent starrings	Project Manager:	225-01720-002	Project #:	Project Name: Onyx 29 CT8 1	Standard Rush	Turn-Around Time: <i>2</i> - <i>υqy</i>
2:#0/M	Remarks: CC: Chance					~	BTEX ) M TPH:8015I 8081 Pesti EDB (Meth PAHs by 8 RCRA 8 M CI, F, Br, 8260 (VOA 8270 (Sem Total Colife	TBE D(GF cide and ( 310 etal NO; )	RO / DF es/8082 504.1) or 827 s 3, NO <sub>2</sub> DA)	PCB's 0SIMS , PO <sub>4</sub> , S	0) 60 <sub>4</sub>	Analysis Request	Þ	lenvironm	51	HALL ENVIRONMENTAL



August 22, 2022

Kent Stallings Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (575) 748-0176 FAX

RE: Onyx 29 CTB1 Separator

OrderNo.: 2208875

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 17 sample(s) on 8/13/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-12 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:00:00 AM Lab ID: 2208875-001 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 8/17/2022 12:05:00 PM ND 14 mg/Kg 1 Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/17/2022 12:05:00 PM Surr: DNOP 98.4 21-129 %Rec 1 8/17/2022 12:05:00 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 61 8/16/2022 9:07:54 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/16/2022 5:08:43 PM 1 Toluene ND 0.047 mg/Kg 8/16/2022 5:08:43 PM 1 Ethvlbenzene ND 0.047 mg/Kg 1 8/16/2022 5:08:43 PM Xylenes, Total ND 0.095 mg/Kg 1 8/16/2022 5:08:43 PM Surr: 1.2-Dichloroethane-d4 104 70-130 %Rec 1 8/16/2022 5:08:43 PM Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/16/2022 5:08:43 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/16/2022 5:08:43 PM 117 Surr: Toluene-d8 98.1 70-130 %Rec 1 8/16/2022 5:08:43 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND mg/Kg 8/16/2022 5:08:43 PM 47 1 Surr: BFB 117 70-130 %Rec 1 8/16/2022 5:08:43 PM

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

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix
- D Н Holding times for preparation or analysis exceeded
- ND
- Not Detected at the Reporting Limit POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-12 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:05:00 AM Lab ID: 2208875-002 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/17/2022 12:29:23 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/17/2022 12:29:23 PM Surr: DNOP 103 21-129 %Rec 1 8/17/2022 12:29:23 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 8/16/2022 9:45:07 PM 190 59 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/16/2022 5:37:25 PM 1 Toluene ND 0.048 mg/Kg 8/16/2022 5:37:25 PM 1 Ethvlbenzene ND 0.048 mg/Kg 1 8/16/2022 5:37:25 PM Xylenes, Total ND 0.096 mg/Kg 1 8/16/2022 5:37:25 PM Surr: 1.2-Dichloroethane-d4 104 70-130 %Rec 1 8/16/2022 5:37:25 PM Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/16/2022 5:37:25 PM Surr: Dibromofluoromethane 122 70-130 %Rec 1 8/16/2022 5:37:25 PM Surr: Toluene-d8 98.7 70-130 %Rec 1 8/16/2022 5:37:25 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/16/2022 5:37:25 PM 48 mg/Kg 1 Surr: BFB 118 70-130 %Rec 1 8/16/2022 5:37:25 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-13 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:10:00 AM Lab ID: 2208875-003 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/17/2022 12:53:58 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/17/2022 12:53:58 PM Surr: DNOP 82.4 21-129 %Rec 1 8/17/2022 12:53:58 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 8/16/2022 9:57:31 PM 59 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/16/2022 6:06:11 PM 1 Toluene ND 0.048 mg/Kg 8/16/2022 6:06:11 PM 1 Ethvlbenzene ND 0.048 mg/Kg 1 8/16/2022 6:06:11 PM Xylenes, Total ND 0.096 mg/Kg 1 8/16/2022 6:06:11 PM Surr: 1.2-Dichloroethane-d4 110 70-130 %Rec 1 8/16/2022 6:06:11 PM Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 8/16/2022 6:06:11 PM Surr: Dibromofluoromethane 124 70-130 %Rec 1 8/16/2022 6:06:11 PM Surr: Toluene-d8 99.1 70-130 %Rec 1 8/16/2022 6:06:11 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND mg/Kg 8/16/2022 6:06:11 PM 48 1 Surr: BFB 116 70-130 %Rec 1 8/16/2022 6:06:11 PM

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

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix
- D Н Holding times for preparation or analysis exceeded
- ND
- Not Detected at the Reporting Limit POL
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-13 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:15:00 AM Lab ID: 2208875-004 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 8/17/2022 1:18:14 PM ND 15 mg/Kg 1 Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/17/2022 1:18:14 PM Surr: DNOP 77.2 21-129 %Rec 1 8/17/2022 1:18:14 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 8/16/2022 10:34:44 PM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/16/2022 6:34:53 PM 1 Toluene ND 0.049 mg/Kg 8/16/2022 6:34:53 PM 1 Ethvlbenzene ND 0.049 mg/Kg 1 8/16/2022 6:34:53 PM Xylenes, Total ND 0.098 mg/Kg 1 8/16/2022 6:34:53 PM Surr: 1.2-Dichloroethane-d4 108 70-130 %Rec 1 8/16/2022 6:34:53 PM Surr: 4-Bromofluorobenzene 105 70-130 %Rec 1 8/16/2022 6:34:53 PM Surr: Dibromofluoromethane 122 70-130 %Rec 1 8/16/2022 6:34:53 PM Surr: Toluene-d8 101 70-130 %Rec 1 8/16/2022 6:34:53 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/16/2022 6:34:53 PM 49 mg/Kg 1

119

70-130

%Rec

1

8/16/2022 6:34:53 PM

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

**Qualifiers:** 

Surr: BFB

- 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-14 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:20:00 AM Lab ID: 2208875-005 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/17/2022 1:42:46 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/17/2022 1:42:46 PM Surr: DNOP 98.7 21-129 %Rec 1 8/17/2022 1:42:46 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 8/16/2022 10:47:09 PM 160 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/16/2022 7:03:33 PM 1 Toluene ND 0.047 mg/Kg 8/16/2022 7:03:33 PM 1 Ethvlbenzene ND 0.047 mg/Kg 1 8/16/2022 7:03:33 PM Xylenes, Total ND 0.095 mg/Kg 1 8/16/2022 7:03:33 PM Surr: 1.2-Dichloroethane-d4 109 70-130 %Rec 1 8/16/2022 7:03:33 PM Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/16/2022 7:03:33 PM Surr: Dibromofluoromethane 126 70-130 %Rec 1 8/16/2022 7:03:33 PM Surr: Toluene-d8 98.4 70-130 %Rec 1 8/16/2022 7:03:33 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND mg/Kg 8/16/2022 7:03:33 PM 47 1 Surr: BFB 117 70-130 %Rec 1 8/16/2022 7:03:33 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208875

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-14 4' Collection Date: 8/11/2022 10:25:00 AM Received Date: 8/13/2022 7:40:00 AM

Lab ID: 2208875-006	Matrix: SOIL	Receiv	ed Date:	8/13/2	2022 7:40:00 AM
Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL R	ANGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/17/2022 1:56:26 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/17/2022 1:56:26 PM
Surr: DNOP	93.9	21-129	%Rec	1	8/17/2022 1:56:26 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	170	60	mg/Kg	20	8/16/2022 10:59:33 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	8/16/2022 7:32:10 PM
Toluene	ND	0.050	mg/Kg	1	8/16/2022 7:32:10 PM
Ethylbenzene	ND	0.050	mg/Kg	1	8/16/2022 7:32:10 PM
Xylenes, Total	ND	0.10	mg/Kg	1	8/16/2022 7:32:10 PM
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	8/16/2022 7:32:10 PM
Surr: 4-Bromofluorobenzene	107	70-130	%Rec	1	8/16/2022 7:32:10 PM
Surr: Dibromofluoromethane	119	70-130	%Rec	1	8/16/2022 7:32:10 PM
Surr: Toluene-d8	99.9	70-130	%Rec	1	8/16/2022 7:32:10 PM
EPA METHOD 8015D MOD: GASOI	INE RANGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/16/2022 7:32:10 PM
Surr: BFB	119	70-130	%Rec	1	8/16/2022 7:32:10 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-15 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:30:00 AM Lab ID: 2208875-007 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/17/2022 11:09:00 AM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 8/17/2022 11:09:00 AM Surr: DNOP 82.1 21-129 %Rec 1 8/17/2022 11:09:00 AM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/16/2022 11:11:58 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.023 mg/Kg 8/16/2022 8:00:48 PM 1 Toluene ND 0.047 mg/Kg 8/16/2022 8:00:48 PM 1 Ethvlbenzene ND 0.047 mg/Kg 1 8/16/2022 8:00:48 PM Xylenes, Total ND 0.093 mg/Kg 1 8/16/2022 8:00:48 PM Surr: 1.2-Dichloroethane-d4 107 70-130 %Rec 1 8/16/2022 8:00:48 PM Surr: 4-Bromofluorobenzene 107 70-130 %Rec 1 8/16/2022 8:00:48 PM Surr: Dibromofluoromethane 122 70-130 %Rec 1 8/16/2022 8:00:48 PM Surr: Toluene-d8 101 70-130 %Rec 1 8/16/2022 8:00:48 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND mg/Kg 8/16/2022 8:00:48 PM 47 1 Surr: BFB 119 70-130 %Rec 1 8/16/2022 8:00:48 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Onyx 29 CTB1 Separator

Project:

Analytical Report Lab Order 2208875

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-15 4' Collection Date: 8/11/2022 10:35:00 AM Received Date: 8/13/2022 7:40:00 AM

Lab ID: 2208875-008	Matrix: SOIL	Rece	eived Date:	8/13/2	022 7:40:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	NGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/17/2022 11:23:03 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/17/2022 11:23:03 AM
Surr: DNOP	78.5	21-129	%Rec	1	8/17/2022 11:23:03 AM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/16/2022 11:24:22 PM
EPA METHOD 8260B: VOLATILES SI	HORT LIST				Analyst: BRM
Benzene	ND	0.023	mg/Kg	1	8/16/2022 8:29:23 PM
Toluene	ND	0.046	mg/Kg	1	8/16/2022 8:29:23 PM
Ethylbenzene	ND	0.046	mg/Kg	1	8/16/2022 8:29:23 PM
Xylenes, Total	ND	0.093	mg/Kg	1	8/16/2022 8:29:23 PM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	8/16/2022 8:29:23 PM
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	8/16/2022 8:29:23 PM
Surr: Dibromofluoromethane	115	70-130	%Rec	1	8/16/2022 8:29:23 PM
Surr: Toluene-d8	101	70-130	%Rec	1	8/16/2022 8:29:23 PM
EPA METHOD 8015D MOD: GASOLIN	NE RANGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	8/16/2022 8:29:23 PM
Surr: BFB	122	70-130	%Rec	1	8/16/2022 8:29:23 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-16 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:40:00 AM Lab ID: 2208875-009 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/17/2022 9:32:06 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/17/2022 9:32:06 AM Surr: DNOP 86.9 21-129 %Rec 1 8/17/2022 9:32:06 AM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 8/16/2022 11:36:46 PM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.025 mg/Kg 8/16/2022 8:57:57 PM 1 Toluene ND 0.050 mg/Kg 8/16/2022 8:57:57 PM 1 Ethvlbenzene ND 0.050 mg/Kg 1 8/16/2022 8:57:57 PM Xylenes, Total ND 0.099 mg/Kg 1 8/16/2022 8:57:57 PM Surr: 1.2-Dichloroethane-d4 105 70-130 %Rec 1 8/16/2022 8:57:57 PM Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/16/2022 8:57:57 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/16/2022 8:57:57 PM 119 Surr: Toluene-d8 99.1 70-130 %Rec 1 8/16/2022 8:57:57 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/16/2022 8:57:57 PM 5.0 mg/Kg 1 Surr: BFB 114 70-130 %Rec 1 8/16/2022 8:57:57 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Project:

Onyx 29 CTB1 Separator

**Analytical Report** Lab Order 2208875

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-16 4' Collection Date: 8/11/2022 10:45:00 AM Received Date: 8/13/2022 7:40:00 AM

Lab ID: 2208875-010	Matrix: SOIL	Recei	ved Date:	8/13/2	022 7:40:00 AM
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/17/2022 9:45:54 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/17/2022 9:45:54 AM
Surr: DNOP	95.8	21-129	%Rec	1	8/17/2022 9:45:54 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	100	60	mg/Kg	20	8/16/2022 7:04:05 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	8/16/2022 9:26:30 PM
Toluene	ND	0.049	mg/Kg	1	8/16/2022 9:26:30 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/16/2022 9:26:30 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/16/2022 9:26:30 PM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	8/16/2022 9:26:30 PM
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	8/16/2022 9:26:30 PM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	8/16/2022 9:26:30 PM
Surr: Toluene-d8	102	70-130	%Rec	1	8/16/2022 9:26:30 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/16/2022 9:26:30 PM
Surr: BFB	121	70-130	%Rec	1	8/16/2022 9:26:30 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 PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-17 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:50:00 AM Lab ID: 2208875-011 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/17/2022 9:59:50 AM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/17/2022 9:59:50 AM Surr: DNOP 92.7 21-129 %Rec 1 8/17/2022 9:59:50 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/16/2022 8:30:31 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/16/2022 9:55:05 PM 1 Toluene ND 0.049 mg/Kg 8/16/2022 9:55:05 PM 1 Ethvlbenzene ND 0.049 mg/Kg 1 8/16/2022 9:55:05 PM Xylenes, Total ND 0.097 mg/Kg 1 8/16/2022 9:55:05 PM Surr: 1.2-Dichloroethane-d4 107 70-130 %Rec 1 8/16/2022 9:55:05 PM Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/16/2022 9:55:05 PM Surr: Dibromofluoromethane 122 70-130 %Rec 1 8/16/2022 9:55:05 PM Surr: Toluene-d8 101 70-130 %Rec 1 8/16/2022 9:55:05 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/16/2022 9:55:05 PM 49 mg/Kg 1

121

70-130

%Rec

1

8/16/2022 9:55:05 PM

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

**Qualifiers:** 

Surr: BFB

- 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: WES22-17 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 10:55:00 AM Lab ID: 2208875-012 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/17/2022 10:13:40 AM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/17/2022 10:13:40 AM Surr: DNOP 101 21-129 %Rec 1 8/17/2022 10:13:40 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 61 8/16/2022 8:42:52 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/17/2022 12:46:56 AM 1 Toluene ND 0.048 mg/Kg 8/17/2022 12:46:56 AM 1 Ethvlbenzene ND 0.048 mg/Kg 1 8/17/2022 12:46:56 AM Xylenes, Total ND 0.095 mg/Kg 1 8/17/2022 12:46:56 AM Surr: 1.2-Dichloroethane-d4 107 70-130 %Rec 1 8/17/2022 12:46:56 AM Surr: 4-Bromofluorobenzene 105 70-130 %Rec 1 8/17/2022 12:46:56 AM Surr: Dibromofluoromethane 70-130 %Rec 1 8/17/2022 12:46:56 AM 117 Surr: Toluene-d8 101 70-130 %Rec 1 8/17/2022 12:46:56 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/17/2022 12:46:56 AM 48 mg/Kg 1 Surr: BFB 116 70-130 %Rec 1 8/17/2022 12:46:56 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208875

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-09 6' Collection Date: 8/11/2022 11:00:00 AM Received Date: 8/13/2022 7:40:00 AM

Lab ID: 2208875-013	Matrix: SOIL	Recei	ved Date:	8/13/2	022 7:40:00 AM
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	25	14	mg/Kg	1	8/17/2022 10:55:21 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/17/2022 10:55:21 AM
Surr: DNOP	89.5	21-129	%Rec	1	8/17/2022 10:55:21 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	1600	60	mg/Kg	20	8/16/2022 8:55:12 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	8/17/2022 1:15:31 AM
Toluene	ND	0.047	mg/Kg	1	8/17/2022 1:15:31 AM
Ethylbenzene	ND	0.047	mg/Kg	1	8/17/2022 1:15:31 AM
Xylenes, Total	ND	0.095	mg/Kg	1	8/17/2022 1:15:31 AM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	8/17/2022 1:15:31 AM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	8/17/2022 1:15:31 AM
Surr: Dibromofluoromethane	115	70-130	%Rec	1	8/17/2022 1:15:31 AM
Surr: Toluene-d8	98.6	70-130	%Rec	1	8/17/2022 1:15:31 AM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/17/2022 1:15:31 AM
Surr: BFB	120	70-130	%Rec	1	8/17/2022 1:15:31 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/22/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: BES22-10 6' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/11/2022 11:05:00 AM Lab ID: 2208875-014 Matrix: SOIL Received Date: 8/13/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) 100 15 mg/Kg 1 8/17/2022 9:54:52 AM Motor Oil Range Organics (MRO) 8/17/2022 9:54:52 AM 62 50 mg/Kg 1 Surr: DNOP 95.5 21-129 %Rec 1 8/17/2022 9:54:52 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 1800 8/16/2022 9:07:33 PM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: BRM Benzene ND 0.024 mg/Kg 8/17/2022 1:44:03 AM 1 Toluene ND 0.048 mg/Kg 8/17/2022 1:44:03 AM 1 Ethvlbenzene ND 0.048 mg/Kg 1 8/17/2022 1:44:03 AM Xylenes, Total ND 0.095 mg/Kg 1 8/17/2022 1:44:03 AM Surr: 1.2-Dichloroethane-d4 105 70-130 %Rec 1 8/17/2022 1:44:03 AM Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/17/2022 1:44:03 AM Surr: Dibromofluoromethane 119 70-130 %Rec 1 8/17/2022 1:44:03 AM Surr: Toluene-d8 99.3 70-130 %Rec 1 8/17/2022 1:44:03 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND mg/Kg 8/17/2022 1:44:03 AM 48 1 Surr: BFB 117 70-130 %Rec 1 8/17/2022 1:44:03 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Onyx 29 CTB1 Separator

Project:

**Analytical Report** Lab Order 2208875

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2022 Client Sample ID: BES22-11 6' Collection Date: 8/11/2022 11:10:00 AM **Descived Deter** 8/12/2022 7:40:00 AM

Lab ID: 2208875-015	Matrix: SOIL	Rece	ived Date:	8/13/2	022 7:40:00 AM
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/17/2022 10:18:35 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/17/2022 10:18:35 AM
Surr: DNOP	93.4	21-129	%Rec	1	8/17/2022 10:18:35 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	110	59	mg/Kg	20	8/16/2022 9:19:54 PM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	8/17/2022 2:12:39 AM
Toluene	ND	0.049	mg/Kg	1	8/17/2022 2:12:39 AM
Ethylbenzene	ND	0.049	mg/Kg	1	8/17/2022 2:12:39 AM
Xylenes, Total	ND	0.098	mg/Kg	1	8/17/2022 2:12:39 AM
Surr: 1,2-Dichloroethane-d4	111	70-130	%Rec	1	8/17/2022 2:12:39 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/17/2022 2:12:39 AM
Surr: Dibromofluoromethane	120	70-130	%Rec	1	8/17/2022 2:12:39 AM
Surr: Toluene-d8	99.3	70-130	%Rec	1	8/17/2022 2:12:39 AM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/17/2022 2:12:39 AM
Surr: BFB	114	70-130	%Rec	1	8/17/2022 2:12:39 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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208875

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-12 6' Collection Date: 8/11/2022 11:15:00 AM Received Date: 8/13/2022 7:40:00 AM

Lab ID: 2208875-016	Matrix: SOIL	Recei	ved Date:	8/13/2	022 7:40:00 AM
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/16/2022 11:15:48 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/16/2022 11:15:48 AM
Surr: DNOP	89.6	21-129	%Rec	1	8/16/2022 11:15:48 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/17/2022 2:11:02 PM
Surr: BFB	105	37.7-212	%Rec	1	8/17/2022 2:11:02 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	8/16/2022 8:26:29 PM
Toluene	ND	0.050	mg/Kg	1	8/16/2022 8:26:29 PM
Ethylbenzene	ND	0.050	mg/Kg	1	8/16/2022 8:26:29 PM
Xylenes, Total	ND	0.099	mg/Kg	1	8/16/2022 8:26:29 PM
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	8/16/2022 8:26:29 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/16/2022 9:32:15 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 range due to dilution or matrix interference

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

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Project: Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208875

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-13 6' Collection Date: 8/11/2022 11:20:00 AM Baseived Date: 8/12/2022 7:40:00 AM

Lab ID: 2208875-017	Matrix: SOIL	Rece	eived Date:	8/13/2	022 7:40:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/16/2022 11:29:49 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/16/2022 11:29:49 AM
Surr: DNOP	93.1	21-129	%Rec	1	8/16/2022 11:29:49 AM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/17/2022 2:34:48 PM
Surr: BFB	108	37.7-212	%Rec	1	8/17/2022 2:34:48 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	8/16/2022 9:37:14 PM
Toluene	ND	0.049	mg/Kg	1	8/16/2022 9:37:14 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/16/2022 9:37:14 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/16/2022 9:37:14 PM
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	8/16/2022 9:37:14 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	97	60	mg/Kg	20	8/16/2022 10:09:17 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# QC SUMMARY REPORT Hall E

	WO#:	2208875
Invironmental Analysis Laboratory, Inc.		22-Aug-22

Client: Project:	Devon Er Onyx 29	nergy CTB1 Sep	arator								
Sample ID: ME	3-69543	SampT	ype: mb	olk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: PB	s	Batch	D: 69	543	F	lunNo: <b>9</b>	0330				
Prep Date: 8/	/16/2022	Analysis D	ate: 8/	16/2022	S	eqNo: 3	222397	Units: mg/K			
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID: LC	S-69543	SampT	ype: Ics	;	Tes	tCode: El	PA Method	300.0: Anions	s		
Client ID: LC	SS	Batch	ID: 69	543	F	lunNo: 9	0330				
Prep Date: 8/	/16/2022	Analysis D	ate: 8/	16/2022	S	eqNo: 3	222398	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15	1.5	15.00	0	97.1	90	110			
Sample ID: ME	3-69530	SampT	ype: mk	olk	Tes	tCode: El	PA Method	300.0: Anion:	s		
Client ID: PB	S	Batch	ID: 69	530	F	lunNo: 9	0309				
Prep Date: 8/	/16/2022	Analysis D	ate: 8/	16/2022	S	eqNo: 3	222751	Units: mg/K	g		
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID: LC	S-69530	SampT	ype: Ics		Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: LC	SS	Batch	D: 69	530	F	lunNo: <b>9</b>	0309				
Prep Date: 8/	/16/2022	Analysis D	ate: 8/	16/2022	S	eqNo: 3	222752	Units: mg/Kg			
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	92.0	90	110			

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

## QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client:	Devon Energy										
Project:	Onyx 29 CTB	1 Separa	tor								
Sample ID: MB-69	521 S	ampType	: MB	LK	Tes	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS		Batch ID	: 695	21	R	unNo: 90	0276		-	-	
Prep Date: 8/16/2	2022 Anal	ysis Date	: 8/1	6/2022	S	eqNo: 32	221703	Units: mg/Kg			
Analyte	Re	sult F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO)	ND	15								
Motor Oil Range Organie	cs (MRO)	ND	50								
Surr: DNOP		8.8		10.00		87.7	21	129			
Sample ID: LCS-69	9521 S	ampType	E: LCS	8	Tes	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS		Batch ID	: 695	21	R	unNo: <b>90</b>	0276				
Prep Date: 8/16/2	2 <b>022</b> Anal	ysis Date	: 8/1	6/2022	S	eqNo: 32	221704	Units: mg/K	g		
Analyte	Re	sult F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO)	43	15	50.00	0	86.6	64.4	127			
Surr: DNOP		3.6		5.000		72.9	21	129			
Sample ID: MB-69	<b>519</b> S	ampType	: MB	LK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS		Batch ID	: 695	19	RunNo: 90333						
Prep Date: 8/15/2	2022 Anal	ysis Date	: 8/1	7/2022	S	eqNo: 32	222874	Units: mg/K	g		
Analyte	Re	sult F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO)	ND	15								
Motor Oil Range Organie	cs (MRO)	ND	50								
Surr: DNOP		8.7		10.00		86.9	21	129			
Sample ID: LCS-69	9519 S	ampType	E: LCS	S	Tes	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS		Batch ID	: 695	19	R	unNo: <b>90</b>	0333				
Prep Date: 8/15/2	2022 Anal	ysis Date	: 8/1	7/2022	S	eqNo: 32	222875	Units: mg/K	g		
Analyte	Re	sult F	QL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO)	44	15	50.00	0	87.6	64.4	127			
Surr: DNOP		4.2		5.000		84.4	21	129			
Sample ID: 220887	<b>'5-002AMS</b> S	ampType	: MS		Tes	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: WES22	2-12 4'	Batch ID	: 695	19	R	unNo: 90	0347				
Prep Date: 8/15/2	2022 Anal	ysis Date	: 8/1	7/2022	S	eqNo: 32	226236	Units: <b>mg/K</b>	g		
Analyte	Re	sult F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (	(DRO)	57	15	48.83	14.00	88.3	36.1	154			
Surr: DNOP		6.6		4.883		134	21	129			S

#### **Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208875

22-Aug-22

WO#:

L.		WO#:	2208875
Hall Env	vironmental Analysis Laboratory, Inc.		22-Aug-22
Client:	Devon Energy		

Project:	Onyx 29 (	0.	arator								
Sample ID:	2208875-002AMSD	SampT	ype: <b>MS</b>	D	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	WES22-12 4'	Batch	n ID: 69	519	R	lunNo: 9	)347				
Prep Date:	8/15/2022	Analysis D	ate: <b>8/</b>	17/2022	SeqNo: 3226237		Units: mg/k	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	51	15	48.88	14.00	75.4	36.1	154	11.6	33.9	
Surr: DNOP		5.8		4.888		118	21	129	0	0	

#### Qualifiers:

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- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## **QC SUMMARY REPORT** Hall Enviro

MAKI KEPUKI	WO#:	2208875
onmental Analysis Laboratory, Inc.		22-Aug-22

Client: Devon E Project: Onyx 29	Cnergy CTB1 Sepa	rator								
Sample ID: mb-69518	SampTy	pe: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID: PBS	Batch	ID: 69	518	RunNo: 90345						
Prep Date: 8/15/2022	Analysis Da	ite: <b>8/</b>	17/2022	S	eqNo: 32	223615	Units: mg/K	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 1000	5.0	1000		105	37.7	212			
Sample ID: Ics-69518	SampTy	pe: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: 69	518	R	lunNo: 9	0345				
Prep Date: 8/15/2022	Analysis Da	ite: <b>8/</b>	17/2022	S	eqNo: 32	223616	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2100		1000		210	37.7	212			
Sample ID: 2208875-016ams	SampTy	ре: МS	6	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BES22-12 6'	Batch	ID: 69	518	R	unNo: 9	0345				
Prep Date: 8/15/2022	Analysis Da	ite: <b>8/</b>	17/2022	S	eqNo: 3	223618	Units: mg/K	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	24.18	0	116	70	130			
Surr: BFB	2100		967.1		221	37.7	212			S
Sample ID: 2208875-016ams	<b>d</b> SampTy	ре: МS	SD	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: BES22-12 6'	Batch	ID: 69	518	R	lunNo: 9	0345				
Prep Date: 8/15/2022	Analysis Da	te: <b>8/</b>	17/2022	S	eqNo: 3	223619	Units: <b>mg/K</b>	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	4.9	24.61	0	108	70	130	5.30	20	
Surr: BFB	2100		984.3		215	37.7	212	0	0	S

#### **Qualifiers:**

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- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Devon Energy

**Client:** 

## **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Project: Onyx 29	CTB1 Sep	parator								
Sample ID: mb-69518	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batcl	h ID: 69	518	R	lunNo: 9	0310				
Prep Date: 8/15/2022	Analysis E	Date: <b>8/</b>	16/2022	S	eqNo: 3	222136	Units: mg/K	٢g		
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		105	70	130			
Sample ID: LCS-69518	SampT	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batc	h ID: 69	518	R	lunNo: 9	0310				
Prep Date: 8/15/2022	Analysis D	Date: <b>8/</b>	16/2022	S	eqNo: 3	222137	Units: mg/K	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.97	0.050	1.000	0	96.8	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		108	70	130			
	1.1		1.000		100	70	150			
Sample ID: 2208875-017ams		Гуре: <b>МS</b>		Tes		_	8021B: Volat	tiles		
	SampT	Гуре: <b>МS</b> h ID: <b>69:</b>	5			PA Method		tiles		
Sample ID: 2208875-017ams	SampT	h ID: 69	518	R	tCode: Ef	PA Method				
Sample ID: 2208875-017ams Client ID: BES22-13 6'	Samp1 Batcl	h ID: 69	5 518 16/2022	R	tCode: EF	PA Method	8021B: Volat		RPDLimit	Qual
Sample ID:         2208875-017ams           Client ID:         BES22-13 6'           Prep Date:         8/15/2022	Samp1 Batcl Analysis E	h ID: 69: Date: 8/	5 518 16/2022	R	tCode: EF tunNo: 90 SeqNo: 32	PA Method 0310 222140	8021B: Volat	ζg	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte	Samp1 Batch Analysis D Result	h ID: 699 Date: 8/ PQL	5 518 16/2022 SPK value	R S SPK Ref Val	Code: EF CunNo: 9 GeqNo: 32 %REC	PA Method 0310 222140 LowLimit	8021B: Volat Units: mg/K HighLimit	ζg	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene	SampT Batcl Analysis D Result 1.0	h ID: 699 Date: 8/ PQL 0.024	518 16/2022 SPK value 0.9542	R S SPK Ref Val 0	tCode: EF tunNo: 96 SeqNo: 32 %REC 109	PA Method 0310 222140 LowLimit 68.8	8021B: Volat Units: mg/K HighLimit 120	ζg	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene	SampT Batcl Analysis E Result 1.0 1.1	h ID: 699 Date: 8/ PQL 0.024 0.048	518 16/2022 SPK value 0.9542 0.9542	R SPK Ref Val 0 0	tCode: EF RunNo: 96 SeqNo: 32 %REC 109 114	PA Method 0310 222140 LowLimit 68.8 73.6	8021B: Volat Units: mg/k HighLimit 120 124	ζg	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene	SampT Batcl Analysis E Result 1.0 1.1 1.1	h ID: 699 Date: 8/ PQL 0.024 0.048 0.048	518 16/2022 SPK value 0.9542 0.9542 0.9542	R SPK Ref Val 0 0 0	Code: EF RunNo: 9 GeqNo: 32 %REC 109 114 115	PA Method 0310 222140 LowLimit 68.8 73.6 72.7	8021B: Volat Units: mg/k HighLimit 120 124 129	ζg	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total	SampT Batcl Analysis E Result 1.0 1.1 1.1 3.3 1.0	h ID: 699 Date: 8/ PQL 0.024 0.048 0.048	5 518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542	R SPK Ref Val 0 0 0 0	Code: EF RunNo: 90 GeqNo: 32 %REC 109 114 115 115 107	PA Method 0310 222140 LowLimit 68.8 73.6 72.7 75.7 70	8021B: Volat Units: mg/K HighLimit 120 124 129 126	<b>Sg</b> %RPD	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene	SampT Batcl Analysis E Result 1.0 1.1 1.1 3.3 1.0	h ID: 69 Date: 8/ PQL 0.024 0.048 0.048 0.095	518 16/2022 SPK value 0.9542 0.9542 0.9542 2.863 0.9542	R SPK Ref Val 0 0 0 0 0 Test	Code: EF RunNo: 90 GeqNo: 32 %REC 109 114 115 115 107	PA Method 0310 222140 LowLimit 68.8 73.6 72.7 75.7 75.7 70 PA Method	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130	<b>Sg</b> %RPD	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208875-017amsc	SampT Batcl Analysis E Result 1.0 1.1 1.1 3.3 1.0	h ID: 699 Date: 8/ PQL 0.024 0.048 0.048 0.095 Type: MS h ID: 699	518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542 2.863 0.9542 518	R SPK Ref Val 0 0 0 0 Tesi	Code: EF RunNo: 90 GeqNo: 32 <u>%REC</u> 109 114 115 115 107 tCode: EF	PA Method 0310 222140 LowLimit 68.8 73.6 72.7 75.7 70 PA Method 0310	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130	Sg %RPD	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208875-017amsc Client ID: BES22-13 6'	SampT Batcl Analysis I Result 1.0 1.1 1.1 3.3 1.0 I SampT Batcl Analysis I Result	h ID: 69 Date: 8/ PQL 0.024 0.048 0.048 0.095 Type: MS h ID: 69 Date: 8/ PQL	5 518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542 2.863 0.9542 518 16/2022 SPK value	R SPK Ref Val 0 0 0 0 Tesi	Code: EF RunNo: 9 %REC 109 114 115 115 107 Code: EF RunNo: 9 SeqNo: 32 %REC	PA Method 0310 222140 222140 68.8 73.6 72.7 75.7 70 PA Method 0310 222141 LowLimit	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit	Sg %RPD tiles Sg %RPD	RPDLimit	Qual
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208875-017amsc Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene	SampT Batcl Analysis E Result 1.0 1.1 1.1 3.3 1.0 I SampT Batcl Analysis E Result 0.98	h ID: 69 Date: 8/ PQL 0.024 0.048 0.048 0.095 Type: MS h ID: 69 Date: 8/ PQL 0.024	518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542 518 16/2022 SPK value 0.9524	R SPK Ref Val 0 0 0 0 Tes R S	Code: EF RunNo: 90 BeqNo: 32 %REC 109 114 115 115 107 Code: EF RunNo: 90 BeqNo: 32 %REC 103	PA Method 0310 222140 222140 222140 68.8 73.6 72.7 75.7 70 PA Method 0310 222141 LowLimit 68.8	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit 120	5g %RPD tiles 5g %RPD 6.28	RPDLimit 20	
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208875-017amsc Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte	SampT Batcl Analysis I Result 1.0 1.1 1.1 3.3 1.0 I SampT Batcl Analysis I Result	h ID: 69 Date: 8/ PQL 0.024 0.048 0.048 0.095 Type: MS h ID: 69 Date: 8/ PQL	518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542 518 16/2022 SPK value 0.9524 0.9524 0.9524	R SPK Ref Val 0 0 0 0 Test R SPK Ref Val	Code: EF RunNo: 90 BeqNo: 32 %REC 109 114 115 115 107 Code: EF RunNo: 90 BeqNo: 32 %REC 103 107	PA Method 0310 222140 222140 222140 68.8 73.6 72.7 75.7 70 PA Method 0310 222141 LowLimit 68.8 73.6	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit	5g %RPD tiles 5g 6.28 6.63	RPDLimit 20 20	
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208875-017amsc Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene	SampT Batcl Analysis E Result 1.0 1.1 1.1 3.3 1.0 I SampT Batcl Analysis E Result 0.98	h ID: 69 Date: 8/ PQL 0.024 0.048 0.048 0.095 Type: MS h ID: 69 Date: 8/ PQL 0.024	518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542 30.9542 518 16/2022 SPK value 0.9524 0.9524 0.9524 0.9524	SPK Ref Val 0 0 0 0 Test SPK Ref Val 0	Code: EF RunNo: 90 BeqNo: 32 %REC 109 114 115 115 107 Code: EF RunNo: 90 BeqNo: 32 %REC 103	PA Method 0310 222140 222140 222140 68.8 73.6 72.7 75.7 70 PA Method 0310 222141 LowLimit 68.8 73.6 72.7	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit 120	5g %RPD tiles 5g %RPD 6.28	RPDLimit 20 20 20	
Sample ID: 2208875-017ams Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208875-017amsc Client ID: BES22-13 6' Prep Date: 8/15/2022 Analyte Benzene Toluene	SampT Batcl Analysis E Result 1.0 1.1 1.1 3.3 1.0 I SampT Batcl Analysis E Result 0.98 1.0	h ID: 699 Date: 8/ PQL 0.024 0.048 0.048 0.048 0.095 Type: MS h ID: 699 Date: 8/ PQL 0.024 0.048	518 16/2022 SPK value 0.9542 0.9542 2.863 0.9542 30.9542 518 16/2022 SPK value 0.9524 0.9524 0.9524	SPK Ref Val 0 0 0 0 0 Test SPK Ref Val 0 0	Code: EF RunNo: 90 BeqNo: 32 %REC 109 114 115 115 107 Code: EF RunNo: 90 BeqNo: 32 %REC 103 107	PA Method 0310 222140 222140 222140 68.8 73.6 72.7 75.7 70 PA Method 0310 222141 LowLimit 68.8 73.6	8021B: Volat Units: mg/K HighLimit 120 124 129 126 130 8021B: Volat Units: mg/K HighLimit 120 124	5g %RPD tiles 5g 6.28 6.63	RPDLimit 20 20	

#### **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 PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

WO#: 2208875 22-Aug-22 Devon Energy

**Client:** 

## QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

**Released to Imaging: 11/22/2022 2:49:36 PM** 

Project: Onyx 2	9 CTB1 Sep	arator								
Sample ID: Ics-69509	SampT	Гуре: <b>LC</b>	S4	Test	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: BatchQC	Batcl	h ID: 69	509	R	RunNo: 9	0315				
Prep Date: 8/15/2022	Analysis E	Date: <b>8/</b>	16/2022	S	SeqNo: 3	222198	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.1	80	120			
Toluene	0.94	0.050	1.000	0	93.5	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		107	70	130			
Surr: Dibromofluoromethane	0.60		0.5000		120	70	130			
Surr: Toluene-d8	0.50		0.5000		99.2	70	130			
Sample ID: mb-69509	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batc	h ID: 69	509	R	RunNo: <b>9</b>	0315				
Prep Date: 8/15/2022	Analysis E	Date: <b>8/</b>	16/2022	S	SeqNo: 3	222199	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	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene					400	70	130			
Sun. 4-Bromoliuorobenzene	0.52		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.52 0.60		0.5000 0.5000		103 120	70 70	130			

Qualifiers:

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- 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 interference
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- E Estimated value
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- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2208875

22-Aug-22

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Devon Energy Onyx 29 CTB1 Sep	arator								
Sample ID: Ics-6950	09 SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: LCSS	Batcl	n ID: 69	509	F	RunNo: 9	0315				
Prep Date: 8/15/20	022 Analysis D	ate: <b>8/</b>	16/2022	S	SeqNo: 3	222224	Units: mg/K	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(GRO) 24	5.0	25.00	0	95.1	70	130			
Surr: BFB	580		500.0		115	70	130			
Sample ID: mb-695	09 SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batcl	n ID: 69	509	F	RunNo: 9	0315				
Prep Date: 8/15/20	Analysis D	ate: 8/	16/2022	S	SeqNo: 3	222225	Units: mg/K	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(GRO) ND	5.0								
Surr: BFB	590		500.0		118	70	130			

Qualifiers:

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- ND Not Detected at the Reporting Limit
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2208875

22-Aug-22

WO#:

<ol> <li>Is Chain of Custody complete?</li> <li>How was the sample delivered?</li> <li>Log In</li> <li>Was an attempt made to cool the samples?</li> <li>Were all samples received at a temperature of &gt;0° C to 6.0°C</li> <li>Sample(s) in proper container(s)?</li> <li>Sufficient sample volume for indicated test(s)?</li> <li>Are samples (except VOA and ONG) properly preserved?</li> </ol>	Yes <u>Couri</u> Yes Yes Yes	er V	No No		RcptNo: 1 Not Present NA NA
Completed By:       Juan Rojas       8/13/2022 9:01:05 AM         Reviewed By:       Image: State Stat	<u>Couri</u> Yes Yes Yes		No No		NA 🗔
Completed By:       Juan Rojas       8/13/2022 9:01:05 AM         Reviewed By:       Image: 8/13/202         Chain of Custody       8/13/202         Chain of Custody       8/13/202         1.       Is Chain of Custody complete?         2.       How was the sample delivered?         Log In       3.         3.       Was an attempt made to cool the samples?         4.       Were all samples received at a temperature of >0° C to 6.0°C         5.       Sample(s) in proper container(s)?         6.       Sufficient sample volume for indicated test(s)?         7.       Are samples (except VOA and ONG) properly preserved?	<u>Couri</u> Yes Yes Yes		No No		NA 🗔
Reviewed By:       Me       8/13/22         Chain of Custody       2       1. Is Chain of Custody complete?       2         2.       How was the sample delivered?       2         Log In       3. Was an attempt made to cool the samples?         4.       Were all samples received at a temperature of >0° C to 6.0°C         5.       Sample(s) in proper container(s)?         6.       Sufficient sample volume for indicated test(s)?         7.       Are samples (except VOA and ONG) properly preserved?	<u>Couri</u> Yes Yes Yes		No		NA 🗔
<ol> <li>Is Chain of Custody complete?</li> <li>How was the sample delivered?</li> <li>Log In</li> <li>Was an attempt made to cool the samples?</li> <li>Were all samples received at a temperature of &gt;0° C to 6.0°C</li> <li>Sample(s) in proper container(s)?</li> <li>Sufficient sample volume for indicated test(s)?</li> <li>Are samples (except VOA and ONG) properly preserved?</li> </ol>	<u>Couri</u> Yes Yes Yes		No		NA 🗔
<ol> <li>Is Chain of Custody complete?</li> <li>How was the sample delivered?</li> <li>Log In</li> <li>Was an attempt made to cool the samples?</li> <li>Were all samples received at a temperature of &gt;0° C to 6.0°C</li> <li>Sample(s) in proper container(s)?</li> <li>Sufficient sample volume for indicated test(s)?</li> <li>Are samples (except VOA and ONG) properly preserved?</li> </ol>	<u>Couri</u> Yes Yes Yes		No		NA 🗔
Log In         3. Was an attempt made to cool the samples?         4. Were all samples received at a temperature of >0° C to 6.0°C         5. Sample(s) in proper container(s)?         6. Sufficient sample volume for indicated test(s)?         7. Are samples (except VOA and ONG) properly preserved?	Yes Yes Yes Yes	2	No		
<ul> <li>3. Was an attempt made to cool the samples?</li> <li>4. Were all samples received at a temperature of &gt;0° C to 6.0°C</li> <li>5. Sample(s) in proper container(s)?</li> <li>6. Sufficient sample volume for indicated test(s)?</li> <li>7. Are samples (except VOA and ONG) properly preserved?</li> </ul>	Yes Yes Yes	<ul> <li>Image: A start of the start of</li></ul>	No		
<ul> <li>4. Were all samples received at a temperature of &gt;0° C to 6.0°C</li> <li>5. Sample(s) in proper container(s)?</li> <li>6. Sufficient sample volume for indicated test(s)?</li> <li>7. Are samples (except VOA and ONG) properly preserved?</li> </ul>	Yes Yes Yes	<ul> <li>Image: A start of the start of</li></ul>	No		
<ul> <li>5. Sample(s) in proper container(s)?</li> <li>6. Sufficient sample volume for indicated test(s)?</li> <li>7. Are samples (except VOA and ONG) properly preserved?</li> </ul>	Yes Yes				NA 🗔
<ul> <li>6. Sufficient sample volume for indicated test(s)?</li> <li>7. Are samples (except VOA and ONG) properly preserved?</li> </ul>	Yes		No		
7. Are samples (except VOA and ONG) properly preserved?					
		V	No		
8. Was preservative added to bottles?	Yes	~	No		
	Yes		No	•	NA 🗌
9. 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
		-		e	bottles checked
1. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	~	No		for pH: (<2 or >12 unless noted)
	Yes	~	No		Adjusted?
	Yes		No		-1-1
그는 것 같은 물건이 안 다니 것 같은 것 같은 것 같은 것 같은 것 같은 것 같은 것 같이 있다. 것 같은 것 같	Yes		No		Checked by: JAS (13/2
pecial Handling (if applicable)					
	Yes		No		NA 🗹
Person Notified: Date			_	-	
By Whom: Via:	eMa		Phone	Fax	In Person
Regarding:	1.1.2			+C. (0)-	
Client Instructions:					
16. Additional remarks:					
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Intact Seal No Se	al Da	te	Signed	Bv	

Page 1 of 1

	Chain-o	of-Cu	Chain-of-Custody Record	Turn-Around Time:	1.10	660-2		3			COL		
Client:	DEVONILIEFEX	1/101	~ + CX	□ Standard	I B Rush				ANAL ENVI			ENVIRONMENIAL VSTS I ABODATOD	.>
				Project Name:	e:				alled way				-
Mailin	Mailing Address:	017 Fill	21.16	theo	29 6781	I LSEPArator)	4901	4901 Hawkins NE -	s NE -	Albuqu	www.riaiieriNironirrieniai.com ins NE - Albuquerque, NM 87109	M 87109	: 11/1
		ţ		Project #:			Tel	505-345-3975	-3975	Fax	505-345-4107	4107	(7202
Phone #:	e #:			22	22E-01720-002	200-			Ar	Analysis	Request		
email	email or Fax#:	-		Project Manager:	ager:		Sec. 2			*O	(Jr		45:
QA/QC	QA/QC Package:		Level 4 (Full Validation)	Kent	Sbuillet S	560	_			PO₄, S	nəedA\t		31 AM
Accre	Accreditation:	AZ COI	Az Compliance	Sampler: CV	1		סצי	(1		<sup>50</sup>	uəs		
D NELAC	9	山 Other		On Ice:	L Yes	ON []	10	.40	3	N			
	(ad			# of Coolers:			ЯЭ	g p	slet	03'			
				Cooler Temp	Cooler Temp(including cF): C-U HU-12C	1+0-1=05- (°C)	ופם(	oqtə	əM (	r, N (AO	1.12		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	220587	втех <i>у</i> 1961 Ре	EDB (W	вска в	8560 (V	S) 0728 DO IstoT		
11/8	10:00	Soil	12 21-2252M	402	ICE				P	1	-		
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	10:10		WES22-13 2'			2002							
	10:15		LUES 22-13 4'			h00-							
	10:20		Lutes22-14 2'			Sour							
	10:25		LES22-14 01			200-							
	10:30		WESZZ-IS Z'			100-							
	10:35		WESZZ-IS 4			-300-							
_	017:01		1 2 91-225AM			-0101							
	517:01		WESZZ-16 4			an							
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-	55:01		4 ES22-17 1,	1		210-							
Date:		Relinquished by:	id by:	Received by:	Via:	Date Time	Remarks:	20.0	HANCE	1.2	Dixon		
				allunun	dr	8/13/30 930	2	Direct	11.18	CONDA	200		age
Sign	Time: 1920	Relinquished by:		Received by:	Via?	RL2102-1110	410	2012:70	20%	51.86			177 oj
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Client:	ulain	- ot- o	Chain-of-Custody Record	I urn-Around Tr	HIME: Z-Day	600			I	ALL	EN.	VIF	HALL ENVIRONMENTAL	NTAI	
1.1	DEVO	Devon Vertex	rter	□ Standard	I BRush					IN	YST	v	ANALYSTS LABORATORY	<b>ACT</b>	1.
				Project Name:	4					Ind ww	enviro	) mem	www.hallenvironmental.com		
Mailing Address:	vddress	00	FIL	theo	29 CIBI	1 contraction	4	4901 Hawkins NE	awkins	- NE	Albug	nerau	Albuqueraue. NM 87109		: 11/1
		(		Project #:		ſ		Tel. 505-345-3975	5-345-	3975	Fax	505	Fax 505-345-4107		1/202
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email or Fax#:	Fax#:	-		Project Manager:	ager:		_	10	-		<sup>⊅</sup> O		(Jr		:45:.
QA/QC Package:	ackage: ard		Level 4 (Full Validation)	Kent	t stallings	560	.208) s		SMIS	01110	PO₄, S		ıəsdA\t		31 AM
Accreditation:	1.0		Az Compliance	Sampler: $\mathcal{C}\mathcal{D}$	0			1.1			10 <sup>5</sup>		uəsə		
D NELAC	19	内 Other		On Ice:	D Yes	ON D	100	100		_	۷ '	(40	Pro		
□ EDD (Type)	Type)_			# of Coolers:	1					_	_		) w.		
				Cooler Temp(including CF): (	-	(2.) しかうこんのかか	1	_					notilo		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	X 3T8	9084 P	M) 803 PAHs b	S ARDA	8560 (V	S) 0728	D letol		
11/8	11:00	1.105	BESZT-09 6'	20 \$	ICC	P	5		-		1	-		F	-
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Date: Time: F 3/12/22 9900	Time:	Child LA	ed by:	Received by:	Via: HCIULAI	Bate Time SIC3(2) 7.KU(C)		4110	TH.	51.8620125 #0.	862	5			178 of
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Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES22-19 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/12/2022 1:00:00 PM Lab ID: 2208917-001 Matrix: SOIL Received Date: 8/16/2022 7:25:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/17/2022 10:26:43 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/17/2022 10:26:43 PM Surr: DNOP 101 21-129 %Rec 1 8/17/2022 10:26:43 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 8/17/2022 8:45:28 PM 140 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR Benzene ND 0.024 mg/Kg 8/17/2022 12:59:27 PM 1 Toluene ND 0.048 mg/Kg 8/17/2022 12:59:27 PM 1 Ethvlbenzene ND 0.048 mg/Kg 1 8/17/2022 12:59:27 PM Xylenes, Total ND 0.096 mg/Kg 1 8/17/2022 12:59:27 PM Surr: 1.2-Dichloroethane-d4 106 70-130 %Rec 1 8/17/2022 12:59:27 PM Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/17/2022 12:59:27 PM Surr: Dibromofluoromethane 121 70-130 %Rec 1 8/17/2022 12:59:27 PM Surr: Toluene-d8 97.7 70-130 %Rec 1 8/17/2022 12:59:27 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/17/2022 12:59:27 PM 4.8 1 Surr: BFB 122 70-130 %Rec 1 8/17/2022 12:59:27 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
- NDNot Detected at the Reporting LimitPOLPractical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES22-21 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/12/2022 1:10:00 PM Lab ID: 2208917-002 Matrix: SOIL Received Date: 8/16/2022 7:25:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/17/2022 10:42:38 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/17/2022 10:42:38 PM Surr: DNOP 94.9 21-129 %Rec 1 8/17/2022 10:42:38 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 8/17/2022 8:57:49 PM 100 59 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR Benzene ND 0.024 mg/Kg 8/17/2022 2:25:40 PM 1 Toluene ND 0.048 mg/Kg 8/17/2022 2:25:40 PM 1 Ethvlbenzene ND 0.048 mg/Kg 1 8/17/2022 2:25:40 PM Xylenes, Total ND 0.096 mg/Kg 1 8/17/2022 2:25:40 PM Surr: 1.2-Dichloroethane-d4 109 70-130 %Rec 1 8/17/2022 2:25:40 PM Surr: 4-Bromofluorobenzene 105 70-130 %Rec 1 8/17/2022 2:25:40 PM Surr: Dibromofluoromethane 121 70-130 %Rec 1 8/17/2022 2:25:40 PM Surr: Toluene-d8 98.8 70-130 %Rec 1 8/17/2022 2:25:40 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/17/2022 2:25:40 PM 4.8 1 Surr: BFB 118 70-130 %Rec 1 8/17/2022 2:25:40 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
- POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2208917

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES22-25 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/12/2022 1:20:00 PM Lab ID: 2208917-003 Matrix: SOIL Received Date: 8/16/2022 7:25:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/17/2022 10:58:16 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/17/2022 10:58:16 PM Surr: DNOP 93.2 21-129 %Rec 1 8/17/2022 10:58:16 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 8/17/2022 9:10:10 PM 120 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR Benzene ND 0.024 mg/Kg 8/17/2022 3:52:03 PM 1 Toluene ND 0.049 mg/Kg 8/17/2022 3:52:03 PM 1 Ethvlbenzene ND 0.049 mg/Kg 1 8/17/2022 3:52:03 PM Xylenes, Total ND 0.097 mg/Kg 1 8/17/2022 3:52:03 PM Surr: 1.2-Dichloroethane-d4 103 70-130 %Rec 1 8/17/2022 3:52:03 PM Surr: 4-Bromofluorobenzene 105 70-130 %Rec 1 8/17/2022 3:52:03 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/17/2022 3:52:03 PM 118 Surr: Toluene-d8 94.9 70-130 %Rec 1 8/17/2022 3:52:03 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/17/2022 3:52:03 PM 49 1 Surr: BFB 117 70-130 %Rec 1 8/17/2022 3:52:03 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

POL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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August 23, 2022

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

RE: Onyx 29 CTB1 Separator

OrderNo.: 2208A05

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 20 sample(s) on 8/17/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-26 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:00:00 AM Lab ID: 2208A05-001 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 5:05:39 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 5:05:39 PM Surr: DNOP 105 21-129 %Rec 1 8/18/2022 5:05:39 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 140 60 8/18/2022 2:36:24 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 12:27:18 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 12:27:18 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 12:27:18 PM Xylenes, Total ND 0.10 mg/Kg 1 8/18/2022 12:27:18 PM Surr: 1,2-Dichloroethane-d4 109 %Rec 8/18/2022 12:27:18 PM 70-130 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 12:27:18 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 12:27:18 PM 118 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 12:27:18 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 12:27:18 PM 5.0 1 Surr: BFB 122 70-130 %Rec 1 8/18/2022 12:27:18 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-27 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:05:00 AM Lab ID: 2208A05-002 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 5:49:07 PM Motor Oil Range Organics (MRO) 8/18/2022 5:49:07 PM ND 50 mg/Kg 1 Surr: DNOP 59.3 21-129 %Rec 1 8/18/2022 5:49:07 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 68 60 8/18/2022 3:38:28 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 8/18/2022 1:53:19 PM Benzene ND mg/Kg 1 Toluene ND 8/18/2022 1:53:19 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 1:53:19 PM Xylenes, Total ND 0.098 mg/Kg 1 8/18/2022 1:53:19 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 1:53:19 PM 110 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 1:53:19 PM Surr: Dibromofluoromethane 120 70-130 %Rec 1 8/18/2022 1:53:19 PM Surr: Toluene-d8 101 70-130 %Rec 1 8/18/2022 1:53:19 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 1:53:19 PM 49 1 Surr: BFB 120 70-130 %Rec 1 8/18/2022 1:53:19 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-28 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:10:00 AM Lab ID: 2208A05-003 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 6:04:09 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 6:04:09 PM Surr: DNOP 95.0 21-129 %Rec 1 8/18/2022 6:04:09 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/18/2022 4:15:41 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 3:19:30 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 3:19:30 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 3:19:30 PM Xylenes, Total ND 0.099 mg/Kg 1 8/18/2022 3:19:30 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 8/18/2022 3:19:30 PM 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/18/2022 3:19:30 PM Surr: Dibromofluoromethane 120 70-130 %Rec 1 8/18/2022 3:19:30 PM Surr: Toluene-d8 99.3 70-130 %Rec 1 8/18/2022 3:19:30 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 3:19:30 PM 5.0 1 Surr: BFB 122 70-130 %Rec 1 8/18/2022 3:19:30 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

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

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-29 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:15:00 AM Lab ID: 2208A05-004 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 6:19:19 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/18/2022 6:19:19 PM Surr: DNOP 92.6 21-129 %Rec 1 8/18/2022 6:19:19 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/20/2022 2:57:23 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 3:48:12 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 3:48:12 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 3:48:12 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 3:48:12 PM Surr: 1,2-Dichloroethane-d4 108 70-130 %Rec 8/18/2022 3:48:12 PM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 3:48:12 PM Surr: Dibromofluoromethane 122 70-130 %Rec 1 8/18/2022 3:48:12 PM Surr: Toluene-d8 96.0 70-130 %Rec 1 8/18/2022 3:48:12 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 3:48:12 PM 48 1 Surr: BFB 115 70-130 %Rec 1 8/18/2022 3:48:12 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-30 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:20:00 AM Lab ID: 2208A05-005 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 6:34:52 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 6:34:52 PM Surr: DNOP 93.4 21-129 %Rec 1 8/18/2022 6:34:52 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 60 8/20/2022 3:59:26 PM 150 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 4:16:52 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 4:16:52 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 4:16:52 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 4:16:52 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 4:16:52 PM 110 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/18/2022 4:16:52 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 4:16:52 PM 123 Surr: Toluene-d8 98.7 70-130 %Rec 1 8/18/2022 4:16:52 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 4:16:52 PM 48 1 Surr: BFB 119 70-130 %Rec 1 8/18/2022 4:16:52 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-31 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:25:00 AM Lab ID: 2208A05-006 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 6:50:16 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 6:50:16 PM Surr: DNOP 85.4 21-129 %Rec 1 8/18/2022 6:50:16 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 71 60 8/20/2022 4:11:51 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 4:45:35 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 4:45:35 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 4:45:35 PM Xylenes, Total ND 0.097 mg/Kg 1 8/18/2022 4:45:35 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 8/18/2022 4:45:35 PM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 4:45:35 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 4:45:35 PM 116 Surr: Toluene-d8 98.7 70-130 %Rec 1 8/18/2022 4:45:35 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 4:45:35 PM 49 1 Surr: BFB 121 70-130 %Rec 1 8/18/2022 4:45:35 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-32 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:30:00 AM Lab ID: 2208A05-007 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 7:05:35 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 8/18/2022 7:05:35 PM Surr: DNOP 103 21-129 %Rec 1 8/18/2022 7:05:35 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 60 8/20/2022 4:24:16 PM 120 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 5:14:14 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 5:14:14 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 5:14:14 PM Xylenes, Total ND 0.097 mg/Kg 1 8/18/2022 5:14:14 PM Surr: 1,2-Dichloroethane-d4 105 70-130 %Rec 8/18/2022 5:14:14 PM 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/18/2022 5:14:14 PM Surr: Dibromofluoromethane 120 70-130 %Rec 1 8/18/2022 5:14:14 PM Surr: Toluene-d8 100 70-130 %Rec 1 8/18/2022 5:14:14 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 5:14:14 PM 49 1 Surr: BFB 118 70-130 %Rec 1 8/18/2022 5:14:14 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-008

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-15 4' Collection Date: 8/15/2022 9:35:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 7:21:14 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 7:21:14 PM
Surr: DNOP	119	21-129	%Rec	1	8/18/2022 7:21:14 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	200	60	mg/Kg	20	8/20/2022 4:36:41 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 5:42:49 PM
Toluene	ND	0.047	mg/Kg	1	8/18/2022 5:42:49 PM
Ethylbenzene	ND	0.047	mg/Kg	1	8/18/2022 5:42:49 PM
Xylenes, Total	ND	0.095	mg/Kg	1	8/18/2022 5:42:49 PM
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	8/18/2022 5:42:49 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/18/2022 5:42:49 PM
Surr: Dibromofluoromethane	118	70-130	%Rec	1	8/18/2022 5:42:49 PM
Surr: Toluene-d8	100	70-130	%Rec	1	8/18/2022 5:42:49 PM
EPA METHOD 8015D MOD: GASOLINE RANG	ε				Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/18/2022 5:42:49 PM
Surr: BFB	119	70-130	%Rec	1	8/18/2022 5:42:49 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 range due to dilution or matrix interference

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

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-16 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:40:00 AM Lab ID: 2208A05-009 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 7:36:33 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/18/2022 7:36:33 PM Surr: DNOP 92.9 21-129 %Rec 1 8/18/2022 7:36:33 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 460 60 8/20/2022 4:49:05 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 6:11:26 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 6:11:26 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 6:11:26 PM Xylenes, Total ND 0.097 mg/Kg 1 8/18/2022 6:11:26 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 8/18/2022 6:11:26 PM 1 Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/18/2022 6:11:26 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 6:11:26 PM 118 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 6:11:26 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 6:11:26 PM 49 1 Surr: BFB 120 70-130 %Rec 1 8/18/2022 6:11:26 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-17 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:45:00 AM Lab ID: 2208A05-010 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 7:52:10 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 7:52:10 PM Surr: DNOP 108 21-129 %Rec 1 8/18/2022 7:52:10 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 60 8/20/2022 5:01:30 PM 83 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 6:40:02 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 6:40:02 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 6:40:02 PM Xylenes, Total ND 0.10 mg/Kg 1 8/18/2022 6:40:02 PM Surr: 1,2-Dichloroethane-d4 103 %Rec 8/18/2022 6:40:02 PM 70-130 1 Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/18/2022 6:40:02 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 6:40:02 PM 118 Surr: Toluene-d8 98.6 70-130 %Rec 1 8/18/2022 6:40:02 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 6:40:02 PM 5.0 1 Surr: BFB 121 70-130 %Rec 1 8/18/2022 6:40:02 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Gasoline Range Organics (GRO)

**EPA METHOD 8015D MOD: GASOLINE RANGE** 

Surr: Toluene-d8

Surr: BFB

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

8/18/2022 7:08:43 PM

Analyst: JR

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-18 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:50:00 AM Lab ID: 2208A05-011 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 8:07:19 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 8:07:19 PM Surr: DNOP 76.5 21-129 %Rec 1 8/18/2022 8:07:19 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 60 8/18/2022 5:18:21 PM 64 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 8/18/2022 7:08:43 PM Benzene ND mg/Kg 1 Toluene ND 8/18/2022 7:08:43 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 7:08:43 PM Xylenes, Total ND 0.097 mg/Kg 1 8/18/2022 7:08:43 PM Surr: 1,2-Dichloroethane-d4 107 70-130 %Rec 8/18/2022 7:08:43 PM 1

105

116

101

ND

118

70-130

70-130

70-130

70-130

48

%Rec

%Rec

%Rec

mg/Kg

%Rec

1

1

1

1

1

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Released to Imaging: 11/22/2022 2:49:36 PM

-

**Project:** 

Lab ID:

Analyses

**Analytical Report** Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Separator

2208A05-012

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-19 4' Collection Date: 8/15/2022 9:55:00 AM Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: **DGH** 

Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 8:22:35 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 8:22:35 PM
Surr: DNOP	101	21-129	%Rec	1	8/18/2022 8:22:35 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	260	60	mg/Kg	20	8/18/2022 6:20:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.025	mg/Kg	1	8/18/2022 7:37:18 PM
Toluene	ND	0.049	mg/Kg	1	8/18/2022 7:37:18 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/18/2022 7:37:18 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/18/2022 7:37:18 PM
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	8/18/2022 7:37:18 PM
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	8/18/2022 7:37:18 PM
Surr: Dibromofluoromethane	122	70-130	%Rec	1	8/18/2022 7:37:18 PM
Surr: Toluene-d8	98.9	70-130	%Rec	1	8/18/2022 7:37:18 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/18/2022 7:37:18 PM
Surr: BFB	118	70-130	%Rec	1	8/18/2022 7:37:18 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

н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-20 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 10:00:00 AM Lab ID: 2208A05-013 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 8:37:46 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 8:37:46 PM Surr: DNOP 86.5 21-129 %Rec 1 8/18/2022 8:37:46 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 60 8/18/2022 6:57:06 PM 130 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 8:05:54 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 8:05:54 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 8:05:54 PM Xylenes, Total ND 0.099 mg/Kg 1 8/18/2022 8:05:54 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 8:05:54 PM 110 1 Surr: 4-Bromofluorobenzene 108 70-130 %Rec 1 8/18/2022 8:05:54 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 8:05:54 PM 116 Surr: Toluene-d8 98.4 70-130 %Rec 1 8/18/2022 8:05:54 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 8:05:54 PM 5.0 1 Surr: BFB 120 70-130 %Rec 1 8/18/2022 8:05:54 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-014

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-21 4' Collection Date: 8/15/2022 10:05:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	13	mg/Kg	1	8/18/2022 8:52:56 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	8/18/2022 8:52:56 PM
Surr: DNOP	84.3	21-129	%Rec	1	8/18/2022 8:52:56 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	85	60	mg/Kg	20	8/18/2022 7:09:27 PM
EPA METHOD 8260B: VOLATILES SHORT LIST	т				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 8:34:30 PM
Toluene	ND	0.049	mg/Kg	1	8/18/2022 8:34:30 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/18/2022 8:34:30 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/18/2022 8:34:30 PM
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	8/18/2022 8:34:30 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/18/2022 8:34:30 PM
Surr: Dibromofluoromethane	121	70-130	%Rec	1	8/18/2022 8:34:30 PM
Surr: Toluene-d8	100	70-130	%Rec	1	8/18/2022 8:34:30 PM
EPA METHOD 8015D MOD: GASOLINE RANGI	E				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/18/2022 8:34:30 PM
Surr: BFB	120	70-130	%Rec	1	8/18/2022 8:34:30 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-015

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-22 4' Collection Date: 8/15/2022 10:10:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 9:08:12 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/18/2022 9:08:12 PM
Surr: DNOP	97.6	21-129	%Rec	1	8/18/2022 9:08:12 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	110	60	mg/Kg	20	8/18/2022 7:21:48 PM
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 9:03:05 PM
Toluene	ND	0.048	mg/Kg	1	8/18/2022 9:03:05 PM
Ethylbenzene	ND	0.048	mg/Kg	1	8/18/2022 9:03:05 PM
Xylenes, Total	ND	0.096	mg/Kg	1	8/18/2022 9:03:05 PM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	8/18/2022 9:03:05 PM
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	8/18/2022 9:03:05 PM
Surr: Dibromofluoromethane	116	70-130	%Rec	1	8/18/2022 9:03:05 PM
Surr: Toluene-d8	99.3	70-130	%Rec	1	8/18/2022 9:03:05 PM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/18/2022 9:03:05 PM
Surr: BFB	118	70-130	%Rec	1	8/18/2022 9:03:05 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-33 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 11:30:00 AM Lab ID: 2208A05-016 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/18/2022 9:23:14 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 9:23:14 PM Surr: DNOP 99.5 21-129 %Rec 1 8/18/2022 9:23:14 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/18/2022 7:34:10 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 9:31:40 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 9:31:40 PM 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 1 8/18/2022 9:31:40 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 9:31:40 PM Surr: 1,2-Dichloroethane-d4 108 70-130 %Rec 8/18/2022 9:31:40 PM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 9:31:40 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 9:31:40 PM 118 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 9:31:40 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 9:31:40 PM 47 1 Surr: BFB 124 70-130 %Rec 1 8/18/2022 9:31:40 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

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

POL

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 16 of 25

Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-33 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 11:35:00 AM Lab ID: 2208A05-017 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 9:38:21 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 9:38:21 PM Surr: DNOP 104 21-129 %Rec 1 8/18/2022 9:38:21 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/18/2022 7:46:30 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 10:00:17 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 10:00:17 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 10:00:17 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 10:00:17 PM Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 8/18/2022 10:00:17 PM 1 Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 8/18/2022 10:00:17 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 10:00:17 PM 115 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 10:00:17 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 10:00:17 PM 48 1 Surr: BFB 118 70-130 %Rec 1 8/18/2022 10:00:17 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-34 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 11:40:00 AM Lab ID: 2208A05-018 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/18/2022 9:53:44 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 9:53:44 PM Surr: DNOP 95.0 21-129 %Rec 1 8/18/2022 9:53:44 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/18/2022 8:23:32 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/19/2022 12:51:33 AM Benzene mg/Kg 1 Toluene ND 8/19/2022 12:51:33 AM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/19/2022 12:51:33 AM Xylenes, Total ND 0.098 mg/Kg 1 8/19/2022 12:51:33 AM Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 8/19/2022 12:51:33 AM 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/19/2022 12:51:33 AM Surr: Dibromofluoromethane 70-130 %Rec 1 8/19/2022 12:51:33 AM 112 Surr: Toluene-d8 98.8 70-130 %Rec 1 8/19/2022 12:51:33 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/19/2022 12:51:33 AM 49 1 Surr: BFB 119 70-130 %Rec 1 8/19/2022 12:51:33 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**Project:** 

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-019

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-34 4' Collection Date: 8/15/2022 11:45:00 AM Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 10:09:38 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 10:09:38 PM
Surr: DNOP	94.4	21-129	%Rec	1	8/18/2022 10:09:38 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	72	59	mg/Kg	20	8/18/2022 8:35:53 PM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/19/2022 1:20:01 AM
Toluene	ND	0.048	mg/Kg	1	8/19/2022 1:20:01 AM
Ethylbenzene	ND	0.048	mg/Kg	1	8/19/2022 1:20:01 AM
Xylenes, Total	ND	0.097	mg/Kg	1	8/19/2022 1:20:01 AM
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	8/19/2022 1:20:01 AM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/19/2022 1:20:01 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	8/19/2022 1:20:01 AM
Surr: Toluene-d8	99.2	70-130	%Rec	1	8/19/2022 1:20:01 AM
EPA METHOD 8015D MOD: GASOLINE RAN	IGE				Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/19/2022 1:20:01 AM
Surr: BFB	117	70-130	%Rec	1	8/19/2022 1:20:01 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

CLIENT: Vertex Resources Services, Inc.

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-14 8' Collection Date: 8/15/2022 1:30:00 PM Received Date: 8/17/2022 7:10:00 AM

Lab ID: 2208A05-020	Matrix: SOIL	Rece	ived Date:	8/17/2	022 7:10:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL F	RANGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 10:25:10 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 10:25:10 PM
Surr: DNOP	88.6	21-129	%Rec	1	8/18/2022 10:25:10 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	80	60	mg/Kg	20	8/18/2022 8:48:14 PM
EPA METHOD 8260B: VOLATILES	SHORT LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/19/2022 1:48:32 AM
Toluene	ND	0.048	mg/Kg	1	8/19/2022 1:48:32 AM
Ethylbenzene	ND	0.048	mg/Kg	1	8/19/2022 1:48:32 AM
Xylenes, Total	ND	0.096	mg/Kg	1	8/19/2022 1:48:32 AM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	8/19/2022 1:48:32 AM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	8/19/2022 1:48:32 AM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	8/19/2022 1:48:32 AM
Surr: Toluene-d8	99.2	70-130	%Rec	1	8/19/2022 1:48:32 AM
EPA METHOD 8015D MOD: GASC	LINE RANGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/19/2022 1:48:32 AM
Surr: BFB	116	70-130	%Rec	1	8/19/2022 1:48:32 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

2208A05

WO#:

	Ivironnien	tal Analysis Laborato	ry, mc.	23-Aug-2
Client: Project:		Resources Services, Inc. 29 CTB1 Separator		
Sample ID:	MB-69603	SampType: mblk	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 69603	RunNo: 90384	
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226290 Units: mg/Kg	
Analyte Chloride		ResultPQLSPK valueND1.5	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLim	t Qual
Sample ID:	LCS-69603	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 69603	RunNo: 90384	
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226292 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLim	t Qual
hloride		14 1.5 15.00	0 95.4 90 110	
Sample ID:	MB-69613	SampType: mblk	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 69613	RunNo: 90383	
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226631 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLim	t Qual
Chloride		ND 1.5		
Sample ID:	LCS-69613	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 69613	RunNo: 90383	
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226632 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLim	t Qual
hloride		14 1.5 15.00	0 94.5 90 110	
Sample ID:	MB-69605	SampType: mblk	TestCode: EPA Method 300.0: Anions	
Client ID:	PBS	Batch ID: 69605	RunNo: <b>90460</b>	
Prep Date:	8/18/2022	Analysis Date: 8/20/2022	SeqNo: 3228049 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLim	t Qual
Chloride		ND 1.5		
Sample ID:	LCS-69605	SampType: Ics	TestCode: EPA Method 300.0: Anions	
Client ID:	LCSS	Batch ID: 69605	RunNo: <b>90460</b>	
Prep Date:	8/18/2022	Analysis Date: 8/20/2022	SeqNo: 3228050 Units: mg/Kg	
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLim	t 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

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2208A05

WO#:

Hall Er	nvironmental	l Analy	rsis L	aborato	ry, Inc.						23-Aug-2
Client: Project:		esources S CTB1 Sep		, Inc.							
Sample ID:	MB-69585	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	PBS	Batch	n ID: 69	585	F	RunNo: <b>90</b>	)393				
Prep Date:	8/17/2022	Analysis D	0ate: <b>8/</b>	18/2022	:	SeqNo: 32	225979	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	15								
	e Organics (MRO)	ND	50								
Surr: DNOP		9.6		10.00		96.0	21	129			
Sample ID:	LCS-69585	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	LCSS	Batch	n ID: 69	585	F	RunNo: <b>9(</b>	)393				
Prep Date:	8/17/2022	Analysis D	0ate: <b>8/</b>	18/2022	:	SeqNo: 32	225980	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	55	15	50.00	0	111	64.4	127			
Surr: DNOP		5.4		5.000		108	21	129			
Sample ID:	2208A05-001AMS	SampT	ype: MS	6	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	WES22-26 2'	Batch	n ID: 69	585	F	RunNo: <b>90</b>	)393				
Prep Date:	8/17/2022	Analysis D	0ate: <b>8/</b>	18/2022	:	SeqNo: 32	225982	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	41	15	50.00	0	82.7	36.1	154			
Surr: DNOP		3.0		5.000		61.0	21	129			
Sample ID:	2208A05-001AMSE	) SampT	уре: М	SD	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	WES22-26 2'	Batch	n ID: 69	585	F	RunNo: <b>9(</b>	)393				
Prep Date:	8/17/2022	Analysis D	)ate: <b>8/</b>	18/2022	:	SeqNo: 32	225983	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	39	14	46.55	0	83.4	36.1	154	6.30	33.9	

#### 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
- S % Recovery outside of range due to dilution or matrix interference

3.0

4.655

B Analyte detected in the associated Method Blank

64.5

21

129

0

0

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

**Client:** 

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Vertex Resources Services, Inc.

Project: Onyx 29 0	CTB1 Sep	arator								
Sample ID: 2208a05-002ams	Samp	SampType: MS4 TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: WES22-27 2'	Batcl	h ID: 69	569	F	RunNo: 90	0413				
Prep Date: 8/17/2022	Analysis [	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225801	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.024	0.9625	0	98.1	75.8	123			
Toluene	0.94	0.048	0.9625	0	97.4	68.3	130			
Ethylbenzene	0.90	0.048	0.9625	0	93.1	76.6	132			
Xylenes, Total	2.9	0.096	2.887	0	101	74.7	132			
Surr: 1,2-Dichloroethane-d4	0.49		0.4812		102	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.4812		106	70	130			
Surr: Dibromofluoromethane	0.59		0.4812		122	70	130			
Surr: Toluene-d8	0.49		0.4812		101	70	130			
Sample ID: 2208a05-002amsd	208a05-002amsd SampType: MSD4 TestCode: EPA Method 8260B: Volatiles Short List									
Client ID: WES22-27 2'	Batcl	Batch ID: 69569 RunNo: 90413								
Prep Date: 8/17/2022	Analysis [	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225802	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9699	0	86.1	75.8	123	12.3	20	
Foluene	0.80	0.048	0.9699	0	82.5	68.3	130	15.8	20	
Ethylbenzene	0.80	0.048	0.9699	0	83.0	76.6	132	10.8	20	
Kylenes, Total	2.5	0.097	2.910	0	87.3	74.7	132	13.3	20	
Surr: 1,2-Dichloroethane-d4	0.51		0.4850		105	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.52		0.4850		107	70	130	0	0	
Surr: Dibromofluoromethane	0.59		0.4850		121	70	130	0	0	
Surr: Toluene-d8	0.46		0.4850		95.3	70	130	0	0	
Sample ID: Ics-69569	Samp	Type: LC	S4	Tes	tCode: EF	PA Method	8260B: Volati	les Short	List	
Client ID: BatchQC	Batcl	h ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date: 8/17/2022	Analysis I	Date: <b>8/</b>	18/2022	S	SeqNo: 3	225821	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	84.6	80	120			
Toluene	0.82	0.050	1.000	0	82.4	80	120			
Ethylbenzene	0.85	0.050	1.000	0	85.5	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.5	80	120			
Aylonos, rotai										
Surr: 1,2-Dichloroethane-d4	0.54		0.5000		109	70	130			
	0.54 0.53		0.5000 0.5000		109 105	70 70	130 130			
Surr: 1,2-Dichloroethane-d4										

#### **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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2208A05

23-Aug-22

**Client:** 

**Project:** 

Client ID:

Prep Date:

Analvte

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Sample ID: mb-69569

PBS

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Surr: Toluene-d8

8/17/2022

Vertex Resources Services,

Onyx 29 CTB1 Separator

Result

ND

ND

ND

ND

0.50

0.53

0.57

0.50

Batch ID: 69569

Analysis Date: 8/18/2022

PQL

0.025

0.050

0.050

0.10

SPK value SPK Ref Val

0.5000

0.5000

0.5000

0.5000

#### 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

#### Page 24 of 25

Released to 1	maging:	11/22/2022	2:49:36 PM	
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Analysis Laborator	y, Inc.	23-Aug-22
urces Services, Inc. B1 Separator		
SampType: <b>MBLK</b>	TestCode: EPA Method 8260B: Volatiles Short List	

Units: mg/Kg

130

130

130

130

%RPD

RPDLimit

HighLimit

RunNo: 90413

%REC

100

106

115

99.6

SeqNo: 3225822

LowLimit

70

70

70

70

WO#: 2208A05 23-Aug-22

Qual

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:		esources Se CTB1 Sepa	,	Inc.							
Sample ID:	2208a05-001ams	SampT	ype: MS	5	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline R	ange	
Client ID:	WES22-26 2'	Batch	ID: 695	569	F	RunNo: 90	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> '	18/2022	S	SeqNo: 32	225834	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	26	5.0	24.98	0	105	65.9	123			
Surr: BFB		570		499.5		115	70	130			
Sample ID:	2208a05-001amsd	SampT	ype: MS	D	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline R	ange	
Client ID:	WES22-26 2'	Batch	ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> ′	18/2022	S	SeqNo: 32	225835	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	5.0	24.93	0	97.2	65.9	123	7.77	20	
Surr: BFB		560		498.5		113	70	130	0	0	
Sample ID:	lcs-69569	SampT	ype: LC	S	TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID:	LCSS	Batch	ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> ′	18/2022	S	SeqNo: 32	225855	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	25.00	0	87.2	70	130			
Surr: BFB		580		500.0		117	70	130			
Sample ID:	mb-69569	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline R	lange	
Client ID:	PBS	Batch	ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> *	18/2022	S	SeqNo: 32	225856	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	ND	5.0								
Surr: BFB		580		500.0		117	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2208A05

23-Aug-22

Page 207 of 433

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental A Albuq TEL: 505-345-3975 F Website: www.halle	490 uerq AX:	I Hawkins ue, NM 87 505-345-4	NE 109 <b>S</b> 107	am	nple Log-In Check	Page 208
Client Name: Vertex Resources Services, Inc.	Work Order Number: 2	2208	A05			RcptNo: 1	- 0
Received By: Juan Rojas 8/	17/2022 7:10:00 AM			Guans	G		
Completed By: Cheyenne Cason 8/	17/2022 8:04:39 AM			Chand .			
Reviewed By: m 8-117-122				Ciperto			
Chain of Custody							
1. Is Chain of Custody complete?	,	Yes	~	No [		Not Present	
2. How was the sample delivered?	<u>(</u>	Cour	er				
Log In							
3. Was an attempt made to cool the samples?	Y	les	~	No [			
4. Were all samples received at a temperature of >	0° С to 6.0°С у	'es	~	No [		NA 🗌	
5. Sample(s) in proper container(s)?	Y	'es		No [			
6. Sufficient sample volume for indicated test(s)?	Y	es	~	No [			
7. Are samples (except VOA and ONG) properly pre	served? Y	es	~	No 🗌	1		
8. Was preservative added to bottles?	Y	es		No 🔽		NA 🗌	
9. Received at least 1 vial with headspace <1/4" for	AQ VOA? Y	es		No 🗌	1		
10. Were any sample containers received broken?		'es		No No	/		1
11. Does paperwork match bottle labels?	Y	es	~	No 🗌	2	# of preserved bottles checked for pH:	
(Note discrepancies on chain of custody) 12. Are matrices correctly identified on Chain of Custo	adu2 V	es	2	No 🗌	i l	(<2 or 12 unle Adjusted2	ss noted)
13. Is it clear what analyses were requested?		es es				, lajuelo e	
14. Were all holding times able to be met?		es es			1	Checked by: KPG	8.17.2
(If no, notify customer for authorization.)	,	65			-		0 11 2
Special Handling (if applicable)							
15, Was client notified of all discrepancies with this o	rder? Y	es		No 🗌	]	NA 🗹	
Person Notified:	Date:	_	_		-		
By Whom:	Via:	eMa	i 🗌 Ph	one 🗌 F	ax	In Person	
Regarding:							
Client Instructions:							
16. Additional remarks:							
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal In	tact Seal No Sea	l Da	te S	Signed By			
1 0.3 Good Not Pres	ent						

.

Page 1 of 1

	Chain-of-Custody Record	Turn-Around Time: 2-Day	60						
Client:	Devon/vertex	Standard Z Rush			ANAL			VETS LABODATOD	,>
									÷.
Mailin	Mailing Address:	ongt Zg CT 81	(Send ration)	4901 F	4901 Hawkins NE			Albuquerque, NM 87109	: 11/5
		Project #:		Tel. 5(	Tel. 505-345-3975	10	× 505-	Fax 505-345-4107	[/20]
Phone #:	e #:	225-01720-001				Anal	Analysis Request	lest	
email	email or Fax#:	Project Manager:			1	<sup>⊅</sup> O		(tr	45::
QA/QC	QA/QC Package: Standard      Level 4 (Full Validation)	Kent stanings	see		SMIS	S '⁺Od		192dA\t	31 AM
Accre	1: D Az Con	Sampler: C J		ЯО		' <sup>7</sup> 0		uəsa	
D NELAC		-Yes	ON D	10	_		(A	Pre	
	EDD (Type)	olers: )		ЯÐ)		103	1.1	) ա	-
		Cooler Temp(including CF): 0.	3-0-0-3 (°C)	12D(	1.1	۶۲, <i>N</i>	100	nofilo	
Date	Time Matrix Sample Name	Container Preservative Type and # Type	HEAL NO. 720524085	(ХЭТВ 08:НЧТ 8081 Ра	M) 803 d sHA9	всва в су F, в	V) 0728 2) 0728	Total Co	
8/15	9:00 50.7	TCE	50			1	-		
-	9:05 1 2552-27 2'	1 1 6	202			-			1
-	9:10 LESZEZE Z'	0	063						
	9:15 WES22-29 2'		ha						
	9:20 WESZ-30 2'		Sac			-			
	9:25 45522-31 2'		300						
	9:30 LESZE32 2'		207						
	9:35 BES2-15 41	8	08						
	9:40 BESZ-16 4		600						
	9:45 85522-17 4'	0	010						
	9:50 BES22-18 4	0	011						
	, 17 b1-22538 , SS:6	0	210			~			
Date:		Received by: Via:	Allohn 1115	Remarks:	CC: Ch	10 11 B	Devon	. 2	Page
8 lb 02	ate: Time: Relinquished by:	Via:	Date Time	2c	14:2	5186292 :#0	518		209 of
s last		1 MANIN K	11 +10/ -11						14

Re

Client:						-								TRAFT & C
	Deve	1/4	Devon/vertex	□ Standard	A Rush								ANAL ENVIKONMENTAL	EN LAL
				Project Name:					۲ :			2	LADOR	ALORI
Mailing Address:	Address	uo	F.70	xhuo	29 0781	/ CSEPArazor)	7	1901 F	v lawkir	s NE	- Albu	onme	www.nallenvironmental.com 4901 Hawkins NE - Albudulerdue NM 87109	þ
		-		Project #:				Tel. 5	5-34	Tel. 505-345-3975	Ë	Fax 50	505-345-4107	2
Phone #:				225-	100-02110-922	01					Anal		Request	
email or Fax#:	Fax#:			Project Manager:	iger:			10		-	۴O	-	(Jr	
QA/QC Package:	ackage: ard		Level 4 (Full Validation)	Kent	sbuilles -	só	.208) s'	PCB's O/MR	151.3777	SWIS	PO₄, S		rəsdA\t	
Accreditation: □ NELAC	ation: C		□ Az Compliance	Sampler: C	CD	SM E		1967-971	1.1.1	1/28 J	' <sup>z</sup> ON			
□ EDD (Type)	Type)	1		# of Coolers:	-						-	10/	-	
				Cooler Temp(including CF):	(including CF): C	(3.0-20.2 (°C)		N. 16			3r, N			
Date T	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL NO MIN	0	9 1808	EDB (V	ARAS	si)E, E	1) 0928	S) 0728 D letal C	
8115 10:00	0:0	5017	B5522-20 4	205	ICE	013	5			1	5			
1 1	10:05	-	BESZZ-21 41	_	-	014	-			-	-	-		
1	01:01	~	BESZZ-22 4'			015					-			
/	11:30		WES22-33 2'			016					1			
~	21:35		WES22-33 4'			017				-		-		
Ň	11:40		LES22-34 21			018								
×	54:11		2552-34 42'			org								
~	1:30	-	BES22-14 8'			020	-							
												-		
										-				
Date: Ti	Time:	Relinquished by:	led by:	Received by:	Via:	Date Time	Remarks:		$\frac{\partial}{\partial z}$	- 49.	CC: Chance Dixon	-13		
Dafte: / Ti	Time:	Relinguished hv-	ad hv.	WWWWWWW	Jun D	9/11/12/11/19		\$	Sec.	Direct Bill		CIONER	2	
Alaps 1900	1900	apur	New York	Merenven by.	icuinter	RIZD JUD		202	i,	2012	0#: Z1029812	5		



August 23, 2022

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

RE: Onyx 29 CTB1 Separator

OrderNo.: 2208A05

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 20 sample(s) on 8/17/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-26 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:00:00 AM Lab ID: 2208A05-001 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 5:05:39 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 5:05:39 PM Surr: DNOP 105 21-129 %Rec 1 8/18/2022 5:05:39 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 140 60 8/18/2022 2:36:24 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 12:27:18 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 12:27:18 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 12:27:18 PM Xylenes, Total ND 0.10 mg/Kg 1 8/18/2022 12:27:18 PM Surr: 1,2-Dichloroethane-d4 109 %Rec 8/18/2022 12:27:18 PM 70-130 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 12:27:18 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 12:27:18 PM 118 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 12:27:18 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 12:27:18 PM 5.0 1 Surr: BFB 122 70-130 %Rec 1 8/18/2022 12:27:18 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 1 of 25

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-27 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:05:00 AM Lab ID: 2208A05-002 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 8/18/2022 5:49:07 PM Motor Oil Range Organics (MRO) 8/18/2022 5:49:07 PM ND 50 mg/Kg 1 Surr: DNOP 59.3 21-129 %Rec 1 8/18/2022 5:49:07 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 68 60 8/18/2022 3:38:28 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 8/18/2022 1:53:19 PM Benzene ND mg/Kg 1 Toluene ND 8/18/2022 1:53:19 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 1:53:19 PM Xylenes, Total ND 0.098 mg/Kg 1 8/18/2022 1:53:19 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 1:53:19 PM 110 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 1:53:19 PM Surr: Dibromofluoromethane 120 70-130 %Rec 1 8/18/2022 1:53:19 PM Surr: Toluene-d8 101 70-130 %Rec 1 8/18/2022 1:53:19 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 1:53:19 PM 49 1 Surr: BFB 120 70-130 %Rec 1 8/18/2022 1:53:19 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

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

Page 2 of 25

Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-28 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:10:00 AM Lab ID: 2208A05-003 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 6:04:09 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 6:04:09 PM Surr: DNOP 95.0 21-129 %Rec 1 8/18/2022 6:04:09 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/18/2022 4:15:41 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 3:19:30 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 3:19:30 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 3:19:30 PM Xylenes, Total ND 0.099 mg/Kg 1 8/18/2022 3:19:30 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 8/18/2022 3:19:30 PM 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/18/2022 3:19:30 PM Surr: Dibromofluoromethane 120 70-130 %Rec 1 8/18/2022 3:19:30 PM Surr: Toluene-d8 99.3 70-130 %Rec 1 8/18/2022 3:19:30 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 3:19:30 PM 5.0 1 Surr: BFB 122 70-130 %Rec 1 8/18/2022 3:19:30 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

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

Page 3 of 25

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-004

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-29 2' Collection Date: 8/15/2022 9:15:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 6:19:19 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 6:19:19 PM
Surr: DNOP	92.6	21-129	%Rec	1	8/18/2022 6:19:19 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/20/2022 2:57:23 PM
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 3:48:12 PM
Toluene	ND	0.048	mg/Kg	1	8/18/2022 3:48:12 PM
Ethylbenzene	ND	0.048	mg/Kg	1	8/18/2022 3:48:12 PM
Xylenes, Total	ND	0.095	mg/Kg	1	8/18/2022 3:48:12 PM
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	8/18/2022 3:48:12 PM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	8/18/2022 3:48:12 PM
Surr: Dibromofluoromethane	122	70-130	%Rec	1	8/18/2022 3:48:12 PM
Surr: Toluene-d8	96.0	70-130	%Rec	1	8/18/2022 3:48:12 PM
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/18/2022 3:48:12 PM
Surr: BFB	115	70-130	%Rec	1	8/18/2022 3:48:12 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 range due to dilution or matrix interference

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

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Date Reported: 8/23/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-30 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:20:00 AM Lab ID: 2208A05-005 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 6:34:52 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 6:34:52 PM Surr: DNOP 93.4 21-129 %Rec 1 8/18/2022 6:34:52 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 60 8/20/2022 3:59:26 PM 150 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 4:16:52 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 4:16:52 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 4:16:52 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 4:16:52 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 4:16:52 PM 110 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/18/2022 4:16:52 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 4:16:52 PM 123 Surr: Toluene-d8 98.7 70-130 %Rec 1 8/18/2022 4:16:52 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 4:16:52 PM 48 1 Surr: BFB 119 70-130 %Rec 1 8/18/2022 4:16:52 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-31 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:25:00 AM Lab ID: 2208A05-006 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 6:50:16 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 6:50:16 PM Surr: DNOP 85.4 21-129 %Rec 1 8/18/2022 6:50:16 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 71 60 8/20/2022 4:11:51 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 4:45:35 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 4:45:35 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 4:45:35 PM Xylenes, Total ND 0.097 mg/Kg 1 8/18/2022 4:45:35 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 8/18/2022 4:45:35 PM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 4:45:35 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 4:45:35 PM 116 Surr: Toluene-d8 98.7 70-130 %Rec 1 8/18/2022 4:45:35 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 4:45:35 PM 49 1 Surr: BFB 121 70-130 %Rec 1 8/18/2022 4:45:35 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Analyses

**Analytical Report** Lab Order 2208A05

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Separator

2208A05-007

CLIENT: Vertex Resources Services, Inc. Client Sample ID: WES22-32 2' Collection Date: 8/15/2022 9:30:00 AM Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** 

EPA METHOD 8015M/D: DIESEL RANGE ORGANI	CS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 7:05:35 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/18/2022 7:05:35 PM
Surr: DNOP	103	21-129	%Rec	1	8/18/2022 7:05:35 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	120	60	mg/Kg	20	8/20/2022 4:24:16 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 5:14:14 PM
Toluene	ND	0.049	mg/Kg	1	8/18/2022 5:14:14 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/18/2022 5:14:14 PM
Xylenes, Total	ND	0.097	mg/Kg	1	8/18/2022 5:14:14 PM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	8/18/2022 5:14:14 PM
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	8/18/2022 5:14:14 PM
Surr: Dibromofluoromethane	120	70-130	%Rec	1	8/18/2022 5:14:14 PM
Surr: Toluene-d8	100	70-130	%Rec	1	8/18/2022 5:14:14 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/18/2022 5:14:14 PM
Surr: BFB	118	70-130	%Rec	1	8/18/2022 5:14:14 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

н Holding times for preparation or analysis exceeded

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-15 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:35:00 AM Lab ID: 2208A05-008 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 7:21:14 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/18/2022 7:21:14 PM Surr: DNOP 21-129 %Rec 1 8/18/2022 7:21:14 PM 119 **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 200 60 8/20/2022 4:36:41 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 5:42:49 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 5:42:49 PM 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 1 8/18/2022 5:42:49 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 5:42:49 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 5:42:49 PM 110 1 Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 8/18/2022 5:42:49 PM Surr: Dibromofluoromethane 8/18/2022 5:42:49 PM 70-130 %Rec 1 118 Surr: Toluene-d8 100 70-130 %Rec 1 8/18/2022 5:42:49 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 5:42:49 PM 47 1 Surr: BFB 119 70-130 %Rec 1 8/18/2022 5:42:49 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-009

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-16 4' Collection Date: 8/15/2022 9:40:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 7:36:33 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 7:36:33 PM
Surr: DNOP	92.9	21-129	%Rec	1	8/18/2022 7:36:33 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	460	60	mg/Kg	20	8/20/2022 4:49:05 PM
EPA METHOD 8260B: VOLATILES SHORT LIST	г				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 6:11:26 PM
Toluene	ND	0.049	mg/Kg	1	8/18/2022 6:11:26 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/18/2022 6:11:26 PM
Xylenes, Total	ND	0.097	mg/Kg	1	8/18/2022 6:11:26 PM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	8/18/2022 6:11:26 PM
Surr: 4-Bromofluorobenzene	104	70-130	%Rec	1	8/18/2022 6:11:26 PM
Surr: Dibromofluoromethane	118	70-130	%Rec	1	8/18/2022 6:11:26 PM
Surr: Toluene-d8	102	70-130	%Rec	1	8/18/2022 6:11:26 PM
EPA METHOD 8015D MOD: GASOLINE RANGE	E				Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/18/2022 6:11:26 PM
Surr: BFB	120	70-130	%Rec	1	8/18/2022 6:11:26 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-17 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:45:00 AM Lab ID: 2208A05-010 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 7:52:10 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 7:52:10 PM Surr: DNOP 108 21-129 %Rec 1 8/18/2022 7:52:10 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 60 8/20/2022 5:01:30 PM 83 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 6:40:02 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 6:40:02 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 6:40:02 PM Xylenes, Total ND 0.10 mg/Kg 1 8/18/2022 6:40:02 PM Surr: 1,2-Dichloroethane-d4 103 %Rec 8/18/2022 6:40:02 PM 70-130 1 Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/18/2022 6:40:02 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 6:40:02 PM 118 Surr: Toluene-d8 98.6 70-130 %Rec 1 8/18/2022 6:40:02 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 6:40:02 PM 5.0 1 Surr: BFB 121 70-130 %Rec 1 8/18/2022 6:40:02 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

Н Holding times for preparation or analysis exceeded

ND

Not Detected at the Reporting Limit POL

Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 10 of 25

Date Reported: 8/23/2022

8/18/2022 7:08:43 PM

Analyst: JR

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-18 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:50:00 AM Lab ID: 2208A05-011 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 8:07:19 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 8:07:19 PM Surr: DNOP 76.5 21-129 %Rec 1 8/18/2022 8:07:19 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 60 8/18/2022 5:18:21 PM 64 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 8/18/2022 7:08:43 PM Benzene ND mg/Kg 1 Toluene ND 8/18/2022 7:08:43 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 7:08:43 PM Xylenes, Total ND 0.097 mg/Kg 1 8/18/2022 7:08:43 PM Surr: 1,2-Dichloroethane-d4 107 70-130 %Rec 8/18/2022 7:08:43 PM 1

105

ND

118

70-130

70-130

70-130

70-130

48

%Rec

%Rec

%Rec

mg/Kg

%Rec

1

1

1

1

1

# Surr: Dibromofluoromethane116Surr: Toluene-d8101EPA METHOD 8015D MOD: GASOLINE RANGE

Surr: 4-Bromofluorobenzene

Gasoline Range Organics (GRO)

Surr: BFB

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

Qualifiers:

- Value exceeds Maximum Contaminant Level Sample Diluted Due to Matrix
- D Sample Diluted Due to MatrixH 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-19 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 9:55:00 AM Lab ID: 2208A05-012 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 8:22:35 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/18/2022 8:22:35 PM Surr: DNOP 101 21-129 %Rec 1 8/18/2022 8:22:35 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 260 60 8/18/2022 6:20:04 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.025 8/18/2022 7:37:18 PM Benzene ND mg/Kg 1 Toluene ND 8/18/2022 7:37:18 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/18/2022 7:37:18 PM Xylenes, Total ND 0.098 mg/Kg 1 8/18/2022 7:37:18 PM Surr: 1,2-Dichloroethane-d4 108 70-130 %Rec 8/18/2022 7:37:18 PM 1 Surr: 4-Bromofluorobenzene 104 70-130 %Rec 1 8/18/2022 7:37:18 PM Surr: Dibromofluoromethane 122 70-130 %Rec 1 8/18/2022 7:37:18 PM Surr: Toluene-d8 98.9 70-130 %Rec 1 8/18/2022 7:37:18 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 7:37:18 PM 49 1 Surr: BFB 118 70-130 %Rec 1 8/18/2022 7:37:18 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Released to Imaging: 11/22/2022 2:49:36 PM

Date Reported: 8/23/2022

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-20 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 10:00:00 AM Lab ID: 2208A05-013 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 8:37:46 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 8:37:46 PM Surr: DNOP 86.5 21-129 %Rec 1 8/18/2022 8:37:46 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 60 8/18/2022 6:57:06 PM 130 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/18/2022 8:05:54 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 8:05:54 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 8/18/2022 8:05:54 PM Xylenes, Total ND 0.099 mg/Kg 1 8/18/2022 8:05:54 PM Surr: 1,2-Dichloroethane-d4 70-130 %Rec 8/18/2022 8:05:54 PM 110 1 Surr: 4-Bromofluorobenzene 108 70-130 %Rec 1 8/18/2022 8:05:54 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 8:05:54 PM 116 Surr: Toluene-d8 98.4 70-130 %Rec 1 8/18/2022 8:05:54 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 8:05:54 PM 5.0 1 Surr: BFB 120 70-130 %Rec 1 8/18/2022 8:05:54 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-014

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-21 4' Collection Date: 8/15/2022 10:05:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	13	mg/Kg	1	8/18/2022 8:52:56 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	8/18/2022 8:52:56 PM
Surr: DNOP	84.3	21-129	%Rec	1	8/18/2022 8:52:56 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	85	60	mg/Kg	20	8/18/2022 7:09:27 PM
EPA METHOD 8260B: VOLATILES SHORT LIST	Г				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	8/18/2022 8:34:30 PM
Toluene	ND	0.049	mg/Kg	1	8/18/2022 8:34:30 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/18/2022 8:34:30 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/18/2022 8:34:30 PM
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	8/18/2022 8:34:30 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/18/2022 8:34:30 PM
Surr: Dibromofluoromethane	121	70-130	%Rec	1	8/18/2022 8:34:30 PM
Surr: Toluene-d8	100	70-130	%Rec	1	8/18/2022 8:34:30 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/18/2022 8:34:30 PM
Surr: BFB	120	70-130	%Rec	1	8/18/2022 8:34:30 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-22 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 10:10:00 AM Lab ID: 2208A05-015 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 9:08:12 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 9:08:12 PM Surr: DNOP 97.6 21-129 %Rec 1 8/18/2022 9:08:12 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 60 8/18/2022 7:21:48 PM 110 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 9:03:05 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 9:03:05 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 9:03:05 PM Xylenes, Total ND 0.096 mg/Kg 1 8/18/2022 9:03:05 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 8/18/2022 9:03:05 PM 1 Surr: 4-Bromofluorobenzene 105 70-130 %Rec 1 8/18/2022 9:03:05 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 9:03:05 PM 116 Surr: Toluene-d8 99.3 70-130 %Rec 1 8/18/2022 9:03:05 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 9:03:05 PM 48 1 Surr: BFB 118 70-130 %Rec 1 8/18/2022 9:03:05 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-33 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 11:30:00 AM Lab ID: 2208A05-016 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 9:23:14 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 9:23:14 PM Surr: DNOP 99.5 21-129 %Rec 1 8/18/2022 9:23:14 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/18/2022 7:34:10 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 9:31:40 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 9:31:40 PM 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 1 8/18/2022 9:31:40 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 9:31:40 PM Surr: 1,2-Dichloroethane-d4 108 70-130 %Rec 8/18/2022 9:31:40 PM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/18/2022 9:31:40 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 9:31:40 PM 118 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 9:31:40 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 9:31:40 PM 47 1 Surr: BFB 124 70-130 %Rec 1 8/18/2022 9:31:40 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

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

POL

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 16 of 25

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-33 4' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 11:35:00 AM Lab ID: 2208A05-017 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/18/2022 9:38:21 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/18/2022 9:38:21 PM Surr: DNOP 104 21-129 %Rec 1 8/18/2022 9:38:21 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/18/2022 7:46:30 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 8/18/2022 10:00:17 PM Benzene mg/Kg 1 Toluene ND 8/18/2022 10:00:17 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/18/2022 10:00:17 PM Xylenes, Total ND 0.095 mg/Kg 1 8/18/2022 10:00:17 PM Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 8/18/2022 10:00:17 PM 1 Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 8/18/2022 10:00:17 PM Surr: Dibromofluoromethane 70-130 %Rec 1 8/18/2022 10:00:17 PM 115 Surr: Toluene-d8 102 70-130 %Rec 1 8/18/2022 10:00:17 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/18/2022 10:00:17 PM 48 1 Surr: BFB 118 70-130 %Rec 1 8/18/2022 10:00:17 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-34 2' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 11:40:00 AM Lab ID: 2208A05-018 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 9:53:44 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 9:53:44 PM Surr: DNOP 95.0 21-129 %Rec 1 8/18/2022 9:53:44 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride ND 60 8/18/2022 8:23:32 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 8/19/2022 12:51:33 AM Benzene mg/Kg 1 Toluene ND 8/19/2022 12:51:33 AM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 8/19/2022 12:51:33 AM Xylenes, Total ND 0.098 mg/Kg 1 8/19/2022 12:51:33 AM Surr: 1,2-Dichloroethane-d4 103 70-130 %Rec 8/19/2022 12:51:33 AM 1 Surr: 4-Bromofluorobenzene 106 70-130 %Rec 1 8/19/2022 12:51:33 AM Surr: Dibromofluoromethane 70-130 %Rec 1 8/19/2022 12:51:33 AM 112 Surr: Toluene-d8 98.8 70-130 %Rec 1 8/19/2022 12:51:33 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/19/2022 12:51:33 AM 49 1 Surr: BFB 119 70-130 %Rec 1 8/19/2022 12:51:33 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A05-019

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A05

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-34 4' Collection Date: 8/15/2022 11:45:00 AM Received Date: 8/17/2022 7:10:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 10:09:38 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 10:09:38 PM
Surr: DNOP	94.4	21-129	%Rec	1	8/18/2022 10:09:38 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JTT</b>
Chloride	72	59	mg/Kg	20	8/18/2022 8:35:53 PM
EPA METHOD 8260B: VOLATILES SHORT I	LIST				Analyst: <b>JR</b>
Benzene	ND	0.024	mg/Kg	1	8/19/2022 1:20:01 AM
Toluene	ND	0.048	mg/Kg	1	8/19/2022 1:20:01 AM
Ethylbenzene	ND	0.048	mg/Kg	1	8/19/2022 1:20:01 AM
Xylenes, Total	ND	0.097	mg/Kg	1	8/19/2022 1:20:01 AM
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	8/19/2022 1:20:01 AM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/19/2022 1:20:01 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	8/19/2022 1:20:01 AM
Surr: Toluene-d8	99.2	70-130	%Rec	1	8/19/2022 1:20:01 AM
EPA METHOD 8015D MOD: GASOLINE RAN	NGE				Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/19/2022 1:20:01 AM
Surr: BFB	117	70-130	%Rec	1	8/19/2022 1:20:01 AM

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BES22-14 8' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/15/2022 1:30:00 PM Lab ID: 2208A05-020 Matrix: SOIL Received Date: 8/17/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 15 mg/Kg 1 8/18/2022 10:25:10 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/18/2022 10:25:10 PM Surr: DNOP 88.6 21-129 %Rec 1 8/18/2022 10:25:10 PM **EPA METHOD 300.0: ANIONS** Analyst: JTT Chloride 80 60 8/18/2022 8:48:14 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 8/19/2022 1:48:32 AM Benzene ND mg/Kg 1 Toluene ND 8/19/2022 1:48:32 AM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 8/19/2022 1:48:32 AM Xylenes, Total ND 0.096 mg/Kg 1 8/19/2022 1:48:32 AM Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 8/19/2022 1:48:32 AM 1 Surr: 4-Bromofluorobenzene 103 70-130 %Rec 1 8/19/2022 1:48:32 AM Surr: Dibromofluoromethane 70-130 %Rec 1 8/19/2022 1:48:32 AM 112 Surr: Toluene-d8 99.2 70-130 %Rec 1 8/19/2022 1:48:32 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 8/19/2022 1:48:32 AM 48 1 Surr: BFB 116 70-130 %Rec 1 8/19/2022 1:48:32 AM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Released to Imaging: 11/22/2022 2:49:36 PM

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

2208A05

WO#:

Hall Er	nvironmen	tal Analysis Laborato	ry, Inc.	23-Aug-2					
Client: Project:		Resources Services, Inc. 29 CTB1 Separator							
Sample ID:	MB-69603	SampType: mblk	TestCode: EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID: 69603	RunNo: 90384						
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226290 Units: mg/Kg						
Analyte			SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual					
Chloride		ND 1.5							
Sample ID:	LCS-69603	SampType: Ics	TestCode: EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID: 69603	RunNo: 90384						
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226292 Units: mg/Kg						
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual					
Chloride		14 1.5 15.00	0 95.4 90 110						
Sample ID:	MB-69613	SampType: mblk	TestCode: EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID: 69613	RunNo: 90383						
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226631 Units: mg/Kg						
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual					
Chloride		ND 1.5							
Sample ID:	LCS-69613	SampType: Ics	TestCode: EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID: 69613	RunNo: 90383						
Prep Date:	8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226632 Units: mg/Kg						
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual					
Chloride		14 1.5 15.00	0 94.5 90 110						
Sample ID:	MB-69605	SampType: <b>mblk</b>	TestCode: EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID: 69605	RunNo: 90460						
Prep Date:	8/18/2022	Analysis Date: 8/20/2022	SeqNo: 3228049 Units: mg/Kg						
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual					
Chloride		ND 1.5							
Sample ID:	LCS-69605	SampType: Ics	TestCode: EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID: 69605	RunNo: <b>90460</b>						
Prep Date:	8/18/2022	Analysis Date: 8/20/2022	SeqNo: 3228050 Units: mg/Kg						
Analyte		Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit	Qual					
Chloride		14 1.5 15.00	0 95.0 90 110						

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

3.0

4.655

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2208A05

WO#:

Hall Er	nvironmenta	l Analy	sis L	aborato	ory, Inc.						23-Aug-2
Client: Project:		esources Se CTB1 Sepa		, Inc.							
Sample ID:	MB-69585	SampT	ype: MI	BLK	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	PBS	Batch	Batch ID: 69585 RunNo: 90393								
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b>	18/2022	:	SeqNo: 32	225979	Units: <b>mg/#</b>	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	ND	15								
•	ge Organics (MRO)	ND	50								
Surr: DNOP		9.6		10.00		96.0	21	129			
Sample ID:	LCS-69585	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics								Organics	
Client ID:	LCSS	Batch ID: 69585			F	RunNo: <b>9</b>	0393				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b>	18/2022	:	SeqNo: 32	225980	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	55	15	50.00	0	111	64.4	127			
Surr: DNOP	•	5.4		5.000		108	21	129			
Sample ID:	2208A05-001AMS	SampT	ype: MS	6	Tes	stCode: EF	PA Method	8015M/D: Die	esel Range	Organics	
Client ID:	WES22-26 2'	Batch	ID: 69	585	F	RunNo: <b>9</b>	0393				
Prep Date:	8/17/2022	Analysis D	ate: 8/	18/2022	Ś	SeqNo: 32	225982	Units: <b>mg/k</b>	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	41	15	50.00	0	82.7	36.1	154			
Surr: DNOP	•	3.0		5.000		61.0	21	129			
Sample ID:	2208A05-001AMSE	<b>)</b> SampT	ype: MS	SD	Tes	stCode: EF	PA Method	8015M/D: Die	esel Range	Organics	
Client ID:	WES22-26 2'	Batch	n ID: 69	585	RunNo: <b>90393</b>						
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b>	18/2022	:	SeqNo: 32	225983	Units: <b>mg/k</b>	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range	Organics (DRO)	39	14	46.55	0	83.4	36.1	154	6.30	33.9	

#### 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
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

64.5

21

129

0

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

0

**Client:** 

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Vertex Resources Services, Inc.

SampType:         MS           Batch ID:         695           alysis Date:         8/1           esult         PQL           0.94         0.024           0.94         0.048           0.90         0.048           2.9         0.096           0.49         0.049	69 18/2022 SPK value 0.9625 0.9625	F	tCode: EF RunNo: 9( SeqNo: 32 %REC	)413 225801	8260B: Volatil Units: mg/Kg		List	
PQL           PQL           0.94         0.024           0.94         0.048           0.90         0.048           0.90         0.048           0.90         0.096	<b>SPK value</b> 0.9625 0.9625	SPK Ref Val	SeqNo: 32	225801	Units: <b>mg/K</b> g	)		
PQL           0.94         0.024           0.94         0.048           0.90         0.048           2.9         0.096	SPK value 0.9625 0.9625	SPK Ref Val			Units: mg/Kg	9		
0.940.0240.940.0480.900.0482.90.096	0.9625 0.9625		%REC	Land Sector				
0.940.0480.900.0482.90.096	0.9625	0		LowLimit	HighLimit	%RPD	RPDLimit	Qual
0.90 0.048 2.9 0.096			98.1	75.8	123			
2.9 0.096	0 0005	0	97.4	68.3	130			
	0.9625	0	93.1	76.6	132			
).49	2.887	0	101	74.7	132			
	0.4812		102	70	130			
).51	0.4812		106	70	130			
).59	0.4812		122	70	130			
).49	0.4812		101	70	130			
SampType: <b>MS</b>	D4	Tes	tCode: EF	PA Method	8260B: Volatil	es Short I	List	
Batch ID: 695	69	F	RunNo: 90413					
alysis Date: 8/1	8/2022	S	SeqNo: 32	225802	Units: mg/Kg	J		
sult PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0.84 0.024	0.9699	0	86.1	75.8	123	12.3	20	
0.80 0.048	0.9699	0	82.5	68.3	130	15.8	20	
0.80 0.048	0.9699	0	83.0	76.6	132	10.8	20	
2.5 0.097	2.910	0	87.3	74.7	132	13.3	20	
).51	0.4850		105	70	130	0	0	
).52	0.4850		107	70	130	0	0	
).59	0.4850		121	70	130	0	0	
).46	0.4850		95.3	70	130	0	0	
SampType: LC:	S4	Tes	tCode: EF	A Method	8260B: Volatil	es Short I	_ist	
Batch ID: 695	69	F	RunNo: <b>9(</b>	0413				
alysis Date: 8/1	8/2022	S	SeqNo: 32	225821	Units: mg/Kg	)		
sult PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
0.85 0.025	1.000	0	84.6	80	120			
0.82 0.050	1.000	0	82.4	80	120			
	1.000	0	85.5	80	120			
2.6 0.10	3.000	0	87.5	80	120			
	0.5000	-	109	70	130			
).53	0.5000		105					
).53 ).58	0.5000 0.5000		105 116	70 70	130 130			
	Batch ID: 695 alysis Date: 8/1 sult PQL 0.84 0.024 0.80 0.048 0.80 0.048 2.5 0.097 0.51 0.52 0.59 0.46 SampType: LC Batch ID: 695 alysis Date: 8/1 esult PQL 0.85 0.025 0.82 0.050	SampType:       MSD4         Batch ID:       69569         alysis Date:       8/18/2022         sult       PQL       SPK value         0.84       0.024       0.9699         0.80       0.048       0.9699         0.80       0.048       0.9699         0.80       0.048       0.9699         0.50       0.048       0.9699         0.51       0.4850         0.52       0.4850         0.59       0.4850         0.59       0.4850         0.46       0.4850         0.46       0.4850         SampType:       LCS4         Batch ID:       69569         alysis Date:       8/18/2022         esult       PQL       SPK value         0.85       0.025       1.000         0.85       0.025       1.000         0.85       0.050       1.000         0.85       0.050       1.000         0.85       0.050       1.000	SampType:       MSD4       Tes         Batch ID:       69569       F         alysis Date:       8/18/2022       S         sult       PQL       SPK value       SPK Ref Val         0.84       0.024       0.9699       0         0.80       0.048       0.9699       0         0.80       0.048       0.9699       0         0.80       0.048       0.9699       0         0.80       0.048       0.9699       0         0.80       0.048       0.9699       0         0.51       0.4850       0       0         0.52       0.4850       0       0         0.59       0.4850       0       0         0.46       0.4850       0       0         SampType:       LCS4       Tes       Tes         Batch ID:       69569       F       F         alysis Date:       8/18/2022       S       S         sult       PQL       SPK value       SPK Ref Val         0.85       0.025       1.000       0         0.85       0.050       1.000       0         0.85       0.050       1.000       0<	SampType:       MSD4       TestCode:       EF         Batch ID:       69569       RunNo:       90         alysis Date:       8/18/2022       SeqNo:       32         asult       PQL       SPK value       SPK Ref Val       %REC         0.84       0.024       0.9699       0       86.1         0.80       0.048       0.9699       0       82.5         0.80       0.048       0.9699       0       83.0         2.5       0.097       2.910       0       87.3         0.51       0.4850       105       105         0.52       0.4850       107         0.59       0.4850       121         0.46       0.4850       95.3         SampType:       LCS4       TestCode:       EF         Batch ID:       69569       RunNo:       90         alysis Date:       8/18/2022       SeqNo:       32         sult       PQL       SPK value       SPK Ref Val       %REC         0.85       0.025       1.000       0       84.6         0.82       0.050       1.000       0       85.5         2.6       0.10       3.000	TestCode: EPA Method         Batch ID: 69569       RunNo: 90413         Batch ID: 69569       RunNo: 3225802         SeqNo: 3225802         sult       PQL       SPK value       SPK Ref Val       %REC       LowLimit         0.84       0.024       0.9699       0       86.1       75.8       75.8         0.80       0.048       0.9699       0       82.5       68.3       76.6         0.80       0.048       0.9699       0       87.3       74.7         0.51       0.4850       105       70       70         0.52       0.4850       107       70       70         0.59       0.4850       121       70       70         0.59       0.4850       95.3       70         SampType: LCS4       TestCode: EPA Method         Batch ID: 69569       RunNo: 90413         sult       PQL       SPK value       SPK Ref Val       %REC       LowLimit         Jossi Date: 8/18/2022       SeqNo: 3225821         sult       PQL <th< td=""><td>SampType:         MSD4         TestCode:         EPA Method         8260B:         Volatili           Batch ID:         69569         RunNo:         90413             10/15/10/10/10/10/10/10/10/10/10/10/10/10/10/</td><td>TestCode: EPA Method 8260B: Volatiles Short I           Batch ID:         69569         RunNo:         90413           alysis Date:         8/18/2022         SeqNo:         3225802         Units:         mg/Kg           sult         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           0.84         0.024         0.9699         0         86.1         75.8         123         12.3           0.80         0.048         0.9699         0         82.5         68.3         130         15.8           0.80         0.048         0.9699         0         87.3         74.7         132         13.3           0.80         0.048         0.9699         0         87.3         74.7         132         13.3           0.51         0.4850         105         70         130         0           0.52         0.4850         107         70         130         0           0.4850         95.3         70         130         0           0.4860         95.3         70         130         0           0.4850         95.3         70         130         0</td><td>TestCode: EPA Method 8260B: Volatiles Short List           Batch ID: 69569         RunNo: 90413           Units: mg/Kg           Units: mg/Kg           Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1</td></th<>	SampType:         MSD4         TestCode:         EPA Method         8260B:         Volatili           Batch ID:         69569         RunNo:         90413             10/15/10/10/10/10/10/10/10/10/10/10/10/10/10/	TestCode: EPA Method 8260B: Volatiles Short I           Batch ID:         69569         RunNo:         90413           alysis Date:         8/18/2022         SeqNo:         3225802         Units:         mg/Kg           sult         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD           0.84         0.024         0.9699         0         86.1         75.8         123         12.3           0.80         0.048         0.9699         0         82.5         68.3         130         15.8           0.80         0.048         0.9699         0         87.3         74.7         132         13.3           0.80         0.048         0.9699         0         87.3         74.7         132         13.3           0.51         0.4850         105         70         130         0           0.52         0.4850         107         70         130         0           0.4850         95.3         70         130         0           0.4860         95.3         70         130         0           0.4850         95.3         70         130         0	TestCode: EPA Method 8260B: Volatiles Short List           Batch ID: 69569         RunNo: 90413           Units: mg/Kg           Units: mg/Kg           Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1         Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1           Num viewed 1

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S

Released to Imaging: 11/22/2022 2:49:36 PM

- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL

Page 23 of 25

#### WO#: 2208A05

**Client:** 

Vertex Resources Services, Inc.

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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2208A05

WO#:

SUMMARY REPORT	

Project: Onyx 29	OCTB1 Sep	arator								
Sample ID: mb-69569	Result         PQL         SPK           ND         0.025           ND         0.050           ND         0.050           ND         0.10           4         0.50         0.           ie         0.53         0.		BLK	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batc	h ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date: 8/17/2022	Analysis [	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225822	Units: <b>mg/K</b>	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	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.53		0.5000		106	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		115	70	130			
Surr: Toluene-d8	0.50		0.5000		99.6	70	130			

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:		esources Se CTB1 Sepa	,	Inc.							
Sample ID:	2208a05-001ams	SampT	ype: MS	5	TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID:	WES22-26 2'	Batch	ID: 695	569	F	RunNo: 90	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> '	18/2022	S	SeqNo: 32	225834	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	26	5.0	24.98	0	105	65.9	123			
Surr: BFB		570		499.5		115	70	130			
Sample ID:	2208a05-001amsd	SampT	ype: MS	D	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline R	ange	
Client ID:	WES22-26 2'	Batch	ID: 695	D: 69569 RunNo: 90413							
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> *	18/2022	SeqNo: 3225835 Units: mg/Kg						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	5.0	24.93	0	97.2	65.9	123	7.77	20	
Surr: BFB		560		498.5		113	70	130	0	0	
Sample ID:	lcs-69569	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline R	ange	
Client ID:	LCSS	Batch	ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> ′	18/2022	S	SeqNo: 32	225855	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	25.00	0	87.2	70	130			
Surr: BFB		580		500.0		117	70	130			
Sample ID:	mb-69569	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline R	lange	
Client ID:	PBS	Batch	ID: 695	569	F	RunNo: <b>9</b>	0413				
Prep Date:	8/17/2022	Analysis D	ate: <b>8/</b> *	18/2022	S	SeqNo: 32	225856	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	e Organics (GRO)	ND	5.0								
Surr: BFB		580		500.0		117	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208A05

23-Aug-22

WO#:

ANALYSIS LABORATORY	Hall Environmental A Albuq TEL: 505-345-3975 I Website: www.hali	490 puerg FAX:	01 Hawkins Jue, NM 87 505-345-4	NE 109 Sa 107	ampl	e Log-In	Chec	Page 237 k List
Client Name: Vertex Resources Services, Inc.	Work Order Number:	220	8A05			Rcpt	No: 1	
Received By: Juan Rojas 8/	17/2022 7:10:00 AM			Hearing	g)			
Completed By: Cheyenne Cason 8/	17/2022 8:04:39 AM			Chanter .				
Reviewed By: m 8/17/22				Gone				
Chain of Custody								
1. Is Chain of Custody complete?		Yes	~	No 🗌	1	Not Present	3	
2. How was the sample delivered?		Cou	rier					
Log In								
3. Was an attempt made to cool the samples?		Yes		No 🗌		NA		
4. Were all samples received at a temperature of	•0° C to 6.0°C	Yes		No 🗌		NA 🗌	1	
5. Sample(s) in proper container(s)?		Yes		No 🗌	3			
6. Sufficient sample volume for indicated test(s)?	١	/es	~	No 🗌	]			
7. Are samples (except VOA and ONG) properly pro	eserved?	es	~	No 🗌	]			
8. Was preservative added to bottles?	Y	/es		No 🔽	]	NA 🗌	1	
9. Received at least 1 vial with headspace <1/4" for	AQ VOA?	'es		No 🗌	]		1	
10. Were any sample containers received broken?		Yes		No 🔽		annen a d		1
11.Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Y	es	~	No 🗌	bo	f preserved tiles checked pH:	or this	less noted)
12. Are matrices correctly identified on Chain of Cust	odv?	'es		No 🗌	1	Adjusted?	01 12 UI	less noted)
13. Is it clear what analyses were requested?		'es		No 🗌	1	/		
14. Were all holding times able to be met? (If no, notify customer for authorization.)		'es		No 🗆		Checked by	KPa	8.17.2
Special Handling (if applicable)								
15, Was client notified of all discrepancies with this of	order?	Yes		No 🗌	]	NA 🔽	1	
Person Notified:	Date:	-	_		-			
By Whom:		eMa	ail 🗌 Ph	one 🗌 Fa	ax 🗔	n Person		
Regarding:		-						
Client Instructions:								
16. Additional remarks:								
17. <u>Cooler Information</u> Cooler No Temp °C Condition Seal Ir	2012 Contract Contra	al Da	ate S	Signed By				
1 0.3 Good Not Pre	sent							

.

Page 1 of 1

Client: Client: Mailing Address: Phone #: email or Fax#:	Ston / Vartas						VIRC		
Mailing Address Phone #: email or Fax#: QA/QC Package:		Standard      Rush	ч		ANAL	I VS	A I S	AALL ENVIKONMEN I AL ANAI YSTS I ABODATOD	,>
Mailing Address Phone #: email or Fax#: QA/QC Package:									-
Phone #: email or Fax#: QA/QC Package:	si an Eile	ongt 29 CT8	1 CSERATORION	4901 H	4901 Hawkins NE		nineratie.	Albuquerane. NM 87109	. 11/1
Phone #: email or Fax#: QA/QC Package:		Project #:		Tel. 50	Tel. 505-345-3975		Fax 505-345-4107	5-4107	(/20)
email or Fax#: QA/QC Package:		225-01720-001	101			Anal	Analysis Request	st	
QA/QC Package		Project Manager:		-		*0			-
□ Standard	Level 4 (Full Validation)	Kent stamings	sbein		SMIS	PO4, S	1924A\ti		31 AM
Accreditation:	□ Az Compliance	Sampler: C J		סא		<sup>'7</sup> 0	192		_
D NELAC	Other	On Ice: D_Yes	ON []	10	3 10				
□ EDD (Type)		# of Coolers: )		ย)	01	<sup>8</sup> 01	٥٨		
		Cooler Temp(including CF): 0	(0.) > -0-0-2 ( (c)	ופם(	83	r, N	-ime		
Date Time	Matrix Sample Name	Container Preservative Type and # Type	HEAL NO. 77 CK AOSS	ХЭТВ 108:НЭТ 8081 Ре	M) 803 (d sHA9	всва в сі F, в	00580 (V) 8270 (S 701 Co		
8115 9:00	5017		120	11		1			
1 9:05	1 WESZ-27 Z'	1 1	ccz	1 1		-			
01:0			<i>c</i> 03						
9:15	WES22-29 2'		had						
9:20			Sac			-			
9:25	4552-31 2'		500						
9:30	4 ES22-32 2'		207						
5::6	85522-15 41		008						
017:6	BES22-16 4		609						
517:0	8552-17 4'		010						
05:6	B5525-18 41		011						
55:6	BES22-19 41'		210	+ 1		~			
Date: Time:	Relinquished by:	Received by: Via:	F	Remarks: C	20:049706	1.2.2	Dixan		10
i i i i i i i i i i i i i i i i i i i		AWWWWWWW	311 man 112	q	Direct	BIN D	Devon		ige 2
Silvar 1000		Received by: Via:		24	10 H 1	8 6292	57		,30 C
minan Indu talui	TY	2 1 CONTRE	17122	7:10					of 43

R

	hain	- - - -	Chain-of-Custody Record	I urn-Around 1 ime:		2-044						CLE		ivea
Client:		Devon/Vertex	ertex	□ Standard	A Rush			1			N N N		ANAL VERS LADDATOD	by (
				Project Name:									NO I ANO	CD
Mailing	Mailing Address:	uo	F.70	shuo	29 0781	1 LSEPARATOR)	4	901 Ha	ww wkins l	www.riailerivironmental.com ins NE - Albuquerque NM 8	Induction	nental	www.rialieftyrronmental.com 4901 Hawkins NE - Albuquerque NM 87109	: 11/1
		_		Project #:				Tel. 505-345-3975	-345-3	975	Fax	505-34	505-345-4107	1/202
Phone #:	#:			225	225-01720-001	0				Ana		Request	st	22.7:
email o	email or Fax#:			Project Manager:	ager:				-	.0		(+-	(11	45::
QA/QC Packa	QA/QC Package:		Level 4 (Full Validation)	Kent	sbu:11025 -	560	208) s' 998 (802	PCB's	SMIS	PO₄, S	0 170 1		ıəsdA\t	31 AM
Accreditation:	itation:			2	90			2808		SON	1701			
				On Ice:	۲1	L No		/se	_		10		1)	
	(1 ype)		-	# of Coolers:	1			əpi	1.1.1		-			_
		G.		Cooler Temp(including CF):	(including CF): C	130=0.3 (°C)	/	Pestic	(Metho	8 k, 1	(AOV)	im92)		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	22084035	-	1808		1	-		12101	
21/2	8/15 10:00	Soil	B5522-20 4	204	ICE	013	1	-		11	-			
-	10:05	-	BESZZ-21 41	1		614								4
	10:10	1	BESZ2-22 4'			015								
	11:30		42522-33 2'			016								
	11:35	-	WES22-33 4'			017								
	11:40		LES22-34 21			018								
	54:11		NES22-34 42'			pid								1.0
	1:30		BES22-14 8'			020								
												-		
														1.4
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Rector Rector	te: Time:	Relinquished by:	ed by:	Received by:	Via:	Date Time	X	207	N:	0#: 21029815	5/2			239 of
201-10	1 100	222		1 N	Trink	NIL VILIX								f4



August 23, 2022

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

RE: Onyx 29 CTB1 Separator

OrderNo.: 2208A84

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/18/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab ID:

Analyses

**Analytical Report** Lab Order 2208A84

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-35 1' Onyx 29 CTB1 Separator Collection Date: 8/16/2022 9:30:00 AM 2208A84-001 Matrix: SOIL Received Date: 8/18/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) mg/Kg 8/18/2022 11:56:59 AM ND 13 1 Motor Oil Range Organics (MRO) ND 1 8/18/2022 11:56:59 AM 45 mg/Kg Surr: DNOP 88.2 21-129 %Rec 1 8/18/2022 11:56:59 AM RM Л Λ RM

EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	8/18/2022 1:11:00 PM
Surr: BFB	104	37.7-212	%Rec	1	8/18/2022 1:11:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.016	mg/Kg	1	8/18/2022 1:11:00 PM
Toluene	ND	0.031	mg/Kg	1	8/18/2022 1:11:00 PM
Ethylbenzene	ND	0.031	mg/Kg	1	8/18/2022 1:11:00 PM
Xylenes, Total	ND	0.063	mg/Kg	1	8/18/2022 1:11:00 PM
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	8/18/2022 1:11:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/20/2022 1:55:18 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

- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- E Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 8

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

CLIENT: Vertex Resources Services, Inc.

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-36 1' Collection Date: 8/16/2022 9:35:00 AM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A84-002	Matrix: SOIL	Rece	vived Date:	8/18/2	2022 7:15:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 12:10:51 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 12:10:51 PM
Surr: DNOP	92.6	21-129	%Rec	1	8/18/2022 12:10:51 PM
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	8/18/2022 1:51:00 PM
Surr: BFB	104	37.7-212	%Rec	1	8/18/2022 1:51:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.017	mg/Kg	1	8/18/2022 1:51:00 PM
Toluene	ND	0.035	mg/Kg	1	8/18/2022 1:51:00 PM
Ethylbenzene	ND	0.035	mg/Kg	1	8/18/2022 1:51:00 PM
Xylenes, Total	ND	0.069	mg/Kg	1	8/18/2022 1:51:00 PM
Surr: 4-Bromofluorobenzene	99.2	70-130	%Rec	1	8/18/2022 1:51:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/20/2022 2:07:43 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 8

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A84-003

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

 Client Sample ID: WES22-37 1'

 Collection Date: 8/16/2022 9:40:00 AM

 Matrix: SOIL
 Received Date: 8/16/2022 7:15:00 AM

 Result
 RL Qual Units DF Date Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	19	15	mg/Kg	1	8/18/2022 12:24:49 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 12:24:49 PM
Surr: DNOP	96.8	21-129	%Rec	1	8/18/2022 12:24:49 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	8/18/2022 2:11:00 PM
Surr: BFB	102	37.7-212	%Rec	1	8/18/2022 2:11:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.016	mg/Kg	1	8/18/2022 2:11:00 PM
Toluene	ND	0.031	mg/Kg	1	8/18/2022 2:11:00 PM
Ethylbenzene	ND	0.031	mg/Kg	1	8/18/2022 2:11:00 PM
Xylenes, Total	ND	0.063	mg/Kg	1	8/18/2022 2:11:00 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/18/2022 2:11:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/20/2022 2:20:09 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

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 8

H Holding times for preparation or analysis exceeded

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A84-004

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-38 2'Collection Date: 8/16/2022 11:30:00 AMMatrix: SOILReceived Date: 8/18/2022 7:15:00 AMResultRL Qual UnitsDFDate Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 12:38:44 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 12:38:44 PM
Surr: DNOP	89.3	21-129	%Rec	1	8/18/2022 12:38:44 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/18/2022 2:30:00 PM
Surr: BFB	104	37.7-212	%Rec	1	8/18/2022 2:30:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.020	mg/Kg	1	8/18/2022 2:30:00 PM
Toluene	ND	0.039	mg/Kg	1	8/18/2022 2:30:00 PM
Ethylbenzene	ND	0.039	mg/Kg	1	8/18/2022 2:30:00 PM
Xylenes, Total	ND	0.079	mg/Kg	1	8/18/2022 2:30:00 PM
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	8/18/2022 2:30:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	190	60	mg/Kg	20	8/20/2022 2:32:34 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 8

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A84-005

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-40 2' Collection Date: 8/16/2022 1:00:00 PM Received Date: 8/18/2022 7:15:00 AM

<b>Eub ID:</b> 22001101 005	Matrix: Sole	necc	I'teu Dutei	0/10/2	1022 7:15:00 7 HM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 12:52:49 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/18/2022 12:52:49 PM
Surr: DNOP	102	21-129	%Rec	1	8/18/2022 12:52:49 PM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	8/18/2022 2:50:00 PM
Surr: BFB	105	37.7-212	%Rec	1	8/18/2022 2:50:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.020	mg/Kg	1	8/18/2022 2:50:00 PM
Toluene	ND	0.041	mg/Kg	1	8/18/2022 2:50:00 PM
Ethylbenzene	ND	0.041	mg/Kg	1	8/18/2022 2:50:00 PM
Xylenes, Total	ND	0.081	mg/Kg	1	8/18/2022 2:50:00 PM
Surr: 4-Bromofluorobenzene	98.9	70-130	%Rec	1	8/18/2022 2:50:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	220	60	mg/Kg	20	8/20/2022 2:44:58 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

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

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

Page 5 of 8

H Holding times for preparation or analysis exceeded

Client: Project:		ex Resources Se x 29 CTB1 Sepa		Inc.							
Sample ID:	MB-69605	SampTy	/pe: mb	lk	Tes	tCode: EP	A Method	300.0: Anions	;		
Client ID:	PBS	Batch	ID: 696	605	F	RunNo: <b>90</b>	9460				
Prep Date:	8/18/2022	Analysis Da	ate: <b>8/</b> 2	20/2022	S	SeqNo: 32	228049	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-69605	SampTy	/pe: Ics		Tes	tCode: EP	PA Method	300.0: Anions	;		
Client ID:	LCSS	Batch	ID: 696	605	F	RunNo: <b>90</b>	9460				
Prep Date:	8/18/2022	Analysis Da	ate: <b>8/</b> 2	20/2022	S	SeqNo: 32	228050	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	95.0	90	110			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208A84

23-Aug-22

WO#:

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

	Resources S 29 CTB1 Sep		Inc.							
Sample ID: 2.5ug gro lcs	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID: LCSS	Batch	n ID: <b>A9</b>	0390	F	RunNo: <b>9(</b>	)390				
Prep Date:	Analysis D	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225322	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	72.3	137			
Surr: BFB	2200		1000		218	37.7	212			S
Sample ID: mb	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range	!	
Client ID: PBS	Batch	n ID: <b>A9</b>	0390	F	RunNo: <b>9(</b>	)390				
Prep Date:	Analysis D	Date: <b>8/</b>	18/2022	S	SeqNo: 32	225323	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	1000		1000		103	37.7	212			

#### 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2208A84

23-Aug-22

WO#:

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Client: Project:		esources S CTB1 Sep		Inc.							
Sample ID: 100ng	btex lcs	Samp	Гуре: <b>LC</b>	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS		Batc	h ID: <b>B9</b>	0390	F	RunNo: <b>9(</b>	0390				
Prep Date:		Analysis [	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225327	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	83.4	80	120			
Toluene		0.86	0.050	1.000	0	85.6	80	120			
Ethylbenzene		0.87	0.050	1.000	0	87.2	80	120			
Xylenes, Total		2.6	0.10	3.000	0	87.1	80	120			
Surr: 4-Bromofluorobe	enzene	1.0		1.000		99.7	70	130			
Sample ID: mb		Samp	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS		Batc	h ID: <b>B9</b>	0390	F	RunNo: <b>9(</b>	0390				
Prep Date:		Analysis [	Date: <b>8/</b> *	18/2022	5	SeqNo: 32	225328	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-Bromofluorobe	enzene	1.0		1.000		99.6	70	130			

- \* 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

WO#: 2208A84 23-Aug-22

	4901 H Albuquerque, 505-345-3975 FAX: 505 psite: www.hallenvironi	-345-4107	mple Log-In Check I	₋ist
Client Name: Vertex Resources Work Ord Services, Inc.	der Number: 2208A8	4	RcptNo: 1	
Received By: Tracy Casarrubias 8/18/2022	7:15:00 AM			
Completed By: Tracy Casarrubias 8/18/2022	8:15:24 AM			
Reviewed By: KPG 8.18.22				
Chain of Custody				
1. Is Chain of Custody complete?	Yes 🔽	No 🗌	Not Present	
2. How was the sample delivered?	Courier			
Log In				
3. Was an attempt made to cool the samples?	Yes 🔽	No 🗌	NA 🗌	
4. Were all samples received at a temperature of >0° C to 6	.0°C Yes 🗹	No 🗌		
5. Sample(s) in proper container(s)?	Yes 🔽	No 🗌		
6. Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗌		
7. Are samples (except VOA and ONG) properly preserved?	Yes 🔽	No 🗌		
8. Was preservative added to bottles?	Yes 🗌	No 🔽	NA 🗌	
9. Received at least 1 vial with headspace <1/4" for AQ VOA	? Yes 🗌	No 🗌	NA 🔽	
10. Were any sample containers received broken?	Yes 🗆	No 🔽		
			# of preserved bottles checked	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🔽	No 🗌	for pH:	Totad)
12. Are matrices correctly identified on Chain of Custody?	Yes 🔽	No 🗌	(<2 or >12 unless Adjusted?	noted)
13. Is it clear what analyses were requested?	Yes 🔽	No 🗌	/ .	1
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🔽	No 🗆	Checked by: JMS118	3/22
Special Handling (if applicable)				
15. Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🔽	
Person Notified:			101.121	
By Whom:	Date:			
Regarding:	Via: 🗌 eMail	Phone Fax	In Person	
Client Instructions:				
16. Additional remarks:				
17. Cooler Information				
CAN STREET ST	eal No Seal Date	Signed By		

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Page 1 of 1

						45:.	31 AM														Page	e 250 of 4				
	ANAL ENVIRONMENTAL ANALYSTS LARODATODY	www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Eax 505-345-4107	is Request	(tr	ıəsdA\ti		1.000	٥٨-	(AOV) im92) iotiloD	0728	-								Dion	21029815				
		w hallenvir	NE - Albu	3975 Fs	Anal	<sup>⊅</sup> O	PO₄, S		S	Ibte OV	A 8 Mé, 18 Mé	G) E BCB		-			-				CC: Chanel	LOIS : TOZ				
2		4901 Hawkins NE - Tel. 505-345-3975				_	081 Pesticides/8082 PCB's DB (Method 504.1) MHs by 8310 or 8270SIMS					EDB							+		00:00	AO # :				
			490	Tel			208) e'	80/0	SЯ	(GI	015D	:НЧТ	1								Remarks:					
1-04-00	ZRUSH Same dawn	2	(SEPPERATOR)		10		10	-	LI NO	2-0.1=5.2	3-0.1=5.7 (°C)	2208ABU (	GOL	200	003	hoo	005				Pate Time	Bate Time				
	Rush	0		ect #: ZZ5-017Z0 -001		ger:	stanings		LAYes			Preservative Type	ICL	1				-			Via:	Marcon				
	□ Standard	Project Name:	shun	Project #:	226-1	Project Manager:	Kent	Sampler: CD	Un Ice:	# of Coolers:	E	Container Type and #	1.00				-				Received by:	Received by:				
Chain-of-Custody Record	40%	Mailine Address.	on Fill				Level 4 (Full Validation)					Sample Name	LESS2-35 1	LU522-36 1'	UES22-37 1'	WES22-38 2'										
	Devon / Verbert				Phone #:	+	-	-	-	-			Az Compliance			- 1	Matrix	Soi'I	1			-				Relinquished by:
			Mailing Address:			email or Fax#:	QA/QC Package:	:uo		EDD (Type)		Time	9:30	2:35	9:40	11:30	1:00				Time:	Time:				
1	Client:		Mailing			Phone #	Phone #	Phone #	Phone #	email c	QA/QC Packa	Accreditation				Date	21112	1			1				Date:	Date:



August 23, 2022

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

RE: Onyx 29 CTB1 Separator

OrderNo.: 2208A84

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/18/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab ID:

Analyses

Surr: DNOP

**Analytical Report** Lab Order 2208A84

Date Reported: 8/23/2022

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: WES22-35 1' Onyx 29 CTB1 Separator Collection Date: 8/16/2022 9:30:00 AM 2208A84-001 Matrix: SOIL Received Date: 8/18/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) mg/Kg 8/18/2022 11:56:59 AM ND 13 1 Motor Oil Range Organics (MRO) ND 1 8/18/2022 11:56:59 AM 45 mg/Kg 88.2 21-129 %Rec 1 8/18/2022 11:56:59 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM M

Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	8/18/2022 1:11:00 PM
Surr: BFB	104	37.7-212	%Rec	1	8/18/2022 1:11:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.016	mg/Kg	1	8/18/2022 1:11:00 PM
Toluene	ND	0.031	mg/Kg	1	8/18/2022 1:11:00 PM
Ethylbenzene	ND	0.031	mg/Kg	1	8/18/2022 1:11:00 PM
Xylenes, Total	ND	0.063	mg/Kg	1	8/18/2022 1:11:00 PM
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	8/18/2022 1:11:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/20/2022 1:55:18 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

- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- E Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 8

CLIENT: Vertex Resources Services, Inc.

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-36 1' Collection Date: 8/16/2022 9:35:00 AM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A84-002	Matrix: SOIL	<b>Received Date:</b> 8/18/2022 7:15:00 AM								
Analyses	Result	RL Qu	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH					
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 12:10:51 PM					
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 12:10:51 PM					
Surr: DNOP	92.6	21-129	%Rec	1	8/18/2022 12:10:51 PM					
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: BRM					
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	8/18/2022 1:51:00 PM					
Surr: BFB	104	37.7-212	%Rec	1	8/18/2022 1:51:00 PM					
EPA METHOD 8021B: VOLATILES					Analyst: BRM					
Benzene	ND	0.017	mg/Kg	1	8/18/2022 1:51:00 PM					
Toluene	ND	0.035	mg/Kg	1	8/18/2022 1:51:00 PM					
Ethylbenzene	ND	0.035	mg/Kg	1	8/18/2022 1:51:00 PM					
Xylenes, Total	ND	0.069	mg/Kg	1	8/18/2022 1:51:00 PM					
Surr: 4-Bromofluorobenzene	99.2	70-130	%Rec	1	8/18/2022 1:51:00 PM					
EPA METHOD 300.0: ANIONS					Analyst: NAI					
Chloride	ND	60	mg/Kg	20	8/20/2022 2:07:43 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

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

B Analyte detected in the associated Method Blank

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

RL Reporting Limit

Page 2 of 8

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

E Estimated value

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A84-003

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-37 1' Collection Date: 8/16/2022 9:40:00 AM Matrix: SOIL Received Date: 8/18/2022 7:15:00 AM Result RL Qual Units DE Date Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	19	15	mg/Kg	1	8/18/2022 12:24:49 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 12:24:49 PM
Surr: DNOP	96.8	21-129	%Rec	1	8/18/2022 12:24:49 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	8/18/2022 2:11:00 PM
Surr: BFB	102	37.7-212	%Rec	1	8/18/2022 2:11:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.016	mg/Kg	1	8/18/2022 2:11:00 PM
Toluene	ND	0.031	mg/Kg	1	8/18/2022 2:11:00 PM
Ethylbenzene	ND	0.031	mg/Kg	1	8/18/2022 2:11:00 PM
Xylenes, Total	ND	0.063	mg/Kg	1	8/18/2022 2:11:00 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/18/2022 2:11:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/20/2022 2:20:09 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 8

Lab ID:

CLIENT: Vertex Resources Services, Inc.

2208A84-004

Onyx 29 CTB1 Separator

Analytical Report
Lab Order 2208A84

Date Reported: 8/23/2022

### Hall Environmental Analysis Laboratory, Inc.

 Client Sample ID: WES22-38 2'

 Collection Date: 8/16/2022 11:30:00 AM

 Matrix: SOIL
 Received Date: 8/18/2022 7:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 12:38:44 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/18/2022 12:38:44 PM
Surr: DNOP	89.3	21-129	%Rec	1	8/18/2022 12:38:44 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/18/2022 2:30:00 PM
Surr: BFB	104	37.7-212	%Rec	1	8/18/2022 2:30:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.020	mg/Kg	1	8/18/2022 2:30:00 PM
Toluene	ND	0.039	mg/Kg	1	8/18/2022 2:30:00 PM
Ethylbenzene	ND	0.039	mg/Kg	1	8/18/2022 2:30:00 PM
Xylenes, Total	ND	0.079	mg/Kg	1	8/18/2022 2:30:00 PM
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	8/18/2022 2:30:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	190	60	mg/Kg	20	8/20/2022 2:32:34 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 interference

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

Page 4 of 8

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1 Separator

Analytical Report Lab Order 2208A84

Date Reported: 8/23/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-40 2' Collection Date: 8/16/2022 1:00:00 PM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A84-005	Matrix: SOIL	<b>Received Date:</b> 8/18/2022 7:15:00 AM								
Analyses	Result	RL Qua	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH					
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 12:52:49 PM					
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/18/2022 12:52:49 PM					
Surr: DNOP	102	21-129	%Rec	1	8/18/2022 12:52:49 PM					
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: BRM					
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	8/18/2022 2:50:00 PM					
Surr: BFB	105	37.7-212	%Rec	1	8/18/2022 2:50:00 PM					
EPA METHOD 8021B: VOLATILES					Analyst: BRM					
Benzene	ND	0.020	mg/Kg	1	8/18/2022 2:50:00 PM					
Toluene	ND	0.041	mg/Kg	1	8/18/2022 2:50:00 PM					
Ethylbenzene	ND	0.041	mg/Kg	1	8/18/2022 2:50:00 PM					
Xylenes, Total	ND	0.081	mg/Kg	1	8/18/2022 2:50:00 PM					
Surr: 4-Bromofluorobenzene	98.9	70-130	%Rec	1	8/18/2022 2:50:00 PM					
EPA METHOD 300.0: ANIONS					Analyst: NAI					
Chloride	220	60	mg/Kg	20	8/20/2022 2:44:58 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 8

Client: Project:		ex Resources Serv x 29 CTB1 Separa		Inc.							
Sample ID:	MB-69605	SampTyp	e: mb	lk	Tes	stCode: EF	A Method	300.0: Anions	;		
Client ID:	PBS	Batch ID	): <b>696</b>	605	F	RunNo: <b>9(</b>	9460				
Prep Date:	8/18/2022	Analysis Date	e: <b>8/2</b>	20/2022	S	SeqNo: 32	228049	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID:	LCS-69605	SampTyp	e: Ics		Tes	stCode: EF	A Method	300.0: Anions	;		
Client ID:	LCSS	Batch ID	): <b>696</b>	605	F	RunNo: <b>9(</b>	9460				
Prep Date:	8/18/2022	Analysis Date	e: <b>8/2</b>	20/2022	S	SeqNo: 32	228050	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	95.0	90	110			

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208A84

23-Aug-22

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

	Resources S 29 CTB1 Sep		Inc.							
Sample ID: 2.5ug gro lcs	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID: LCSS	Batch	n ID: <b>A9</b>	0390	F	RunNo: <b>9(</b>	)390				
Prep Date:	Analysis D	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225322	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	72.3	137			
Surr: BFB	2200		1000		218	37.7	212			S
Sample ID: mb	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range	!	
Client ID: PBS	Batch	n ID: <b>A9</b>	0390	F	RunNo: <b>9(</b>	)390				
Prep Date:	Analysis D	Date: <b>8/</b>	18/2022	S	SeqNo: 32	225323	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	1000		1000		103	37.7	212			

#### 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2208A84 23-Aug-22

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Client: Project:		esources S CTB1 Sep		Inc.							
Sample ID: 100ng	btex lcs	Samp	Гуре: <b>LC</b>	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS		Batc	h ID: <b>B9</b>	0390	F	RunNo: <b>9(</b>	0390				
Prep Date:		Analysis [	Date: <b>8/</b> *	18/2022	S	SeqNo: 32	225327	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	83.4	80	120			
Toluene		0.86	0.050	1.000	0	85.6	80	120			
Ethylbenzene		0.87	0.050	1.000	0	87.2	80	120			
Xylenes, Total		2.6	0.10	3.000	0	87.1	80	120			
Surr: 4-Bromofluorobe	enzene	1.0		1.000		99.7	70	130			
Sample ID: mb		Samp	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS		Batc	h ID: <b>B9</b>	0390	F	RunNo: <b>9(</b>	0390				
Prep Date:		Analysis [	Date: <b>8/</b> *	18/2022	5	SeqNo: 32	225328	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-Bromofluorobe	enzene	1.0		1.000		99.6	70	130			

- \* 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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WO#: 2208A84

23-Aug-22

ANAL	ONMENTAL (SIS RATORY	TEL: 505-345	4901 Hawkins Albuquerque. NM 87 3975 FAX: 505-345-4 w.hallenvironmental.	109 Sar 107	nple Log-In Check List
Client Name:	Vertex Resources Services, Inc.	Work Order Num	ber: 2208A84		RcptNo: 1
Received By:	Tracy Casarrubias	8/18/2022 7:15:00	AM		
Completed By:	Tracy Casarrubias	8/18/2022 8:15:24	AM		
Reviewed By:	KPG 8.18.	27			
Chain of Cus					
1. Is Chain of Cu	ustody complete?		Yes 🗹	No 🗌	Not Present
2. How was the	sample delivered?		Courier		
Log In					
3. Was an attem	pt made to cool the sample	s?	Yes 🔽	No 🗌	
4. Were all samp	les received at a temperatu	rre of >0° C to 6.0°C	Yes 🔽	No 🗌	
5. Sample(s) in p	proper container(s)?		Yes 🔽	No 🗌	
6. Sufficient sam	ple volume for indicated tes	t(s)?	Yes 🔽	No 🗌	
7. Are samples (e	except VOA and ONG) prop	erly preserved?	Yes 🔽	No 🗌	
8. Was preservat	ive added to bottles?		Yes 🗌	No 🔽	NA 🗌
9. Received at lea	ast 1 vial with headspace <	1/4" for AQ VOA?	Yes	No 🗌	
	ple containers received bro		Yes 🗆	No 🔽	
					# of preserved bottles checked
	rk match bottle labels? ncies on chain of custody)		Yes 🔽	No 🗌	for pH:
	orrectly identified on Chain	of Custody?	Yes 🔽	No 🗌	(<2 or >12 unless noted) Adjusted?
	analyses were requested?		Yes 🔽	No 🗌	
14. Were all holdin	g times able to be met?		Yes 🔽	No 🗌	Checked by: JNS182
(If no, notify cu	stomer for authorization.)			/	
Special Handli	ng (if applicable)				
15. Was client not	ified of all discrepancies wi	th this order?	Yes 🗌	No 🗌	NA 🗹
Person I	Notified:	Date			
By Who	m:	Via:	And the second	one 🗌 Fax	In Person
Regardir	ng:				
Client In	structions:				
16. Additional ren	harks:				
17. Cooler Inform	and in a				

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Page 1 of 1

	.>				2 7:	45:3	31 AM													Pag	e 261 of 4
	ANAL ENVIKONMENTAL	www.hallenvironmental.com	www.rianeriviroliniterital.com 4901 Hawkins NE - Albuquerque, NM 87109	505-345-4107	Request	(tu	iəsdA\ti	uəse	100	10 m		2) 0728 D letoT	1							Dien	Time: Relinquished by: Received by Via: co. Date Time Oract 8:11 Ocron 8 [19,12] 7:15 40±1: 2/0298/5
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			291952	ect #:		iger:	speiners	9	Yes	-	10	Preservative Type	Icl	1						Via:	Marco
	□ Standard	Project Name:	shuo	Project #:	275	Project Manager:	Kent	Sampler: $\mathcal{L}\mathcal{D}$	On Ice:	# of Coolers:	Cooler Temp(including CF):	Container Type and #					ſ			Received by:	Received by:
						Ĩ.	tion)						, 1			,2					0
Unain-or-Custody Record	40%		F176				Level 4 (Full Validation)	pliance				Sample Name	L 5222-35	LU5522-36	UES22-37 1	WES22-38 2	4522-90 2			by:	by:
j-	Devon / Verkes		ON FI					Az Compliance	□ Other				-			4				Relinquished by:	Relinquished by:
P-L	uon						e:	1.8	2.11	1	_	Matrix		10	0	0				Relir	Relir
Ugi	De		Mailing Address:		#:	email or Fax#:	QA/QC Package:	Accreditation:	AC	□ EDD (Type)		Time	9:30	2:35	9:40	11:30	1:00			Time:	Time:
	Client:		ailing		Phone #:	nail o	QA/QC Packa	ccredi	D NELAC	EDD		Date	2115	1	-					Date:	Date:



August 22, 2022

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

OrderNo.: 2208A82

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

RE: Onyx 29 CTB1

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 9 sample(s) on 8/18/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Project: Onyx 29 CTB1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-01 4' Collection Date: 8/17/2022 12:00:00 PM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A82-001	Matrix: SOIL	Received Date: 8/18/2022 7:15:00 AM								
Analyses	Result	RL Qua	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH					
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 1:06:46 PM					
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/18/2022 1:06:46 PM					
Surr: DNOP	92.6	21-129	%Rec	1	8/18/2022 1:06:46 PM					
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM					
Gasoline Range Organics (GRO)	ND	3.3	mg/Kg	1	8/18/2022 10:14:00 AM					
Surr: BFB	102	37.7-212	%Rec	1	8/18/2022 10:14:00 AM					
EPA METHOD 8021B: VOLATILES					Analyst: BRM					
Benzene	ND	0.016	mg/Kg	1	8/18/2022 10:14:00 AM					
Toluene	ND	0.033	mg/Kg	1	8/18/2022 10:14:00 AM					
Ethylbenzene	ND	0.033	mg/Kg	1	8/18/2022 10:14:00 AM					
Xylenes, Total	ND	0.065	mg/Kg	1	8/18/2022 10:14:00 AM					
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/18/2022 10:14:00 AM					
EPA METHOD 300.0: ANIONS					Analyst: NAI					
Chloride	ND	60	mg/Kg	20	8/18/2022 10:40:35 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 13

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-02 5' Collection Date: 8/17/2022 12:10:00 PM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A82-002	Matrix: SOIL	<b>Received Date:</b> 8/18/2022 7:15:00 AM								
Analyses	Result	RL Qu	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH					
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 1:20:52 PM					
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/18/2022 1:20:52 PM					
Surr: DNOP	87.8	21-129	%Rec	1	8/18/2022 1:20:52 PM					
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM					
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	8/18/2022 10:34:00 AM					
Surr: BFB	103	37.7-212	%Rec	1	8/18/2022 10:34:00 AM					
EPA METHOD 8021B: VOLATILES					Analyst: BRM					
Benzene	ND	0.017	mg/Kg	1	8/18/2022 10:34:00 AM					
Toluene	ND	0.034	mg/Kg	1	8/18/2022 10:34:00 AM					
Ethylbenzene	ND	0.034	mg/Kg	1	8/18/2022 10:34:00 AM					
Xylenes, Total	ND	0.069	mg/Kg	1	8/18/2022 10:34:00 AM					
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/18/2022 10:34:00 AM					
EPA METHOD 300.0: ANIONS					Analyst: NAI					
Chloride	ND	60	mg/Kg	20	8/18/2022 10:52:59 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project: Onyx 29 CTB1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2208A82

Date Reported: 8/22/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-05 5' Collection Date: 8/17/2022 12:15:00 PM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A82-003	Matrix: SOIL	Rece	Received Date: 8/18/2022 7:15:00 AM								
Analyses	Result	RL Qu	al Units	DF	Date Analyzed						
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: DGH						
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 1:34:55 PM						
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/18/2022 1:34:55 PM						
Surr: DNOP	93.4	21-129	%Rec	1	8/18/2022 1:34:55 PM						
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: BRM						
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	8/18/2022 10:53:00 AM						
Surr: BFB	102	37.7-212	%Rec	1	8/18/2022 10:53:00 AM						
EPA METHOD 8021B: VOLATILES					Analyst: BRM						
Benzene	ND	0.018	mg/Kg	1	8/18/2022 10:53:00 AM						
Toluene	ND	0.035	mg/Kg	1	8/18/2022 10:53:00 AM						
Ethylbenzene	ND	0.035	mg/Kg	1	8/18/2022 10:53:00 AM						
Xylenes, Total	ND	0.071	mg/Kg	1	8/18/2022 10:53:00 AM						
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	8/18/2022 10:53:00 AM						
EPA METHOD 300.0: ANIONS					Analyst: NAI						
Chloride	ND	60	mg/Kg	20	8/18/2022 11:05:23 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-06 4' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Collection Date: 8/17/2022 12:20:00 PM Lab ID: 2208A82-004 Matrix: SOIL Received Date: 8/18/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 1:49:01 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 8/18/2022 1:49:01 PM 21-129 Surr: DNOP 89.6 %Rec 1 8/18/2022 1:49:01 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/18/2022 11:13:00 AM 3.2 mg/Kg 1 Surr: BFB 100 37.7-212 %Rec 1 8/18/2022 11:13:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: BRM 8/18/2022 11:13:00 AM Benzene ND 0.016 mg/Kg 1 Toluene ND 0.032 mg/Kg 1 8/18/2022 11:13:00 AM Ethylbenzene ND 0.032 mg/Kg 1 8/18/2022 11:13:00 AM Xylenes, Total ND 0.064 mg/Kg 1 8/18/2022 11:13:00 AM Surr: 4-Bromofluorobenzene 97.0 70-130 %Rec 1 8/18/2022 11:13:00 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/18/2022 11:17:48 AM ma/Ka 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BES22-07 4' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Collection Date: 8/17/2022 12:25:00 PM Lab ID: 2208A82-005 Matrix: SOIL Received Date: 8/18/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 2:02:54 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/18/2022 2:02:54 PM 21-129 Surr: DNOP 93.6 %Rec 1 8/18/2022 2:02:54 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/18/2022 11:32:00 AM 3.4 mg/Kg 1 Surr: BFB 99.9 37.7-212 %Rec 1 8/18/2022 11:32:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 8/18/2022 11:32:00 AM 0.017 mg/Kg 1 Toluene ND 0.034 mg/Kg 1 8/18/2022 11:32:00 AM Ethylbenzene ND 0.034 mg/Kg 1 8/18/2022 11:32:00 AM Xylenes, Total ND 0.067 mg/Kg 1 8/18/2022 11:32:00 AM Surr: 4-Bromofluorobenzene 95.5 70-130 %Rec 1 8/18/2022 11:32:00 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 59 8/18/2022 11:30:13 AM ma/Ka 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

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

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2208A82-006

Analytical Report
Lab Order 2208A82

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 8/22/2022 Client Sample ID: WES22-41 1' Collection Date: 8/17/2022 12:30:00 PM

**Received Date:** 8/18/2022 7:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 2:16:49 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/18/2022 2:16:49 PM
Surr: DNOP	83.9	21-129	%Rec	1	8/18/2022 2:16:49 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.6	mg/Kg	1	8/18/2022 11:52:00 AM
Surr: BFB	99.9	37.7-212	%Rec	1	8/18/2022 11:52:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.018	mg/Kg	1	8/18/2022 11:52:00 AM
Toluene	ND	0.036	mg/Kg	1	8/18/2022 11:52:00 AM
Ethylbenzene	ND	0.036	mg/Kg	1	8/18/2022 11:52:00 AM
Xylenes, Total	ND	0.073	mg/Kg	1	8/18/2022 11:52:00 AM
Surr: 4-Bromofluorobenzene	97.7	70-130	%Rec	1	8/18/2022 11:52:00 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/18/2022 11:42:38 AM

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report
Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-42 1' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Collection Date: 8/17/2022 12:35:00 PM Lab ID: 2208A82-007 Matrix: SOIL Received Date: 8/18/2022 7:15:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 14 mg/Kg 1 8/18/2022 2:31:03 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 8/18/2022 2:31:03 PM 21-129 Surr: DNOP 88.3 %Rec 1 8/18/2022 2:31:03 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/18/2022 12:12:00 PM 3.2 mg/Kg 1 Surr: BFB 103 37.7-212 %Rec 1 8/18/2022 12:12:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 8/18/2022 12:12:00 PM 0.016 mg/Kg 1 Toluene ND 0.032 mg/Kg 1 8/18/2022 12:12:00 PM Ethylbenzene ND 0.032 mg/Kg 1 8/18/2022 12:12:00 PM Xylenes, Total ND 0.064 mg/Kg 1 8/18/2022 12:12:00 PM 8/18/2022 12:12:00 PM Surr: 4-Bromofluorobenzene 96.7 70-130 %Rec 1 **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/18/2022 11:55:02 AM ma/Ka 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

**Analytical Report** Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-43 2' Collection Date: 8/17/2022 12:40:00 PM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A82-008	Matrix: SOIL	Rec	eived Date:	8/18/2	022 7:15:00 AM
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/18/2022 2:44:51 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/18/2022 2:44:51 PM
Surr: DNOP	91.4	21-129	%Rec	1	8/18/2022 2:44:51 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	8/18/2022 12:31:00 PM
Surr: BFB	97.3	37.7-212	%Rec	1	8/18/2022 12:31:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.017	mg/Kg	1	8/18/2022 12:31:00 PM
Toluene	ND	0.034	mg/Kg	1	8/18/2022 12:31:00 PM
Ethylbenzene	ND	0.034	mg/Kg	1	8/18/2022 12:31:00 PM
Xylenes, Total	ND	0.067	mg/Kg	1	8/18/2022 12:31:00 PM
Surr: 4-Bromofluorobenzene	95.0	70-130	%Rec	1	8/18/2022 12:31:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/18/2022 12:07:27 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: Onyx 29 CTB1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report
Lab Order 2208A82

Date Reported: 8/22/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-44 2' Collection Date: 8/17/2022 12:45:00 PM Received Date: 8/18/2022 7:15:00 AM

Lab ID: 2208A82-009	Matrix: SOIL	Rece	ived Date:	8/18/2	022 7:15:00 AM
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/18/2022 2:58:49 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/18/2022 2:58:49 PM
Surr: DNOP	89.2	21-129	%Rec	1	8/18/2022 2:58:49 PM
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	8/18/2022 12:51:00 PM
Surr: BFB	98.5	37.7-212	%Rec	1	8/18/2022 12:51:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.016	mg/Kg	1	8/18/2022 12:51:00 PM
Toluene	ND	0.031	mg/Kg	1	8/18/2022 12:51:00 PM
Ethylbenzene	ND	0.031	mg/Kg	1	8/18/2022 12:51:00 PM
Xylenes, Total	ND	0.062	mg/Kg	1	8/18/2022 12:51:00 PM
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	8/18/2022 12:51:00 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	8/18/2022 12:44:42 PM

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

**Qualifiers:** 

- \* Value exceeds Maximum Contaminant Level.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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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	ertex Resources Services, Inc. nyx 29 CTB1			
Sample ID: MB-69603	SampType: mblk	TestCode: EPA Method	l 300.0: Anions	
Client ID: PBS	Batch ID: 69603	RunNo: 90384		
Prep Date: 8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226290	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID: LCS-69603	SampType: Ics	TestCode: EPA Method	l 300.0: Anions	
Client ID: LCSS	Batch ID: 69603	RunNo: 90384		
Prep Date: 8/18/2022	Analysis Date: 8/18/2022	SeqNo: 3226292	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	14 1.5 15.00	0 95.4 90	110	

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208A82

22-Aug-22

Client: Project:	Vertex Re Onyx 29 (	esources S CTB1	ervices	, Inc.							
Sample ID: 22	08A82-001AMS	SampT	уре: М	6	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: BE	S22-01 4'	Batch	n ID: 69	593	R	RunNo: <b>9</b>	0393				
Prep Date: 8	/18/2022	Analysis D	0ate: <b>8/</b>	18/2022	S	SeqNo: 3	225976	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Orga	inics (DRO)	40	14	46.73	0	85.6	36.1	154			
Surr: DNOP		3.7		4.673		79.8	21	129			
Sample ID: 22	08A82-001AMSE	<b>)</b> SampT	уре: М	SD	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: BE	S22-01 4'	Batch	n ID: 69	593	R	RunNo: 9	0393				
Prep Date: 8	/18/2022	Analysis D	Date: 8/	18/2022	S	SeqNo: 3	225977	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Orga	inics (DRO)	44	14	48.12	0	90.9	36.1	154	9.02	33.9	

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208A82

22-Aug-22

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Vertex Re Onyx 29	esources S CTB1	ervices	, Inc.							
Sample ID: 2.5ug	gro Ics	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: LCSS		Batch	n ID: A9	0390	F	RunNo: 9	0390				
Prep Date:		Analysis D	ate: 8/	18/2022	5	SeqNo: 3	225322	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	ics (GRO)	25	5.0	25.00	0	102	72.3	137			
Surr: BFB		2200		1000		218	37.7	212			S
Sample ID: mb		SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: PBS		Batch	n ID: A9	0390	F	RunNo: 9	0390				
Prep Date:		Analysis D	ate: 8/	18/2022	S	SeqNo: 3	225323	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	ics (GRO)	ND	5.0								
Surr: BFB		1000		1000		103	37.7	212			
Sample ID: 2208a	82-001ams	SampT	ype: MS	3	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	е	
Client ID: BES2	2-01 4'	Batch	n ID: A9	0390	F	RunNo: 9	0390				
Prep Date:		Analysis D	ate: 8/	18/2022	S	SeqNo: 3	225325	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	ics (GRO)	25	5.0	25.00	0	99.8	70	130			
Surr: BFB		2100		1000		211	37.7	212			
Sample ID: 2208a	82-001amsd	I SampT	ype: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015D: Gaso	oline Rang	e	
Client ID: BES2	2-01 4'	Batch	n ID: A9	0390	F	RunNo: 9	0390				
Prep Date:		Analysis D	ate: 8/	18/2022	S	SeqNo: 3	225326	Units: mg/k	٢g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organ	ics (GRO)	24	5.0	25.00	0	97.5	70	130	2.39	20	
Surr: BFB		2100		1000		206	37.7	212	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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208A82

22-Aug-22

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

	Resources S 9 CTB1	Services,	Inc.							
Sample ID: 100ng btex Ics	Samp	Туре: <b>LC</b>	S	Tes	Code: EF	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batc	h ID: <b>B9</b>	0390	R	unNo: 90	0390				
Prep Date:	Analysis [	Date: <b>8/</b>	18/2022	S	eqNo: 32	225327	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	1.000	0	83.4	80	120			
oluene	0.86	0.050	1.000	0	85.6	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.2	80	120			
(ylenes, Total	2.6	0.10	3.000	0	87.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	70	130			
Sample ID: <b>mb</b>	Samp	Туре: <b>МЕ</b>	BLK	Tes	Code: EF	PA Method	8021B: Vola	tiles		
Client ID: PBS	Batc	h ID: <b>B9</b>	0390	R	unNo: 90	0390				
Prep Date:	Analysis [	Date: <b>8/</b>	18/2022	S	eqNo: 32	225328	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
oluene	ND	0.050								
Ethylbenzene	ND	0.050								
(ylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	70	130			
Sample ID: 2208a82-002am	s Samp	Туре: <b>МS</b>	5	Tes	Code: EF	PA Method	8021B: Vola	tiles		
Client ID: BES22-02 5'	Batc	h ID: <b>B9</b>	0390	R	unNo: <b>90</b>	0390				
Prep Date:	Analysis [	Date: <b>8/</b>	18/2022	S	eqNo: 32	225329	Units: mg/k	٢g		
Prep Date: Analyte	Analysis [ Result	Date: <b>8/</b> PQL		SPK Ref Val	eqNo: 32 %REC	225329 LowLimit	Units: <b>mg/k</b> HighLimit	<b>(g</b> %RPD	RPDLimit	Qual
	Result 0.88	PQL 0.025	SPK value 1.000		%REC 88.2	LowLimit 68.8	HighLimit 120	-	RPDLimit	Qual
Analyte Benzene Toluene	Result	PQL	SPK value 1.000 1.000	SPK Ref Val	%REC	LowLimit 68.8 73.6	HighLimit	-	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene	Result 0.88 0.91 0.92	PQL 0.025 0.050 0.050	SPK value 1.000 1.000 1.000	SPK Ref Val 0 0 0	%REC 88.2 90.5 91.9	LowLimit 68.8 73.6 72.7	HighLimit 120 124 129	-	RPDLimit	Qual
Analyte Benzene Foluene Ethylbenzene Kylenes, Total	Result 0.88 0.91 0.92 2.8	PQL 0.025 0.050	SPK value 1.000 1.000 1.000 3.000	SPK Ref Val 0 0	%REC 88.2 90.5 91.9 91.8	LowLimit 68.8 73.6 72.7 75.7	HighLimit 120 124 129 126	-	RPDLimit	Qual
Analyte Benzene Toluene Ethylbenzene	Result 0.88 0.91 0.92	PQL 0.025 0.050 0.050	SPK value 1.000 1.000 1.000	SPK Ref Val 0 0 0	%REC 88.2 90.5 91.9	LowLimit 68.8 73.6 72.7	HighLimit 120 124 129	-	RPDLimit	Qual
Analyte Benzene Foluene Ethylbenzene Kylenes, Total	Result 0.88 0.91 0.92 2.8 0.93	PQL 0.025 0.050 0.050	SPK value 1.000 1.000 3.000 1.000	SPK Ref Val 0 0 0 0	%REC 88.2 90.5 91.9 91.8 93.0	LowLimit 68.8 73.6 72.7 75.7 70	HighLimit 120 124 129 126	%RPD	RPDLimit	Qual
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene	Result           0.88           0.91           0.92           2.8           0.93           sd         Samp <sup>1</sup>	PQL 0.025 0.050 0.050 0.10	SPK value 1.000 1.000 3.000 1.000	SPK Ref Val 0 0 0 0 Test	%REC 88.2 90.5 91.9 91.8 93.0	LowLimit 68.8 73.6 72.7 75.7 70 PA Method	HighLimit 120 124 129 126 130	%RPD	RPDLimit	Qual
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>2208a82-002am</b>	Result           0.88           0.91           0.92           2.8           0.93           sd         Samp <sup>1</sup>	PQL 0.025 0.050 0.10 Type: <b>MS</b>	SPK value 1.000 1.000 3.000 1.000 5D 0390	SPK Ref Val 0 0 0 0 Tesi	%REC 88.2 90.5 91.9 91.8 93.0	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 0390	HighLimit 120 124 129 126 130	%RPD	RPDLimit	Qual
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208a82-002am Client ID: BES22-02 5'	Result           0.88           0.91           0.92           2.8           0.93           sd           Samp           Batc           Analysis I           Result	PQL 0.025 0.050 0.10 Type: MS h ID: B9 Date: 8/ PQL	SPK value 1.000 1.000 3.000 1.000 5D 0390 18/2022 SPK value	SPK Ref Val 0 0 0 0 Tesi	%REC 88.2 90.5 91.9 91.8 93.0 Code: EF cunNo: 90 SeqNo: 32 %REC	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 0390 225330 LowLimit	HighLimit 120 124 129 126 130 8021B: Vola Units: mg/P HighLimit	%RPD tiles {g %RPD	RPDLimit	Qual
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: 2208a82-002am Client ID: BES22-02 5' Prep Date: Analyte Benzene	Result           0.88           0.91           0.92           2.8           0.93           sd           Samp           Batc           Analysis I           Result           0.85	PQL 0.025 0.050 0.10 Type: MS h ID: B9 Date: 8/ PQL 0.025	SPK value 1.000 1.000 3.000 1.000 5D 0390 18/2022 SPK value 1.000	SPK Ref Val 0 0 0 0 Tes R S	%REC 88.2 90.5 91.9 91.8 93.0 COde: EF cunNo: 90 seqNo: 32 %REC 85.1	LowLimit 68.8 73.6 72.7 75.7 70 PA Method 0390 225330 LowLimit 68.8	HighLimit 120 124 129 126 130 8021B: Volar Units: mg/H HighLimit 120	%RPD tiles (g %RPD 3.60	RPDLimit 20	
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>2208a82-002am</b> Client ID: <b>BES22-02 5'</b> Prep Date: Analyte	Result           0.88           0.91           0.92           2.8           0.93           sd           Samp           Batc           Analysis I           Result	PQL 0.025 0.050 0.10 Type: MS h ID: B9 Date: 8/ PQL 0.025 0.050	SPK value 1.000 1.000 3.000 1.000 5D 0390 18/2022 SPK value 1.000 1.000	SPK Ref Val 0 0 0 Test R SPK Ref Val	%REC 88.2 90.5 91.9 91.8 93.0 Code: EF cunNo: 90 SeqNo: 32 %REC	LowLimit 68.8 73.6 72.7 75.7 70 <b>PA Method</b> 0390 225330 LowLimit 68.8 73.6	HighLimit 120 124 129 126 130 8021B: Vola Units: mg/P HighLimit	%RPD tiles {g %RPD	RPDLimit	
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>2208a82-002am</b> Client ID: <b>BES22-02 5'</b> Prep Date: Analyte Benzene Foluene Ethylbenzene	Result           0.88           0.91           0.92           2.8           0.93           sd           Samp <sup>1</sup> Batc           Analysis I           Result           0.85           0.87           0.89	PQL 0.025 0.050 0.10 Type: MS h ID: B9 Date: 8/ PQL 0.025 0.050 0.050	SPK value 1.000 1.000 3.000 1.000 5D 0390 18/2022 SPK value 1.000 1.000 1.000 1.000	SPK Ref Val 0 0 0 Test R SPK Ref Val 0	%REC 88.2 90.5 91.9 91.8 93.0 Code: EF SunNo: 90 SeqNo: 32 %REC 85.1 87.2 88.8	LowLimit 68.8 73.6 72.7 75.7 70 <b>PA Method</b> 0390 225330 LowLimit 68.8 73.6 72.7	HighLimit 120 124 129 126 130 8021B: Volar Units: mg/P HighLimit 120 124 129	%RPD tiles (g %RPD 3.60 3.69 3.42	RPDLimit 20 20 20	
Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenzene Sample ID: <b>2208a82-002am</b> Client ID: <b>BES22-02 5'</b> Prep Date: Analyte Benzene Foluene	Result           0.88           0.91           0.92           2.8           0.93   sd Samp <sup>T</sup> Batc Analysis E Result 0.85 0.87	PQL 0.025 0.050 0.10 Type: MS h ID: B9 Date: 8/ PQL 0.025 0.050	SPK value 1.000 1.000 3.000 1.000 5D 0390 18/2022 SPK value 1.000 1.000	SPK Ref Val 0 0 0 Test SPK Ref Val 0 0	%REC 88.2 90.5 91.9 91.8 93.0 Code: EF SunNo: 90 SeqNo: 32 %REC 85.1 87.2	LowLimit 68.8 73.6 72.7 75.7 70 <b>PA Method</b> 0390 225330 LowLimit 68.8 73.6	HighLimit 120 124 129 126 130 8021B: Volar Units: mg/k HighLimit 120 124	%RPD tiles (g %RPD 3.60 3.69	RPDLimit 20 20	

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

WO#: 2208A82

Released to Imaging: 11/22/2022 2:49:36 PM

	ex Resources ces, Inc.	Work Orde	r Number: 220	8A82			RcptN	o: 1
Received By: Trac	cy Casarrubias	8/18/2022 7:1	15:00 AM					
Completed By: Trac	cy Casarrubias	8/18/2022 8:0	00:00 AM					
Reviewed By:	24 8.18	.22						
Chain of Custody								
1. Is Chain of Custody	complete?		Yes		No		Not Present	
2. How was the sample	e delivered?		Cou	rier				
Log In								
3. Was an attempt mad	de to cool the samples	9?	Yes		No			
4. Were all samples red	ceived at a temperatur	re of >0° C to 6.0°	°C Yes		No			
5. Sample(s) in proper	container(s)?		Yes	•	No			
6. Sufficient sample vol	ume for indicated test	(s)?	Yes		No [			
7. Are samples (except	VOA and ONG) prope	erly preserved?	Yes	~	No [			
8. Was preservative add	ded to bottles?		Yes		No [	~	NA 🗌	
9. Received at least 1 v	ial with headspace <1	/4" for AQ VOA?	Yes		No [		NA 🔽	
10. Were any sample co	ntainers received brok	ken?	Yes		No	V		
11. Does paperwork mat			Yes		No [		# of preserved bottles checked for pH:	
(Note discrepancies of 2. Are matrices correctly		f Custody2	Yes		No [		(<2 c Adjusted?	or >12 unless noted)
3. Is it clear what analys		a ousloby?	Yes		No [			
4. Were all holding time (If no, notify custome	s able to be met?		Yes		No [		Checked by:	Jus/18/22
pecial Handling (in	f applicable)							
15. Was client notified of	f all discrepancies with	this order?	Yes		No		NA 🔽	
Person Notified	4: T		Date:			-		
By Whom:	1		Via: 🗌 eM	ail 🗌 Pl	none 🗌 I	Fax	In Person	
Regarding:								
Client Instruction	ons:							
16. Additional remarks:								

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Page 1 of 1

Olient         Altern Vervez, Project Name.         Distriction         Alta LESTA ABORATORY www.hallenviormentation.           Project Name.         Project Name.         Annu Lesta Aboratory www.hallenviormentation.           Project Name.         Project Name.         Annu Lesta Aboratory www.hallenviormentation.           Project Name.         Project Name.         Annu Lesta Aboratory Mone#i.         Project Name           Project Name         Project Name         Project Name         Project Name         Annu Lesta Aboratory Mone#i.         Annu Lesta Aboratory Mone#information         Annu Lesta Aboratory Mone#information         Annu Lesta Aboratory Mone#information         Annu Lesta Aboratory Mone#information           Annu Lesta         District Aboratory Mone#information         District Aboratory Mone#information         Annu Lesta Aboratory Mone#information         Annu LestAboratory Mone#information         Annu LestAboratory Mone#information         Annu LestAboratory Monu Aboratory Mone#information <th></th> <th>Chain</th> <th>D-Jo-</th> <th>Chain-of-Custody Record</th> <th>Turn-Around T</th> <th>Time:</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>ļ</th> <th></th> <th></th>		Chain	D-Jo-	Chain-of-Custody Record	Turn-Around T	Time:							ļ		
Project Name:     Project Name:     Project Name:     Project Name:     Project Name:       II or Faxk::     II or Faxk::     DNUJV 2A CTB I     4901 Han       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     Project Manager:     NUN 2A CTB I       II or Faxk::     II or Faxk::     II or Faxk::     NUN 2A CTB I       II or Faxk::     II or Faxk::     II or Faxk::     II or Faxk::       II or Faxk::     II or Faxk::     II or Faxk::     II or Faxk::       II in Matrix:     Sample:     II or Faxk::     II or Faxk::       II in Matrix:     Sample:     II or Faxk::     II or Faxk::       II in Matrix:     Sample:     II or Faxk::     II or Faxk::       II in Matrix:     Sample:     II or Faxk::     II or Faxk::       II in Matrix:     Sample:     II or Faxk::     II or Faxk	Client:		N/US	ereex	□ Standard	K Rush	Samu Davk			A N		N N N		RORATOR	.>
Ing Address:     On U/X     MC CTB I     4901 Hawkins NE       In Fixed     Din U/X     MC CTB I     4901 Hawkins NE       In Fixed     Project #:     Project #:     716 55.345.355       In Fixed     Din Fixed     Project Manager:     200 1       In Fixed     Din Fixed     Project Manager:     200 1       In Fixed     Din Fixed     Project Manager:     200 1       In Fixed     Din Fixed     200 1     100 1       In Fixed     Din Fixed     200 1     100 1       In Fixed     Din Fixed     200 1     100 1       In Fixed     Sampler:     00 1     100 5       In Fixed     Sampler:     00 5     100 5       In Fixed     Sampler:     00 5     100 5       In Fixed					Project Name						w haller		l of let up of		
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C Package:       C Package:       Level 4 (Full Validation)       Luck 1       Level 4 (Full Validation)         Inflation:	email c	or Fax#:			Project Mana	ger:				-	0		(tr		:45:
OD (Type)         Definition         Rate Compliance         Sampler: ()         Rest Compliance         Sampler: ()         Sampler: ()         Rest Compliance         Sampler: ()         Rest Compliance         Sampler: ()         Sample	QA/QC	Package		Level 4 (Full Validation)	Ken		you		_	SWIS	S ''Oc		192dA\		31 AM
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Time         Matrix         Sample Name         Cooler Templement on;5.3 - 1: -5.1         (C)         Matrix         Sample Name         Cooler Templement on;5.3 - 1: -5.1         (C)         Matrix         Sample Name         Container         Preservative         HEAL NO.         EEAL NO.         EEAL NO.         EEAL NO.         EEAL NO.         EEAL NO.         EEAC         Matrix         Sample Name         Container         Preservative         HEAL NO.         Matrix         Sample Name         Container         Preservative         Matrix         Sample Name         Cooler Templement on the No.         Matrix         Sample Name         Cooler         Matrix         Sample Name         Cooler Templement on the No.         Matrix         Sample Name         Cooler         Matrix         Matri         Matrix         Matrix <t< td=""><td></td><td>(Type)</td><td></td><td></td><td># of Coolers:</td><td>1</td><td></td><td></td><td>səpi</td><td>1.00</td><td></td><td></td><td>1</td><td></td><td></td></t<>		(Type)			# of Coolers:	1			səpi	1.00			1		
Time         Matrix         Sample Name         Container         Preservative         HEAL No.         EX         EX <td></td> <td></td> <td></td> <td></td> <td>Cooler Temp</td> <td>- A</td> <td>1:5.2 (</td> <td></td> <td>oitee</td> <td></td> <td>-</td> <td></td> <td>1000</td> <td></td> <td></td>					Cooler Temp	- A	1:5.2 (		oitee		-		1000		
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Analytical Report Lab Order 2208C61

Date Reported:

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: BES22-09 8' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/18/2022 2:00:00 PM Lab ID: 2208C61-001 Matrix: SOIL Received Date: 8/20/2022 8:45:00 AM Analyses Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH **Diesel Range Organics (DRO)** ND 13 mg/Kg 1 8/22/2022 10:13:59 AM Motor Oil Range Organics (MRO) ND 44 mg/Kg 1 8/22/2022 10:13:59 AM Surr: DNOP 103 21-129 %Rec 8/22/2022 10:13:59 AM 1 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/22/2022 10:44:00 AM 3.4 mg/Kg 1 Surr: BFB 95.7 37.7-212 %Rec 1 8/22/2022 10:44:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 0.017 8/22/2022 10:44:00 AM mg/Kg 1 Toluene ND 0.034 mg/Kg 1 8/22/2022 10:44:00 AM Ethylbenzene ND 0.034 mg/Kg 8/22/2022 10:44:00 AM 1 Xylenes, Total ND 0.068 mg/Kg 1 8/22/2022 10:44:00 AM Surr: 4-Bromofluorobenzene 91.1 70-130 %Rec 1 8/22/2022 10:44:00 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/22/2022 11:57:00 AM mg/Kg 20

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

Qualifiers:	* D H	Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix PREFILINITY Holding times for preparation or analysis exceeded	JA <sup>B</sup>	Analyte detected in the associated Method Blank Estimated value Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	D 1 . CO
	PQL	Practical Quanitative Limit	RL	Reporting Limit	Page 1 of 0
	S	% Recovery outside of range due to dilution or matrix interference			

Analytical Report Lab Order 2208C61

Date Reported:

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Devon Energy Client Sample ID: BES22-10 8' **Project:** Onyx 29 CTB1 Separator Collection Date: 8/18/2022 2:10:00 PM 2208C61-002 Lab ID: Matrix: SOIL Received Date: 8/20/2022 8:45:00 AM Analyses Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH **Diesel Range Organics (DRO)** ND 14 mg/Kg 1 8/22/2022 10:37:55 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/22/2022 10:37:55 AM Surr: DNOP 99.0 21-129 %Rec 8/22/2022 10:37:55 AM 1 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 8/22/2022 11:03:00 AM 3.1 mg/Kg 1 Surr: BFB 99.5 37.7-212 %Rec 1 8/22/2022 11:03:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: BRM Benzene ND 0.015 8/22/2022 11:03:00 AM mg/Kg 1 Toluene ND 0.031 mg/Kg 1 8/22/2022 11:03:00 AM Ethylbenzene ND 0.031 mg/Kg 8/22/2022 11:03:00 AM 1 Xylenes, Total ND 0.061 mg/Kg 1 8/22/2022 11:03:00 AM Surr: 4-Bromofluorobenzene 91.7 70-130 %Rec 1 8/22/2022 11:03:00 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride ND 60 8/22/2022 12:09:00 PM mg/Kg 20

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

Qualifiers:	* D H	Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix PREFILITION Holding times for preparation or analysis exceeded		Analyte detected in the associated Method Blank Prstimated value Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	Р	Sample pH Not In Range	D 2 . CO
	PQL	Practical Quanitative Limit	RL	Reporting Limit	Page 2 of 0
	S	% Recovery outside of range due to dilution or matrix interference			

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CT B1 Separator	
Lab ID:	2208G90-001	N

Client Sample ID: WES22 - 45 3' Collection Date: 8/26/2022 9:30:00 AM

Matrix: MEOH (SOIL)

OIL) Received Date: 8/27/2022 9:35:00 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	15	mg/Kg	1	8/30/2022 3:01:56 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/30/2022 3:01:56 AM
Surr: DNOP	91.4	21-129	%Rec	1	8/30/2022 3:01:56 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	8/27/2022 3:36:00 PM
Surr: BFB	110	37.7-212	%Rec	1	8/27/2022 3:36:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.020	mg/Kg	1	8/27/2022 3:36:00 PM
Toluene	ND	0.040	mg/Kg	1	8/27/2022 3:36:00 PM
Ethylbenzene	ND	0.040	mg/Kg	1	8/27/2022 3:36:00 PM
Xylenes, Total	ND	0.080	mg/Kg	1	8/27/2022 3:36:00 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	8/27/2022 3:36:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 5:47:50 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 0

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CT B1 Separator	
Lab ID:	2208G90-002	I

Client Sample ID: WES22 - 46 3' Collection Date: 8/26/2022 9:35:00 AM

Matrix: MEOH (SOIL)

(SOIL) **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/30/2022 3:13:00 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/30/2022 3:13:00 AM
Surr: DNOP	92.0	21-129	%Rec	1	8/30/2022 3:13:00 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	8/27/2022 3:56:00 PM
Surr: BFB	103	37.7-212	%Rec	1	8/27/2022 3:56:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.017	mg/Kg	1	8/27/2022 3:56:00 PM
Toluene	ND	0.034	mg/Kg	1	8/27/2022 3:56:00 PM
Ethylbenzene	ND	0.034	mg/Kg	1	8/27/2022 3:56:00 PM
Xylenes, Total	ND	0.068	mg/Kg	1	8/27/2022 3:56:00 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	8/27/2022 3:56:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 6:25:03 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CT B1 Separator	
Lab ID:	2208G90-003	

Client Sample ID: WES22 - 47 3' Collection Date: 8/26/2022 9:40:00 AM

Matrix: MEOH (SOIL)

(SOIL) **Received Date:** 8/27/2022 9:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/30/2022 3:34:56 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/30/2022 3:34:56 AM
Surr: DNOP	94.6	21-129	%Rec	1	8/30/2022 3:34:56 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	8/27/2022 4:16:00 PM
Surr: BFB	111	37.7-212	%Rec	1	8/27/2022 4:16:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.017	mg/Kg	1	8/27/2022 4:16:00 PM
Toluene	ND	0.034	mg/Kg	1	8/27/2022 4:16:00 PM
Ethylbenzene	ND	0.034	mg/Kg	1	8/27/2022 4:16:00 PM
Xylenes, Total	ND	0.068	mg/Kg	1	8/27/2022 4:16:00 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/27/2022 4:16:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 6:37:28 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

<b>CLIENT:</b>	Vertex Resources Services, Inc.	
Project:	Onyx 29 CT B1 Separator	
Lab ID:	2208G90-004	]

Client Sample ID: WES22 - 48 3' Collection Date: 8/26/2022 9:45:00 AM

Matrix: MEOH (SOIL)

SOIL) Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	8/30/2022 3:45:57 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/30/2022 3:45:57 AM
Surr: DNOP	96.0	21-129	%Rec	1	8/30/2022 3:45:57 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.9	mg/Kg	1	8/27/2022 4:35:00 PM
Surr: BFB	108	37.7-212	%Rec	1	8/27/2022 4:35:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.019	mg/Kg	1	8/27/2022 4:35:00 PM
Toluene	ND	0.039	mg/Kg	1	8/27/2022 4:35:00 PM
Ethylbenzene	ND	0.039	mg/Kg	1	8/27/2022 4:35:00 PM
Xylenes, Total	ND	0.077	mg/Kg	1	8/27/2022 4:35:00 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	8/27/2022 4:35:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 6:49:53 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CT B1 Separator	
Lab ID:	2208G90-005	N

Client Sample ID: WES22 - 49 1' Collection Date: 8/26/2022 9:50:00 AM

Matrix: MEOH (SOIL)

(SOIL) Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/30/2022 3:56:59 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/30/2022 3:56:59 AM
Surr: DNOP	93.8	21-129	%Rec	1	8/30/2022 3:56:59 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	8/27/2022 4:55:00 PM
Surr: BFB	109	37.7-212	%Rec	1	8/27/2022 4:55:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.018	mg/Kg	1	8/27/2022 4:55:00 PM
Toluene	ND	0.037	mg/Kg	1	8/27/2022 4:55:00 PM
Ethylbenzene	ND	0.037	mg/Kg	1	8/27/2022 4:55:00 PM
Xylenes, Total	ND	0.073	mg/Kg	1	8/27/2022 4:55:00 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	8/27/2022 4:55:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 7:02:17 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CT B1 Separator	
Lab ID:	2208G90-006	I

Client Sample ID: WES22 - 50 0.5' Collection Date: 8/26/2022 9:55:00 AM

Matrix: MEOH (SOIL) Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/30/2022 4:07:53 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/30/2022 4:07:53 AM
Surr: DNOP	86.0	21-129	%Rec	1	8/30/2022 4:07:53 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	8/27/2022 5:34:00 PM
Surr: BFB	107	37.7-212	%Rec	1	8/27/2022 5:34:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.018	mg/Kg	1	8/27/2022 5:34:00 PM
Toluene	ND	0.037	mg/Kg	1	8/27/2022 5:34:00 PM
Ethylbenzene	ND	0.037	mg/Kg	1	8/27/2022 5:34:00 PM
Xylenes, Total	ND	0.073	mg/Kg	1	8/27/2022 5:34:00 PM
Surr: 4-Bromofluorobenzene	99.5	70-130	%Rec	1	8/27/2022 5:34:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 7:14:42 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level.
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Analytical Report

# Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208G90

Date Reported:

<b>CLIENT:</b>	Vertex Resources Services, Inc.
Project:	Onyx 29 CT B1 Separator

2208G90-007

Client Sample ID: BES22 - 23 1' Collection Date: 8/26/2022 10:00:00 AM

Matrix: MEOH (SOIL)

SOIL) Received Date: 8/27/2022 9:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	8/30/2022 4:18:41 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/30/2022 4:18:41 AM
Surr: DNOP	88.1	21-129	%Rec	1	8/30/2022 4:18:41 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	3.4	mg/Kg	1	8/27/2022 5:54:00 PM
Surr: BFB	102	37.7-212	%Rec	1	8/27/2022 5:54:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.017	mg/Kg	1	8/27/2022 5:54:00 PM
Toluene	ND	0.034	mg/Kg	1	8/27/2022 5:54:00 PM
Ethylbenzene	ND	0.034	mg/Kg	1	8/27/2022 5:54:00 PM
Xylenes, Total	ND	0.068	mg/Kg	1	8/27/2022 5:54:00 PM
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	8/27/2022 5:54:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	ND	60	mg/Kg	20	8/29/2022 7:27:06 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level.
 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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June 07, 2022

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

OrderNo.: 2205B74

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

RE: Onyx 29 CTB1

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 23 sample(s) on 5/26/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Lab ID:

Analyses

**Analytical Report** Lab Order 2205B74

Date Reported: 6/7/2022

5/28/2022 2:22:02 AM

5/28/2022 2:22:02 AM 5/28/2022 2:22:02 AM

6/1/2022 10:34:46 PM

Analyst: JMT

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-01 0' Onyx 29 CTB1 Collection Date: 5/24/2022 8:30:00 AM 2205B74-001 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: ED Diesel Range Organics (DRO) 20 9.6 mg/Kg 1 5/31/2022 3:47:57 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 5/31/2022 3:47:57 PM Surr: DNOP 61.6 51.1-141 %Rec 1 5/31/2022 3:47:57 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 2:22:02 AM 4.7 mg/Kg 1 Surr: BFB 91.4 37.7-212 %Rec 1 5/28/2022 2:22:02 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 0.023 ma/Ka 1 5/28/2022 2:22:02 AM 5/28/2022 2:22:02 AM

Benzene	ND	0.023	mg/Kg	1
Toluene	ND	0.047	mg/Kg	1
Ethylbenzene	ND	0.047	mg/Kg	1
Xylenes, Total	ND	0.093	mg/Kg	1
Surr: 4-Bromofluorobenzene	93.8	70-130	%Rec	1
EPA METHOD 300.0: ANIONS				
Chloride	ND	61	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
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- в Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 31

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-002

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-02 0' Collection Date: 5/24/2022 8:40:00 AM Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/31/2022 4:11:53 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 4:11:53 PM
Surr: DNOP	57.9	51.1-141	%Rec	1	5/31/2022 4:11:53 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2022 3:32:52 AM
Surr: BFB	97.7	37.7-212	%Rec	1	5/28/2022 3:32:52 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	5/28/2022 3:32:52 AM
Toluene	ND	0.047	mg/Kg	1	5/28/2022 3:32:52 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2022 3:32:52 AM
Xylenes, Total	ND	0.095	mg/Kg	1	5/28/2022 3:32:52 AM
Surr: 4-Bromofluorobenzene	98.0	70-130	%Rec	1	5/28/2022 3:32:52 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	5400	300	mg/Kg	100	6/2/2022 12:06:38 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project: Onyx 29 CTB1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-02 2' Collection Date: 5/24/2022 8:45:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-003	Matrix: SOIL	Received Date: 5/26/2022 7:00:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RAI	NGE ORGANICS				Analyst: ED		
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/31/2022 4:35:37 PM		
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/31/2022 4:35:37 PM		
Surr: DNOP	64.1	51.1-141	%Rec	1	5/31/2022 4:35:37 PM		
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: NSB		
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/28/2022 3:56:23 AM		
Surr: BFB	96.6	37.7-212	%Rec	1	5/28/2022 3:56:23 AM		
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	0.024	mg/Kg	1	5/28/2022 3:56:23 AM		
Toluene	ND	0.049	mg/Kg	1	5/28/2022 3:56:23 AM		
Ethylbenzene	ND	0.049	mg/Kg	1	5/28/2022 3:56:23 AM		
Xylenes, Total	ND	0.098	mg/Kg	1	5/28/2022 3:56:23 AM		
Surr: 4-Bromofluorobenzene	97.0	70-130	%Rec	1	5/28/2022 3:56:23 AM		
EPA METHOD 300.0: ANIONS					Analyst: NAI		
Chloride	2700	150	mg/Kg	50	6/2/2022 12:19:03 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Analyses

**Analytical Report** Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-02 4' Onyx 29 CTB1 Collection Date: 5/24/2022 1:15:00 PM 2205B74-004 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyst: ED EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 9.9 mg/Kg 1 5/31/2022 4:59:23 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 5/31/2022 4:59:23 PM Surr: DNOP 59.9 51.1-141 %Rec 1 5/31/2022 4:59:23 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 4:20:05 AM 4.6 mg/Kg 1 Surr: BFB 98.0 37.7-212 %Rec 1 5/28/2022 4:20:05 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB ND 5/28/2022 4:20:05 AM 0.023 mg/Kg 1

Benzene Toluene ND 0.046 mg/Kg 1 5/28/2022 4:20:05 AM Ethylbenzene ND 0.046 mg/Kg 1 5/28/2022 4:20:05 AM Xylenes, Total ND 0.092 mg/Kg 1 5/28/2022 4:20:05 AM Surr: 4-Bromofluorobenzene 97.1 70-130 %Rec 1 5/28/2022 4:20:05 AM **EPA METHOD 300.0: ANIONS** Chloride mg/Kg 6/2/2022 12:01:38 AM 260 61 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

POL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 4 of 31

Analyst: JMT

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-005

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-03 0' Collection Date: 5/24/2022 8:50:00 AM Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: ED
Diesel Range Organics (DRO)	4100	95		mg/Kg	10	6/1/2022 12:24:41 PM
Motor Oil Range Organics (MRO)	2400	470		mg/Kg	10	6/1/2022 12:24:41 PM
Surr: DNOP	0	51.1-141	S	%Rec	10	6/1/2022 12:24:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/28/2022 4:43:44 AM
Surr: BFB	93.4	37.7-212		%Rec	1	5/28/2022 4:43:44 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/28/2022 4:43:44 AM
Toluene	ND	0.047		mg/Kg	1	5/28/2022 4:43:44 AM
Ethylbenzene	ND	0.047		mg/Kg	1	5/28/2022 4:43:44 AM
Xylenes, Total	ND	0.094		mg/Kg	1	5/28/2022 4:43:44 AM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	5/28/2022 4:43:44 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	5500	150		mg/Kg	50	6/2/2022 12:31:27 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 6/7/2022

6/2/2022 1:08:39 PM

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-03 2' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 8:55:00 AM Lab ID: 2205B74-006 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: ED EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** 240 9.6 mg/Kg 1 6/1/2022 1:12:26 PM Motor Oil Range Organics (MRO) 6/1/2022 1:12:26 PM 140 48 mg/Kg 1 Surr: DNOP 93.2 51.1-141 %Rec 1 6/1/2022 1:12:26 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 5:30:59 AM 4.9 mg/Kg 1 Surr: BFB 96.0 37.7-212 %Rec 1 5/28/2022 5:30:59 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 5/28/2022 5:30:59 AM 0.025 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 5/28/2022 5:30:59 AM Ethylbenzene ND 0.049 mg/Kg 1 5/28/2022 5:30:59 AM Xylenes, Total ND 0.099 mg/Kg 1 5/28/2022 5:30:59 AM Surr: 4-Bromofluorobenzene 98.5 70-130 %Rec 1 5/28/2022 5:30:59 AM **EPA METHOD 300.0: ANIONS** Analyst: NAI

3700

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

**Qualifiers:** 

Chloride

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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

mg/Kg

50

150

P Sample pH Not In Range

RL Reporting Limit

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CLIENT: Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022
Client Sample ID: BH22-04 0'

Project:	Onyx 29 CTB1		Collec	tion Date:	5/24/2	.022 9:00:00 AM
Lab ID:	2205B74-007	Matrix: SOIL	Recei	ived Date:	5/26/2	022 7:00:00 AM
Analyses		Result	RL Qua	al Units	DF	Date Analyzed
EPA ME	THOD 8015M/D: DIESEL RA	ANGE ORGANICS				Analyst: <b>ED</b>
Diesel R	ange Organics (DRO)	12	9.0	mg/Kg	1	5/31/2022 6:11:58 PM
Motor Oi	I Range Organics (MRO)	ND	45	mg/Kg	1	5/31/2022 6:11:58 PM
Surr: I	ONOP	75.3	51.1-141	%Rec	1	5/31/2022 6:11:58 PM
EPA ME	THOD 8015D: GASOLINE R	ANGE				Analyst: NSB
Gasoline	Range Organics (GRO)	ND	4.8	mg/Kg	1	5/28/2022 5:54:36 AM
Surr: E	BFB	99.6	37.7-212	%Rec	1	5/28/2022 5:54:36 AM
EPA ME	THOD 8021B: VOLATILES					Analyst: NSB
Benzene	9	ND	0.024	mg/Kg	1	5/28/2022 5:54:36 AM
Toluene		ND	0.048	mg/Kg	1	5/28/2022 5:54:36 AM
Ethylben	zene	ND	0.048	mg/Kg	1	5/28/2022 5:54:36 AM
Xylenes,	Total	ND	0.097	mg/Kg	1	5/28/2022 5:54:36 AM
Surr: 4	4-Bromofluorobenzene	95.7	70-130	%Rec	1	5/28/2022 5:54:36 AM
EPA ME	THOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride		98	60	mg/Kg	20	6/2/2022 12:38:51 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-008

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-05 0' Collection Date: 5/24/2022 9:10:00 AM Received Date: 5/26/2022 7:00:00 AM

				0, 20, 2	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: <b>ED</b>
Diesel Range Organics (DRO)	29	9.4	mg/Kg	1	5/31/2022 6:36:29 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 6:36:29 PM
Surr: DNOP	78.6	51.1-141	%Rec	1	5/31/2022 6:36:29 PM
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/28/2022 6:18:19 AM
Surr: BFB	93.9	37.7-212	%Rec	1	5/28/2022 6:18:19 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	5/28/2022 6:18:19 AM
Toluene	ND	0.046	mg/Kg	1	5/28/2022 6:18:19 AM
Ethylbenzene	ND	0.046	mg/Kg	1	5/28/2022 6:18:19 AM
Xylenes, Total	ND	0.092	mg/Kg	1	5/28/2022 6:18:19 AM
Surr: 4-Bromofluorobenzene	95.2	70-130	%Rec	1	5/28/2022 6:18:19 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	73	60	mg/Kg	20	6/2/2022 12:51:17 AM

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

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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H Holding times for preparation or analysis exceeded

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-06 0' Collection Date: 5/24/2022 9:15:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-009	Matrix: SOIL	Rece	vived Date:	5/26/2	022 7:00:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	17	10	mg/Kg	1	5/31/2022 7:00:53 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	5/31/2022 7:00:53 PM
Surr: DNOP	71.5	51.1-141	%Rec	1	5/31/2022 7:00:53 PM
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2022 6:41:58 AM
Surr: BFB	94.5	37.7-212	%Rec	1	5/28/2022 6:41:58 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	5/28/2022 6:41:58 AM
Toluene	ND	0.047	mg/Kg	1	5/28/2022 6:41:58 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2022 6:41:58 AM
Xylenes, Total	ND	0.093	mg/Kg	1	5/28/2022 6:41:58 AM
Surr: 4-Bromofluorobenzene	96.2	70-130	%Rec	1	5/28/2022 6:41:58 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	5000	150	mg/Kg	50	6/2/2022 1:21:03 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-010

**Analytical Report** Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-06 2' Collection Date: 5/24/2022 9:20:00 AM Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/31/2022 7:25:13 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 7:25:13 PM
Surr: DNOP	69.8	51.1-141	%Rec	1	5/31/2022 7:25:13 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/28/2022 7:05:38 AM
Surr: BFB	91.8	37.7-212	%Rec	1	5/28/2022 7:05:38 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	5/28/2022 7:05:38 AM
Toluene	ND	0.049	mg/Kg	1	5/28/2022 7:05:38 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/28/2022 7:05:38 AM
Xylenes, Total	ND	0.097	mg/Kg	1	5/28/2022 7:05:38 AM
Surr: 4-Bromofluorobenzene	96.5	70-130	%Rec	1	5/28/2022 7:05:38 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	4500	150	mg/Kg	50	6/2/2022 1:33:28 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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-011

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

 Client Sample ID: BH22-06 6'

 Collection Date: 5/24/2022 1:45:00 PM

 Matrix: SOIL
 Received Date: 5/26/2022 7:00:00 AM

 Result
 RL Oual Units DE Date Analyzed

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	5/31/2022 7:49:27 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 7:49:27 PM
Surr: DNOP	71.5	51.1-141	%Rec	1	5/31/2022 7:49:27 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	5/28/2022 7:29:19 AM
Surr: BFB	92.6	37.7-212	%Rec	1	5/28/2022 7:29:19 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	5/28/2022 7:29:19 AM
Toluene	ND	0.046	mg/Kg	1	5/28/2022 7:29:19 AM
Ethylbenzene	ND	0.046	mg/Kg	1	5/28/2022 7:29:19 AM
Xylenes, Total	ND	0.092	mg/Kg	1	5/28/2022 7:29:19 AM
Surr: 4-Bromofluorobenzene	93.9	70-130	%Rec	1	5/28/2022 7:29:19 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	120	60	mg/Kg	20	6/2/2022 1:28:30 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

- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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H Holding times for preparation or analysis exceeded

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-07 0' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 10:20:00 AM Lab ID: 2205B74-012 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: SB EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 9.5 mg/Kg 1 5/27/2022 1:09:32 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 5/27/2022 1:09:32 PM Surr: DNOP 78.1 51.1-141 %Rec 1 5/27/2022 1:09:32 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 100 60 6/2/2022 1:40:54 AM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 5/27/2022 1:54:40 PM Benzene mg/Kg 1 Toluene ND 5/27/2022 1:54:40 PM 0.050 mg/Kg 1 Ethylbenzene ND 0.050 mg/Kg 1 5/27/2022 1:54:40 PM Xylenes, Total ND 0.10 mg/Kg 1 5/27/2022 1:54:40 PM Surr: 1,2-Dichloroethane-d4 97.6 %Rec 5/27/2022 1:54:40 PM 70-130 1 Surr: 4-Bromofluorobenzene 94.3 70-130 %Rec 1 5/27/2022 1:54:40 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 1:54:40 PM 111 Surr: Toluene-d8 99.1 70-130 %Rec 1 5/27/2022 1:54:40 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 1:54:40 PM 5.0 1 Surr: BFB 107 70-130 %Rec 1 5/27/2022 1:54:40 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-013

Analytical Report Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-08 0' Collection Date: 5/24/2022 9:25:00 AM

Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst: <b>SB</b>
Diesel Range Organics (DRO)	7100	94		mg/Kg	10	5/27/2022 7:21:06 PM
Motor Oil Range Organics (MRO)	4700	470		mg/Kg	10	5/27/2022 7:21:06 PM
Surr: DNOP	0	51.1-141	S	%Rec	10	5/27/2022 7:21:06 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	1300	61		mg/Kg	20	6/2/2022 2:18:07 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JR
Benzene	ND	0.024		mg/Kg	1	5/27/2022 3:20:57 PM
Toluene	ND	0.048		mg/Kg	1	5/27/2022 3:20:57 PM
Ethylbenzene	ND	0.048		mg/Kg	1	5/27/2022 3:20:57 PM
Xylenes, Total	ND	0.095		mg/Kg	1	5/27/2022 3:20:57 PM
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	5/27/2022 3:20:57 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	5/27/2022 3:20:57 PM
Surr: Dibromofluoromethane	114	70-130		%Rec	1	5/27/2022 3:20:57 PM
Surr: Toluene-d8	98.1	70-130		%Rec	1	5/27/2022 3:20:57 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 3:20:57 PM
Surr: BFB	109	70-130		%Rec	1	5/27/2022 3:20:57 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-08 2' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 9:30:00 AM Lab ID: 2205B74-014 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: SB **Diesel Range Organics (DRO)** 76 10 mg/Kg 1 5/27/2022 1:33:59 PM Motor Oil Range Organics (MRO) 72 50 mg/Kg 1 5/27/2022 1:33:59 PM Surr: DNOP 98.3 51.1-141 %Rec 1 5/27/2022 1:33:59 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 4700 150 6/2/2022 1:45:52 PM mg/Kg 50 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 5/27/2022 4:47:23 PM Benzene ND mg/Kg 1 Toluene ND 5/27/2022 4:47:23 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 5/27/2022 4:47:23 PM Xylenes, Total ND 0.096 mg/Kg 1 5/27/2022 4:47:23 PM Surr: 1,2-Dichloroethane-d4 106 70-130 %Rec 5/27/2022 4:47:23 PM 1 Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1 5/27/2022 4:47:23 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 4:47:23 PM 119 Surr: Toluene-d8 96.9 70-130 %Rec 1 5/27/2022 4:47:23 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 4:47:23 PM 48 1 Surr: BFB 107 70-130 %Rec 1 5/27/2022 4:47:23 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Onyx 29 CTB1

2205B74-015

Diesel Range Organics (DRO)

Diesel Range Organics (DRO)

Motor Oil Range Organics (MRO)

**Project:** 

Lab ID:

Analyses

**Analytical Report** Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 **CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-08 5' Collection Date: 5/24/2022 1:40:00 PM Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB mg/Kg 120 9.4 1 5/27/2022 1:58:24 PM ND mg/Kg 1 5/27/2022 1:58:24 PM ND mg/Kg 1 5/27/2022 1:58:24 PM 5/27/2022 1.58.24 PM 120 ma/Ka 17 1

5 5 ( )			0 0		
Motor Oil Range Organics (MRO)	120	47	mg/Kg	1	5/27/2022 1:58:24 PM
Surr: DNOP		-	%Rec	1	5/27/2022 1:58:24 PM
Surr: DNOP	104	51.1-141	%Rec	1	5/27/2022 1:58:24 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	720	60	mg/Kg	20	6/2/2022 2:42:57 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.025	mg/Kg	1	5/27/2022 5:16:12 PM
Toluene	ND	0.050	mg/Kg	1	5/27/2022 5:16:12 PM
Ethylbenzene	ND	0.050	mg/Kg	1	5/27/2022 5:16:12 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/27/2022 5:16:12 PM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	5/27/2022 5:16:12 PM
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	5/27/2022 5:16:12 PM
Surr: Dibromofluoromethane	122	70-130	%Rec	1	5/27/2022 5:16:12 PM
Surr: Toluene-d8	96.8	70-130	%Rec	1	5/27/2022 5:16:12 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/27/2022 5:16:12 PM
Surr: BFB	108	70-130	%Rec	1	5/27/2022 5:16:12 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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- E Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-09 0 **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 9:35:00 AM Lab ID: 2205B74-016 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: SB EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** 16 9.3 mg/Kg 1 5/31/2022 12:32:21 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 5/31/2022 12:32:21 PM Surr: DNOP 82.5 51.1-141 %Rec 1 5/31/2022 12:32:21 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 370 60 6/2/2022 2:55:22 AM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 5/27/2022 5:45:01 PM Benzene mg/Kg 1 Toluene ND 5/27/2022 5:45:01 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 5/27/2022 5:45:01 PM Xylenes, Total ND 0.098 mg/Kg 1 5/27/2022 5:45:01 PM Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 5/27/2022 5:45:01 PM 1 Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 5/27/2022 5:45:01 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 5:45:01 PM 116 Surr: Toluene-d8 98.6 70-130 %Rec 1 5/27/2022 5:45:01 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 5:45:01 PM 49 1 Surr: BFB 109 70-130 %Rec 1 5/27/2022 5:45:01 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-10 0 **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 9:45:00 AM Lab ID: 2205B74-017 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: SB **Diesel Range Organics (DRO)** 390 9.7 mg/Kg 1 5/27/2022 2:22:47 PM Motor Oil Range Organics (MRO) 370 48 mg/Kg 1 5/27/2022 2:22:47 PM Surr: DNOP 104 51.1-141 %Rec 1 5/27/2022 2:22:47 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 20000 1500 6/2/2022 1:58:16 PM mg/Kg 500 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 5/27/2022 6:13:46 PM Benzene mg/Kg 1 Toluene ND 5/27/2022 6:13:46 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 5/27/2022 6:13:46 PM Xylenes, Total ND 0.098 mg/Kg 1 5/27/2022 6:13:46 PM Surr: 1,2-Dichloroethane-d4 104 70-130 %Rec 5/27/2022 6:13:46 PM 1 Surr: 4-Bromofluorobenzene 96.7 70-130 %Rec 1 5/27/2022 6:13:46 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 6:13:46 PM 115 Surr: Toluene-d8 97.1 70-130 %Rec 1 5/27/2022 6:13:46 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 6:13:46 PM 49 1 Surr: BFB 107 70-130 %Rec 1 5/27/2022 6:13:46 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-10 2' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 9:50:00 AM Lab ID: 2205B74-018 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: ED **Diesel Range Organics (DRO)** 49 10 mg/Kg 1 5/31/2022 8:37:47 PM Motor Oil Range Organics (MRO) ND 51 mg/Kg 1 5/31/2022 8:37:47 PM Surr: DNOP 71.7 51.1-141 %Rec 1 5/31/2022 8:37:47 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 7200 300 6/2/2022 2:10:40 PM mg/Kg 100 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 5/27/2022 6:42:26 PM Benzene ND mg/Kg 1 Toluene ND 5/27/2022 6:42:26 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 5/27/2022 6:42:26 PM Xylenes, Total ND 0.097 mg/Kg 1 5/27/2022 6:42:26 PM Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 5/27/2022 6:42:26 PM 1 Surr: 4-Bromofluorobenzene 98.9 70-130 %Rec 1 5/27/2022 6:42:26 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 6:42:26 PM 116 Surr: Toluene-d8 98.6 70-130 %Rec 1 5/27/2022 6:42:26 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 6:42:26 PM 48 1 Surr: BFB 109 70-130 %Rec 1 5/27/2022 6:42:26 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-10 3' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 1:10:00 PM Lab ID: 2205B74-019 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: SB **Diesel Range Organics (DRO)** ND 9.8 mg/Kg 1 5/27/2022 3:11:44 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 5/27/2022 3:11:44 PM Surr: DNOP 58.5 51.1-141 %Rec 1 5/27/2022 3:11:44 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 430 60 6/2/2022 3:32:36 AM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 5/27/2022 7:11:06 PM Benzene mg/Kg 1 Toluene ND 5/27/2022 7:11:06 PM 0.047 mg/Kg 1 Ethylbenzene ND 0.047 mg/Kg 1 5/27/2022 7:11:06 PM Xylenes, Total ND 0.094 mg/Kg 1 5/27/2022 7:11:06 PM Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 5/27/2022 7:11:06 PM 1 Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1 5/27/2022 7:11:06 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 7:11:06 PM 115 Surr: Toluene-d8 99.5 70-130 %Rec 1 5/27/2022 7:11:06 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 7:11:06 PM 47 1

109

70-130

%Rec

1

5/27/2022 7:11:06 PM

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

**Qualifiers:** 

Surr: BFB

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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-11 0' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 9:55:00 AM Lab ID: 2205B74-020 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: SB EPA METHOD 8015M/D: DIESEL RANGE ORGANICS **Diesel Range Organics (DRO)** ND 10 mg/Kg 1 5/27/2022 3:36:12 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 5/27/2022 3:36:12 PM Surr: DNOP 51.5 51.1-141 %Rec 1 5/27/2022 3:36:12 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 230 60 6/1/2022 5:14:13 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.024 5/27/2022 7:39:44 PM Benzene ND mg/Kg 1 Toluene ND 5/27/2022 7:39:44 PM 0.048 mg/Kg 1 Ethylbenzene ND 0.048 mg/Kg 1 5/27/2022 7:39:44 PM Xylenes, Total ND 0.097 mg/Kg 1 5/27/2022 7:39:44 PM Surr: 1,2-Dichloroethane-d4 96.3 70-130 %Rec 5/27/2022 7:39:44 PM 1 Surr: 4-Bromofluorobenzene 96.2 70-130 %Rec 1 5/27/2022 7:39:44 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 7:39:44 PM 114 Surr: Toluene-d8 100 70-130 %Rec 1 5/27/2022 7:39:44 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 7:39:44 PM 48 1 Surr: BFB 108 70-130 %Rec 1 5/27/2022 7:39:44 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-12 0' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 10:05:00 AM Lab ID: 2205B74-021 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: SB **Diesel Range Organics (DRO)** ND 10 mg/Kg 1 5/27/2022 4:00:38 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 5/27/2022 4:00:38 PM Surr: DNOP 59.9 51.1-141 %Rec 1 5/27/2022 4:00:38 PM **EPA METHOD 300.0: ANIONS** Analyst: NAI Chloride 17000 600 6/2/2022 10:39:49 AM mg/Kg 200 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.025 5/27/2022 8:08:26 PM Benzene mg/Kg 1 Toluene ND 5/27/2022 8:08:26 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 5/27/2022 8:08:26 PM Xylenes, Total ND 0.099 mg/Kg 1 5/27/2022 8:08:26 PM Surr: 1,2-Dichloroethane-d4 105 70-130 %Rec 5/27/2022 8:08:26 PM 1 Surr: 4-Bromofluorobenzene 101 70-130 %Rec 1 5/27/2022 8:08:26 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 8:08:26 PM 113 Surr: Toluene-d8 101 70-130 %Rec 1 5/27/2022 8:08:26 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 8:08:26 PM 49 1 Surr: BFB 113 70-130 %Rec 1 5/27/2022 8:08:26 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Lab ID:

Analyses

Chloride

Benzene

Toluene

Ethylbenzene

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Dibromofluoromethane

Gasoline Range Organics (GRO)

**EPA METHOD 8015D MOD: GASOLINE RANGE** 

Surr: Toluene-d8

Surr: BFB

**Analytical Report** Lab Order 2205B74

5/27/2022 8:37:02 PM

Analyst: JR

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 **CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-12 2' Onyx 29 CTB1 Collection Date: 5/24/2022 10:10:00 AM 2205B74-022 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: ED **Diesel Range Organics (DRO)** ND 9.8 mg/Kg 1 5/31/2022 9:01:57 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 5/31/2022 9:01:57 PM Surr: DNOP 58.7 51.1-141 %Rec 1 5/31/2022 9:01:57 PM **EPA METHOD 300.0: ANIONS** Analyst: JMT 230 60 6/1/2022 6:03:37 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR 0.025 5/27/2022 8:37:02 PM ND mg/Kg 1 ND 5/27/2022 8:37:02 PM 0.049 mg/Kg 1 ND 0.049 mg/Kg 1 5/27/2022 8:37:02 PM Xylenes, Total ND 0.099 mg/Kg 1 5/27/2022 8:37:02 PM

70-130

70-130

70-130

70-130

70-130

49

%Rec

%Rec

%Rec

%Rec

mg/Kg

%Rec

1

1

1

1

1

1

104

98.0

114

100

ND

107

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

POL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

в Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 22 of 31

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-03 5' **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 1:35:00 PM Lab ID: 2205B74-023 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: SB **Diesel Range Organics (DRO)** 480 9.9 mg/Kg 1 5/27/2022 4:49:38 PM Motor Oil Range Organics (MRO) 460 49 mg/Kg 1 5/27/2022 4:49:38 PM Surr: DNOP 51.1-141 %Rec 1 5/27/2022 4:49:38 PM 113 **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride 640 60 6/1/2022 6:15:57 PM mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JR ND 0.024 5/27/2022 9:05:34 PM Benzene mg/Kg 1 Toluene ND 5/27/2022 9:05:34 PM 0.049 mg/Kg 1 Ethylbenzene ND 0.049 mg/Kg 1 5/27/2022 9:05:34 PM Xylenes, Total ND 0.098 mg/Kg 1 5/27/2022 9:05:34 PM Surr: 1,2-Dichloroethane-d4 102 70-130 %Rec 5/27/2022 9:05:34 PM 1 Surr: 4-Bromofluorobenzene 95.1 70-130 %Rec 1 5/27/2022 9:05:34 PM Surr: Dibromofluoromethane 70-130 %Rec 1 5/27/2022 9:05:34 PM 111 Surr: Toluene-d8 97.1 70-130 %Rec 1 5/27/2022 9:05:34 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JR Gasoline Range Organics (GRO) ND mg/Kg 5/27/2022 9:05:34 PM 49 1 Surr: BFB 105 70-130 %Rec 1 5/27/2022 9:05:34 PM

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

**Qualifiers:** 

Value exceeds Maximum Contaminant Level
 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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Client: Project:		tex Resources Services, Ind vx 29 CTB1	с.							
Sample ID:	MB-67840	SampType: mblk		Tes	TestCode: EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID: 67840		F	RunNo: <b>8</b>	8422				
Prep Date:	6/1/2022	Analysis Date: 6/1/20	22	S	SeqNo: 3'	137024	Units: mg/Kg	J		
Analyte			PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-67840	SampType: Ics		Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 67840		F	RunNo: <b>8</b>	8422				
Prep Date:	6/1/2022	Analysis Date: 6/1/20	22	S	SeqNo: 3'	137025	Units: mg/Kg	J		
Analyte		Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	94.6	90	110			
Sample ID:	MB-67832	SampType: mblk		Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	PBS	Batch ID: 67832		F	RunNo: <b>8</b>	8432				
Prep Date:	6/1/2022	Analysis Date: 6/1/20	22	S	SeqNo: 3'	137379	Units: mg/Kg	J		
Analyte		Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-67832	SampType: Ics		Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 67832		F	RunNo: <b>8</b>	8432				
Prep Date:	6/1/2022	Analysis Date: 6/1/20	22	S	SeqNo: 3	137380	Units: mg/Kg	J		
Analyte		Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	94.2	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205B74

07-Jun-22

WO#:

Client: Vertex Re		ervices,	Inc.							
Project: Onyx 29 (	TBI									
Sample ID: LCS-67737	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	ID: 677	737	F	RunNo: 88332					
Prep Date: 5/26/2022	Analysis D	ate: 5/	27/2022	S	SeqNo: 31	132996	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.3	64.4	127			
Surr: DNOP	4.1		5.000		81.2	51.1	141			
Sample ID: MB-67737	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	ID: 677	737	F	RunNo: <b>88</b>	3332				
Prep Date: 5/26/2022	Analysis D	ate: 5/	27/2022	S	SeqNo: 31	132997	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	9.2		10.00		92.1	51.1	141			
Sample ID: 2205B74-012AMSD	SampT	уре: МS	D	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: BH22-07 0'	Batch ID: 67737		F	RunNo: 88332						
Prep Date: 5/26/2022	Analysis D	ate: 5/2	27/2022	S	SeqNo: 31	134548	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	9.5	47.66	0	82.1	36.1	154	11.6	33.9	
Surr: DNOP	1.0		4.766		21.5	51.1	141	0	0	S
Sample ID: MB-67765	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	ID: 677	765	F	RunNo: <b>88</b>	3381				
Prep Date: 5/27/2022	Analysis D	ate: 5/	31/2022	S	SeqNo: 31	135345	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	6.8		10.00		68.2	51.1	141			
	SampType: <b>MS</b>			Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Sample ID: 2205B74-012AMS	Sampi	)po. me								
Sample ID:         2205B74-012AMS           Client ID:         BH22-07 0'		D: 67		F	RunNo: <b>88</b>	3381				
•		n ID: 677	737		RunNo: <b>88</b> SeqNo: <b>3</b> 1		Units: <b>mg/K</b>	g		
Client ID: BH22-07 0'	Batch	n ID: 677	737 31/2022				Units: <b>mg/K</b> HighLimit	g %RPD	RPDLimit	Qual
Client ID: BH22-07 0' Prep Date: 5/26/2022	Batch Analysis D	n ID: 677 pate: 5/3	737 31/2022	S	SeqNo: 31	135370	-	-	RPDLimit	Qual

#### **Qualifiers:**

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- 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

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Client: Project:	Vertex Res Onyx 29 C		ervices,	Inc.							
Sample ID: 220	05B74-012AMSD	SampT	ype: MS	D	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics	
Client ID: BH	122-07 0'	Batch	ID: 677	737	F	RunNo: <b>88</b>	3381				
Prep Date: 5/	/26/2022	Analysis D	ate: 5/3	31/2022	S	SeqNo: 31	35371	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Orgar	nics (DRO)	50	9.5	47.66	0	104	36.1	154	8.29	33.9	
Surr: DNOP		2.7		4.766		57.2	51.1	141	0	0	
Sample ID: LC	S-67765	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LC	SS	Batch	ID: 677	765	F	RunNo: <b>88</b>	3381				
Prep Date: 5/	/27/2022	Analysis D	ate: 5/3	31/2022	S	SeqNo: 31	35454	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Orgar	nics (DRO)	46	10	50.00	0	92.9	64.4	127			
Surr: DNOP		2.7		5.000		53.2	51.1	141			

Qualifiers:

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

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WO#: 2205B74 07-Jun-22

	tex Resources S yx 29 CTB1	bervices,	Inc.							
Sample ID: mb-67730 Client ID: PBS	Batc	Type: <b>ME</b> h ID: <b>677</b>	730	F	RunNo: <b>88</b>	348	8015D: Gaso	Ū		
Prep Date: 5/26/2022 Analyte Gasoline Range Organics (GR	Analysis I Result 0) ND	Date: <b>5/</b> 2 PQL 5.0		SPK Ref Val	SeqNo: <b>3</b> 1 %REC	LowLimit	Units: <b>mg/K</b> HighLimit	<b>g</b> %RPD	RPDLimit	Qual
Surr: BFB Sample ID: Ics-67730	1000 Samp <sup>-</sup>	Туре: <b>LC</b>	1000 <b>S</b>	Tes	99.9 stCode: EF	37.7 PA Method	212 8015D: Gaso	line Range		
Client ID:         LCSS           Prep Date:         5/26/2022	Batc Analysis [	h ID: 677 Date: 5/2			RunNo: <b>88</b> SeqNo: <b>3</b> 1		Units: <b>mg/K</b>	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GR Surr: BFB	0) 29 2200	5.0	25.00 1000	0	116 219	72.3 37.7	137 212			S

- \* Value exceeds Maximum Contaminant Level.
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- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205B74

07-Jun-22

WO#:

	ex Resources S	Services,	Inc.							
Project: Ony	x 29 CTB1									
Sample ID: mb-67730	Samp	Туре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: PBS	Batc	h ID: 677	730	F	RunNo: <b>88</b>	3348				
Prep Date: 5/26/2022	Analysis I	Date: <b>5/</b> 2	27/2022	Ś	SeqNo: 31	133452	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								
Kylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			
Sample ID: LCS-67730	Samp	Type: LC	S	Tes	tCode: EF	PA Method	8021B: Volati	iles		
Client ID: LCSS	Batc	h ID: 677	730	F	RunNo: <b>88</b>	3348				
Prep Date: 5/26/2022	Analysis I	Date: <b>5/</b> 2	27/2022	Ś	SeqNo: 31	133453	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.6	80	120			
Toluene	0.97	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Qualifiers:

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

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2205B74

07-Jun-22

WO#:

Client: Vertex Re Project: Onyx 29 (		Services,	Inc.							
Sample ID: 2205b74-013ams	Samp	Туре: <b>МЅ</b>	4	Tes	tCode: EF	PA Method	8260B: Volati	iles Short	List	
Client ID: BH22-08 0'	Bato	h ID: 677	'32	F	RunNo: <b>88</b>	8359				
Prep Date: 5/26/2022	Analysis	Date: 5/2	27/2022	5	SeqNo: 31	134178	Units: mg/K	á		
Analyte	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9515	0	96.3	63.5	137	, or the D		Quui
Toluene	1.0	0.048	0.9515	0	106	77.6	127			
Ethylbenzene	1.0	0.048	0.9515	0	106	77.9	129			
Kylenes, Total	3.1	0.095	2.854	0	108	76.8	127			
Surr: 1,2-Dichloroethane-d4	0.47		0.4757	-	98.2	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.4757		99.5	70	130			
Surr: Dibromofluoromethane	0.53		0.4757		111	70	130			
Surr: Toluene-d8	0.00		0.4757		98.9	70	130			
Sample ID: 2205b74-013amsd		Туре: <b>МS</b>					8260B: Volati	iles Short	List	
Client ID: BH22-08 0'	Bato	h ID: 677	'32	F	RunNo: <b>88</b>	8359				
Prep Date: 5/26/2022	Analysis	Date: 5/2	27/2022	5	SeqNo: 31	134179	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9606	0	97.2	63.5	137	1.88	20	
Toluene	0.99	0.048	0.9606	0	103	77.6	127	1.50	20	
Ethylbenzene	1.0	0.048	0.9606	0	104	77.9	129	0.867	20	
Kylenes, Total	3.0	0.096	2.882	0	104	76.8	127	3.53	20	
Surr: 1,2-Dichloroethane-d4	0.51		0.4803		106	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.48		0.4803		99.3	70	130	0	0	
Surr: Dibromofluoromethane	0.56		0.4803		117	70	130	0	0	
Surr: Toluene-d8	0.48		0.4803		99.4	70	130	0	0	
Sample ID: Ics-67732	Samp	Type: LC	S4	Tes	tCode: EF	PA Method	8260B: Volati	iles Short	List	
Client ID: BatchQC	Bato	h ID: 677	'32	F	RunNo: <b>88</b>	8359				
Prep Date: 5/26/2022	Analysis	Date: 5/2	27/2022	S	SeqNo: 31	134190	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.4	80	120			
Toluene	0.99	0.050	1.000	0	99.0	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
	-			0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0						
		0.10	3.000 0.5000	0						
ylenes, Total Surr: 1,2-Dichloroethane-d4 Surr: 4-Bromofluorobenzene	0.52	0.10	0.5000	0	104	70	130			
		0.10		0						

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- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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### Released to Imaging: 11/22/2022 2:49:36 PM

WO#: 2205B74

	Resources S 29 CTB1	ervices,	Inc.							
Sample ID: mb-67732	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8260B: Volati	les Short	List	
Client ID: PBS	Batc	h ID: 677	732	F	RunNo: <b>88</b>	3359				
Prep Date: 5/26/2022	Analysis [	Date: 5/2	27/2022	S	SeqNo: 31	134191	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	0.50		0.5000		99.6	70	130			
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		113	70	130			
Surr: Toluene-d8	0.50		0.5000		99.5	70	130			

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- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
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- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2205B74 07-Jun-22

Client:	Vertex Re		ervices,	Inc.							
Project:	Onyx 29 (	CTB1									
Sample ID:	2205b74-012ams	SampT	Гуре: МS	5	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline F	lange	
Client ID:	BH22-07 0'	Batcl	h ID: 677	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis E	Date: <b>5/</b> 2	27/2022	S	SeqNo: 3	134153	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	25	4.9	24.53	0	103	61.1	127			
Surr: BFB		490		490.7		101	70	130			
Sample ID:	2205b74-012amsd	SampT	Гуре: МS	SD.	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline F	lange	
Client ID:	BH22-07 0'	Batcl	h ID: 677	732	F	RunNo: <b>8</b> 8	8359				
Prep Date:	5/26/2022	Analysis E	Date: <b>5/</b> 3	27/2022	S	SeqNo: 3'	134154	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	4.9	24.32	0	98.2	61.1	127	5.80	20	
Surr: BFB		500		486.4		103	70	130	0	0	
Sample ID:	lcs-67732	SampT	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline F	lange	
Client ID:	LCSS	Batcl	h ID: 677	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis E	Date: <b>5/</b> 3	27/2022	S	SeqNo: 3'	134174	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	93.4	70	130			
Surr: BFB		520		500.0		105	70	130			
Sample ID:	mb-67732	SampT	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D Mod: (	Gasoline F	lange	
Client ID:	PBS	Batcl	h ID: 677	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis E	Date: <b>5/</b> 3	27/2022	5	SeqNo: 3	134175	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
	e Organics (GRO)	ND	5.0								
Surr: BFB		550		500.0		111	70	130			

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

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2205B74

07-Jun-22

WO#:

ANAL	RONMENT YSIS RATORY	AL	TE	tll Environment A EL: 505-345-39 Website: www.	49 Ibuquer 75 FAX	01 Hawk que. NM : 505-34	kins NE 87109 5-4107	Sa	mple Log-In (	Check List
Client Name:	Vertex Res Services, I		Work	Order Numb	er: 220	5B74	6		RcptNo	p: 1
Received By:	Tracy Cas	sarrubias	5/26/20	022 7:00:00 A	M					
Completed By: Reviewed By:	Tracy Cas	sarrubias 76-22	5/26/20	)22 8:24:57 A	м					
Chain of Cus	tody									
1. Is Chain of C		lete?			Yes		1		Not Present	
2. How was the					Cou					
Login										
Log In 3. Was an attem	npt made to o	cool the samp	les?		Yes		N	lo 🗆	NA 🗆	
4. Were all samp	oles received	l at a tempera	ture of >0° C	to 6.0°C	Yes		N	lo 🗆		
5. Sample(s) in	proper conta	iner(s)?			Yes		N	lo 🗆		
6. Sufficient sam	iple volume f	or indicated te	st(s)?		Yes		N	• 🗆		
7. Are samples (	except VOA	and ONG) pro	perly preserve	ed?	Yes	~	N	•		
8. Was preserva	tive added to	bottles?			Yes		N	• 🔽	NA 🗌	
9. Received at le	ast 1 vial wit	h headspace ·	<1/4" for AQ \	/OA?	Yes	П	N	• 🗆		
10. Were any san					Yes			0	# of preserved	
11. Does paperwo (Note discrepa			er.		Yes		N	•	bottles checked for pH:	or >12 unless noted)
2. Are matrices o		1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.			Yes		N	•	Adjusted?	
3. Is it clear what			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Yes			•	/	
4. Were all holdir (If no, notify cu					Yes		N	•	Checked by:	50 5/26/22
pecial Handl	ing (if app	licable)								
15. Was client no	tified of all di	iscrepancies w	with this order?	?	Yes		N	•	NA 🗹	
Person	Notified:			Date:						
By Who	m:	-		Via:	∏eM	ail 🗌	Phone	Fax	In Person	
Regardi	ng:			504150	<u>ц</u> с.,		0.0202.0			
Client Ir	structions:	[					_			
16. Additional rer	marks:									
17. <u>Cooler Infor</u> Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal D	ate	Signe	d Du		
1	0.5	Good	Yes	ocarno	JearD	ale	Signe	ч Бу		
2	3.7	Good	Yes			-			-	
3	1.6	Good	Yes						-	
4	2.4	Good	Yes							

Page 1 of 1

t: 1/01.12.1	/				Ц	I	ALL		IVI	HALL ENVIRONMENTAL	1.1
	☑ Standard	g Rush 5	SAMAN		F		NAI	YS	S	ANALYSIS LABORATORY	
(Devon)	Project Name:						ed www	llenvir	iemuc	www.hallenvironmental.com	
Address:	DMyx 29	1 CTB		4	901 F	lawkin	4901 Hawkins NE -		onnero	Albuquerque, NM 87109	; 11/
					Tel. 50	05-345	Tel. 505-345-3975		Fax 50	505-345-4107	1/20
	27F-0	01720						Anal	is Re	quest	
	Project Manager:				10			۶O	-	(tr	.43.
Level 4 (Full Validation)	MONICA	Peppin		208) s'	PCB's		SWISC	PO4, S		ıəsdA\tr	:31 AM
□ Az Compliance □ Other	Sampler: C Di On Ice:	N, S(	Courteur			and the first state		' <sup>z</sup> ON	(A	1	
	# of Coolers: A						_	-	1000	_	
	Cooler Temp(including CF):	1: Sue	Checklist (°C)			111	1.00				
Sample Name	Container Prese Type and # Type	ervative	HEAL NO. 77.052 74	RTEX)	9081 Pé	EDB (W	a shaq 3 AADA	1	S) 0728 V) 0928		
CONTRACTOR				>		1	-			1	
BH72-01 0'	1 Hospar 1	ice N	100	1				>	-		
BH22-02 0	<u></u>	0	005	-			-	-			
BH22-02 2		00	SUCI						-		
BH22-02 4'		0	004	-							
BH22-03 0	), []	0	OUS					-			
BH22-03 2		de	404						_		
BH 22-04 0		0	cl07-	-					-		
BH22-05 0		0	OVA	_							
BH22-06 C	,(	0(	004					_	-		
BH22-06 2	2.	010	0						-		
BH122-06 6		10	-	-			_	-	-		
	Received by: Via:		Date Time	Remarks:	ks:				- (		
Sally Carter	COMMIMIC		5/2/33 900	7	WOLK	X	Urder	4	5	20956105	rag
Relinquished by:	Received by: V	For									e 320
A. A	4	3/26/	2	3	purect bill	F P	1110	Devor	50		° Oj

Client:	LIDIN														
	VUNT	Vertex (1	Devon)		⊠ Standard	d d Rush	5 how				ALL	EN X		HALL ENVIRONMENTAL	INTAL
			7	2.0	Project Name:		11			5		0	2	ADOR	
Mailing	Mailing Address:				OWNX	29 CTB	1		4901 Hawkins NF	w Awkin	WW.na	allenviro	onmer	www.nallenvironmental.com ins NF - Alburnieratue NM 87100	
	MQ	1 kill			Project #:				Tel 5(	5-345	Tel 505-345-3975		Aucid	505-345-4107	
Phone #:	#	N			27E-(	07 FIC						Analysis Request	is Re	luest	
email or Fax#:	r Fax#:				Project Manag	ager:		-	(0		-	*O	-	()tr	
QA/QC Packa	QA/QC Package:		Level 4 (Full Validation)	ation)	MOMICA	a Peppin	E.		(11) (1) (1) (1) (1) (1) (1) (1) (1) (1)		SMIS	PO4, S		nəzdA\t	
Accreditation:	tation: AC	□ Az Co	□ Az Compliance		Sampler: (	DIXON,	S Carteur	_	1.1.1.1.1.1.1.1		0/781	' <sup>z</sup> ON	()		
EDD (Type)	(Type)				# of Coolers:	1 100				1.1	_	<sup>3</sup> '	70V		
					Cooler Temp	5	Chucklist (°C)	_				1.1.1.1			
Date	Time	Matrix	Sample Name		Container Type and #	Preservative Type	HEAL No.	NX3T8	08:H9T 99 1808	M) 803	RAHS b	а 'н()	V) 0728	DO letol	
5/24	10:20	Soil	BH22-07	0'	1 tog lav	ice		) >	~ /						
1	9:25	-	BH22-08	0	-	4	210	-				-	-		
	9:30		BH22-08	2.		_	hin			1		-	-		
	1:40		BH22-08	2		_	210					-	-		
	9:35		BH22-09	0,			016					-			
	9:45		BH 22-10	0			410			1			-		
	9:50		BH22-10	2'			810						-		
	01:1	-	BH 22 - 10	3,			014	_							
	9:55		BH22-11	0,			010								
	10:05		BH22-12	,0			120						-		
	10:10		BH22-12	11			110					-			
-	1:35	1	BH22-03	5	_	_	623					-			
Date:	Time:	Relinquished by:	ed by:		Received by:	Via:	Date Time	Remarks:	rks:						
V	7:50	Pound (	y Cartter		adumn	ONN	335/20 900	N	WORK	Order		20956105	261	05	
S b5 00 190	Time:	Relinquished by:	ed by:	C	Received by:	Vie: Caur	10 C C C C C		Direct		bill	Devon	500		
J.	necessary.	samples sub	If necessary, samples submitted to Hall Environmental maybe subcontracted to other accredited laboratories.	the subce	Intracted to other a	ccredited laboratorie	+	s possibilit	y. Any su	b-contra	cted data	will he cle	ton more	politions and an Inc.	1000



June 07, 2022

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

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

RE: Onyx 29 CTB1

OrderNo.: 2205B74

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 23 sample(s) on 5/26/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-01 0' Collection Date: 5/24/2022 8:30:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-001	Matrix: SOIL	Recei	ved Date:	5/26/2	022 7:00:00 AM
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	20	9.6	mg/Kg	1	5/31/2022 3:47:57 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/31/2022 3:47:57 PM
Surr: DNOP	61.6	51.1-141	%Rec	1	5/31/2022 3:47:57 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2022 2:22:02 AM
Surr: BFB	91.4	37.7-212	%Rec	1	5/28/2022 2:22:02 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	5/28/2022 2:22:02 AM
Toluene	ND	0.047	mg/Kg	1	5/28/2022 2:22:02 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2022 2:22:02 AM
Xylenes, Total	ND	0.093	mg/Kg	1	5/28/2022 2:22:02 AM
Surr: 4-Bromofluorobenzene	93.8	70-130	%Rec	1	5/28/2022 2:22:02 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	ND	61	mg/Kg	20	6/1/2022 10:34:46 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 31

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-02 0' Collection Date: 5/24/2022 8:40:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-002	Matrix: SOIL	Recei	ved Date:	5/26/20	022 7:00:00 AM
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/31/2022 4:11:53 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 4:11:53 PM
Surr: DNOP	57.9	51.1-141	%Rec	1	5/31/2022 4:11:53 PM
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2022 3:32:52 AM
Surr: BFB	97.7	37.7-212	%Rec	1	5/28/2022 3:32:52 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	5/28/2022 3:32:52 AM
Toluene	ND	0.047	mg/Kg	1	5/28/2022 3:32:52 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2022 3:32:52 AM
Xylenes, Total	ND	0.095	mg/Kg	1	5/28/2022 3:32:52 AM
Surr: 4-Bromofluorobenzene	98.0	70-130	%Rec	1	5/28/2022 3:32:52 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	5400	300	mg/Kg	100	6/2/2022 12:06:38 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Onyx 29 CTB1

2205B74-003

**Project:** 

Lab ID:

Analyses

**Analytical Report** Lab Order 2205B74

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 **CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-02 2' Collection Date: 5/24/2022 8:45:00 AM Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** 

EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/31/2022 4:35:37 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/31/2022 4:35:37 PM
Surr: DNOP	64.1	51.1-141	%Rec	1	5/31/2022 4:35:37 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/28/2022 3:56:23 AM
Surr: BFB	96.6	37.7-212	%Rec	1	5/28/2022 3:56:23 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	5/28/2022 3:56:23 AM
Toluene	ND	0.049	mg/Kg	1	5/28/2022 3:56:23 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/28/2022 3:56:23 AM
Xylenes, Total	ND	0.098	mg/Kg	1	5/28/2022 3:56:23 AM
Surr: 4-Bromofluorobenzene	97.0	70-130	%Rec	1	5/28/2022 3:56:23 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	2700	150	mg/Kg	50	6/2/2022 12:19:03 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Analyses

Surr: DNOP

Surr: BFB

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

**EPA METHOD 8021B: VOLATILES** 

Surr: 4-Bromofluorobenzene

**EPA METHOD 300.0: ANIONS** 

**Analytical Report** Lab Order 2205B74

5/28/2022 4:20:05 AM

5/28/2022 4:20:05 AM

5/28/2022 4:20:05 AM

5/28/2022 4:20:05 AM

5/28/2022 4:20:05 AM 5/28/2022 4:20:05 AM

6/2/2022 12:01:38 AM

Analyst: NSB

Analyst: JMT

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-02 4' **CLIENT:** Vertex Resources Services, Inc. Onyx 29 CTB1 Collection Date: 5/24/2022 1:15:00 PM 2205B74-004 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: ED Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 5/31/2022 4:59:23 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 5/31/2022 4:59:23 PM 51.1-141 59.9 %Rec 1 5/31/2022 4:59:23 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 4:20:05 AM

4.6

37.7-212

0.023

0.046

0.046

0.092

70-130

61

98.0

ND

ND

ND

ND

97.1

260

mg/Kg

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

1

1

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
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

**Analytical Report** Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-03 0' Collection Date: 5/24/2022 8:50:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-005	Matrix: SOIL	DIL         Received Date: 5/26/2022 7:00:00 AM				
Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst: ED
Diesel Range Organics (DRO)	4100	95		mg/Kg	10	6/1/2022 12:24:41 PM
Motor Oil Range Organics (MRO)	2400	470		mg/Kg	10	6/1/2022 12:24:41 PM
Surr: DNOP	0	51.1-141	S	%Rec	10	6/1/2022 12:24:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/28/2022 4:43:44 AM
Surr: BFB	93.4	37.7-212		%Rec	1	5/28/2022 4:43:44 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	5/28/2022 4:43:44 AM
Toluene	ND	0.047		mg/Kg	1	5/28/2022 4:43:44 AM
Ethylbenzene	ND	0.047		mg/Kg	1	5/28/2022 4:43:44 AM
Xylenes, Total	ND	0.094		mg/Kg	1	5/28/2022 4:43:44 AM
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	5/28/2022 4:43:44 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	5500	150		mg/Kg	50	6/2/2022 12:31:27 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

6/2/2022 1:08:39 PM

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-03 2' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 8:55:00 AM Lab ID: 2205B74-006 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: ED Diesel Range Organics (DRO) 240 9.6 mg/Kg 1 6/1/2022 1:12:26 PM Motor Oil Range Organics (MRO) 140 48 mg/Kg 1 6/1/2022 1:12:26 PM 51.1-141 Surr: DNOP 93.2 %Rec 1 6/1/2022 1:12:26 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 5:30:59 AM 4.9 mg/Kg 1 Surr: BFB 96.0 37.7-212 %Rec 1 5/28/2022 5:30:59 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 5/28/2022 5:30:59 AM 1 Toluene ND 0.049 mg/Kg 1 5/28/2022 5:30:59 AM Ethylbenzene ND 0.049 mg/Kg 1 5/28/2022 5:30:59 AM Xylenes, Total ND 0.099 mg/Kg 1 5/28/2022 5:30:59 AM 5/28/2022 5:30:59 AM Surr: 4-Bromofluorobenzene 98.5 70-130 %Rec 1 **EPA METHOD 300.0: ANIONS** Analyst: NAI

3700

150

ma/Ka

50

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

**Qualifiers:** 

Chloride

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project: Onyx 29 CTB1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-04 0' Collection Date: 5/24/2022 9:00:00 AM

Lab ID: 2205B74-007	Matrix: SOIL	<b>Received Date:</b> 5/26/2022 7:00:00 AM					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: ED		
Diesel Range Organics (DRO)	12	9.0	mg/Kg	1	5/31/2022 6:11:58 PM		
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	5/31/2022 6:11:58 PM		
Surr: DNOP	75.3	51.1-141	%Rec	1	5/31/2022 6:11:58 PM		
EPA METHOD 8015D: GASOLINE RAN	GE				Analyst: NSB		
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/28/2022 5:54:36 AM		
Surr: BFB	99.6	37.7-212	%Rec	1	5/28/2022 5:54:36 AM		
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	0.024	mg/Kg	1	5/28/2022 5:54:36 AM		
Toluene	ND	0.048	mg/Kg	1	5/28/2022 5:54:36 AM		
Ethylbenzene	ND	0.048	mg/Kg	1	5/28/2022 5:54:36 AM		
Xylenes, Total	ND	0.097	mg/Kg	1	5/28/2022 5:54:36 AM		
Surr: 4-Bromofluorobenzene	95.7	70-130	%Rec	1	5/28/2022 5:54:36 AM		
EPA METHOD 300.0: ANIONS					Analyst: JMT		
Chloride	98	60	mg/Kg	20	6/2/2022 12:38:51 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-05 0' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Collection Date: 5/24/2022 9:10:00 AM Lab ID: 2205B74-008 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: ED Diesel Range Organics (DRO) 29 9.4 mg/Kg 1 5/31/2022 6:36:29 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 5/31/2022 6:36:29 PM Surr: DNOP 78.6 51.1-141 %Rec 1 5/31/2022 6:36:29 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 6:18:19 AM 4.6 mg/Kg 1 Surr: BFB 93.9 37.7-212 %Rec 1 5/28/2022 6:18:19 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.023 mg/Kg 5/28/2022 6:18:19 AM 1 Toluene ND 0.046 mg/Kg 1 5/28/2022 6:18:19 AM Ethylbenzene ND 0.046 mg/Kg 1 5/28/2022 6:18:19 AM Xylenes, Total ND 0.092 mg/Kg 1 5/28/2022 6:18:19 AM Surr: 4-Bromofluorobenzene 95.2 70-130 %Rec 1 5/28/2022 6:18:19 AM Analyst: JMT **EPA METHOD 300.0: ANIONS** Chloride 73 60 6/2/2022 12:51:17 AM ma/Ka 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-06 0' Collection Date: 5/24/2022 9:15:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-009	Matrix: SOIL	<b>Received Date:</b> 5/26/2022 7:00:00 AM				
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED	
Diesel Range Organics (DRO)	17	10	mg/Kg	1	5/31/2022 7:00:53 PM	
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	5/31/2022 7:00:53 PM	
Surr: DNOP	71.5	51.1-141	%Rec	1	5/31/2022 7:00:53 PM	
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: NSB	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/28/2022 6:41:58 AM	
Surr: BFB	94.5	37.7-212	%Rec	1	5/28/2022 6:41:58 AM	
EPA METHOD 8021B: VOLATILES					Analyst: NSB	
Benzene	ND	0.023	mg/Kg	1	5/28/2022 6:41:58 AM	
Toluene	ND	0.047	mg/Kg	1	5/28/2022 6:41:58 AM	
Ethylbenzene	ND	0.047	mg/Kg	1	5/28/2022 6:41:58 AM	
Xylenes, Total	ND	0.093	mg/Kg	1	5/28/2022 6:41:58 AM	
Surr: 4-Bromofluorobenzene	96.2	70-130	%Rec	1	5/28/2022 6:41:58 AM	
EPA METHOD 300.0: ANIONS					Analyst: NAI	
Chloride	5000	150	mg/Kg	50	6/2/2022 1:21:03 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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CLIENT: Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-06 2'

Project: Onyx 29 CTB1	Collection Date: 5/24/2022 9:20:00 AM							
Lab ID: 2205B74-010	Matrix: SOIL	Receiv	ved Date:	5/26/2	022 7:00:00 AM			
Analyses	Result	RL Qua	l Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED			
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	5/31/2022 7:25:13 PM			
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 7:25:13 PM			
Surr: DNOP	69.8	51.1-141	%Rec	1	5/31/2022 7:25:13 PM			
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB			
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/28/2022 7:05:38 AM			
Surr: BFB	91.8	37.7-212	%Rec	1	5/28/2022 7:05:38 AM			
EPA METHOD 8021B: VOLATILES					Analyst: NSB			
Benzene	ND	0.024	mg/Kg	1	5/28/2022 7:05:38 AM			
Toluene	ND	0.049	mg/Kg	1	5/28/2022 7:05:38 AM			
Ethylbenzene	ND	0.049	mg/Kg	1	5/28/2022 7:05:38 AM			
Xylenes, Total	ND	0.097	mg/Kg	1	5/28/2022 7:05:38 AM			
Surr: 4-Bromofluorobenzene	96.5	70-130	%Rec	1	5/28/2022 7:05:38 AM			
EPA METHOD 300.0: ANIONS					Analyst: NAI			
Chloride	4500	150	mg/Kg	50	6/2/2022 1:33:28 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Analyses

Surr: DNOP

Surr: BFB

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

**EPA METHOD 8021B: VOLATILES** 

Surr: 4-Bromofluorobenzene

**EPA METHOD 300.0: ANIONS** 

**Analytical Report** Lab Order 2205B74

Date Reported: 6/7/2022

5/28/2022 7:29:19 AM

6/2/2022 1:28:30 AM

Analyst: NSB

Analyst: JMT

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-06 6' Onyx 29 CTB1 Collection Date: 5/24/2022 1:45:00 PM 2205B74-011 Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM Result **RL** Qual Units DF **Date Analyzed** EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: ED **Diesel Range Organics (DRO)** 5/31/2022 7:49:27 PM ND 9.3 mg/Kg 1 Motor Oil Range Organics (MRO) ND 5/31/2022 7:49:27 PM 47 mg/Kg 1 71.5 51.1-141 %Rec 1 5/31/2022 7:49:27 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 5/28/2022 7:29:19 AM 4.6 mg/Kg 1

37.7-212

0.023

0.046

0.046

0.092

70-130

60

%Rec

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

1

1

1

20

92.6

ND

ND

ND

ND

93.9

120

Refer to the OC Summary report and sample login checklist for flagged OC data and preservation information.		
Refer to the UK Nummary report and sample login checklist for flagged UK 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
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 11/22/2022 2:49:36 PM

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-07 0' Collection Date: 5/24/2022 10:20:00 AM

<b>Project:</b>	Onyx 29 CTB1	Matrix: SOIL         Collection Date: 5/24/2022 10:20:00 AM           Received Date: 5/26/2022 7:00:00 AM						
Lab ID:	2205B74-012							
Analyses		Result	RL Qua	al Units	DF	Date Analyzed		
EPA MET	HOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: SB		
Diesel R	ange Organics (DRO)	ND	9.5	mg/Kg	1	5/27/2022 1:09:32 PM		
Motor Oi	l Range Organics (MRO)	ND	48	mg/Kg	1	5/27/2022 1:09:32 PM		
Surr: I	DNOP	78.1	51.1-141	%Rec	1	5/27/2022 1:09:32 PM		
EPA MET	HOD 300.0: ANIONS					Analyst: JMT		
Chloride		100	60	mg/Kg	20	6/2/2022 1:40:54 AM		
EPA MET	HOD 8260B: VOLATILES SH	IORT LIST				Analyst: JR		
Benzene		ND	0.025	mg/Kg	1	5/27/2022 1:54:40 PM		
Toluene		ND	0.050	mg/Kg	1	5/27/2022 1:54:40 PM		
Ethylben	zene	ND	0.050	mg/Kg	1	5/27/2022 1:54:40 PM		
Xylenes,	Total	ND	0.10	mg/Kg	1	5/27/2022 1:54:40 PM		
Surr: 7	1,2-Dichloroethane-d4	97.6	70-130	%Rec	1	5/27/2022 1:54:40 PM		
Surr: 4	1-Bromofluorobenzene	94.3	70-130	%Rec	1	5/27/2022 1:54:40 PM		
Surr: I	Dibromofluoromethane	111	70-130	%Rec	1	5/27/2022 1:54:40 PM		
Surr:	Foluene-d8	99.1	70-130	%Rec	1	5/27/2022 1:54:40 PM		
EPA MET	HOD 8015D MOD: GASOLIN	IE RANGE				Analyst: JR		
Gasoline	Range Organics (GRO)	ND	5.0	mg/Kg	1	5/27/2022 1:54:40 PM		
Surr: I	BFB	107	70-130	%Rec	1	5/27/2022 1:54:40 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-08 0' Collection Date: 5/24/2022 9:25:00 AM

<b>Project:</b>	Onyx 29 CTB1	Collection Date: 5/24/2022 9:25:00 AM						
Lab ID:	2205B74-013	Matrix: SOIL	I	Receiv	ed Date:	5/26/2	022 7:00:00 AM	
Analyses		Result	RL	Qual	Units	DF	Date Analyzed	
EPA MET	THOD 8015M/D: DIESEL RAM	NGE ORGANICS					Analyst: SB	
Diesel R	ange Organics (DRO)	7100	94		mg/Kg	10	5/27/2022 7:21:06 PM	
Motor Oi	I Range Organics (MRO)	4700	470		mg/Kg	10	5/27/2022 7:21:06 PM	
Surr: I	DNOP	0	51.1-141	S	%Rec	10	5/27/2022 7:21:06 PM	
EPA MET	THOD 300.0: ANIONS						Analyst: <b>JMT</b>	
Chloride		1300	61		mg/Kg	20	6/2/2022 2:18:07 AM	
EPA ME	THOD 8260B: VOLATILES SI	HORT LIST					Analyst: JR	
Benzene	)	ND	0.024		mg/Kg	1	5/27/2022 3:20:57 PM	
Toluene		ND	0.048		mg/Kg	1	5/27/2022 3:20:57 PM	
Ethylben	izene	ND	0.048		mg/Kg	1	5/27/2022 3:20:57 PM	
Xylenes,	Total	ND	0.095		mg/Kg	1	5/27/2022 3:20:57 PM	
Surr:	1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	5/27/2022 3:20:57 PM	
Surr: 4	4-Bromofluorobenzene	101	70-130		%Rec	1	5/27/2022 3:20:57 PM	
Surr: I	Dibromofluoromethane	114	70-130		%Rec	1	5/27/2022 3:20:57 PM	
Surr:	Toluene-d8	98.1	70-130		%Rec	1	5/27/2022 3:20:57 PM	
EPA ME	THOD 8015D MOD: GASOLIN	NE RANGE					Analyst: JR	
Gasoline	e Range Organics (GRO)	ND	4.8		mg/Kg	1	5/27/2022 3:20:57 PM	
Surr: I	BFB	109	70-130		%Rec	1	5/27/2022 3:20:57 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-014

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-08 2' Collection Date: 5/24/2022 9:30:00 AM Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	76	10	mg/Kg	1	5/27/2022 1:33:59 PM
Motor Oil Range Organics (MRO)	72	50	mg/Kg	1	5/27/2022 1:33:59 PM
Surr: DNOP	98.3	51.1-141	%Rec	1	5/27/2022 1:33:59 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	4700	150	mg/Kg	50	6/2/2022 1:45:52 PM
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 4:47:23 PM
Toluene	ND	0.048	mg/Kg	1	5/27/2022 4:47:23 PM
Ethylbenzene	ND	0.048	mg/Kg	1	5/27/2022 4:47:23 PM
Xylenes, Total	ND	0.096	mg/Kg	1	5/27/2022 4:47:23 PM
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	5/27/2022 4:47:23 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	5/27/2022 4:47:23 PM
Surr: Dibromofluoromethane	119	70-130	%Rec	1	5/27/2022 4:47:23 PM
Surr: Toluene-d8	96.9	70-130	%Rec	1	5/27/2022 4:47:23 PM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/27/2022 4:47:23 PM
Surr: BFB	107	70-130	%Rec	1	5/27/2022 4:47:23 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-08 5' Collection Date: 5/24/2022 1:40:00 PM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-015	Matrix: SOIL	Rece	Received Date: 5/26/2022 7:00:00 AM				
Analyses	Result	RL Qua	al Units	DF	Date Analyzed		
EPA METHOD 8015M/D: DIESEL RAM	IGE ORGANICS				Analyst: SB		
Diesel Range Organics (DRO)	120	9.4	mg/Kg	1	5/27/2022 1:58:24 PM		
Motor Oil Range Organics (MRO)	120	47	mg/Kg	1	5/27/2022 1:58:24 PM		
Surr: DNOP	104	51.1-141	%Rec	1	5/27/2022 1:58:24 PM		
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>		
Chloride	720	60	mg/Kg	20	6/2/2022 2:42:57 AM		
EPA METHOD 8260B: VOLATILES SH	HORT LIST				Analyst: JR		
Benzene	ND	0.025	mg/Kg	1	5/27/2022 5:16:12 PM		
Toluene	ND	0.050	mg/Kg	1	5/27/2022 5:16:12 PM		
Ethylbenzene	ND	0.050	mg/Kg	1	5/27/2022 5:16:12 PM		
Xylenes, Total	ND	0.099	mg/Kg	1	5/27/2022 5:16:12 PM		
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	5/27/2022 5:16:12 PM		
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	5/27/2022 5:16:12 PM		
Surr: Dibromofluoromethane	122	70-130	%Rec	1	5/27/2022 5:16:12 PM		
Surr: Toluene-d8	96.8	70-130	%Rec	1	5/27/2022 5:16:12 PM		
EPA METHOD 8015D MOD: GASOLIN	IE RANGE				Analyst: JR		
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/27/2022 5:16:12 PM		
Surr: BFB	108	70-130	%Rec	1	5/27/2022 5:16:12 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 range due to dilution or matrix interference

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

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Project: Onyx 29 CTB1

Surr: BFB

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-09 0' Collection Date: 5/24/2022 9:35:00 AM

Lab ID: 2205B74-016	Matrix: SOIL	Recei	ved Date:	5/26/2	022 7:00:00 AM
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	16	9.3	mg/Kg	1	5/31/2022 12:32:21 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	5/31/2022 12:32:21 PM
Surr: DNOP	82.5	51.1-141	%Rec	1	5/31/2022 12:32:21 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	370	60	mg/Kg	20	6/2/2022 2:55:22 AM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 5:45:01 PM
Toluene	ND	0.049	mg/Kg	1	5/27/2022 5:45:01 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 5:45:01 PM
Xylenes, Total	ND	0.098	mg/Kg	1	5/27/2022 5:45:01 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	5/27/2022 5:45:01 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	5/27/2022 5:45:01 PM
Surr: Dibromofluoromethane	116	70-130	%Rec	1	5/27/2022 5:45:01 PM
Surr: Toluene-d8	98.6	70-130	%Rec	1	5/27/2022 5:45:01 PM
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 5:45:01 PM

109

70-130

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 interference
- B Analyte detected in the associated Method Blank

%Rec 1

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

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5/27/2022 5:45:01 PM

Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-017

Analytical Report Lab Order 2205B74

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-10 0' Collection Date: 5/24/2022 9:45:00 AM

Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: SB				
Diesel Range Organics (DRO)	390	9.7	mg/Kg	1	5/27/2022 2:22:47 PM
Motor Oil Range Organics (MRO)	370	48	mg/Kg	1	5/27/2022 2:22:47 PM
Surr: DNOP	104	51.1-141	%Rec	1	5/27/2022 2:22:47 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	20000	1500	mg/Kg	500	6/2/2022 1:58:16 PM
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 6:13:46 PM
Toluene	ND	0.049	mg/Kg	1	5/27/2022 6:13:46 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 6:13:46 PM
Xylenes, Total	ND	0.098	mg/Kg	1	5/27/2022 6:13:46 PM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	5/27/2022 6:13:46 PM
Surr: 4-Bromofluorobenzene	96.7	70-130	%Rec	1	5/27/2022 6:13:46 PM
Surr: Dibromofluoromethane	115	70-130	%Rec	1	5/27/2022 6:13:46 PM
Surr: Toluene-d8	97.1	70-130	%Rec	1	5/27/2022 6:13:46 PM
EPA METHOD 8015D MOD: GASOLINE RAM	NGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 6:13:46 PM
Surr: BFB	107	70-130	%Rec	1	5/27/2022 6:13:46 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project: Onyx 29 CTB1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205B74

### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-10 2' Collection Date: 5/24/2022 9:50:00 AM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-018	Matrix: SOIL	Rece	vived Date:	5/26/20	022 7:00:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	49	10	mg/Kg	1	5/31/2022 8:37:47 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	5/31/2022 8:37:47 PM
Surr: DNOP	71.7	51.1-141	%Rec	1	5/31/2022 8:37:47 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	7200	300	mg/Kg	100	6/2/2022 2:10:40 PM
EPA METHOD 8260B: VOLATILES SHOP	RT LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 6:42:26 PM
Toluene	ND	0.048	mg/Kg	1	5/27/2022 6:42:26 PM
Ethylbenzene	ND	0.048	mg/Kg	1	5/27/2022 6:42:26 PM
Xylenes, Total	ND	0.097	mg/Kg	1	5/27/2022 6:42:26 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	5/27/2022 6:42:26 PM
Surr: 4-Bromofluorobenzene	98.9	70-130	%Rec	1	5/27/2022 6:42:26 PM
Surr: Dibromofluoromethane	116	70-130	%Rec	1	5/27/2022 6:42:26 PM
Surr: Toluene-d8	98.6	70-130	%Rec	1	5/27/2022 6:42:26 PM
EPA METHOD 8015D MOD: GASOLINE F	RANGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/27/2022 6:42:26 PM
Surr: BFB	109	70-130	%Rec	1	5/27/2022 6:42:26 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-10 3' Collection Date: 5/24/2022 1:10:00 PM Received Date: 5/26/2022 7:00:00 AM

Lab ID: 2205B74-019	Matrix: SOIL	Receiv	ed Date:	5/26/2	022 7:00:00 AM
Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/27/2022 3:11:44 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/27/2022 3:11:44 PM
Surr: DNOP	58.5	51.1-141	%Rec	1	5/27/2022 3:11:44 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	430	60	mg/Kg	20	6/2/2022 3:32:36 AM
EPA METHOD 8260B: VOLATILES S	HORT LIST				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 7:11:06 PM
Toluene	ND	0.047	mg/Kg	1	5/27/2022 7:11:06 PM
Ethylbenzene	ND	0.047	mg/Kg	1	5/27/2022 7:11:06 PM
Xylenes, Total	ND	0.094	mg/Kg	1	5/27/2022 7:11:06 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	5/27/2022 7:11:06 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	5/27/2022 7:11:06 PM
Surr: Dibromofluoromethane	115	70-130	%Rec	1	5/27/2022 7:11:06 PM
Surr: Toluene-d8	99.5	70-130	%Rec	1	5/27/2022 7:11:06 PM
EPA METHOD 8015D MOD: GASOLI	NE RANGE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/27/2022 7:11:06 PM
Surr: BFB	109	70-130	%Rec	1	5/27/2022 7:11:06 PM

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

**Qualifiers:** 

- Value exceeds Maximum Contaminant Level.
   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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-020

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-11 0' Collection Date: 5/24/2022 9:55:00 AM Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/27/2022 3:36:12 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/27/2022 3:36:12 PM
Surr: DNOP	51.5	51.1-141	%Rec	1	5/27/2022 3:36:12 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	230	60	mg/Kg	20	6/1/2022 5:14:13 PM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: <b>JR</b>
Benzene	ND	0.024	mg/Kg	1	5/27/2022 7:39:44 PM
Toluene	ND	0.048	mg/Kg	1	5/27/2022 7:39:44 PM
Ethylbenzene	ND	0.048	mg/Kg	1	5/27/2022 7:39:44 PM
Xylenes, Total	ND	0.097	mg/Kg	1	5/27/2022 7:39:44 PM
Surr: 1,2-Dichloroethane-d4	96.3	70-130	%Rec	1	5/27/2022 7:39:44 PM
Surr: 4-Bromofluorobenzene	96.2	70-130	%Rec	1	5/27/2022 7:39:44 PM
Surr: Dibromofluoromethane	114	70-130	%Rec	1	5/27/2022 7:39:44 PM
Surr: Toluene-d8	100	70-130	%Rec	1	5/27/2022 7:39:44 PM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: JR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/27/2022 7:39:44 PM
Surr: BFB	108	70-130	%Rec	1	5/27/2022 7:39:44 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-021

Analytical Report Lab Order 2205B74

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 Client Sample ID: BH22-12 0' Collection Date: 5/24/2022 10:05:00 AM

Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS				Analyst: SB
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	5/27/2022 4:00:38 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	5/27/2022 4:00:38 PM
Surr: DNOP	59.9	51.1-141	%Rec	1	5/27/2022 4:00:38 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	17000	600	mg/Kg	200	6/2/2022 10:39:49 AM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JR
Benzene	ND	0.025	mg/Kg	1	5/27/2022 8:08:26 PM
Toluene	ND	0.049	mg/Kg	1	5/27/2022 8:08:26 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 8:08:26 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/27/2022 8:08:26 PM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	5/27/2022 8:08:26 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	5/27/2022 8:08:26 PM
Surr: Dibromofluoromethane	113	70-130	%Rec	1	5/27/2022 8:08:26 PM
Surr: Toluene-d8	101	70-130	%Rec	1	5/27/2022 8:08:26 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 8:08:26 PM
Surr: BFB	113	70-130	%Rec	1	5/27/2022 8:08:26 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB1

2205B74-022

Analytical Report Lab Order 2205B74

Date Reported: 6/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-12 2' Collection Date: 5/24/2022 10:10:00 AM Received Date: 5/26/2022 7:00:00 AM

				0, 20, 2	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	5/31/2022 9:01:57 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	5/31/2022 9:01:57 PM
Surr: DNOP	58.7	51.1-141	%Rec	1	5/31/2022 9:01:57 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	230	60	mg/Kg	20	6/1/2022 6:03:37 PM
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: <b>JR</b>
Benzene	ND	0.025	mg/Kg	1	5/27/2022 8:37:02 PM
Toluene	ND	0.049	mg/Kg	1	5/27/2022 8:37:02 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 8:37:02 PM
Xylenes, Total	ND	0.099	mg/Kg	1	5/27/2022 8:37:02 PM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	5/27/2022 8:37:02 PM
Surr: 4-Bromofluorobenzene	98.0	70-130	%Rec	1	5/27/2022 8:37:02 PM
Surr: Dibromofluoromethane	114	70-130	%Rec	1	5/27/2022 8:37:02 PM
Surr: Toluene-d8	100	70-130	%Rec	1	5/27/2022 8:37:02 PM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 8:37:02 PM
Surr: BFB	107	70-130	%Rec	1	5/27/2022 8:37:02 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Lab ID:

Onyx 29 CTB1

2205B74-023

**Analytical Report** Lab Order 2205B74

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/7/2022 **CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-03 5' Collection Date: 5/24/2022 1:35:00 PM Matrix: SOIL Received Date: 5/26/2022 7:00:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: SB
Diesel Range Organics (DRO)	480	9.9	mg/Kg	1	5/27/2022 4:49:38 PM
Motor Oil Range Organics (MRO)	460	49	mg/Kg	1	5/27/2022 4:49:38 PM
Surr: DNOP	113	51.1-141	%Rec	1	5/27/2022 4:49:38 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	640	60	mg/Kg	20	6/1/2022 6:15:57 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	т				Analyst: JR
Benzene	ND	0.024	mg/Kg	1	5/27/2022 9:05:34 PM
Toluene	ND	0.049	mg/Kg	1	5/27/2022 9:05:34 PM
Ethylbenzene	ND	0.049	mg/Kg	1	5/27/2022 9:05:34 PM
Xylenes, Total	ND	0.098	mg/Kg	1	5/27/2022 9:05:34 PM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	5/27/2022 9:05:34 PM
Surr: 4-Bromofluorobenzene	95.1	70-130	%Rec	1	5/27/2022 9:05:34 PM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	5/27/2022 9:05:34 PM
Surr: Toluene-d8	97.1	70-130	%Rec	1	5/27/2022 9:05:34 PM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: <b>JR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/27/2022 9:05:34 PM
Surr: BFB	105	70-130	%Rec	1	5/27/2022 9:05:34 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Client: Project:	Vertex Re Onyx 29	esources S CTB1	ervices	, Inc.							
Sample ID: M	IB-67840	SampT	ype: <b>m</b> t	olk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: PI	BS	Batch	n ID: 67	840	F	RunNo: <b>8</b>	8422				
Prep Date:	6/1/2022	Analysis D	Date: 6/	1/2022	5	SeqNo: 3	137024	Units: mg/K	g		
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID: LO	CS-67840	SampT	ype: Ics	5	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: LO	CSS	Batch	n ID: 67	840	F	RunNo: <b>8</b>	8422				
Prep Date:	6/1/2022	Analysis D	Date: 6/	1/2022	S	SeqNo: 3	137025	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.6	90	110			
Sample ID: M	IB-67832	SampT	ype: mb	olk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: PI	BS	Batch	n ID: 67	832	F	RunNo: <b>8</b>	8432				
Prep Date:	6/1/2022	Analysis D	Date: 6/	1/2022	5	SeqNo: 3	137379	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID: L	CS-67832	SampT	ype: Ics	5	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: LO	CSS	Batch	n ID: 67	832	F	RunNo: <b>8</b>	8432				
Prep Date: 6	6/1/2022	Analysis D	Date: 6/	1/2022	S	SeqNo: 3	137380	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	94.2	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 Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205B74

08-Jun-22

Client: Vertex Ro Project: Onyx 29	esources Services, Ir CTB1	ıc.							
Sample ID: LCS-67737	SampType: LCS		Test	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID: 67737	7	R	unNo: 88	3332				
Prep Date: 5/26/2022	Analysis Date: 5/27/	/2022	S	eqNo: 31	132996	Units: mg/K	g		
Analyte	Result PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40 10	50.00	0	80.3	64.4	127			
Surr: DNOP	4.1	5.000		81.2	51.1	141			
Sample ID: MB-67737	SampType: MBL	κ	Test	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 67737	7	R	unNo: <b>88</b>	3332				
Prep Date: 5/26/2022	Analysis Date: 5/27/	/2022	S	eqNo: 31	132997	Units: mg/K	g		
Analyte	Result PQL S	PK 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	9.2	10.00		92.1	51.1	141			
Sample ID: 2205B74-012AMS	D SampType: MSD	Test	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: BH22-07 0'	Batch ID: 67737	7	R	unNo: 88	3332				
Prep Date: 5/26/2022	Analysis Date: 5/27/	/2022	S	eqNo: 31	134548	Units: mg/K	g		
Analyte	Result PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39 9.5	47.66	0	82.1	36.1	154	11.6	33.9	
Surr: DNOP	1.0	4.766		21.5	51.1	141	0	0	S
Sample ID: MB-67765	SampType: MBL	۲	Test	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 67765	5	R	unNo: 88	3381				
Prep Date: 5/27/2022	Analysis Date: 5/31/	/2022	S	eqNo: 31	135345	Units: mg/K	g		
Analyte	Result PQL S	PK 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	6.8	10.00		68.2	51.1	141			
Sample ID: 2205B74-012AMS	SampType: <b>MS</b>		Test	Code: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: BH22-07 0'	Batch ID: 67737	7	R	unNo: 88	3381				
Prep Date: 5/26/2022	Analysis Date: 5/31/	/2022	S	eqNo: 31	135370	Units: mg/K	g		
Analyte	Result PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54 10	50.00	0	108	36.1	154			
Surr: DNOP	3.4	5.000		67.5	51.1	141			

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205B74

08-Jun-22

Client: Project:	Vertex Re Onyx 29 (	esources Se CTB1	rvices	, Inc.							
Sample ID:	2205B74-012AMS	<b>)</b> SampTy	/pe: <b>M</b> \$	SD	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	BH22-07 0'	Batch	ID: 67	737	R	tunNo: <b>8</b>	8381				
Prep Date:	5/26/2022	Analysis Da	ate: 5/	31/2022	S	eqNo: 3	135371	Units: mg/Kg	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	Organics (DRO)	50	9.5	47.66	0	104	36.1	154	8.29	33.9	
Surr: DNOP		2.7		4.766		57.2	51.1	141	0	0	
Sample ID:	LCS-67765	SampTy	vpe: LC	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:	LCSS	Batch	ID: 67	765	R	unNo: 8	8381				
Prep Date:	5/27/2022	Analysis Da	ate: 5/	31/2022	S	eqNo: 3	135454	Units: mg/Kg	)		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Drganics (DRO)	46	10	50.00	0	92.9	64.4	127			
Surr: DNOP		2.7		5.000		53.2	51.1	141			
Sample ID:	MB-67821	SampTy	vpe: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:	PBS	Batch	ID: 67	821	R	unNo: <b>8</b>	8418				
Prep Date:	6/1/2022	Analysis Da	ate: 6/	3/2022	S	eqNo: 3	138396	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.0		10.00		90.0	51.1	141		-	
Sample ID:	LCS-67821	SampTy	vpe: LC	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:			ID: 67			unNo: 8				: ga	
Prep Date:	6/1/2022	Analysis Da	ate: 6/	3/2022	S	SeqNo: 3	138397	Units: %Rec			
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		3.8	I QL	5.000	OF ICINCI Val	76.1	51.1	141			Quai
Sample ID:	MB-67871	SampTy	vpe: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:	PBS		ID: 67			unNo: 8			J	<b>J</b>	
Prep Date:	6/2/2022	Analysis Da	ate: 6/	4/2022	S	SeqNo: 3	140066	Units: %Rec			
Analyte		Result	POI	SPK value	SPK Ref Val	%RFC	l owl imit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.7		10.00		96.6	51.1	141	, <b>D</b>		~~~
Sample ID:	LCS-67871	SampTy	/pe: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:			ID: 67			unNo: <b>8</b>			Ū	-	
Prep Date:		Analysis Da				SeqNo: 3		Units: %Rec			
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.9		5.000	2	98.0	51.1	141	, D		~~~

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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2205B74

08-Jun-22

	Resources S 9 CTB1	ervices,	Inc.							
Sample ID: mb-67730 Client ID: PBS		Type: <b>ME</b> h ID: <b>67</b>			tCode: Ef		8015D: Gasc	line Rang	e	
Prep Date: 5/26/2022	Analysis E	Date: 5/	27/2022	S	eqNo: 3	133399	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 1000	5.0	1000		99.9	37.7	212			
Sample ID: Ics-67730	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batc	h ID: 67	730	F	unNo: 8	3348				
Prep Date: 5/26/2022	Analysis E	Date: 5/	27/2022	S	eqNo: 3	133400	Units: <b>mg/#</b>	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	72.3	137			
Surr: BFB	2200		1000		219	37.7	212			S

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2205B74 08-Jun-22

Client:Vertex RProject:Onyx 29	Resources S CTB1	Services,	, Inc.							
Sample ID: mb-67730	Samp	Гуре: МЕ	BLK	Tes	TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batc	h ID: 67	730	F	RunNo: <b>88348</b>					
Prep Date: 5/26/2022	Analysis [	Date: 5/	27/2022	SeqNo: 3133452 Units: mg/Kg				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		103	70	130			
Sample ID: LCS-67730	Samp	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: 67	730	F	RunNo: <b>8</b>	8348				
Prep Date: 5/26/2022	Analysis [	Date: 5/	27/2022	S	SeqNo: 3	133453	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.6	80	120			
Toluene	0.97	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

- \* 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2205B74

08-Jun-22

**Client:** 

# **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Vertex Resources Services, Inc.

Project: Onyx 29	CTB1		, me.							
Sample ID: 2205b74-013ams	s Samp	Гуре: МS	64	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: BH22-08 0'	Batc	h ID: 67	732	F	RunNo: 8	8359				
Prep Date: 5/26/2022	Analysis [	Date: 5/	27/2022	S	SeqNo: 3	134178	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9515	0	96.3	63.5	137			
Toluene	1.0	0.048	0.9515	0	106	77.6	127			
Ethylbenzene	1.0	0.048	0.9515	0	106	77.9	129			
Xylenes, Total	3.1	0.095	2.854	0	108	76.8	127			
Surr: 1,2-Dichloroethane-d4	0.47		0.4757		98.2	70	130			
Surr: 4-Bromofluorobenzene	0.47		0.4757		99.5	70	130			
Surr: Dibromofluoromethane	0.53		0.4757		111	70	130			
Surr: Toluene-d8	0.47		0.4757		98.9	70	130			
Sample ID: 2205b74-013ams	d Samp	Гуре: М	SD4	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: BH22-08 0'	Batc	h ID: 67	732	RunNo: <b>88359</b>						
Prep Date: 5/26/2022	Analysis [	Date: 5/	27/2022	S	SeqNo: 3	134179	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.024	0.9606	0	97.2	63.5	137	1.88	20	
Toluene	0.99	0.048	0.9606	0	103	77.6	127	1.50	20	
Ethylbenzene	1.0	0.048	0.9606	0	104	77.9	129	0.867	20	
Xylenes, Total	3.0	0.096	2.882	0	104	76.8	127	3.53	20	
Surr: 1,2-Dichloroethane-d4	0.51		0.4803		106	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.48		0.4803		99.3	70	130	0	0	
Surr: Dibromofluoromethane	0.56		0.4803		117	70	130	0	0	
Surr: Toluene-d8	0.48		0.4803		99.4	70	130	0	0	
Sample ID: Ics-67732	Samp	Гуре: <b>LC</b>	:S4	Tes	tCode: El	PA Method	8260B: Vola	tiles Short	List	
Client ID: BatchQC	Batc	h ID: 67	732	F	RunNo: <b>8</b>	8359				
Prep Date: 5/26/2022	Analysis [	Date: 5/	27/2022	5	SeqNo: 3	134190	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.4	80	120			
Toluene	0.99	0.050	1.000	0	99.0	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.0	70	130			
Surr: Dibromofluoromethane	0.58		0.5000		116	70	130			
	0.00		0.0000							

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 29 of 31

WO#:	2205B74
	08-Jun-22

Client: Project:	Vertex Resources Onyx 29 CTB1	Services	, Inc.							
Sample ID: mb-677	32 Sam	Type: ME	BLK	Test	Code: EF	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Bat	ch ID: 67	732	R	unNo: 8	8359				
Prep Date: 5/26/2	022 Analysis	Date: 5/	27/2022	S	eqNo: 3	134191	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-Dichloroetha	ne-d4 0.50		0.5000		99.6	70	130			
Surr: 4-Bromofluorobe	nzene 0.50		0.5000		101	70	130			
Surr: Dibromofluorome	thane 0.57		0.5000		113	70	130			
Surr: Toluene-d8	0.50		0.5000		99.5	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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

WO#: 2205B74 08-Jun-22

Client:		esources Se	rvices,	, Inc.							
Project:	Onyx 29	CTB1									
Sample ID:	2205b74-012ams	SampTy	/pe: <b>MS</b>	6	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline I	Range	
Client ID:	BH22-07 0'	Batch	ID: 67	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis Da	ate: 5/	27/2022	S	SeqNo: 3	134153	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	25	4.9	24.53	0	103	61.1	127			
Surr: BFB		490		490.7		101	70	130			
Sample ID:	2205b74-012amsd	I SampTy	/pe: <b>MS</b>	SD	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline	Range	
Client ID:	BH22-07 0'	Batch	ID: 67	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis Da	ate: 5/	27/2022	S	SeqNo: 3	134154	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	24	4.9	24.32	0	98.2	61.1	127	5.80	20	
Surr: BFB		500		486.4		103	70	130	0	0	
Sample ID:	lcs-67732	SampTy	/pe: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline I	Range	
Client ID:	LCSS	Batch	ID: 67	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis Da	ate: <b>5/</b>	27/2022	5	SeqNo: 3	134174	Units: <b>mg/k</b>	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	23	5.0	25.00	0	93.4	70	130			
Surr: BFB		520		500.0		105	70	130			
Sample ID:	mb-67732	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: EF	PA Method	8015D Mod:	Gasoline I	Range	
Client ID:	PBS	Batch	ID: 67	732	F	RunNo: <b>8</b>	8359				
Prep Date:	5/26/2022	Analysis Da	ate: 5/	27/2022	S	SeqNo: 3	134175	Units: mg/k	٤g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	e Organics (GRO)	ND	5.0								
Ousonine rang	c organics (orto)	ND	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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2205B74

08-Jun-22

ANAL	RONMENT YSIS RATORY	AL	TE	tll Environment A EL: 505-345-39 Website: www.	49 Ibuquer 75 FAX	01 Hawki que. NM 6 505-345	ns NE 87109 -4107	Sar	nple Log-In Ch	neck List
Client Name:	Vertex Res Services, I		Work	Order Numb	er: 220	5B74	6		RcptNo:	1
Received By:	Tracy Ca	sarrubias	5/26/20	022 7:00:00 A	м					
Completed By: Reviewed By:	11	sarrubias 76-22	5/26/20	)22 8:24:57 A	м					
Chain of Cus	tody									
1. Is Chain of C		lete?			Yes		No		Not Present	
2. How was the					Cou					
Lente										
Log In 3. Was an attem	npt made to	cool the sampl	les?		Yes	✓	No			
1 10/050 011 00000	alara anasta a									
4. Were all samp	pies received	at a temperat	ture of >0° C	to 6.0°C	Yes		NC		NA 🗌	
5. Sample(s) in	proper conta	iner(s)?			Yes		No			
6. Sufficient sam	iple volume f	for indicated te	est(s)?		Yes		No			
7. Are samples (	except VOA	and ONG) pro	perly preserv	ed?	Yes		No			
8. Was preserva	tive added to	bottles?			Yes		No		NA 🗌	
9. Received at le	ast 1 vial wit	h headspace -	<1/4" for AQ \	/OA?	Yes	Π	No		NA 🔽	
10. Were any san					Yes					/
									# of preserved bottles checked	
11. Does paperwo (Note discrepa			in l		Yes		No		for pH:	12 unloss noted)
2. Are matrices of		A CONTRACTOR OF A CONTRACT			Yes		No		Adjusted?	12 unless noted)
3. Is it clear what					Yes				/ _	
4. Were all holdir					Yes		No	-	Checked by:	25/26/22
(If no, notify cu	ustomer for a	authorization.)							1	271041-
Special Handl	ing (if app	olicable)								
15. Was client no	tified of all d	iscrepancies w	with this order	?	Yes		No		NA 🔽	
Person	Notified:			Date:				-		
By Who	m:	1		Via:	∏eM	ail 🗍 F	hone	Fax	In Person	
Regardi	ng:						Contraction of the	1.0.000		
Client Ir	structions:	1					_			
16. Additional rer	marks:									
17. <u>Cooler Infor</u> Cooler No		Condition	Seal Intact	Seel No	Seal D	oto	Cineral	Du		
1	0.5	Good	Yes	Seal No	Seal D	ale	Signed	ву		
2	3.7	Good	Yes							
3	1.6	Good	Yes							
4	2.4	Good	Yes					-		

Page 1 of 1

Client:         ULH-LX         Reference         Relation         Relation         MALVEST REDURATION of the contraction           Milling Actions:         Project Name:         Wave Mallenviconmentation         Wave Mallenviconmentation           Milling Actions:         Milling Actions:         Malvest State State         Malvest State State           Milling Actions:         Milling Actions:         Project Name:         Wave Mallenviconmentation           Milling Actions:         Milling Actions:         Project Name:         22.2 E - 013 2.0           Project Name:         Project Name:         22.2 E - 013 2.0           Project Name:         Project Name:         23.2 E - 013 2.0           Project Name:         Project Name:         23.2 E - 013 2.0           Project Name:         Distribution         Milling Action           Project Name:         Distribution			•						I	1	A L		TAF	<b>TALAC</b>	NATE A	ve
Montalitation         Project Name:         Project	-	tex			☑ Standard		1. Control 1.	Π	$\mathbf{H}$			N N	Z Z	ABOD/	NIAL	
Address:         Umy         29 Class         Class         Address         Ad	(CORRECT)	action	$\sim$		Project Nam					(						
Com         Wut         Project #: 2 2 E - 0172 0         Tail:	ng Address		·			29 CTB			4901 F	lawkir	s NE			e NM 87109		<b>): 11</b> /
Пани веления         2.2.LE         - 0.13.2.0           Fadifi relevel         Delect Manager:         2.2.LE         - 0.13.2.0           Fadifi relevel         Delect Manager:         Project Manager:         Analysis Recents alton:         Project Manager:           atom:         D Actomplance         Delect Manager:         Project Manager:         Project Manager:         Project Manager:           atom:         D Actomplance         Differ:         RY Complance         Differ:         RY Manager:         Project Manager:           atom:         D Actomplance         Differ:         RY Complance         Differ:         RY Manager:         Differ:         RY Manager:         Differ:         RY Manager:         Differ:         RY Manager:           atom:         D Actom         Differ:         RY Vest         D Not         Not         No	0	11	6	Ţ	Project #:				Tel. 5(	05-34 <sup>6</sup>	-3975		x 505	-345-4107		/1/20
Faat:         Project Manager:         Project Manager:         Project Manager:           attaine:         attain:         I Level 4 (Full Validation)         MUVIGC R(ppin)         Attaine         MUVIGC R(ppin)           attain:         I A Compliance         Sampler:         C Dither         Attaine         NOVIGC R(ppin)           attain:         I A Compliance         Sampler:         C Dither         Attaine         NOVIGC R(ppin)           attain:         I A Compliance         Sampler:         C Dither         Attaine         NOVIC           (DPP)         Attaine         Dither         Attaine         NOVIC         C Cuttaine         NOVIC           (DPP)         Attaine         Compliance         Sampler:         C NC         Attaine         NOVIC           (DPP)         Attaine         Contrainer         Preservative         Attaine         NOV         NOV         NOV           (DPP)         BH122-01         O'         I 4''         NOV         NOV         NOV         NOV         NOV           (SS)         BH122-02         O'         I 4''         NOV         NOV         NOV         NOV         NOV         NOV           (SS)         BH122-02         O'         I 4''	e #:	N				-01720	0				1	ualys	is Red	uest		22 7
ackage:         Intervent         MUWICG         Report         Bit         Intervent         Bit         Bit         Intervent         Bit         Bit         Intervent         Bit	or Fax#:				Project Mana	ager:			(0			⁺O	_	(tr		:45:
ation: E Az Compliance Sample: C DYKON, S CAUTAL INDE CC E Other: A Ves E No. Type and # Type E HEAL No. E S S S S S S S S S S S S S S S S S S S	C Package: andard		Level 4 (Full Valida	ation)	MONICA	Peppin			1. Carl - 12.		SWISC	PO₄, S		ıəsdA\ti		:31 AM
Type         # of Coolers in 37 4         # of Coolers in 37 4           Time         Matrix         Sample Name         Cooler Tempenaser: S. a. C.N.(Lklist, Co)           Time         Matrix         Sample Name         Cooler Tempenaser: S. a. C.N.(Lklist, Co)           Bi:30         Soil         BH122-01         C'         1 40; jour           B:340         BH122-02         C'         1 40; jour         Constance           B:355         BH122-02         C'         1 40; jour         Constance           B:350         BH122-02         C'         1 40; jour         Co           B:360         BH122-02         C'         1 40; jour         Co           B:355         BH122-02         C'         1 40; jour         Co           B:350         BH122-02         C'         1 40; jour         Co           B:350         BH122-02         C'         1 40; jour         Co           B:550         BH122-02         C'         1 40; jour         Co           B:550         BH122-02         C'         1 00; jour         Co           B:550         BH122-02         C'         0 0; jour         Co           B:550         BH122-02         C'         0 0; jour	editation: ELAC	□ Az Co	ompliance		Sampler: C On Ice:	Dixon,	~			and the second		' <sup>z</sup> ON	(A			
Time         Matrix         Sample Name         Container         Preservative Type and #         Type         Matrix         Sample Name         Container         Preservative Type         Text. No.         Matrix         Sample Name         Container         Preservative Type and #         Type         Matrix         Sample Name         Container         Preservative Type         Text. No.         Matrix         Sample Name         Container         Preservative Type         Text. No.         Matrix         Sample Name         Container         Preservative Type         Text. No.         Matrix	DD (Type)				# of Coolers:	まれ		-			_	_				
Time         Matrix         Sample Name         Container         Preservative         HEAL No.         Type and #         Top and #         T					Cooler Temp	5	CNUCKLIST			221.P.						
$\alpha$ <td></td> <td>Matrix</td> <td>Sample Name</td> <td></td> <td>Container Tvpe and #</td> <td>Preservative Tvpe</td> <td>HEAL NO.</td> <td></td> <td>100</td> <td></td> <td></td> <td>1.000</td> <td>1. S. A. L. C.</td> <td></td> <td></td> <td></td>		Matrix	Sample Name		Container Tvpe and #	Preservative Tvpe	HEAL NO.		100			1.000	1. S. A. L. C.			
B:30       Soil       BH22-01       O'       I 40jar       ice       Qu       I       V </td <td>A</td> <td>(000)</td> <td>anteleterroll</td> <td></td> <td></td> <td>,</td> <td></td> <td>-</td> <td>1</td> <td>1</td> <td></td> <td>-</td> <td></td> <td>1.00</td> <td></td> <td></td>	A	(000)	anteleterroll			,		-	1	1		-		1.00		
B:340       BH22-02       O'       OU       III       IIII       IIII       IIIII       IIIIII       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII			BH22-01	,0	1 Hoy lar	1121	DOL	>	/		-	>	-			
$B:45$ $BH22-02$ $2^{\circ}$ $UV$ $UV$ $D$ $UV$ $D$ $D$ $D$ $P:50$ $BH22-02$ $2^{\circ}$ $0$ $0$ $0$ $D$	8:4c		BH 22-02	-0	8-		our	1				-				
I:IS       BH22-02       4'       I $0.07$ $0.07$ II       II       II       II       II       III       III       IIII       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	8:45		BH 22 - 02	:2			SUC		1.1							
B:50 $BH22-03$ $0'$ <td>1:15</td> <td></td> <td>BH22-02</td> <td>4'</td> <td></td> <td></td> <td>004</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	1:15		BH22-02	4'			004	-								
B:55 $BH122-03$ $2'$ $dov$ $dov$ $H$ $dov$ $H$ $dov$ $H$	8:50		BH 22 - 03	0'			OUS						1			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	8:55		BH122-03	2'			400	_					-			
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $	9:15	-	BH22-06	,0			500									
1:45 1 BH22-06 6 Received by: Via: Date Time Remarks: 5:20 South, Countrol MMMMMM, 5/26/33 90 WOLK Under 2095/6105 Time: Relinquished by: Var. to Date Time Remarks: 10/1 A	9:20		BH22-06	5.	-		010					-				
Time: Relinquished by: 5:20 Sally Cartor MMMMM, 5/20/30 MOVK Order 20956105 Time: Relinquished by: Received by: Var. Date Time MMM Addition of the context of the Devon	1:45	-	1	0		-	011	-				-				
Prime: Relinquished by: Received by: Var. and Date Time NOVA Urdur 20100	Time:				Received by:	Via:		Remar	ks:	3			C	010100		1
Relinquished by: Received by: Variation Date Time Currect bill Devon	40.00				WULLMMA	on	-	2	VOV	X	ron	4	1		0	Page
	Time:	Relinquish	ed by:		Received by:	Mar ran	2	Ś	1120	+	illi	Dev	50			e 355 oj

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Client:	Ventex	tex (1	Devon)		Standard	d d Rush	s how		V		ALL	EN	VIR -	HALL ENVIRONMENTAL	NTAL	
					Project Name:								0		I CK	- A
Mailing	Mailing Address:				OWNX	29 CTB	1	4	4901 Hawkins NF	wkins	NF -	Alhun	Inent	www.riallenvironmental.com ins NF - Alburuterque NM 87109		D: 11/
	MQ	1 kul	2		Project #.				Tel. 505-345-3975	-345-	3975	Fax	505-	Fax 505-345-4107		/1/20
Phone #:	:#:	N			22E-(	01720					Ar	alysis	Analysis Request	lest		227
email c	email or Fax#:				Project Manag	ager:		-		-		<sup>⊅</sup> O		()u		:45.
QA/QC Packa	QA/QC Package:		Level 4 (Full Validation)	ation)	MONICA	a Peppin	C			SMIS		PO4, S		nəsdA\t		:31 AM
Accrec	Accreditation:	□ Az Co	□ Az Compliance		Sampler: (	DIX ON,	SCarteur		1			' <sup>z</sup> ON	()	resen		r
	D EDD (Type)				# of Coolers:	2 1 I I			(		sla	<sup>'2</sup>	<b>∀</b> 0∧			_
					Cooler Temp	5	Chucklist (°C)				eM e		_	notile		
Date	Time	Matrix	Sample Name		Container Type and #	Preservative Type	HEAL No.	NXETE 108:H91	∍q 1808	M) 803 d sHAC	8 AADF	8560 (V С)) F, в	S) 0228	D) leto]		L.
5/24	10:20	Soil	BH12-07	0			· · · · · · · · · · · · · · · · · · ·	< >	3		1				-	
-	9:25	-	BH 22-08	Õ	- -	4	510	1 1		-		-				
	9:30		BH22-08	2		_	hin			-						
	1:40		BH22-08	10	-	-	210			-						
	9.35		BH22-09	0,			016			-						
	9:45		BH 22 - 10	0			410									
	9:50		BH 22 - 10	2'			810									
	01:1	_	BH 22 - 10	3,			610	_								
	9:55		BH22-11	0'			020									
_	10:05		BH22-12	0'			120					3				
	10:10		BH22-12	21			110									
	1:35		BH22-03	5'			623	-		-						
Date:	Time:	Relinquished by:	ed by:		Received by:	Via:	Date Time	Remarks:								
5124	5/245:20	Sould	y Cartter		adumm	ONN	335/23 900	WORK	V	order		0912	20956105	05		Pag
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		シンシン	2 1 1 1	X	1000		2100166									F4



June 08, 2022

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

RE: Onyx 29 CTB 1

OrderNo.: 2205C48

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/27/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 2205C48

Date Reported: 6/8/2022

5/30/2022 3:13:00 AM

6/2/2022 3:44:01 AM

Analyst: JMT

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-13 0' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB 1 Collection Date: 5/25/2022 9:10:00 AM Lab ID: 2205C48-001 Matrix: SOIL Received Date: 5/27/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 31 9.6 mg/Kg 1 6/1/2022 2:59:50 PM Motor Oil Range Organics (MRO) 52 48 mg/Kg 1 6/1/2022 2:59:50 PM 51.1-141 Surr: DNOP 89.5 %Rec 1 6/1/2022 2:59:50 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND 5/30/2022 3:13:00 AM 4.9 mg/Kg 1 Surr: BFB 82.9 37.7-212 %Rec 1 5/30/2022 3:13:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: RAA Benzene ND 0.024 mg/Kg 5/30/2022 3:13:00 AM 1 Toluene ND 0.049 mg/Kg 1 5/30/2022 3:13:00 AM Ethylbenzene ND 0.049 mg/Kg 1 5/30/2022 3:13:00 AM Xylenes, Total ND 0.097 mg/Kg 1 5/30/2022 3:13:00 AM

 Surr: 4-Bromofluorobenzene
 85.1
 70-130
 %Rec
 1

 EPA METHOD 300.0: ANIONS
 Chloride
 250
 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 range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB 1

Analytical Report Lab Order 2205C48

Date Reported: 6/8/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-13 2' Collection Date: 5/25/2022 9:15:00 AM Received Date: 5/27/2022 7:10:00 AM

Lab ID: 2205C48-002	Matrix: SOIL	Rece	ived Date:	5/27/2	022 7:10:00 AM
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	6/1/2022 3:10:46 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	6/1/2022 3:10:46 PM
Surr: DNOP	90.3	51.1-141	%Rec	1	6/1/2022 3:10:46 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/30/2022 5:11:00 AM
Surr: BFB	87.3	37.7-212	%Rec	1	5/30/2022 5:11:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.025	mg/Kg	1	5/30/2022 5:11:00 AM
Toluene	ND	0.049	mg/Kg	1	5/30/2022 5:11:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/30/2022 5:11:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	5/30/2022 5:11:00 AM
Surr: 4-Bromofluorobenzene	85.5	70-130	%Rec	1	5/30/2022 5:11:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	250	60	mg/Kg	20	6/2/2022 3:56:22 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 interference

B Analyte detected in the associated Method Blank

- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

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Onyx 29 CTB 1

2205C48-003

**Project:** 

Lab ID:

Analyses

**Analytical Report** Lab Order 2205C48

Date Reported: 6/8/2022

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH22-14 0' Collection Date: 5/25/2022 9:20:00 AM Matrix: SOIL Received Date: 5/27/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** 

EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: ED
Diesel Range Organics (DRO)	23	9.2	mg/Kg	1	6/1/2022 11:41:18 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	6/1/2022 11:41:18 PM
Surr: DNOP	68.6	51.1-141	%Rec	1	6/1/2022 11:41:18 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/30/2022 5:31:00 AM
Surr: BFB	83.7	37.7-212	%Rec	1	5/30/2022 5:31:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	5/30/2022 5:31:00 AM
Toluene	ND	0.048	mg/Kg	1	5/30/2022 5:31:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	5/30/2022 5:31:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	5/30/2022 5:31:00 AM
Surr: 4-Bromofluorobenzene	84.2	70-130	%Rec	1	5/30/2022 5:31:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	70	60	mg/Kg	20	6/2/2022 4:08:43 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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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**Analytical Report** Lab Order 2205C48

Date Reported: 6/8/2022

6/2/2022 4:45:44 AM

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-15 0' **CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB 1 Collection Date: 5/25/2022 9:30:00 AM Lab ID: 2205C48-004 Matrix: SOIL Received Date: 5/27/2022 7:10:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: ED Diesel Range Organics (DRO) ND 9.3 mg/Kg 1 6/2/2022 9:57:17 PM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 6/2/2022 9:57:17 PM Surr: DNOP 98.4 51.1-141 %Rec 1 6/2/2022 9:57:17 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: RAA Gasoline Range Organics (GRO) ND 5/30/2022 6:30:00 AM 4.9 mg/Kg 1 Surr: BFB 87.3 37.7-212 %Rec 1 5/30/2022 6:30:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: RAA Benzene ND 0.024 mg/Kg 5/30/2022 6:30:00 AM 1 Toluene ND 0.049 mg/Kg 1 5/30/2022 6:30:00 AM Ethylbenzene ND 0.049 mg/Kg 1 5/30/2022 6:30:00 AM Xylenes, Total ND 0.098 mg/Kg 1 5/30/2022 6:30:00 AM Surr: 4-Bromofluorobenzene 89.1 70-130 %Rec 1 5/30/2022 6:30:00 AM Analyst: JMT **EPA METHOD 300.0: ANIONS** 

120

60

ma/Ka

20

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

**Qualifiers:** 

Chloride

- 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 POL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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Project: Onyx 29 CTB 1

**CLIENT:** Vertex Resources Services, Inc.

Analytical Report Lab Order 2205C48

## Hall Environmental Analysis Laboratory, Inc.

Date Reported: 6/8/2022 Client Sample ID: BH22-16 0' Collection Date: 5/25/2022 9:40:00 AM Received Date: 5/27/2022 7:10:00 AM

Lab ID: 2205C48-005	Matrix: SOIL	Rece	eived Date:	022 7:10:00 AM	
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/2/2022 10:21:44 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/2/2022 10:21:44 PM
Surr: DNOP	91.8	51.1-141	%Rec	1	6/2/2022 10:21:44 PM
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	5/30/2022 7:29:00 AM
Surr: BFB	88.2	37.7-212	%Rec	1	5/30/2022 7:29:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	5/30/2022 7:29:00 AM
Toluene	ND	0.049	mg/Kg	1	5/30/2022 7:29:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	5/30/2022 7:29:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	5/30/2022 7:29:00 AM
Surr: 4-Bromofluorobenzene	88.6	70-130	%Rec	1	5/30/2022 7:29:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	ND	60	mg/Kg	20	6/2/2022 4:58:06 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

**CLIENT:** Vertex Resources Services, Inc.

Onyx 29 CTB 1

Analytical Report Lab Order 2205C48

Date Reported: 6/8/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH22-17 0' Collection Date: 5/25/2022 9:50:00 AM Received Date: 5/27/2022 7:10:00 AM

Lab ID: 2205C48-006	Matrix: SOIL	Reco	022 7:10:00 AM		
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: ED
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	6/2/2022 10:46:19 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	6/2/2022 10:46:19 PM
Surr: DNOP	96.5	51.1-141	%Rec	1	6/2/2022 10:46:19 PM
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	5/30/2022 7:49:00 AM
Surr: BFB	85.8	37.7-212	%Rec	1	5/30/2022 7:49:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: RAA
Benzene	ND	0.024	mg/Kg	1	5/30/2022 7:49:00 AM
Toluene	ND	0.047	mg/Kg	1	5/30/2022 7:49:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	5/30/2022 7:49:00 AM
Xylenes, Total	ND	0.094	mg/Kg	1	5/30/2022 7:49:00 AM
Surr: 4-Bromofluorobenzene	86.6	70-130	%Rec	1	5/30/2022 7:49:00 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	6/2/2022 12:36:26 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Client: Project:	Vertex Re Onyx 29	esources S CTB 1	ervices,	, Inc.							
Sample ID: N	IB-67841	SampT	ype: <b>m</b> t	olk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: P	BS	Batch	h ID: 67	841	F	RunNo: <b>8</b>	8422				
Prep Date:	6/1/2022	Analysis D	Date: 6/	1/2022	S	SeqNo: 3	137026	Units: mg/K	g		
Analyte Chloride		Result ND	PQL 1.5	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID: L	.CS-67841	SampT	ype: Ics	5	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: L	css	Batch	h ID: 67	841	F	RunNo: <b>8</b>	8422				
Prep Date:	6/1/2022	Analysis D	Date: 6/	1/2022	S	SeqNo: 3	137027	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	92.3	90	110			
Sample ID: N	IB-67859	SampT	ype: mt	olk	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: P	PBS	Batch	h ID: 67	859	F	RunNo: <b>8</b>	8449				
Prep Date:	6/2/2022	Analysis D	Date: 6/	2/2022	S	SeqNo: 3	138016	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID: L	.CS-67859	SampT	ype: Ics	6	Tes	tCode: El	PA Method	300.0: Anion	s		
Client ID: L	css	Batch	h ID: 67	859	F	RunNo: <b>8</b>	8449				
Prep Date:	6/2/2022	Analysis D	Date: 6/	2/2022	S	SeqNo: 3	138017	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.4	90	110			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205C48

08-Jun-22

Client: Vertex R	Resources Services,	Inc.							
Project: Onyx 29	CTB 1								
Sample ID: LCS-67800	SampType: LC	S	Tes	Code: EF	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID: 67	800	R	unNo: <b>88</b>	383				
Prep Date: 5/31/2022	Analysis Date: 6/	1/2022	2022 SeqNo: 3135520 Uni				g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51 10	50.00	0	102	64.4	127			
Surr: DNOP	4.0	5.000		79.2	51.1	141			
Sample ID: <b>MB-67800</b>	SampType: ME	BLK	Tes	Code: EF	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 67	800	R	unNo: <b>88</b>	383				
Prep Date: 5/31/2022	Analysis Date: 6/	1/2022	S	eqNo: 31	35522	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		99.5	51.1	141			
Sample ID: <b>MB-67801</b>	SampType: ME	BLK	Tes	Code: EF	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID: 67	801	R	unNo: <b>88</b>	8418				
Prep Date: 5/31/2022	Analysis Date: 6/	1/2022	S	eqNo: 31	36937	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	6.7	10.00		67.1	51.1	141			
Sample ID: <b>LCS-67801</b>	SampType: LC	S	Tes	Code: EF	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batch ID: 67	801	R	unNo: <b>88</b>	418				
Prep Date: 5/31/2022	Analysis Date: 6/	2/2022	S	eqNo: 31	37868	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53 10	50.00	0	107	64.4	127			
Surr: DNOP	4.8	5.000		95.3	51.1	141			
Sample ID: 2205C48-003AMS	S SampType: MS	3	Tes	Code: EF	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: BH22-14 0'	Batch ID: 67	801	R	unNo: 88	418				
Prep Date: 5/31/2022	Analysis Date: 6/	2/2022	S	eqNo: 31	38107	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57 9.7	48.36	23.39	68.9	36.1	154			
Surr: DNOP	3.0	4.836		62.0	51.1	141			

#### **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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205C48

08-Jun-22

Client: Project:		Resources Serv 9 CTB 1	vices,	, Inc.							
Sample ID:	2205C48-003AN	ISD SampType	e: MS	SD	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	BH22-14 0'	Batch ID	): <b>67</b>	801	F	RunNo: 8	8418				
Prep Date:	5/31/2022	Analysis Date	e: 6/	2/2022	S	SeqNo: 3	138108	Units: mg/K	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	76	10	49.80	23.39	106	36.1	154	29.4	33.9	
Surr: DNOP		4.8		4.980		96.0	51.1	141	0	0	
Sample ID:	MB-67871	SampType	e: Me	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Rang	e Organics	
Client ID:	PBS	Batch ID	: 67	871	F	RunNo: <b>8</b>	8418				
Prep Date:	6/2/2022	Analysis Date	e: 6/	4/2022	S	SeqNo: 3	140066	Units: %Rec	;		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.7		10.00		96.6	51.1	141			
Sample ID:	LCS-67871	SampType	e: LC	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	e Organics	
Client ID:	LCSS	Batch ID	): <b>67</b>	871	F	RunNo: <b>8</b>	8418				
Prep Date:	6/2/2022	Analysis Date	: <b>6/</b>	4/2022	S	SeqNo: 3	140074	Units: %Rec	;		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.9		5.000		98.0	51.1	141			

#### 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2205C48

08-Jun-22

Client: Vertex R Project: Onyx 29	esources Services, In CTB 1	с.								
Sample ID: Ics-67761	SampType: LCS		Test	tCode: EP	A Method	8015D: Gaso	line Rang	e		
Client ID: LCSS	Batch ID: 67761		R	lunNo: <b>88</b>	358					
Prep Date: 5/27/2022	Analysis Date: 5/29/	2022	S	eqNo: 31	34017	Units: <b>mg/Kg</b>				
Analyte	Result PQL S	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO) Surr: BFB	24 5.0 1900	25.00 1000	0	94.6 186	72.3 37.7	137 212				
Sample ID: mb-67761	SampType: MBLK	ζ.	Test	tCode: EP	A Method	8015D: Gaso	line Range	e		
Client ID: PBS	Batch ID: 67761		R	tunNo: <b>88</b>	358					
Prep Date: 5/27/2022	Analysis Date: 5/29/	2022	S	eqNo: 31	34018	Units: mg/K	g			
Analyte	Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 870	1000		87.1	37.7	212				
Sample ID: Ics-67768	SampType: LCS		Test	tCode: EP	A Method	8015D: Gaso	line Range	e		
Client ID: LCSS	Batch ID: 67768		R	unNo: <b>88</b>	358					
Prep Date: 5/27/2022	Analysis Date: 5/30/	2022	S	eqNo: 31	34041	Units: mg/K	g			
Analyte	Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23 5.0	25.00	0	93.9	72.3	137				
Surr: BFB	1900	1000		190	37.7	212				
Sample ID: mb-67768	SampType: MBLK		Test	tCode: EP	A Method	8015D: Gaso	line Range	9		
Client ID: PBS	Batch ID: 67768		R	unNo: <b>88</b>	358					
Prep Date: 5/27/2022	Analysis Date: 5/30/	2022	S	eqNo: 31	34042	Units: mg/K	g			
Analyte	Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND 5.0									
Surr: BFB	870	1000		86.6	37.7	212				
Sample ID: 2205c48-003ams	SampType: <b>MS</b>		Test	tCode: EP	A Method	8015D: Gaso	line Rang	9		
Client ID: BH22-14 0'	Batch ID: 67768		R	tunNo: <b>88</b>	358					
Prep Date: 5/27/2022	Analysis Date: 5/30/	2022	S	eqNo: 31	34045	Units: mg/K	g			
Analyte	Result PQL SI	PK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23 4.8	24.08	0	94.6	70	130				
Surr: BFB	1800	963.4		191	37.7	212				
Sample ID: 2205c48-003amsc	SampType: MSD		Test	tCode: EP	A Method	8015D: Gaso	line Range	9		
Client ID: BH22-14 0'	Batch ID: 67768		R	unNo: <b>88</b>	358					
Prep Date: 5/27/2022	Analysis Date: 5/30/	2022	S	eqNo: 31	34046	Units: mg/K	g			

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 interference

Released to Imaging: 11/22/2022 2:49:36 PM

- B Analyte detected in the associated Method Blank
- E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 10 of 13

WO#: 2205C48

08-Jun-22

Client: Project:	Vertex Re Onyx 29 (	esources Se CTB 1	ervices,	, Inc.							
Sample ID: 2	2205c48-003amsd	SampT	ype: <b>MS</b>	SD	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: I	BH22-14 0'	Batch	ID: 67	768	R	unNo: <b>88</b>	3358				
Prep Date:	5/27/2022	Analysis D	ate: <b>5/</b>	30/2022	S	eqNo: 31	34046	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range	Organics (GRO)	22	4.8	24.04	0	92.7	70	130	2.20	20	
Surr: BFB		1800		961.5		189	37.7	212	0	0	

**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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

Page 11 of 13

2205C48

08-Jun-22

	Resources S 9 CTB 1	ervices,	Inc.							
Sample ID: Ics-67761	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	h ID: 67	761	R	unNo: <b>88</b>	3358				
Prep Date: 5/27/2022	Analysis D	Date: <b>5/</b> 2	29/2022	S	eqNo: 31	134079	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.4	80	120			
Toluene	0.97	0.050	1.000	0	97.3	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.4	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.0	70	130			
Sample ID: mb-67761	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	h ID: 67	761	R	lunNo: <b>88</b>	3358				
Prep Date: 5/27/2022	Analysis D	Date: 5/	29/2022	S	eqNo: 31	134080	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	0.88		1.000		87.6	70	130			
Sample ID: Ics-67768	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	h ID: 67	768	R	tunNo: <b>88</b>	3358				
Prep Date: 5/27/2022	Analysis D	Date: 5/	30/2022	S	SeqNo: 31	134102	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.3	80	120			
Toluene	0.87	0.050	1.000	0	87.0	80	120			
Ethylbenzene	0.86	0.050	1.000	0	85.9	80	120			
Xylenes, Total	2.6	0.10	3.000	0	85.1	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.0	70	130			
Sample ID: mb-67768	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	h ID: 677	768	R	tunNo: <b>88</b>	3358				
Prep Date: 5/27/2022	Analysis D	Date: 5/	30/2022	S	eqNo: 31	134103	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	0.87		1.000		86.9	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 interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

WO#: 2205C48

08-Jun-22

	Resources S 9 CTB 1	Services,	Inc.							
Sample ID: 2205c48-004am	s Samp	Гуре: МS	3	Tes	Code: El	PA Method	8021B: Volat	iles		
Client ID: BH22-15 0'	Batc	h ID: 67	768	F	unNo: 8	8358				
Prep Date: 5/27/2022	Analysis [	Date: 5/	30/2022	S	eqNo: 3	134107	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9785	0	94.1	68.8	120			
Toluene	0.94	0.049	0.9785	0	96.3	73.6	124			
Ethylbenzene	0.93	0.049	0.9785	0	95.3	72.7	129			
Xylenes, Total	2.8	0.098	2.935	0	94.7	75.7	126			
Surr: 4-Bromofluorobenzene	0.89		0.9785		91.2	70	130			
Sample ID: 2205c48-004am	sd Samp	Гуре: МS	SD	Tes	Code: El	PA Method	8021B: Volat	iles		
Client ID: BH22-15 0'	Batc	h ID: 67	768	F	unNo: 8	8358				
Prep Date: 5/27/2022	Analysis [	Date: 5/	30/2022	5	eqNo: 3	134108	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	0.9804	0	97.4	68.8	120	3.67	20	
Toluene	0.97	0.049	0.9804	0	99.3	73.6	124	3.23	20	
Ethylbenzene	0.97	0.049	0.9804	0	98.9	72.7	129	3.93	20	
Xylenes, Total	2.9	0.098	2.941	0	97.4	75.7	126	3.05	20	
Surr: 4-Bromofluorobenzene	0.89		0.9804		90.5	70	130	0	0	

**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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

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WO#: 2205C48

08-Jun-22

ANA	IRONMENTAL Lysis Oratory	TEL: 505-345-	ental Analysis Labo 4901 Hawk Albuquerque, NM 3975 FAX: 505-34 w.hallenvironment	ins NE 87109 <b>Sar</b> 5-4107	Sample Log-In Check List				
Client Name:	Vertex Resources Services, Inc.	Work Order Nun	nber: 2205C48		RcptNo: 1				
Received By:	Cheyenne Cason	5/27/2022 7:10:00	AM	chent					
Completed By	Tracy Casarrubias	5/27/2022 8:04:14	AM						
Reviewed By:	Just27/22								
Chain of Cu	<u>istody</u>								
1. Is Chain of	Custody complete?		Yes 🔽	No 🗌	Not Present				
2. How was th	e sample delivered?		Courier						
Log In									
3. Was an atte	empt made to cool the sampl	es?	Yes 🗹	No 🗌					
4. Were all sar	nples received at a temperat	ure of >0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗆				
5. Sample(s) ir	n proper container(s)?		Yes 🔽	No 🗌					
5. Sufficient sa	mple volume for indicated te	st(s)?	Yes 🔽	No 🗌					
7. Are samples	(except VOA and ONG) pro	perly preserved?	Yes 🗹	No 🗌					
8. Was preserv	vative added to bottles?		Yes 🗌	No 🔽	NA 🗌				
9. Received at	least 1 vial with headspace <	1/4" for AQ VOA?	Yes	No 🗌					
	ample containers received br		Yes	No 🔽	# of preserved	0			
	vork match bottle labels? pancies on chain of custody)		Yes 🔽	No 🗌	bottles checked for pH: (<2 or ≥12 unles	s noted)			
	correctly identified on Chain		Yes 🔽	No 🗌	Adjusted?	s noted)			
	at analyses were requested?		Yes 🔽	No 🗌					
	ling times able to be met? customer for authorization.)		Yes 🗹	No 🗆	Checked by CMC 5	127/22			
pecial Hand	lling (if applicable)								
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	otified of all discrepancies w	ith this order?	Yes 🗌	No 🗌					
Persor	n Notified:	Date							
By Wh	iom:	Via:	Charles States States	Phone 🗌 Fax	In Person				
Regard	ding:								
Client	Instructions:								
6. Additional re	emarks:								
7. <u>Cooler Info</u> Cooler No	and the second se	Seal Intact Seal No	Seal Date	Signed By					
1		Yes	Geal Dale	Signed By					

Page 1 of 1

	HALL ENVIRONMENTAL	ANALISTS LABORALOR	www.hallenvironmental.com 4901 Hawkins NF - Albininierina NM 87400	505-345-3975 Fax 505-345-4107	Analysis	u()↓	PO4, S	r 8270 NO <sub>2</sub> ,	0 0 1 (10 0 (23)	y 83 8 Me <sup>5</sup> 8,r, <i>N</i> (AO) (AO)	EDB (M PAHs b RCRA 8 6(1)F, E 8260 (V 8250 (V Total Co	>							clirect bill deven	ordur 20956105
			4901 Ha	Tel. 505		-	о / мв	/ DR/	rsəp DYD	15D(	(X=TB) 08:H9T 8081 P6	/					-		Remarks: dire	Work order
	🗆 Rush		CTB		01720		Peppin	Cartar		1:2.1-022.1 (°C)	ative HEAL No.		6107	003	Pud	OUS	000		Date Time 5 310 32 byD	v' Date Time 5/27/20
Turn-Around Time:					- 01:	nager:		Salley	S:	np(including CF	Preservative <i>t</i> Type		-				-		Via:	y: Via:
I urn-Arou	■ Standard	Project Name:	DWW 29	Project #:	21E	Project Manager:	Monica	Sampler: On Ice	# of Coolers:	Cooler Temp(Including CF): 2	Container Type and #	1 403 par	5				-		Received by:	Received by:
rd							dation)					0'	2'	0'	0,	0'	0			
Chain-of-Custody Record	(Devon)			ile			Level 4 (Full Validation)	□ Az Compliance □ Other			Sample Name	BH 22-13	BH22-13	BI122-14	BH22-15	BI-122-16	E1-72H8		lelinquished by: Salluy Caurthair	id by:
-of-Cl				0M				□ Az Co			Matrix	Soil					-		Relinquished by: Sally C	Relinquished by:
Chain	Vertex		Mailing Address:		#:	email or Fax#:	QA/QC Package:	Accreditation:	EDD (Type)		Time	5/259:10	01:15	9:20	9:30	9:40	9:50		5/26 [0:40	Time:
	Client:		Mailing		Phone #:	email (	QA/QC Packa	Accreditati			Date	5/25	-				-		Date: 5/26	Salar Lan



September 07, 2022

Kent Stallings Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX:

RE: Onyx 29 CTB1 Heater Treater

OrderNo.: 2208I02

Hall Environmental Analysis Laboratory

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

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 11 sample(s) on 8/31/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**Project:** Onyx 29 CTB1 Heater Treater

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-01 0.5' Collection Date: 8/29/2022 10:00:00 AM

Lab ID: 2208I02-001	Matrix: SOIL	Rece	eived Date:	022 7:40:00 AM	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 8:51:13 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2022 8:51:13 PM
Surr: DNOP	97.4	21-129	%Rec	1	9/1/2022 8:51:13 PM
EPA METHOD 8015D: GASOLINE RAM	IGE				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/1/2022 1:09:00 PM
Surr: BFB	95.5	37.7-212	%Rec	1	9/1/2022 1:09:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	9/1/2022 1:09:00 PM
Toluene	ND	0.049	mg/Kg	1	9/1/2022 1:09:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	9/1/2022 1:09:00 PM
Xylenes, Total	ND	0.098	mg/Kg	1	9/1/2022 1:09:00 PM
Surr: 4-Bromofluorobenzene	91.8	70-130	%Rec	1	9/1/2022 1:09:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	110	60	mg/Kg	20	9/1/2022 6:27:20 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 interference

B Analyte detected in the associated Method Blank

- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

RL Reporting Limit

Page 1 of 15

**Project:** 

Chloride

**Analytical Report** Lab Order 2208I02

Date Reported: 9/7/2022

9/1/2022 6:39:44 AM

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: WES22-02 0.5' Collection Date: 8/29/2022 10:05:00 AM

Lab ID: 2208102-002 Matrix: SOIL Received Date: 8/31/2022 7:40:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 15 mg/Kg 1 9/1/2022 9:02:15 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/1/2022 9:02:15 PM 21-129 Surr: DNOP 102 %Rec 1 9/1/2022 9:02:15 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 9/1/2022 1:48:00 PM 4.8 mg/Kg 1 Surr: BFB 94.8 37.7-212 %Rec 1 9/1/2022 1:48:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: BRM 9/1/2022 1:48:00 PM Benzene ND 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2022 1:48:00 PM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2022 1:48:00 PM Xylenes, Total ND 0.096 mg/Kg 1 9/1/2022 1:48:00 PM 9/1/2022 1:48:00 PM Surr: 4-Bromofluorobenzene 89.9 70-130 %Rec 1 Analyst: JMT **EPA METHOD 300.0: ANIONS** 

110

60

ma/Ka

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
- POL
- Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix interference

- в Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- Reporting Limit RL

Page 2 of 15

2208102-003

Project:

Lab ID:

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: WES22-03 0.5' Collection Date: 8/29/2022 10:10:00 AM

**Received Date:** 8/31/2022 7:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/1/2022 9:13:11 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2022 9:13:11 PM
Surr: DNOP	75.8	21-129	%Rec	1	9/1/2022 9:13:11 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/1/2022 2:08:00 PM
Surr: BFB	92.7	37.7-212	%Rec	1	9/1/2022 2:08:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.025	mg/Kg	1	9/1/2022 2:08:00 PM
Toluene	ND	0.050	mg/Kg	1	9/1/2022 2:08:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	9/1/2022 2:08:00 PM
Xylenes, Total	ND	0.10	mg/Kg	1	9/1/2022 2:08:00 PM
Surr: 4-Bromofluorobenzene	89.6	70-130	%Rec	1	9/1/2022 2:08:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	190	60	mg/Kg	20	9/1/2022 8:15:48 AM

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 15

2208102-004

Project:

Lab ID:

Analytical Report Lab Order 2208I02

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Date Reported: 9/7/2022 Client Sample ID: WES22-04 0.5' Collection Date: 8/29/2022 10:15:00 AM

Received Date: 8/31/2022 7:40:00 AM

Analyses	Result	RL Qua	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 9:24:07 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2022 9:24:07 PM
Surr: DNOP	89.3	21-129	%Rec	1	9/1/2022 9:24:07 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/1/2022 2:27:00 PM
Surr: BFB	95.4	37.7-212	%Rec	1	9/1/2022 2:27:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	9/1/2022 2:27:00 PM
Toluene	ND	0.048	mg/Kg	1	9/1/2022 2:27:00 PM
Ethylbenzene	ND	0.048	mg/Kg	1	9/1/2022 2:27:00 PM
Xylenes, Total	ND	0.095	mg/Kg	1	9/1/2022 2:27:00 PM
Surr: 4-Bromofluorobenzene	90.1	70-130	%Rec	1	9/1/2022 2:27:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	170	60	mg/Kg	20	9/1/2022 8:53:00 AM

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 15

Project:

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: WES22-05 2' Collection Date: 8/29/2022 10:20:00 AM Received Date: 8/31/2022 7:40:00 AM

Lab ID: 2208102-005	Matrix: SOIL	Recei	022 7:40:00 AM		
Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/1/2022 9:35:02 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/1/2022 9:35:02 PM
Surr: DNOP	62.8	21-129	%Rec	1	9/1/2022 9:35:02 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/1/2022 2:47:00 PM
Surr: BFB	103	37.7-212	%Rec	1	9/1/2022 2:47:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	9/1/2022 2:47:00 PM
Toluene	ND	0.048	mg/Kg	1	9/1/2022 2:47:00 PM
Ethylbenzene	ND	0.048	mg/Kg	1	9/1/2022 2:47:00 PM
Xylenes, Total	ND	0.096	mg/Kg	1	9/1/2022 2:47:00 PM
Surr: 4-Bromofluorobenzene	92.9	70-130	%Rec	1	9/1/2022 2:47:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	150	60	mg/Kg	20	9/1/2022 9:30:13 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: WES22-06 2' Collection Date: 8/29/2022 10:25:00 AM Received Date: 8/31/2022 7:40:00 AM

Lab ID: 2208102-006	Matrix: SOIL         Received Date: 8/31/2022 7:40:00 AN					
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH	
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 9:45:58 PM	
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/1/2022 9:45:58 PM	
Surr: DNOP	70.0	21-129	%Rec	1	9/1/2022 9:45:58 PM	
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: BRM	
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	9/1/2022 3:07:00 PM	
Surr: BFB	94.2	37.7-212	%Rec	1	9/1/2022 3:07:00 PM	
EPA METHOD 8021B: VOLATILES					Analyst: BRM	
Benzene	ND	0.025	mg/Kg	1	9/1/2022 3:07:00 PM	
Toluene	ND	0.050	mg/Kg	1	9/1/2022 3:07:00 PM	
Ethylbenzene	ND	0.050	mg/Kg	1	9/1/2022 3:07:00 PM	
Xylenes, Total	ND	0.10	mg/Kg	1	9/1/2022 3:07:00 PM	
Surr: 4-Bromofluorobenzene	90.8	70-130	%Rec	1	9/1/2022 3:07:00 PM	
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>	
Chloride	180	60	mg/Kg	20	9/1/2022 9:42:38 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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project: Onyx 29 CTB1 Heater Treater

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: WES22-07 2' Collection Date: 8/29/2022 10:30:00 AM Received Date: 8/31/2022 7:40:00 AM

Lab ID: 2208I02-007	Matrix: SOIL	trix: SOIL         Received Date: 8/31/2022 7:40			
Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 9:56:52 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2022 9:56:52 PM
Surr: DNOP	66.9	21-129	%Rec	1	9/1/2022 9:56:52 PM
EPA METHOD 8015D: GASOLINE RANGE	E				Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/1/2022 3:27:00 PM
Surr: BFB	95.4	37.7-212	%Rec	1	9/1/2022 3:27:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	9/1/2022 3:27:00 PM
Toluene	ND	0.049	mg/Kg	1	9/1/2022 3:27:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	9/1/2022 3:27:00 PM
Xylenes, Total	ND	0.098	mg/Kg	1	9/1/2022 3:27:00 PM
Surr: 4-Bromofluorobenzene	90.9	70-130	%Rec	1	9/1/2022 3:27:00 PM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	290	60	mg/Kg	20	9/1/2022 2:03:11 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: WES22-08 2' Collection Date: 8/29/2022 10:35:00 AM Received Date: 8/31/2022 7:40:00 AM

Lab ID: 2208I02-008	Matrix: SOIL         Received Date: 8/31/2022 7:40:00					
Analyses	Result	RL Qua	al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH	
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/1/2022 10:07:44 PM	
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/1/2022 10:07:44 PM	
Surr: DNOP	76.9	21-129	%Rec	1	9/1/2022 10:07:44 PM	
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: BRM	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/1/2022 3:47:00 PM	
Surr: BFB	95.6	37.7-212	%Rec	1	9/1/2022 3:47:00 PM	
EPA METHOD 8021B: VOLATILES					Analyst: BRM	
Benzene	ND	0.024	mg/Kg	1	9/1/2022 3:47:00 PM	
Toluene	ND	0.047	mg/Kg	1	9/1/2022 3:47:00 PM	
Ethylbenzene	ND	0.047	mg/Kg	1	9/1/2022 3:47:00 PM	
Xylenes, Total	ND	0.095	mg/Kg	1	9/1/2022 3:47:00 PM	
Surr: 4-Bromofluorobenzene	90.1	70-130	%Rec	1	9/1/2022 3:47:00 PM	
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>	
Chloride	270	60	mg/Kg	20	9/1/2022 2:15:35 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208102-009

Project:

Lab ID:

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: BES22-01 1' Collection Date: 8/29/2022 10:40:00 AM Received Date: 8/31/2022 7:40:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 10:18:37 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/1/2022 10:18:37 PM
Surr: DNOP	73.5	21-129	%Rec	1	9/1/2022 10:18:37 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/1/2022 4:07:00 PM
Surr: BFB	94.9	37.7-212	%Rec	1	9/1/2022 4:07:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	9/1/2022 4:07:00 PM
Toluene	ND	0.048	mg/Kg	1	9/1/2022 4:07:00 PM
Ethylbenzene	ND	0.048	mg/Kg	1	9/1/2022 4:07:00 PM
Xylenes, Total	ND	0.095	mg/Kg	1	9/1/2022 4:07:00 PM
Surr: 4-Bromofluorobenzene	91.5	70-130	%Rec	1	9/1/2022 4:07:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	97	60	mg/Kg	20	9/1/2022 10:44:40 AM

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 range due to dilution or matrix interference

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

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Project:

Analytical Report Lab Order 2208I02

Date Reported: 9/7/2022

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Client Sample ID: BES22-02 1' Collection Date: 8/29/2022 10:45:00 AM Received Date: 8/31/2022 7:40:00 AM

Lab ID: 2208I02-010	Matrix: SOIL         Received Date: 8/31/2022 7:40:00 A					
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH	
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/1/2022 10:29:27 PM	
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/1/2022 10:29:27 PM	
Surr: DNOP	75.3	21-129	%Rec	1	9/1/2022 10:29:27 PM	
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM	
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/1/2022 4:26:00 PM	
Surr: BFB	96.5	37.7-212	%Rec	1	9/1/2022 4:26:00 PM	
EPA METHOD 8021B: VOLATILES					Analyst: BRM	
Benzene	ND	0.024	mg/Kg	1	9/1/2022 4:26:00 PM	
Toluene	ND	0.047	mg/Kg	1	9/1/2022 4:26:00 PM	
Ethylbenzene	ND	0.047	mg/Kg	1	9/1/2022 4:26:00 PM	
Xylenes, Total	ND	0.094	mg/Kg	1	9/1/2022 4:26:00 PM	
Surr: 4-Bromofluorobenzene	92.2	70-130	%Rec	1	9/1/2022 4:26:00 PM	
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>	
Chloride	77	60	mg/Kg	20	9/1/2022 10:57:05 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2208I02-011

Project:

Lab ID:

Analytical Report Lab Order 2208I02

#### Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Date Reported: 9/7/2022 Client Sample ID: BES22-03 4' Collection Date: 8/29/2022 10:50:00 AM

Received Date: 8/31/2022 7:40:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANIC					Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 10:40:20 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2022 10:40:20 PM
Surr: DNOP	88.9	21-129	%Rec	1	9/1/2022 10:40:20 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/1/2022 4:46:00 PM
Surr: BFB	93.8	37.7-212	%Rec	1	9/1/2022 4:46:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.024	mg/Kg	1	9/1/2022 4:46:00 PM
Toluene	ND	0.047	mg/Kg	1	9/1/2022 4:46:00 PM
Ethylbenzene	ND	0.047	mg/Kg	1	9/1/2022 4:46:00 PM
Xylenes, Total	ND	0.095	mg/Kg	1	9/1/2022 4:46:00 PM
Surr: 4-Bromofluorobenzene	91.1	70-130	%Rec	1	9/1/2022 4:46:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	110	60	mg/Kg	20	9/1/2022 11:09:29 AM

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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# OC SUMMARY REPORT

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-	MARY REPORT WO#: Imental Analysis Laboratory, Inc.	2208102 07-Sep-22
Client:	Devon Energy Onyx 29 CTB1 Heater Treater	
Sample ID: MB-699	00 SampType: mblk TestCode: EPA Method 300.0: Anions	
Client ID: PBS	Batch ID: 69900 RunNo: 90702	
Prep Date: 8/31/20	D22         Analysis Date:         8/31/2022         SeqNo:         3243373         Units:         mg/Kg	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 0	Qual
Chloride	ND 1.5	
Sample ID: LCS-69	SampType:         Ics         TestCode:         EPA Method 300.0: Anions	
Client ID: LCSS	Batch ID: 69900 RunNo: 90702	
Prep Date: 8/31/20	D22         Analysis Date:         8/31/2022         SeqNo:         3243374         Units:         mg/Kg	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 0	Qual
Chloride	15 1.5 15.00 0 100 90 110	
Sample ID: MB-699	07 SampType: mblk TestCode: EPA Method 300.0: Anions	
Client ID: PBS	Batch ID: 69907 RunNo: 90757	
Prep Date: 9/1/202	22 Analysis Date: 9/1/2022 SeqNo: 3244232 Units: mg/Kg	
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit 0	Qual
Chloride	ND 1.5	
Sample ID: LCS-699	007 SampType: Ics TestCode: EPA Method 300.0: Anions	

Sample ID: LCS-69907	S-69907 SampType: Ics TestCode: EPA Method 30			300.0: Anions	6				
Client ID: LCSS	Batch ID: 69907 RunNo: 90757								
Prep Date: 9/1/2022	Analysis Date: 9/1/	2022	S	eqNo: 32	244233	Units: mg/Kg	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15 1.5	15.00	0	98.6	90	110			

**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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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# **QC SUMMARY REPORT** Ha

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	WO#:	2208102
all Environmental Analysis Laboratory, Inc.		07-Sep-22

Client:	Devon Er	nergy									
Project:	Onyx 29	CTB1 Heat	er Trea	ater							
Sample ID: I	LCS-69888	SampTy	/pe: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch	ID: 698	888	F	RunNo: <b>90</b>	0763				
Prep Date:	8/31/2022	Analysis Da	ate: <b>9/</b>	1/2022	S	SeqNo: 32	244630	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	rganics (DRO)	34	15	50.00	0	69.0	64.4	127			
Surr: DNOP		3.4		5.000		68.2	21	129			
Sample ID: I	MB-69888	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch	ID: 698	888	F	RunNo: <b>9(</b>	0763				
Prep Date:	8/31/2022	Analysis Da	ate: <b>9/</b>	1/2022	S	SeqNo: 32	244632	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range O	•	ND	15								
-	Organics (MRO)	ND	50								
Surr: DNOP		7.5		10.00		75.0	21	129			
Sample ID: I	LCS-69899	SampTy	/pe: <b>LC</b>	S	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	LCSS	Batch	ID: 698	899	F	RunNo: <b>9(</b>	0763				
Prep Date:	8/31/2022	Analysis Da	ate: <b>9/</b> 2	2/2022	S	SeqNo: 32	246702	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.7		5.000		114	21	129			
Sample ID: I	MB-69899	SampTy	/pe: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID:	PBS	Batch	ID: 698	399	F	RunNo: <b>90</b>	0763				
Prep Date:	8/31/2022	Analysis Da	ate: <b>9/</b> 2	2/2022	S	SeqNo: 32	246703	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		10		10.00		105	21	129			

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- В Analyte detected in the associated Method Blank
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

# **QC SUMMARY REPORT** Hall Environm

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AKY KEPUKI	WO#:	2208102
nental Analysis Laboratory, Inc.		07-Sep-22

Client:Devon EProject:Onyx 29	Cnergy CTB1 Heater Treater			
Sample ID: Ics-69886	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range	9
Client ID: LCSS	Batch ID: 69886	RunNo: 90749		
Prep Date: 8/31/2022	Analysis Date: 9/1/2022	SeqNo: 3243798	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Gasoline Range Organics (GRO)	26 5.0 25.00	0 103 72.3	137	
Surr: BFB	2200 1000	217 37.7	212	S
Sample ID: mb-69886	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range	•
Client ID: PBS	Batch ID: 69886	RunNo: 90749		
Prep Date: 8/31/2022	Analysis Date: 9/1/2022	SeqNo: 3243799	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 5.0 920 1000	92.1 37.7	212	
Sample ID: Ics-69889	SampType: LCS	TestCode: EPA Method	8015D: Gasoline Range	•
Client ID: LCSS	Batch ID: 69889	RunNo: 90749		
Prep Date: 8/31/2022	Analysis Date: 9/1/2022	SeqNo: 3243822	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB	2100 1000	213 37.7	212	S
Sample ID: mb-69889	SampType: MBLK	TestCode: EPA Method	8015D: Gasoline Range	)
Client ID: PBS	Batch ID: 69889	RunNo: 90749		
Prep Date: 8/31/2022	Analysis Date: 9/1/2022	SeqNo: 3243823	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: BFB	940 1000	94.0 37.7	212	

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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank В
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Devon Energy

**Client:** 

**Project:** 

## **QC SUMMARY REPORT** Hall Environmental Analysis Laboratory, Inc.

Onyx 29 CTB1 Heater Treater

Sample ID: Ics-69886	SampType: LC	s	Tes	tCode: EPA N	Method	8021B: Volati	les		
Client ID: LCSS	Batch ID: 69	886	R	RunNo: 90749	9				
Prep Date: 8/31/2022	Analysis Date: 9/	/1/2022	S	SeqNo: 32438	846	Units: mg/Kg	9		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81 0.025	1.000	0	81.0	80	120			
Toluene	0.83 0.050	1.000	0	83.1	80	120			
Ethylbenzene	0.84 0.050	1.000	0	84.3	80	120			
Xylenes, Total	2.5 0.10	3.000	0	83.9	80	120			
Surr: 4-Bromofluorobenzene	0.92	1.000		92.2	70	130			
Sample ID: mb-69886	SampType: MI	BLK	Tes	tCode: EPA N	Method	8021B: Volati	les		
Client ID: PBS	Batch ID: 69	886	R	RunNo: <b>9074</b> 9	9				
Prep Date: 8/31/2022	Analysis Date: 9/	/1/2022	S	SeqNo: 32438	847	Units: mg/Kg	9		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND 0.025								
Toluene	ND 0.050								
Ethylbenzene	ND 0.050								
Xylenes, Total	ND 0.10								
Surr: 4-Bromofluorobenzene	0.90	1.000		89.8	70	130			
Sample ID: Ics-69889	SampType: LC	s	Tes	tCode: EPA N	Method	8021B: Volati	les		
Client ID: LCSS	Batch ID: 69	889	R	RunNo: <b>9074</b>	9				
Prep Date: 8/31/2022	Analysis Date: 9/	/1/2022	S	SeqNo: 32438	870	Units: %Rec			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.90	1.000		90.3	70	130			
Sample ID: mb-69889	SampType: MI	BLK	Tes	tCode: EPA N	Method	8021B: Volati	les		
Client ID: PBS	Batch ID: 69	889	R	RunNo: 90749	9				
Prep Date: 8/31/2022	Analysis Date: 9/	/1/2022	S	SeqNo: 32438	871	Units: %Rec			
Analyte	Result PQL	SPK value	SPK Ref Val	%REC Lo	owLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89	1.000		89.5	70	130			

**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 ND
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 15 of 15

WO#: 2208102

07-Sep-22

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmen TEL: 505-345-39 Website: www	490 Albuquerq 975 FAX:	1 Hawkins N ue, NM 8710 505-345-410	7E 19 S	Sam	nple Log-In Check List
Client Name: Devon Energy	Work Order Numb	ber: 2208	3102	-		RcptNo: 1
Received By: Juan Rojas	8/31/2022 7:40:00 A	M	5	Guard	39	
Completed By: Sean Livingston	8/31/2022 8:25:41 #	M		5	1	
Reviewed By: JN 8/31/22					-01	Jon
Chain of Custody						
1. Is Chain of Custody complete?		Yes		No		Not Present
2. How was the sample delivered?		Cour	rier			
Log In			2.1	1.0	_	7.01
3. Was an attempt made to cool the samples	?	Yes		No		
4. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes		No		
5. Sample(s) in proper container(s)?		Yes		No		
6. Sufficient sample volume for indicated test(	s)?	Yes		No [		
7. Are samples (except VOA and ONG) prope	rly preserved?	Yes		No [		
8. Was preservative added to bottles?		Yes		No B	~	
9. Received at least 1 vial with headspace <1/	4" for AQ VOA?	Yes		No [		NA 🗹
10. Were any sample containers received brok	en?	Yes		No		# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes		No [	-	for pH: (<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 [		.(0.0.2)
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No [	⊐	Checked by: March 8 * SI · Z
Special Handling (if applicable)						
15. Was client notified of all discrepancies with	this order?	Yes		No		NA 🗹
Person Notified:	Date:	-			-	
By Whom:	Via:	eMa	ail 🗌 Pho	ne 🗌	Fax	In Person
Regarding:					-	
Client Instructions:						
16. Additional remarks:						
17. Cooler Information						
The first of the f	eal Intact Seal No	Seal Da	ate Si	gned B	у	
1 0.9 Good						

Page 1 of 1

Cha	in-ot-Ci	Chain-of-Custody Record	I urn-Around Time:	N	600				Ш	INT	HALL ENVIDONMENTAL	INTAL
nt: DR	Devon/vertex	ertex	□ Standard	Rush_				NA N	LYS	SI	ANALYSIS LABORATOR	ATORY
nagi			Project Name:					www.	nallenvi	ronmer	www.hallenvironmental.com	
ing Addr	ess:	E, 16	theo	Heater	Treater	49	4901 Hawkins NE	kins NE	1	nquerq	Albuquerque, NM 87109	0
	5		Project #:			Τe	Tel. 505-3	505-345-3975		Fax 505	505-345-4107	
Phone #:			10-222	00-07/10	20				Analysis		Request	
email or Fax#:	#:		Project Manager	iger:				-	<sup>†</sup> O		(ìn	
S:6QA/QC Package: □ Standard	ige:	Level 4 (Full Validation)	kent	stamings	56	208) г'а ЯМ \ ОЯ	PCB's	SWISO	PO₄, S		əsdA\tr	
Accreditation:		□ Az Compliance	Sampler: CD						<sup>z</sup> ON	(		
	Other		On Ice:	D-Yes	ON D	22.80	1.4	no C		AO'		
	(e)	-	# of Coolers:	1		-		310	_		1.1.1	
Date Time	e Matrix	Sample Name	Cooler Temp(Including CF): Container Preserva Type and # Type	tive	HEAL No.	втех / м леговнят	itsə9 1808 EDB (Meth	8 yd eHA9	<u>ВСКА 8 М</u> СІ), F, Br,	40V) 0328 ₩92) 0728	Total Colifo	
0	0		204	ICC	100	11			1/			
10:05	P-1	LESZZ-02 0.5'		1	22	1 1			1			
10110	0	LES22-03 0.5'			003							
10:15	15	WESZ-040.5'			N ACO							
10:26	20	4 ES22-05 2'			005							
10:25	25	LES22-06 2'			00,							
10:30	30	45522-07 Z'			007							
25:01	22	LES22-08 2'			001							
10:10	10	BESZZ-01 1'			500							
511:01	517	BESS2-02 1'			010							
05:01	05	BESZED3 4		-	511	1			-			
Date: Time:	Relinquished by:	led by:	Received by:	Via:	Pate Time	Remarks:		40.	0	- 2	Dixan	
12	Re	ed by:	Received by:	Via:	ΠF .		101	して、生く	N	0456105	101	
TOPO OUT	A A A	LANA LI	110	I don Shi	INE CLIERS		1					



September 06, 2022

Kent Stallings Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040 FAX Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 2208I67

RE: Onyx 29 CTB1 Heater Treater

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 7 sample(s) on 9/1/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

**CLIENT:** Vertex Resources Services, Inc. Onyx 29 CTB1 Heater Treater **Project:** 2208167-001 Lab ID:

Client Sample ID: WES22-09 1' Collection Date: 8/30/2022 11:30:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/1/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 5:43:16 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2022 5:43:16 PM
Surr: DNOP	96.8	21-129	%Rec	1	9/1/2022 5:43:16 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/1/2022 8:49:35 AM
Surr: BFB	95.0	37.7-212	%Rec	1	9/1/2022 8:49:35 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	9/1/2022 8:49:35 AM
Toluene	ND	0.049	mg/Kg	1	9/1/2022 8:49:35 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/1/2022 8:49:35 AM
Xylenes, Total	ND	0.098	mg/Kg	1	9/1/2022 8:49:35 AM
Surr: 4-Bromofluorobenzene	90.0	70-130	%Rec	1	9/1/2022 8:49:35 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	180	60	mg/Kg	20	9/1/2022 3:56:45 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 11

#### Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

**CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2208167-002 Lab ID:

Client Sample ID: WES22-10 1' Collection Date: 8/30/2022 11:35:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/1/2022 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	14	mg/Kg	1	9/1/2022 6:25:11 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	9/1/2022 6:25:11 PM
Surr: DNOP	96.5	21-129	%Rec	1	9/1/2022 6:25:11 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	9/1/2022 9:13:07 AM
Surr: BFB	95.7	37.7-212	%Rec	1	9/1/2022 9:13:07 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	9/1/2022 9:13:07 AM
Toluene	ND	0.041	mg/Kg	1	9/1/2022 9:13:07 AM
Ethylbenzene	ND	0.041	mg/Kg	1	9/1/2022 9:13:07 AM
Xylenes, Total	ND	0.083	mg/Kg	1	9/1/2022 9:13:07 AM
Surr: 4-Bromofluorobenzene	90.4	70-130	%Rec	1	9/1/2022 9:13:07 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	130	60	mg/Kg	20	9/1/2022 4:09:10 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

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

Analyte detected in the associated Method Blank в

Е Estimated value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 2 of 11

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2208167-003 Lab ID:

Client Sample ID: WES22-11 1' Collection Date: 8/30/2022 11:40:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/1/2022 7:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/1/2022 6:39:11 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/1/2022 6:39:11 PM
Surr: DNOP	80.1	21-129	%Rec	1	9/1/2022 6:39:11 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/1/2022 9:36:36 AM
Surr: BFB	96.6	37.7-212	%Rec	1	9/1/2022 9:36:36 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/1/2022 9:36:36 AM
Toluene	ND	0.040	mg/Kg	1	9/1/2022 9:36:36 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/1/2022 9:36:36 AM
Xylenes, Total	ND	0.079	mg/Kg	1	9/1/2022 9:36:36 AM
Surr: 4-Bromofluorobenzene	91.0	70-130	%Rec	1	9/1/2022 9:36:36 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	110	61	mg/Kg	20	9/1/2022 4:46:22 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2208167-004 Lab ID:

Client Sample ID: WES22-12 1' Collection Date: 8/30/2022 11:45:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/1/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: SB
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 6:52:56 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2022 6:52:56 PM
Surr: DNOP	94.9	21-129	%Rec	1	9/1/2022 6:52:56 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/1/2022 10:00:05 AM
Surr: BFB	95.1	37.7-212	%Rec	1	9/1/2022 10:00:05 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/1/2022 10:00:05 AM
Toluene	ND	0.040	mg/Kg	1	9/1/2022 10:00:05 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/1/2022 10:00:05 AM
Xylenes, Total	ND	0.079	mg/Kg	1	9/1/2022 10:00:05 AM
Surr: 4-Bromofluorobenzene	90.2	70-130	%Rec	1	9/1/2022 10:00:05 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	ND	60	mg/Kg	20	9/1/2022 4:58:46 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

PQL Practical Quanitative Limit

- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CTB1 Heater Treater	
Lab ID:	2208167-005	Ma

Client Sample ID: BES22-05 2' Collection Date: 8/30/2022 11:55:00 AM

Matrix: MEOH (SOIL) Received Date: 9/1/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: SB
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 7:06:43 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/1/2022 7:06:43 PM
Surr: DNOP	86.9	21-129	%Rec	1	9/1/2022 7:06:43 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	9/1/2022 10:23:30 AM
Surr: BFB	96.2	37.7-212	%Rec	1	9/1/2022 10:23:30 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	9/1/2022 10:23:30 AM
Toluene	ND	0.047	mg/Kg	1	9/1/2022 10:23:30 AM
Ethylbenzene	ND	0.047	mg/Kg	1	9/1/2022 10:23:30 AM
Xylenes, Total	ND	0.094	mg/Kg	1	9/1/2022 10:23:30 AM
Surr: 4-Bromofluorobenzene	90.7	70-130	%Rec	1	9/1/2022 10:23:30 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>JMT</b>
Chloride	110	60	mg/Kg	20	9/1/2022 5:11:11 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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

CLIENT:	Vertex Resources Services, Inc.	
<b>Project:</b>	Onyx 29 CTB1 Heater Treater	
Lab ID:	2208167-006	Matr

Client Sample ID: BES22-06 2' Collection Date: 8/30/2022 12:00:00 PM

Matrix: MEOH (SOIL)

Received Date: 9/1/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/1/2022 7:20:24 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2022 7:20:24 PM
Surr: DNOP	94.5	21-129	%Rec	1	9/1/2022 7:20:24 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.7	mg/Kg	1	9/1/2022 10:47:01 AM
Surr: BFB	98.2	37.7-212	%Rec	1	9/1/2022 10:47:01 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.019	mg/Kg	1	9/1/2022 10:47:01 AM
Toluene	ND	0.037	mg/Kg	1	9/1/2022 10:47:01 AM
Ethylbenzene	ND	0.037	mg/Kg	1	9/1/2022 10:47:01 AM
Xylenes, Total	ND	0.075	mg/Kg	1	9/1/2022 10:47:01 AM
Surr: 4-Bromofluorobenzene	92.4	70-130	%Rec	1	9/1/2022 10:47:01 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	120	60	mg/Kg	20	9/1/2022 5:23:35 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

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2208I67

Date Reported: 9/6/2022

**CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2208167-007 Lab ID:

Client Sample ID: BES22-07 2' Collection Date: 8/30/2022 12:05:00 PM

Matrix: MEOH (SOIL)

Received Date: 9/1/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/1/2022 7:34:07 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2022 7:34:07 PM
Surr: DNOP	94.1	21-129	%Rec	1	9/1/2022 7:34:07 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	9/1/2022 11:10:32 AM
Surr: BFB	95.8	37.7-212	%Rec	1	9/1/2022 11:10:32 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	9/1/2022 11:10:32 AM
Toluene	ND	0.043	mg/Kg	1	9/1/2022 11:10:32 AM
Ethylbenzene	ND	0.043	mg/Kg	1	9/1/2022 11:10:32 AM
Xylenes, Total	ND	0.086	mg/Kg	1	9/1/2022 11:10:32 AM
Surr: 4-Bromofluorobenzene	90.5	70-130	%Rec	1	9/1/2022 11:10:32 AM
EPA METHOD 300.0: ANIONS					Analyst: JMT
Chloride	110	60	mg/Kg	20	9/1/2022 5:36:00 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference S

- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 7 of 11

	x Resources Services, Inc. 29 CTB1 Heater Treater			
Sample ID: MB-69904	SampType: <b>mblk</b>	TestCode: EPA Method	l 300.0: Anions	
Client ID: PBS	Batch ID: 69904	RunNo: 90757		
Prep Date: 8/31/2022	Analysis Date: 9/1/2022	SeqNo: 3244264	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	ND 1.5			
Sample ID: LCS-69904	SampType: Ics	TestCode: EPA Method	l 300.0: Anions	
Client ID: LCSS	Batch ID: 69904	RunNo: 90757		
Prep Date: 8/31/2022	Analysis Date: 9/1/2022	SeqNo: 3244265	Units: <b>mg/Kg</b>	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Chloride	15 1.5 15.00	0 101 90	110	

#### Qualifiers:

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2208167

06-Sep-22

Client: Vertex l	Resources Se	ervices,	Inc.							
Project: Onyx 29	OCTB1 Hea	ter Tre	ater							
Sample ID: MB-69910	SampT	ype: ME	BLK	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: PBS	Batch	n ID: 69	910	R	unNo: 9	0727				
Prep Date: 9/1/2022	Analysis D	ate: 9/	1/2022	S	eqNo: 3	243472	Units: <b>mg/k</b>	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.0	21	129			
Sample ID: LCS-69910	SampT	ype: LC	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batch	n ID: 69	910	R	unNo: <b>9</b>	0727				
Prep Date: 9/1/2022	Analysis D	ate: 9/	1/2022	S	eqNo: 3	244526	Units: <b>mg/</b>	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	15	50.00	0	88.8	64.4	127			
Surr: DNOP	4.7		5.000		94.8	21	129			
Sample ID: 2208167-001AMS	SampT	ype: <b>MS</b>	6	Test	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: WES22-09 1'	Batch	n ID: 69	910	R	unNo: 9	0727				
Prep Date: 9/1/2022	Analysis D	ate: <b>9/</b>	1/2022	S	eqNo: 3	244528	Units: mg/k	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	14	48.31	0	94.5	36.1	154			
Surr: DNOP	4.8		4.831		98.4	21	129			
Sample ID: 2208167-001AMS	D SampT	ype: MS	SD	Test	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: WES22-09 1'	Batch	n ID: 69	910	R	lunNo: <b>9</b>	0727				
Prep Date: 9/1/2022	Analysis D	ate: <b>9/</b>	1/2022	S	eqNo: 3	244529	Units: mg/k	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	15	48.45	0	90.0	36.1	154	4.64	33.9	
Surr: DNOP	4.6		4.845		95.9	21	129	0	0	

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2208167

06-Sep-22

	Resources Se 9 CTB1 Hea		,							
Sample ID: mb	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: PBS	Batch	ID: <b>G</b> 9	0750	F	RunNo: 9	0750				
Prep Date:	Analysis D	ate: <b>9/</b>	1/2022	S	SeqNo: 3	243897	Units: <b>mg/k</b>	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 990	5.0	1000		99.0	37.7	212			
Sample ID: 2.5ug gro Ics	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	ID: <b>G</b> 9	0750	F	RunNo: <b>9</b>	0750				
Prep Date:	Analysis D	ate: <b>9/</b>	1/2022	S	SeqNo: 3	243898	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	85.5	72.3	137			
Surr: BFB	1800		1000		183	37.7	212			
Sample ID: 2208i67-001ams	SampT	ype: <b>M</b> \$	3	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: WES22-09 1'	Batch	ID: <b>G</b> 9	0750	F	RunNo: 9	0750				
Prep Date:	Analysis D	ate: <b>9/</b>	1/2022	5	SeqNo: 3	243908	Units: <b>mg/</b> #	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.49	0	97.3	70	130			
Surr: BFB	2000		979.4		202	37.7	212			
Sample ID: 2208i67-001ams	d SampT	ype: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015D: Gaso	line Rang	e	
Client ID: WES22-09 1'	Batch	ID: <b>G</b> 9	0750	F	RunNo: <b>9</b>	0750				
Prep Date:	Analysis D	ate: <b>9/</b>	1/2022	S	SeqNo: 3	243909	Units: mg/k	٢g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.49	0	100	70	130	2.72	20	
Surr: BFB	2000		979.4		200	37.7	212	0	0	

#### Qualifiers:

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- J Analyte detected below quantitation limits
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Page 10 of 11

2208167

06-Sep-22

	esources S CTB1 Hea									
Sample ID: <b>mb</b>		Гуре: <b>МЕ</b>		Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS		h ID: <b>B9</b>		F	RunNo: 9	0750				
Prep Date:	Analysis [	-			SeqNo: 3		Units: mg/k	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025					5			
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.93		1.000		93.5	70	130			
Sample ID: 100ng btex Ics	Samp	Гуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batc	h ID: <b>B9</b>	0750	F	RunNo: <b>9</b>	0750				
Prep Date:	Analysis [	Date: <b>9/</b>	1/2022	S	SeqNo: 3	243939	Units: mg/k	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	86.6	80	120			
Toluene	0.90	0.050	1.000	0	90.4	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.6	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.1	70	130			
Sample ID: 2208i67-002ams	Samp	Гуре: <b>М</b>	6	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: WES22-10 1'	Batc	h ID: <b>B9</b>	0750	F	RunNo: 9	0750				
Prep Date:	Analysis [	Date: 9/	1/2022	S	SeqNo: 3	243949	Units: mg/k	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.021	0.8299	0	86.5	68.8	120			
Toluene	0.74	0.041	0.8299	0	89.6	73.6	124			
Ethylbenzene	0.74	0.041	0.8299	0	88.8	72.7	129			
Xylenes, Total	2.2	0.083	2.490	0	87.9	75.7	126			
Surr: 4-Bromofluorobenzene	0.78		0.8299		94.3	70	130			
Sample ID: 2208i67-002amsd		Гуре: <b>М</b>					8021B: Vola	tiles		
Client ID: WES22-10 1'	Batc	h ID: <b>B9</b>	0750	F	RunNo: <b>9</b>	0750				
Prep Date:	Analysis [	Date: 9/	1/2022	S	SeqNo: 3	243950	Units: mg/k	٤g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.021	0.8299	0	86.9	68.8	120	0.438	20	
Toluene	0.75	0.041	0.8299	0	89.8	73.6	124	0.212	20	
Ethylbenzene	0.75	0.041	0.8299	0	90.4	72.7	129	1.69	20	
Xylenes, Total	2.2	0.083	2.490	0	90.0	75.7	126	2.39	20	
Surr: 4-Bromofluorobenzene	0.76		0.8299		91.3	70	130	0	0	

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- % Recovery outside of range due to dilution or matrix interference S
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2208167

06-Sep-22

ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environment A TEL: 505-345-39 Website: www.	49 Ibuquer 75 FAX	01 Hawki que, NM 505-345	ins NE 87109 5-4107	Sar	Page 403
Client Name: Vertex Resources Services, Inc.	Work Order Numbe	er: 220	8167			RcptNo: 1
Received By: Cheyenne Cason	9/1/2022 7:30:00 AM			Cherry Cherry	1	
Completed By: Cheyenne Cason Reviewed By: Reviewed By: Re	9/1/2022 7:50:30 AN			Chine	L	
Chain of Custody						
1. Is Chain of Custody complete?		Yes	~	No		Not Present
2. How was the sample delivered?		Cou				
Log In						
3. Was an attempt made to cool the samples?		Yes		No		
4. Were all samples received at a temperature	of >0° C to 6.0°C	Yes		No		
5. Sample(s) in proper container(s)?		Yes		No		
6. Sufficient sample volume for indicated test(s	)?	Yes	~	No		
7. Are samples (except VOA and ONG) proper	y preserved?	Yes		No		
8. Was preservative added to bottles?		Yes	-	No		
9. Received at least 1 vial with headspace <1/4	" for AQ VOA?	Yes		No		NA 🔽
10. Were any sample containers received broke		Yes				# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes	~	No		bottles checked for pH: (<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		
<ol> <li>Were all holding times able to be met? (If no, notify customer for authorization.)</li> </ol>		Yes	~	No		Checked by: JA 9/1/27
Special Handling (if applicable)						
15. Was client notified of all discrepancies with	this order?	Yes		No		NA 🗹
Person Notified:	Date:	1.0			-	
By Whom:	Via:	eM	ail 🗔 i	Phone	Fax	In Person
Regarding:						
Client Instructions:						
16. Additional remarks:						
and the second	eal Intact Seal No Present	Seal D	ate	Signed I	Ву	

Page 1 of 1

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Client:	Chair	Chain-of-Custody Record	Turn-Around Time: 24	Z4-HOUF		HALLE	NVIR	ENVIRONMENTA	-
Trip in the image     Project Varme:     Project Varme:       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     In the image     In the image     In the image       In the image     <			on / bertex		'n		ANALY	STS 14	ABORATOR	
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пони         2255-07720-002         2225-0720-002           пони         2225-07720-002         2225-07720-002         2225-07720-002         2225-0770-002           Constant         Intervent         Propective         Intervent         Propective         2225-0770-002           Rendration         Az Compliance         Difference         Constant         Propective         Manager           Rendration         Az Compliance         Constant         Propective         Constant         Propective         Constant           Rendration         Az Compliance         Constant         Propective         Constant         Propective         Constant         Propective         Constant           Rendrative         Propective         Constant         Propective         Constant         Propective         Constant         Propective         Constant           Rendrative         Propective         Constant         Propective         Constant         Propective         Constant         Propective         Constant         Cons						Tel 50	1	Fav 505.3	45,4107	1/20
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C Deckage:	email	or Fax#:		Project Manager:		-	<sup>†</sup> O		()1(	45:.
Reditation:     Az Compliance     Sampler:     CA       Intro     Intro     Britik     Britik     Britik       Intro     Britik     Brit     Britik       Intre <td>QA/Q(</td> <td>C Package andard</td> <td></td> <td>1</td> <td>sbu</td> <td>АМ \ O</td> <td></td> <td></td> <td>1920AVI</td> <td><u>31 AM-</u></td>	QA/Q(	C Package andard		1	sbu	АМ \ O			1920AVI	<u>31 AM-</u>
IELAC         Onlos:         Pves         No           000000000000000000000000000000000000	Accre	ditation:	Az Compliance	Sampler: C D		שמ	0228		uəsi	
CDD (Type)         # of Coolers: 1		LAC			ON []	/ 03	3 10 1	(4	Pre	_
E         Time         Matrix         Sample Name         Cooler Temperature         HEAL No.         Th Histor Band         Matrix         Sample Name         Cooler Temperature         HEAL No.         Th Histor Band         Matrix         Sample Name         Container         Preservative         HEAL No.         Th Histor Band         Matrix         Sample Name         Container         Preservative         HEAL No.         Th Histor Band         Matrix         Sample Name         Container         Preservative         Matrix         Sam         Container         Preservative         Matrix         Sam         Container         Preservative         Matrix         Sam         Container         Preservative         Matrix         Sam         Constrainer         Preservative         Matrix         Sam         Constrainer         Proster         Matrix         Proster         Matrix         Proster         Matrix         Proster         Matrix         Proster         Matrix         Proster         Matrix         Proster <th< td=""><td></td><td>D (Type)</td><td></td><td># of Coolers: 1</td><td></td><td>AD)</td><td>01 elet</td><td>٥٨</td><td>) ш</td><td></td></th<>		D (Type)		# of Coolers: 1		AD)	01 elet	٥٨	) ш	
e         Time         Matrix         Sample Name         Container         Preservative         HEAL NO.         Type         Alt No.         Type         Alt No.         Type         Alt No.         Type         Alt No.         No. <th< td=""><td></td><td></td><td></td><td>Cooler Temp(including CF): 1.</td><td></td><td>190</td><td>y 83</td><td>(AO</td><td>101110</td><td></td></th<>				Cooler Temp(including CF): 1.		190	y 83	(AO	101110	
30/1:30     S0/1     LESZE-09     1     4.02     ZC6     201       11:35     LUESZE-10     1     4.02     ZC6     201     1       11:35     LUESZE-10     1     202     203     1     1       11:45     LUESZE-12     1     203     1     1     1       11:45     LUESZE-12     1     203     1     1     1       11:45     LUESZE-12     1     203     1     1     1       11:45     RESZE-05     2'     200     1     1     1       11:45     RESZE-07     2'     201     1     1     1       11:45     RESZE-07     1'     1     1     1     1       11:45	Date	Time				08:H9T	а еная В АЯЗЯ	S) 0228	01810 1	
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N:55     8E522-05     2'     COS     III     COS     III     III       12:05     3E522-05     2'     006     11     10     10     10       12:05     3E522-05     2'     1     COT     11     10     10     10       12:05     3E522-05     2'     1     COT     11     10     10     10       12:05     3E522-05     2'     1     COT     11     10     10     10       12:05     3E522-05     2'     1     COT     11     10     10     10       12:05     1     1     COT     11     10     10     10     10       10:05     1     1     10     10     10     10     10       10:06     10:07     10:07     10:07     10:07     10:07       10:07     10:07     10:07     10:07     10:07     10:07       10:07     10:07     10:07     10:07     10:07     10:07       10:07     10:07     10:07     10:07     10:07     10:07	-	11:43	1 21-2252M		604					
12:00     32522-01 2'     006     1     006       12:05     36522-07 2'     1     006     1       12:05     85522-07 2'     1     006       11     1     1     1       12:05     85522-07 2'     1     006       11     1     0     1       11     1     1     1       11     1     1	-	11:55	8ES22-05		cos					
12:05     325.22-07     2'     1     C01     1     1       Image: the second of the the second of the the second of the		20:21	BESZZ-06 Z		900					
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Time:     Relinquished by:     Received by:     Via:     Date     Time     Remarks:     C: C.MANCE     DixON       Time:     Relinquished by:     Received by:     Via:     Date     Time     Remarks:     C: C.MANCE     DixON       If Mile:     Relinquished by:     Received by:     Via:     Date     Time     Remarks:     C: C.MANCE     DixON       If Mile:     Relinquished by:     Received by:     Via:     Date     Time     LOCH     C: C.MANCE     DixON	_									
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September 08, 2022

Kent Stallings Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Onyx 29 CTB1 Heater Treater

OrderNo.: 2209087

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 15 sample(s) on 9/2/2022 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

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

**CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-001 Lab ID:

Client Sample ID: WES22-13 1' Collection Date: 8/31/2022 9:15:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 11:41:47 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/2/2022 11:41:47 AM
Surr: DNOP	81.5	21-129	%Rec	1	9/2/2022 11:41:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	9/2/2022 10:28:00 AM
Surr: BFB	91.6	37.7-212	%Rec	1	9/2/2022 10:28:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.022	mg/Kg	1	9/2/2022 10:28:00 AM
Toluene	ND	0.044	mg/Kg	1	9/2/2022 10:28:00 AM
Ethylbenzene	ND	0.044	mg/Kg	1	9/2/2022 10:28:00 AM
Xylenes, Total	ND	0.089	mg/Kg	1	9/2/2022 10:28:00 AM
Surr: 4-Bromofluorobenzene	85.8	70-130	%Rec	1	9/2/2022 10:28:00 AM
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/2/2022 11:39:37 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-002 Lab ID:

Client Sample ID: WES22-14 1' Collection Date: 8/31/2022 9:20:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 10:50:36 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/2/2022 10:50:36 AM
Surr: DNOP	88.7	21-129	%Rec	1	9/2/2022 10:50:36 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	9/2/2022 10:48:00 AM
Surr: BFB	92.1	37.7-212	%Rec	1	9/2/2022 10:48:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.022	mg/Kg	1	9/2/2022 10:48:00 AM
Toluene	ND	0.044	mg/Kg	1	9/2/2022 10:48:00 AM
Ethylbenzene	ND	0.044	mg/Kg	1	9/2/2022 10:48:00 AM
Xylenes, Total	ND	0.088	mg/Kg	1	9/2/2022 10:48:00 AM
Surr: 4-Bromofluorobenzene	88.5	70-130	%Rec	1	9/2/2022 10:48:00 AM
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	65	61	mg/Kg	20	9/2/2022 11:52:01 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

**CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-003 Lab ID:

Client Sample ID: WES22-15 1' Collection Date: 8/31/2022 9:25:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/2/2022 11:14:22 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/2/2022 11:14:22 AM
Surr: DNOP	97.6	21-129	%Rec	1	9/2/2022 11:14:22 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	9/2/2022 11:08:00 AM
Surr: BFB	94.3	37.7-212	%Rec	1	9/2/2022 11:08:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.021	mg/Kg	1	9/2/2022 11:08:00 AM
Toluene	ND	0.041	mg/Kg	1	9/2/2022 11:08:00 AM
Ethylbenzene	ND	0.041	mg/Kg	1	9/2/2022 11:08:00 AM
Xylenes, Total	ND	0.083	mg/Kg	1	9/2/2022 11:08:00 AM
Surr: 4-Bromofluorobenzene	88.4	70-130	%Rec	1	9/2/2022 11:08:00 AM
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/2/2022 12:04:26 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-004 Lab ID:

Client Sample ID: WES22-16 1' Collection Date: 8/31/2022 9:30:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 11:38:16 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/2/2022 11:38:16 AM
Surr: DNOP	92.5	21-129	%Rec	1	9/2/2022 11:38:16 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 11:27:00 AM
Surr: BFB	93.8	37.7-212	%Rec	1	9/2/2022 11:27:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.020	mg/Kg	1	9/2/2022 11:27:00 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 11:27:00 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 11:27:00 AM
Xylenes, Total	ND	0.081	mg/Kg	1	9/2/2022 11:27:00 AM
Surr: 4-Bromofluorobenzene	87.8	70-130	%Rec	1	9/2/2022 11:27:00 AM
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	59	mg/Kg	20	9/2/2022 12:41:40 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CTB1 Heater Treater	
Lab ID:	2209087-005	M

Client Sample ID: WES22-17 1' Collection Date: 8/31/2022 9:35:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/2/2022 12:02:05 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/2/2022 12:02:05 PM
Surr: DNOP	94.0	21-129	%Rec	1	9/2/2022 12:02:05 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 11:47:00 AM
Surr: BFB	93.0	37.7-212	%Rec	1	9/2/2022 11:47:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: BRM
Benzene	ND	0.020	mg/Kg	1	9/2/2022 11:47:00 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 11:47:00 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 11:47:00 AM
Xylenes, Total	ND	0.080	mg/Kg	1	9/2/2022 11:47:00 AM
Surr: 4-Bromofluorobenzene	89.4	70-130	%Rec	1	9/2/2022 11:47:00 AM
EPA METHOD 300.0: ANIONS					Analyst: CAS
Chloride	ND	60	mg/Kg	20	9/2/2022 12:54:05 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CTB1 Heater Treater	
Lab ID:	2209087-006	Mat

Client Sample ID: BES22-04 4' Collection Date: 8/31/2022 9:40:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: DGH				
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/2/2022 12:25:56 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/2/2022 12:25:56 PM
Surr: DNOP	93.3	21-129	%Rec	1	9/2/2022 12:25:56 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.1	mg/Kg	1	9/2/2022 9:02:21 AM
Surr: BFB	96.9	37.7-212	%Rec	1	9/2/2022 9:02:21 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/2/2022 9:02:21 AM
Toluene	ND	0.041	mg/Kg	1	9/2/2022 9:02:21 AM
Ethylbenzene	ND	0.041	mg/Kg	1	9/2/2022 9:02:21 AM
Xylenes, Total	ND	0.082	mg/Kg	1	9/2/2022 9:02:21 AM
Surr: 4-Bromofluorobenzene	90.9	70-130	%Rec	1	9/2/2022 9:02:21 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 11:16:16 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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-007 Lab ID:

Client Sample ID: BES22-08 2' Collection Date: 8/31/2022 9:45:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 11:52:20 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/2/2022 11:52:20 AM
Surr: DNOP	79.4	21-129	%Rec	1	9/2/2022 11:52:20 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 9:25:55 AM
Surr: BFB	97.5	37.7-212	%Rec	1	9/2/2022 9:25:55 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/2/2022 9:25:55 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 9:25:55 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 9:25:55 AM
Xylenes, Total	ND	0.079	mg/Kg	1	9/2/2022 9:25:55 AM
Surr: 4-Bromofluorobenzene	91.4	70-130	%Rec	1	9/2/2022 9:25:55 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 11:28:36 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S

Analyte detected in the associated Method Blank в

- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT:	Vertex Resources Services, Inc.	
Project:	Onyx 29 CTB1 Heater Treater	
Lab ID:	2209087-008	Mat

Client Sample ID: BES22-09 2' Collection Date: 8/31/2022 9:55:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 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	15	mg/Kg	1	9/2/2022 12:02:56 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/2/2022 12:02:56 PM
Surr: DNOP	80.8	21-129	%Rec	1	9/2/2022 12:02:56 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 9:49:26 AM
Surr: BFB	97.9	37.7-212	%Rec	1	9/2/2022 9:49:26 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/2/2022 9:49:26 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 9:49:26 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 9:49:26 AM
Xylenes, Total	ND	0.080	mg/Kg	1	9/2/2022 9:49:26 AM
Surr: 4-Bromofluorobenzene	91.7	70-130	%Rec	1	9/2/2022 9:49:26 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	62	60	mg/Kg	20	9/2/2022 11:40:56 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. Onyx 29 CTB1 Heater Treater **Project:** 2209087-009 Lab ID:

Client Sample ID: BES22-10 2' Collection Date: 8/31/2022 9:55:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 12:13:32 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/2/2022 12:13:32 PM
Surr: DNOP	78.7	21-129	%Rec	1	9/2/2022 12:13:32 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	9/2/2022 10:12:55 AM
Surr: BFB	98.0	37.7-212	%Rec	1	9/2/2022 10:12:55 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.017	mg/Kg	1	9/2/2022 10:12:55 AM
Toluene	ND	0.035	mg/Kg	1	9/2/2022 10:12:55 AM
Ethylbenzene	ND	0.035	mg/Kg	1	9/2/2022 10:12:55 AM
Xylenes, Total	ND	0.069	mg/Kg	1	9/2/2022 10:12:55 AM
Surr: 4-Bromofluorobenzene	92.1	70-130	%Rec	1	9/2/2022 10:12:55 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 11:53:18 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-010 Lab ID:

Client Sample ID: BES22-11 2' Collection Date: 8/31/2022 10:00:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 12:24:09 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/2/2022 12:24:09 PM
Surr: DNOP	78.5	21-129	%Rec	1	9/2/2022 12:24:09 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 10:36:27 AM
Surr: BFB	98.4	37.7-212	%Rec	1	9/2/2022 10:36:27 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/2/2022 10:36:27 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 10:36:27 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 10:36:27 AM
Xylenes, Total	ND	0.080	mg/Kg	1	9/2/2022 10:36:27 AM
Surr: 4-Bromofluorobenzene	93.4	70-130	%Rec	1	9/2/2022 10:36:27 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 12:05:39 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S

Analyte detected in the associated Method Blank в

- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

**CLIENT:** Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-011 Lab ID:

Client Sample ID: WES22-09 2' Collection Date: 8/31/2022 10:05:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	EPA METHOD 8015M/D: DIESEL RANGE ORGANICS				
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 12:34:46 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/2/2022 12:34:46 PM
Surr: DNOP	73.8	21-129	%Rec	1	9/2/2022 12:34:46 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	9/2/2022 10:59:56 AM
Surr: BFB	95.9	37.7-212	%Rec	1	9/2/2022 10:59:56 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	9/2/2022 10:59:56 AM
Toluene	ND	0.043	mg/Kg	1	9/2/2022 10:59:56 AM
Ethylbenzene	ND	0.043	mg/Kg	1	9/2/2022 10:59:56 AM
Xylenes, Total	ND	0.086	mg/Kg	1	9/2/2022 10:59:56 AM
Surr: 4-Bromofluorobenzene	90.6	70-130	%Rec	1	9/2/2022 10:59:56 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 12:18:00 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-012 Lab ID:

Client Sample ID: WES22-18 2' Collection Date: 8/31/2022 10:30:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	BANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	9/2/2022 12:45:25 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/2/2022 12:45:25 PM
Surr: DNOP	81.1	21-129	%Rec	1	9/2/2022 12:45:25 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 11:23:32 AM
Surr: BFB	100	37.7-212	%Rec	1	9/2/2022 11:23:32 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/2/2022 11:23:32 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 11:23:32 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 11:23:32 AM
Xylenes, Total	ND	0.080	mg/Kg	1	9/2/2022 11:23:32 AM
Surr: 4-Bromofluorobenzene	90.4	70-130	%Rec	1	9/2/2022 11:23:32 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	59	mg/Kg	20	9/2/2022 12:30:21 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-013 Lab ID:

Client Sample ID: WES22-19 3' Collection Date: 8/31/2022 10:35:00 AM

Matrix: MEOH (SOIL) Received Date: 9/2/2022 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	15	mg/Kg	1	9/2/2022 12:56:03 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/2/2022 12:56:03 PM
Surr: DNOP	75.8	21-129	%Rec	1	9/2/2022 12:56:03 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.0	mg/Kg	1	9/2/2022 11:47:12 AM
Surr: BFB	97.9	37.7-212	%Rec	1	9/2/2022 11:47:12 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.020	mg/Kg	1	9/2/2022 11:47:12 AM
Toluene	ND	0.040	mg/Kg	1	9/2/2022 11:47:12 AM
Ethylbenzene	ND	0.040	mg/Kg	1	9/2/2022 11:47:12 AM
Xylenes, Total	ND	0.079	mg/Kg	1	9/2/2022 11:47:12 AM
Surr: 4-Bromofluorobenzene	92.7	70-130	%Rec	1	9/2/2022 11:47:12 AM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 12:42:42 PM

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

**Qualifiers:** 

\* Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-014 Lab ID:

Client Sample ID: WES22-20 3' Collection Date: 8/31/2022 10:40:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/2/2022 1:06:42 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/2/2022 1:06:42 PM
Surr: DNOP	82.1	21-129	%Rec	1	9/2/2022 1:06:42 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.4	mg/Kg	1	9/2/2022 12:10:49 PM
Surr: BFB	96.8	37.7-212	%Rec	1	9/2/2022 12:10:49 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.022	mg/Kg	1	9/2/2022 12:10:49 PM
Toluene	ND	0.044	mg/Kg	1	9/2/2022 12:10:49 PM
Ethylbenzene	ND	0.044	mg/Kg	1	9/2/2022 12:10:49 PM
Xylenes, Total	ND	0.089	mg/Kg	1	9/2/2022 12:10:49 PM
Surr: 4-Bromofluorobenzene	90.5	70-130	%Rec	1	9/2/2022 12:10:49 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	59	mg/Kg	20	9/2/2022 1:19:44 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

Lab Order 2209087

Date Reported: 9/8/2022

CLIENT: Vertex Resources Services, Inc. **Project:** Onyx 29 CTB1 Heater Treater 2209087-015 Lab ID:

Client Sample ID: WES22-21 1.5' Collection Date: 8/31/2022 10:50:00 AM

Matrix: MEOH (SOIL)

Received Date: 9/2/2022 7:30:00 AM

Analyses	Result	RL Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	14	mg/Kg	1	9/2/2022 1:17:22 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/2/2022 1:17:22 PM
Surr: DNOP	83.3	21-129	%Rec	1	9/2/2022 1:17:22 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	9/2/2022 12:34:29 PM
Surr: BFB	101	37.7-212	%Rec	1	9/2/2022 12:34:29 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.021	mg/Kg	1	9/2/2022 12:34:29 PM
Toluene	ND	0.042	mg/Kg	1	9/2/2022 12:34:29 PM
Ethylbenzene	ND	0.042	mg/Kg	1	9/2/2022 12:34:29 PM
Xylenes, Total	ND	0.084	mg/Kg	1	9/2/2022 12:34:29 PM
Surr: 4-Bromofluorobenzene	94.5	70-130	%Rec	1	9/2/2022 12:34:29 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	ND	60	mg/Kg	20	9/2/2022 1:32:05 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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Client:	Vertex	Resources Services	, Inc.							
Project:	Onyx 2	9 CTB1 Heater Tre	eater							
Sample ID: N	/B-69943	SampType: <b>m</b>	blk	Tes	tCode: El	PA Method	300.0: Anions	6		
Client ID: P	BS	Batch ID: 69	943	F	RunNo: 9	0777				
Prep Date:	9/2/2022	Analysis Date: 9	/2/2022	S	SegNo: 3	245095	Units: mg/K	a		
Analyte		Result PQL		SPK Ref Val		LowLimit	0	%RPD	RPDLimit	Qual
Chloride		ND 1.5		SPK Kel val	%REC	LOWLIMI	HighLimit	%RPD	RPDLIMI	Quai
Sample ID: L	.CS-69943	SampType: Ic	s	Tes	tCode: EF	PA Method	300.0: Anions	6		
Client ID: L	CSS	Batch ID: 69	943	F	RunNo: 90	0777				
Prep Date:	9/2/2022	Analysis Date: 9	/2/2022	S	SeqNo: 32	245096	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1.5	15.00	0	94.4	90	110			
Sample ID: N	/B-69942	SampType: <b>m</b>	blk	Tes	tCode: EF	PA Method	300.0: Anions	6		
Client ID: P	PBS	Batch ID: 69	942	F	RunNo: 90	0776				
Prep Date:	9/2/2022	Analysis Date: 9	/2/2022	S	SeqNo: 3	247708	Units: mg/K	g		
Analyte		Result PQL	SDK value	SPK Ref Val	% REC	LowLimit	HighLimit	- %RPD	RPDLimit	Qual
Chloride		ND 1.5			/inteo	LOWLINI	riigneinnt	70111 D		Quai
Sample ID: L	.CS-69942	SampType: Ic	S	Tes	tCode: EF	PA Method	300.0: Anions	6		
Client ID: L	CSS	Batch ID: 69	942	F	RunNo: 90	0776				
Prep Date:	9/2/2022	Analysis Date: 9	/2/2022	S	SeqNo: 32	247709	Units: mg/K	g		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		15 1.5	15.00	0	98.8	90	110			

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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	esources S CTB1 Hea									
Sample ID: MB-69936 Client ID: PBS	•	Гуре: <b>МЕ</b> h ID: <b>69</b>			tCode: El		8015M/D: Die	esel Range	e Organics	
Prep Date: 9/2/2022	Analysis [	Date: <b>9/</b>	2/2022	S	SeqNo: 3	244905	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.1	21	129			
Sample ID: LCS-69936	Samp	Гуре: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: LCSS	Batc	h ID: 69	936	F	RunNo: 9	0778				
Prep Date: 9/2/2022	Analysis [	Date: <b>9/</b>	2/2022	S	SeqNo: 3	244906	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	15	50.00	0	90.5	64.4	127			
Surr: DNOP	4.4		5.000		87.5	21	129			

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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08-Sep-22

	esources S CTB1 Hea									
Sample ID: <b>mb</b>	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	Ð	
Client ID: PBS	Batch	n ID: <b>G9</b>	0762	F	RunNo: <b>90</b>	0762				
Prep Date:	Analysis D	ate: 9/	2/2022	S	SeqNo: 32	245256	Units: mg/K	íg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	ND 980	5.0	1000		98.1	37.7	212			
Sample ID: 2.5ug gro Ics	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batch	n ID: <b>G9</b>	0762	F	RunNo: <b>9(</b>	0762				
Prep Date:	Analysis D	ate: 9/	2/2022	S	SeqNo: 32	245257	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	72.3	137			
Surr: BFB	2000		1000		203	37.7	212			
Sample ID: 2209087-006AMS	SampT	уре: МS	5	Tes	tCode: EF	PA Method	8015D: Gasc	line Rang	e	
Client ID: BES22-04 4'	Batch	n ID: <b>G9</b>	0762	F	RunNo: <b>9(</b>	0762				
Prep Date:	Analysis D	ate: 9/	2/2022	S	SeqNo: 32	245258	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.1	20.41	0	96.7	70	130			
Surr: BFB	1600		816.3		198	37.7	212			
Sample ID: 2209087-006AMSI	D SampT	ype: MS	D	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: BES22-04 4'	Batch	n ID: <b>G9</b>	0762	F	RunNo: <b>9(</b>	0762				
Prep Date:	Analysis D	ate: <b>9/</b>	2/2022	S	SeqNo: 32	245259	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.1	20.41	0	93.6	70	130	3.32	20	
Surr: BFB	1600		816.3		196	37.7	212	0	0	
Sample ID: 2.5ug gro Ics	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: LCSS	Batch	n ID: <b>A9</b>	0773	F	RunNo: 90	0773				
1					SegNo: 32	45740		'n		
Prep Date:	Analysis D	ate: <b>9/</b> 2	2/2022	S	eqivo. 34	243742	Units: mg/K	y		
Prep Date: Analyte	Analysis D Result	ate: <b>9/</b> 2 PQL		SPK Ref Val	%REC	LowLimit	HighLimit	ور RPD%	RPDLimit	Qual
-					•		-	-	RPDLimit	Qual
Analyte	Result	PQL	SPK value	SPK Ref Val	· %REC	LowLimit	HighLimit	-	RPDLimit	Qual
Analyte Gasoline Range Organics (GRO)	Result 25 2100	PQL	SPK value 25.00 1000	SPK Ref Val 0	%REC 99.9 210	LowLimit 72.3 37.7	HighLimit 137	%RPD		Qual
Analyte Gasoline Range Organics (GRO) Surr: BFB	Result 25 2100 SampT	PQL 5.0	SPK value 25.00 1000 BLK	SPK Ref Val 0 Tes	%REC 99.9 210	LowLimit 72.3 37.7 PA Method	HighLimit 137 212	%RPD		Qual
Analyte Gasoline Range Organics (GRO) Surr: BFB Sample ID: <b>mb</b>	Result 25 2100 SampT	PQL 5.0 ype: <b>ME</b> 1D: <b>A9</b>	SPK value 25.00 1000 BLK 0773	SPK Ref Val 0 Tes F	%REC 99.9 210 tCode: <b>EF</b>	LowLimit 72.3 37.7 PA Method	HighLimit 137 212	%RPD		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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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# QC SUMMARY REPORTWO#:2209087Hall Environmental Analysis Laboratory, Inc.08-Sep-22

	Vertex Resource Onyx 29 CTB1		<i>,</i>							
Sample ID: mb	Sar	mpType: MI	BLK	Tes	tCode: El	PA Method	8015D: Gasc	oline Rang	e	
Client ID: PBS	В	atch ID: A9	0773	F	RunNo: <b>9</b>	0773				
Prep Date:	Analys	is Date: <b>9</b> /	/2/2022	S	SeqNo: 3	245743	Units: <b>mg/H</b>	٢g		
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (	GRO) NI	D 5.0								
Surr: BFB	100	0	1000		99.9	37.7	212			

#### 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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:       Onyx 29 CTB1 Heater Treater         Sample ID: mb       SampType: MBLK       TestCode: EPA Method 8021B: Volatiles         Client ID:       PBS       Batch ID:       B90762       RunNo: 90762         Prep Date:       Analysis Date:       9/2/2022       SeqNo: 3245287       Units: mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimi         Benzene       ND       0.025       0.050       Units:       Toluene       ND       0.050         Ethylbenzene       ND       0.050       Units:       Year of the second of the se	t Qual
Client ID:       PBS       Batch ID:       B90762       RunNo:       90762         Prep Date:       Analysis Date:       9/2/2022       SeqNo:       3245287       Units:       mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit         Benzene       ND       0.025	t Qual
Prep Date:       Analysis Date:       9/2/2022       SeqNo::       3245287       Units:       mg/Kg         Analyte       Result       PQL       SPK value       SPK Ref Val       %REC       LowLimit       HighLimit       %RPD       RPDLimit         Benzene       ND       0.025       - <th>t Qual</th>	t Qual
Analyte     Result     PQL     SPK value     SPK Ref Val     %REC     LowLimit     HighLimit     %RPD     RPDLimit       Benzene     ND     0.025       Toluene     ND     0.050       Ethylbenzene     ND     0.050       Xylenes, Total     ND     0.10       Surr: 4-Bromofluorobenzene     0.90     1.000     90.4     70     130	t Qual
Benzene         ND         0.025           Toluene         ND         0.050           Ethylbenzene         ND         0.050           Xylenes, Total         ND         0.10           Surr: 4-Bromofluorobenzene         0.90         1.000         90.4         70         130           Sample ID:         100ng btex Ics         SampType:         LCS         TestCode:         EPA Method 8021B:         Volatiles	t Qual
Toluene         ND         0.050           Ethylbenzene         ND         0.050           Xylenes, Total         ND         0.10           Surr: 4-Bromofluorobenzene         0.90         1.000         90.4         70         130           Sample ID: 100ng btex Ics         SampType: LCS         TestCode: EPA Method 8021B: Volatiles	
Ethylbenzene     ND     0.050       Xylenes, Total     ND     0.10       Surr: 4-Bromofluorobenzene     0.90     1.000     90.4     70     130       Sample ID: 100ng btex Ics       SampType: LCS	
Xylenes, Total         ND         0.10           Surr: 4-Bromofluorobenzene         0.90         1.000         90.4         70         130           Sample ID:         100ng btex Ics         SampType:         LCS         TestCode:         EPA Method 8021B:         Volatiles	
Surr: 4-Bromofluorobenzene         0.90         1.000         90.4         70         130           Sample ID: 100ng btex Ics         SampType: LCS         TestCode: EPA Method 8021B: Volatiles	
Sample ID: 100ng btex Ics     SampType: LCS     TestCode: EPA Method 8021B: Volatiles	
Client ID:         LCSS         Batch ID:         B90762         RunNo:         90762	
Prep Date:         Analysis Date:         9/2/2022         SeqNo:         3245288         Units: mg/Kg	
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimi	t Qual
Benzene 0.90 0.025 1.000 0 90.1 80 120	
Toluene 0.94 0.050 1.000 0 93.6 80 120	
Ethylbenzene         0.93         0.050         1.000         0         93.0         80         120	
Xylenes, Total 2.8 0.10 3.000 0 92.0 80 120	
Surr: 4-Bromofluorobenzene         0.93         1.000         92.7         70         130	
Sample ID: 2209087-007AMS SampType: MS TestCode: EPA Method 8021B: Volatiles	
Client ID: BES22-08 2' Batch ID: B90762 RunNo: 90762	
Prep Date:         Analysis Date:         9/2/2022         SeqNo:         3245289         Units: mg/Kg	
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimi	t Qual
Benzene 0.70 0.020 0.7905 0 88.3 68.8 120	
Toluene 0.72 0.040 0.7905 0 90.8 73.6 124	
Ethylbenzene 0.72 0.040 0.7905 0 91.3 72.7 129	
Kylenes, Total         2.1         0.079         2.372         0         90.4         75.7         126	
Surr: 4-Bromofluorobenzene         0.74         0.7905         93.9         70         130	
Sample ID: 2209087-007AMSD       SampType: MSD       TestCode: EPA Method 8021B: Volatiles	
Client ID:         BES22-08 2'         Batch ID:         B90762         RunNo:         90762	
Prep Date:         Analysis Date:         9/2/2022         SeqNo:         3245290         Units:         mg/Kg	
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimi	1
	,
Benzene 0.68 0.020 0.7905 0 86.5 68.8 120 2.06 20	
Benzene         0.68         0.020         0.7905         0         86.5         68.8         120         2.06         20           Toluene         0.71         0.040         0.7905         0         89.6         73.6         124         1.37         20	)
Benzene         0.68         0.020         0.7905         0         86.5         68.8         120         2.06         20           Toluene         0.71         0.040         0.7905         0         89.6         73.6         124         1.37         20	)

#### **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
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference S
- Analyte detected in the associated Method Blank в
- Е Estimated value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL
  - Reporting Limit

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2209087

08-Sep-22

Client:	Vertex Resource	es Servic	ces, Inc.							
Project:	Onyx 29 CTB1	Heater 7	Treater							
Sample ID: mb	S	ampType:	MBLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS		Batch ID:	B90773	I	RunNo: <b>9</b>	0773				
Prep Date:	Analy	sis Date:	9/2/2022	:	SeqNo: 3	245771	Units: mg/K	(g		
Analyte	Res	ult PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1	ND 0.0	25							
Toluene	1	ND 0.0	50							
Ethylbenzene	1	ND 0.0	50							
Xylenes, Total	1	ND 0.	10							
Surr: 4-Bromofluoroben	zene 0.	97	1.000		96.5	70	130			
Sample ID: 100ng b	tex lcs2 S	ampType:	LCS	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS		Batch ID:	B90773	I	RunNo: 9	0773				
Prep Date:	Analy	sis Date:	9/2/2022	:	SeqNo: 3	245772	Units: <b>mg/K</b>	íg		
Analyte	Res	ult PG	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.	81 0.0	25 1.000	0	80.7	80	120			
Toluene	0.	84 0.0	50 1.000	0	83.7	80	120			
Ethylbenzene	0	86 0.0	50 1.000	0	85.5	80	120			
Luiyidenzene	0.	00 0.0	1.000	-						
Xylenes, Total	-		10 3.000	-	85.4	80	120			

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 interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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2209087

08-Sep-22

		RONMENT	45:31 AM AL		ll Environme L: 505-345-: Website: ww	490 Albuquero 3975 FAX:	01 Hawk que, NM 505-34:	ins NE 87109 5-4107	Sar	nple Log-In Cl	Page 427 neck List
C	lient Name:	Vertex Res Services, I		Work	Order Num	ber: 220	9087			RcptNo:	1
Re	eceived By:	Cheyenne	e Cason	9/2/202	2 7:30:00 A	M		Chene Chene	1		
	ompleted By:	Cheyenne		9/2/202	2 7:39:32 A	M		Chene	1		
Re	eviewed By:	su a	1/2/22								
<u>Cł</u>	nain of Cus	tody									
1.	Is Chain of C	ustody comp	olete?			Yes	$\checkmark$	No		Not Present	
2.	How was the	sample deliv	vered?			Cou	rier				
L	og In										
3.	Was an attem	npt made to o	cool the samp	bles?		Yes	~	No		NA 🗌	
4.	Were all samp	oles received	l at a tempera	ature of >0° C	to 6.0°C	Yes		No			
5.	Sample(s) in	proper conta	iner(s)?			Yes		No			
6.	Sufficient sam	ple volume f	for indicated t	est(s)?		Yes	~	No			
7.	Are samples (	except VOA	and ONG) pr	operly preserve	ed?	Yes	~	No			
8.	Was preserva	tive added to	bottles?			Yes		No	✓	NA 🗌	
9.	Received at le	ast 1 vial wit	h headspace	<1/4" for AQ \	OA?	Yes		No		NA 🗹	
10.	Were any san	nple containe	ers received b	proken?		Yes		No	~	# of preserved bottles checked	
	Does paperwo (Note discrepa			<i>r</i> )		Yes	~	No		for pH:	12 unless noted)
12.	Are matrices c	orrectly iden	tified on Chai	in of Custody?		Yes	~	No		Adjusted?	/
13.1	Is it clear what	analyses we	ere requested	17		Yes	~	No		/	1. 1.
	Were all holdir (If no, notify cu					Yes	~	No		Checked by: Ji	a/2/22
Spe	cial Handl	ing (if app	olicable)								
15.	Was client no	tified of all di	iscrepancies	with this order?	,	Yes		No		NA 🗹	
	Person	Notified:	F		Date	1			-		
	By Who	m:			Via:	eMa	ail 🗌	Phone	Fax	In Person	
	Regardi	ng:							-		
	Client Ir	structions:									
16.	Additional rer	marks:									
17.	Cooler Inform										
	Cooler No	Temp ⁰C	Condition	Seal Intact	Seal No	Seal D	ate	Signed E	Зу		
	1	1.3	Good	Not Present							
	2	0.9	Good	Not Present							

Page 1 of 1

Client: Xroop/Lertex/ Mailing Address: Phone #:	□ Standard	Er Rush CTBI ECTTCAELT	HALL ANAL www.hall 4901 Hawkins NE - Tel. 505-345-3975	L ENVI LYSIS allenvironme - Albuquer	<b>RONMENTAL</b> LABORATORY antal.com que, NM 87109 15-345-4107
email or Fax#:	Project Manager:		-	⊅⊄ (1	
QA/QC Package:	Kent st	stainings	PCB's	)S ,₄Oq	
Accreditation: 🗆 Az Compliance	Sampler: C.D		רא 282 282		
Other	On Ice: ZYes	O No	/ 0) 98/s	N (A	
EDD (Type)	# of Coolers: 2	1.4	g p səpi	۸۵ ۵۰	
		1.0-0.1	etho	r, N (AC) -ime	
Time Matrix Sample Name	Container Preservative Type and # Type	vative HEAL No. (	ХЭТВ 108:НФТ 198:196 1808 (Марала 199 199 199 199 199 199 199 199 199 19	ВСRA 8 Сі, F, B 8260 (Vo 8270 (So 7048 Co	
9:15 5011 LUESZ2-13 1'	· · · · · ·	2	/	>	
9:20 1 XES22-14 1'	1	667	-		
9:25 WESZZ15 1'		603			
9:30 WESZ2-16 1'		hao			
4:35 WES22-17 1		605			
9:40 BES22-04 4'		CCC CCC			
9:45 BES22-08 2'		100			
9:50 BESZZ-09 Z'		608			
9:55 8552-10 2'		600			
		m10			
10:02 \$0-2253-7 SO:01		011			
2		512		-	
	Received by: Via:	Date	Remarks: CC: CHANCE	ance Dixon	-
	UCUMANAA	2	Direct	12:18	
-		Date	:# 0M	20456105	
- 1 1 0 0 ( Tal a)	0 0 00 000	0 11 - 2720			

NTOR INTAL		Hall     Hall       Hall     Hall       Hall     Mallshis       Nww.hallenvironme     Analysis       Robin     Retails       Robin     Retails       Robin     Robin       Robin       Robin <th>C EDB (Method 504.1)</th> <th></th> <th>Ind Al Rush me: yr 29 CTB / Heater Treater Heater Treater</th> <th></th> <th>Vertex</th> <th>Client:     Deven       Client:     Deven       Mailing Address:     Deven       Phone #:     Phone #:       Bandard     Az Co       Chardsreade:     Other       Standard     Az Co       Date     Time       Matrix     Standard       Standard     Az Co       Date     Time       Matrix     So; 7       Date     Time       Date     Time       Date     Time       Date     Time       Date     Time       Date     No.:50       Date     No.:50       No.:50     No.:50       No.:5</th> <th>Client:</th>	C EDB (Method 504.1)		Ind Al Rush me: yr 29 CTB / Heater Treater Heater Treater		Vertex	Client:     Deven       Client:     Deven       Mailing Address:     Deven       Phone #:     Phone #:       Bandard     Az Co       Chardsreade:     Other       Standard     Az Co       Date     Time       Matrix     Standard       Standard     Az Co       Date     Time       Matrix     So; 7       Date     Time       Date     Time       Date     Time       Date     Time       Date     Time       Date     No.:50       Date     No.:50       No.:50     No.:50       No.:5	Client:
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	0/	o 0	səp		plers: 7 I U	# of (		(ed)	EDI
	(A	28 JC	808/5	1.1	A Yes	On Ic	D Other		NEL
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Page 6

Oil Conservation Division

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.		
A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)		
Description of remediation activities		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name:Dale Woodall Title: Environment Professional Signature:Dale Woodall Telephone:575-7481838		
OCD Only		
Received by:    Date:		
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Closure Approved by: Date:		
Printed Name: Title:		

Received by OCD: 11/1/2022 7:45:31 AM Form C-141 State of New Mexico

Oil Conservation Division

Application ID

Incident ID

District RP Facility ID

## Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

	1
What is the shallowest depth to groundwater beneath the area affected by the release?	$\frac{75}{\text{bgs}}$ (ft
Did this release impact groundwater or surface water?	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant	☐ Yes ⊠ No
watercourse?	🗌 Yes 🛛 No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	🗌 Yes 🔀 No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used	
by less than five households for domestic or stock watering purposes?	🗌 Yes 🔀 No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh	🗌 Yes 🛛 No
water well field?	🗌 Yes 🔀 No
Are the lateral extents of the release within 300 feet of a wetland?	
Are the lateral extents of the release overlying a subsurface mine?	🗌 Yes 🛛 No
Are the lateral extents of the release overlying an unstable area such as karst geology?	🗌 Yes 🛛 No
	🛛 Yes 🗌 No
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🔀 No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	🖂 Yes 🗌 No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.		
<ul> <li>Field</li> <li>Data</li> <li>Dept</li> <li>Deter</li> <li>Borir</li> <li>Photo</li> <li>Topo</li> </ul>	ed site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. d data a table of soil contaminant concentration data th to water determination ermination of water sources and significant watercourses within ½-mile of the lateral extents of the release ng or excavation logs tographs including date and GIS information ographic/Aerial maps pratory data including chain of custody	

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Oil Conservation Division

Incident ID	nAPP2116441032
District RP	
Facility ID	
Application ID	

Page 432 of 433

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

<b>Closure Report Attachment Checklist</b>	Each of the following items must be included in	n the closure report.
--	---	-----------------------

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _Dale Woodall	Title: _Environment Professional			
Signature: Dals Woodall	Date:10/19/2022			
email:dale.woodall@dvn.com	Telephone: 575-748-1838			
OCD Only				
Received by:	Date:			
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.				
Closure Approved by:	Date:			
Printed Name:	Title:			

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

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

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

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	155129
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By Condition

rhamlet We have received your closure report and final C-141 for Incident #NAPP2116441032 ONYX 29 CTB 1, thank you. This closure is approved. 11/22/2022

CONDITIONS

Action 155129

Condition Date

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