Received by OCD: 11/1/2023 1:09:31 PM Form C-141 State of New Mexico

Oil Conservation Division

	1 450 1 0/ 1.
Incident ID	nAPP2317136603
District RP	
Facility ID	
Application ID	

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>55</u> (ft bgs)
Did this release impact groundwater or surface water?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant 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?	🗌 Yes 🛛 No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	🗌 Yes 🛛 No
Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
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
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not 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.

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- \square Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory 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.

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regulations all operators are red public health or the environmen failed to adequately investigate addition, OCD acceptance of a and/or regulations.		Effications and perform c OCD does not relieve th eat to groundwater, surf f responsibility for comp 	orrective actions for rele e operator of liability sh ace water, human health	eases which may endanger ould their operations have a or the environment. In deral, state, or local laws
OCD Only Received by: <u>Shelly Wells</u>		Date: <u>11/1/</u>	2023	

Received by OCD: 11/1/2023 1:09:31 PM Form C-141 State of New Mexico

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	nAPP2317136603
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Application ID	

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points \boxtimes Estimated volume of material to be remediated \bowtie Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. 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. Title: <u>Env. Professional</u> Printed Name: Dale Woodall Signature: Dale Woodall _____ Date: _____11/1/2023 email: <u>dale.woodall@dvn.com</u>_____ Telephone: <u>575-748-1838</u> OCD Only Received by: Shelly Wells Date: 11/1/2023 Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

Environmental Site Remediation Work Plan



General Information

NMOCD District:	District 2	Incident ID:	nAPP2317136603
Landowner:	Federal	RP Reference:	N/A
Client:	Devon Energy Production Company, LP	Site Location:	Hackberry 18 Federal 2 Battery
Date:	September 15, 2023	Project #:	23E-03903
Client Contact:	Dale Woodall	Phone #:	405.318.4697
Vertex PM:	Kent Stallings	Phone #:	346.814.1413

Objective

The objective of the environmental remediation work plan is to identify exceedances found during the site assessment and characterization activity and propose an appropriate remediation technique to address these areas. Areas of environmental concern identified and delineated include along the northwest edge of the pad and off the pad of the Hackberry 18 Federal 2 Battery. The incident occurred when a 3-inch poly line developed a pin hole and ruptured, releasing 8.8 barrels (bbls) of produced water onto the northwest side of the pad and off-site; 1 bbls was recovered. Closure criteria have been selected as per New Mexico Administrative Code (NMAC) 19.15.29. All applicable research as it pertains to closure criteria selection, including reference well CP-01907 POD 1, is presented in Attachment 1. The closure criteria for the site on-pad are presented below in Table 1.

Table 1. Closure Criteria for Soils Impacted by a Release				
Minimum depth below any point within the horizontal boundary of the release to groundwater				
less than 10,000 mg/l TDS	Constituent	Limit		
	Chloride	10,000 mg/kg		
	TPH (GRO+DRO+MRO)	2,500 mg/kg		
51 feet - 100 feet	GRO+DRO	1,000 mg/kg		
	BTEX	50 mg/kg		
	Benzene	10 mg/kg		

TDS – Total dissolved solids

TPH – Total petroleum hydrocarbons = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO) BTEX – Benzene, toluene, ethylbenzene, and xylenes

The closure criteria for the site off-pad are presented below in Table 2.

Table 2. Closure Criteria for Soils to Remediation & Reclamation Standards			
	Constituent	Limit	
0.4 foot bgs (10.15.20.12)	Chloride	600 mg/kg	
0-4 feet bgs (19.15.29.13)	TPH (GRO+DRO+MRO)	100 mg/kg	
	Chloride	10,000 mg/kg	
	TPH (GRO+DRO+MRO)	2,500 mg/kg	
DTGW 51-100 feet (19.15.29.12)	GRO+DRO	1,000 mg/kg	
	BTEX	50 mg/kg	
	Benzene	10 mg/kg	

bgs – Below ground surface

DTGW – Depth to groundwater

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

BTEX – Benzene, toluene, ethylbenzene, and xylenes

Site Assessment/Characterization

Site characterization was compared to the strictest criteria as per NMAC 19.15.2 and completed on August 20, 2023. A total of 22 sample points were established and 47 samples collected for field screening. All 47 samples, including at the deepest vertical distance below closure criteria, were submitted to the laboratory for analysis. Samples were submitted to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico, for analysis. The sample locations are presented in Attachment 2. Laboratory analysis results have been compared to the above noted closure criteria and the results from the characterization activity are presented in Attachment 3. Exceedances are identified in the table as bold with a grey background and bold with a green background for off-pad criteria.

Remedial Activities

General

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

nAPP2317136603 (06-19-2023) - Release from Poly Line along Edge of Pad

A total of 22 sample points were established for analysis along the north and northwest edge of the pad and off the pad. Exceedances to closure criteria were found at sample points BH23-12, BH23-13, BH23-18 above 2 feet and at BH23-19 at 2 feet. A 0.5 foot scrape will be completed around BH23-12 and BH23-13 to address staining. The sample locations and proposed excavation locations are presented in Attachment 2. Heavy equipment will be used to complete excavation in open areas and hand crews will be used to complete excavation next to equipment or lines that is deemed unsafe. A hydrovac truck will be utilized to identify any lines that may be within the area of contaminated soil in close proximity to lines. Confirmatory samples, including discrete sampling in the scraped, stained areas, will be collected as per New Mexico Oil Conservation Division guidance and submitted for laboratory analysis of all applicable parameters. The estimated volume to be excavated is approximately **217 cubic yards.**

Environmental Site Remediation Work Plan

Sample Point	Excavation Depth	Remediation Method
BH23-12	1'-2'	Backhoe/Handcrew
BH23-13	1'-2'	Backhoe/Handcrew
BH23-18	1'-2'	Backhoe
BH23-19	3'	Backhoe
Around BH23-12 & BH23-13	0.5'	Backhoe

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

Stephanie McCarty

Stephanie McCarty, B.Sc.

September 15, 2023 Date

Kent Stallings P.G.

Kent Stallings, P.G. PROJECT MANAGER, REPORT REVIEW ____September 15, 2023______

Date

Attachments

Attachment 1. Closure Criteria Research

Attachment 2. Characterization Sampling and Proposed Excavation Site Schematic

Attachment 3. Laboratory Results Table and Laboratory Data Reports

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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 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

Longitude

Latitude			

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

(NAD 83 in decimal degrees to 5 decimal places)

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		

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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: Dale Woodall	Title: Env. Professional
Signature: Dale Woodall	Date:
email:dale.woodall@dvn.com	Telephone: <u>575-748-1838</u>
OCD Only	
Received by: <u>Shelly Wells</u>	Date: <u>6/23/2023</u>

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Oil Conservation Division

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Site Assessment/Characterization

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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
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Are the lateral extents of the release within 300 feet of a wetland?	🗌 Yes 🛛 No
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
Are the lateral extents of the release within a 100-year floodplain?	🗌 Yes 🛛 No
Did the release impact areas not 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.

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- \boxtimes Depth to water determination
- Determination of water sources and significant watercourses within ¹/₂-mile of the lateral extents of the release
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- Photographs including date and GIS information
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Received by OCD: 11/1	1/2023 1:09:31 PM State of New Mexico		Page 10 of 138				
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Page 4	Oil Conservation Division		District RP				
			Facility ID				
			Application ID				
regulations all operators public health or the env failed to adequately inva addition, OCD acceptar and/or regulations. Printed Name: Signature: Dalk (information given above is true and complete to the s are required to report and/or file certain release not ironment. The acceptance of a C-141 report by the C estigate and remediate contamination that pose a three ince of a C-141 report does not relieve the operator of Dale Woodall Woodall woodall@dvn.com	ifications and perform co DCD does not relieve the eat to groundwater, surfa responsibility for compl 	prective actions for rele operator of liability sho ce water, human health	ases which may endanger ould their operations have or the environment. In deral, state, or local laws			
OCD Only							
Received by:		Date:					

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Oil Conservation Division

<u>Remediation Plan Checklist</u>: Each of the following items must be included in the plan.

Incident ID	nAPP2317136603
District RP	
Facility ID	
Application ID	

Remediation Plan

Detailed description of proposed remediation technique Scaled sitemap with GPS coordinates showing delineation points Estimated volume of material to be remediated Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required) Deferral Requests Only: Each of the following items must be confirmed as part of any request for deferral of remediation. Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction. Extents of contamination must be fully delineated. Contamination does not cause an imminent risk to human health, the environment, or groundwater. 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: ____ Dale Woodall _____ Title: ____ Env. Professional _____ Signature: Dale Woodall Date: 11/1/2023 Telephone: _____ 575-748-1838 email: _____ dale.woodall@dvn.com OCD Only Received by: Date: Approved Approved with Attached Conditions of Approval Denied Deferral Approved Signature: Date:

ATTACHMENT 1

Closure C	riteria Worksheet				
	e: Hackberry 18 Fed 2				
	rdinates: 32.66565861, -103.9104969				
Site Spec	ific Conditions	Value	Unit		
1	Depth to Groundwater	>55	feet		
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	7,645	feet		
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	4,772			
4	Within 300 feet from an occupied residence, school, hospital, institution or church	18,007	feet		
5	 i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 	7,992	feet		
	ii) Within 1000 feet of any fresh water well or spring		feet		
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)		
7	Within 300 feet of a wetland	4,936	feet		
8	Within the area overlying a subsurface mine	No	(Y/N)		
9	Within an unstable area (Karst Map)	Medium	Critical High Medium Low		
10	Within a 100-year Floodplain	No	>500 year		
11	Soil Type	Berino loan	ny fine sand		
12	Ecological Classification	loamy			
13	Geology	Qep			
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	51-100'	<50' 51-100' >100'		



New Mexico Office of the State Engineer Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)	(R=POD replaced, O=orpha C=the fil closed)	ned,	1						V 2=NE est to la	E 3=SW 4=S urgest) (N	E) JAD83 UTM in n	neters)	(In fee	et)	
POD Number <u>CP 01907 POD1</u>	Code	POD Sub- basin CP	County ED	64		4	Sec 18	Tws 19S	Rng 31E	X 603017	Y 3614737 🍋	DistanceDept 855	hWellDepth		ater umn
<u>CP 00873 POD1</u>		СР	LE		1	1	19	19S	31E	601772	3613147* 🌍	1646	340	180	160
<u>CP 01943 POD1</u>		СР	ED	1	3	1	20	19S	31E	603217	3612883 🌍	2141	55		
<u>CP 00357 POD1</u>		СР	ED	4	4	1	24	19S	30E	600667	3612631* 🌍	2590	630		
<u>CP 00357 POD2</u>		СР	ED	4	3	1	24	19S	30E	600265	3612627* 🌑	2844	630		
<u>CP 00722 POD2</u>		СР	ED	2	1	1	25	19S	30E	600276	3611620* 🌍	3651	350	65	285
<u>CP 00647 POD1</u>	0	СР	ED	4	2	2	15	19S	30E	598235	3614621* 🌍	3929	200	92	108
<u>CP 01941 POD1</u>		СР	ED	3	2	2	29	19S	31E	604524	3611512 🌍	4005	55	54	1
<u>CP 00829 POD1</u>		СР	LE		2	4	16	19S	31E	606165	3614009* 🌍	4070	120		
<u>CP 00822 POD1</u>		СР	LE		4	4	15	19S	30E	598148	3613516* 🌍	4198	90		
											Avera	ge Depth to Water	:	97 feet	
												Minimum Dep	th:	54 feet	
												Maximum Dept	h:	180 feet	
Record Count: 10															
UTMNAD83 Radius	<u>s Search (in</u>	<u>meters)</u>	<u>:</u>												
Easting (X): 602	2162		North	ing	(Y)	:	3614	747			Radius: 5000				
*UTM location was derived	from PLSS -	- see Help													

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

6/29/23 4:24 PM

WATER COLUMN/ AVERAGE DEPTH TO WATER



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

N	OSE POD NO. (WELL NO.) POD 1 (TW-1)				WELL TAG ID NO. N/A			OSE FILE NO(S). CP-1907					
GENERAL AND WELL LOCATION	WELL OWNER NAME(S) Devon Energy						PHONE (OPTIONAL) 575-748-1838						
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy						CITY Artesia		ST. NN	ате И 88210	ZIP		
			degrees minutes seconds 32 39 55.76 N			• ACCURACY REQUIRED: ONE TENTH OF A SECOND							
IER	(FROM GPS)	LO	NGITUDE	103 54 4.95			W	* DATUM RE	QUIRED: WGS 84				
1. GET	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE SE NE NE Sec. 18 T19S R31S NMPM												
	LICENSE NO. 1249		NAME OF LICENSED	DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.						
2. DRILLING & CASING INFORMATION	DRILLING STARTED 7/13/2022		DRILLING ENDED 7/13/2022		H OF COMPLETED WELL (FT) Temporary Well ±55			and the second sec) DEPTH WATER FIRST ENCOUNTERED (FT) N/A				
	COMPLETED W	ELL IS:	ARTESIAN	T DRY HOLE SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL N/A 7/13/2022, 7/1/					
	DRILLING FLUID: AIR MUD ADDITIVES – SPECIFY:												
	DRILLING METHOD: ROTARY HAMMER CABLE TOOL OTHER - SPECIFY: Hollow Stem Auger												
	DEPTH (feet bgl) BORE HOLE		CASING MATERIAL AND/OR		ASING	CASING		ASING WALL	SLOT				
	FROM	то	DIAM (inches)	(include each casing string, and		CON	NECTION TYPE pling diameter)	INSIDE DIAM. (inches)		THICKNESS (inches)	SIZE (inches		
	0	55	±6.5	Boring-HSA			-	-					
ILLIN									1				
DRI		_								-		-	
4			-							-			
		-				-	_		-	-		-	
											1		
ANNULAR MATERIAL	DEPTH (feet bgl) BORE HOLE			LIST ANNULAR SEAL MATERIAL A					AMOUNT		METHOD OF		
	FROM	то	DIAM. (inches)	GRAVEL PACK SIZE-RANGE BY INTERV			ERVAL	RVAL (cubic feet)		PLACEMENT			
											24722-250		
ULAR									USC Un	1200	1 4V44 PM3 (1)		
ANN									1				
э.													
FOR	OSE INTERNA	L USE						WR-2	0 WELL REC	ORD & LO	OG (Version 01/2	8/2022)	
	ENO. CP.	19	07.702	The	-/ POD N	0.		TRN	NO. 72	616	,7		
LOC	ATION	9.	31.18.42	22				WELL TAG I	d NO. 🚽	+	PAGE	1 OF 2	

	DEPTH (feet bgl)		L. S. S.	COLOR AND TYPE OF MATERIAL ENCOUNTERED -				WATER		ESTIMATED YIELD FOR	
4. HYDROGEOLOGIC LOG OF WELL	FROM	то	THICKNESS (feet)	CKNESS INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES					ING? / NO)	WATER- BEARING ZONES (gpm)	
	0	29	29	Sand, Medi	Sand, Medium/ Fine grained, poorly graded, Light brown				√ N		
	29	44	15	Sand, Medium/ Fine	Sand, Medium/ Fine grained, poorly graded, with caliche Light brown / white				√N		
	44	55	11	Sand, Medi	um/ Fine grained, po	n/ Fine grained, poorly graded, Light brown			√N		
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TEST; RIG SUPERVISION	WELL TEST TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.										
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface.										
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:										
6	Shane Eldridge, Cameron Pruitt										
SIGNALUKE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:										
o. SIGN	Jack At	Jack Atkins Jackie D. Atkins						8/4/2022			
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-		AT LICE					WR-20 WELL R	COPD &	LOCAL	rsion 01/28/202	
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Hackberry 18 Federal 2 Battery

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CKBERRY 18 FEDERAL #002

Google Earth

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Distance to nearest DTGW reference: 0.5 miles to pad Red radius: 0.5 miles



-aville

POD-1907





U.S. Fish and Wildlife Service

National Wetlands Inventory

Page 18 of 138 02 - Hackberry 18 Fed 2 Battery -Watercourse: 7,645 feet away (1.45 miles)



Lake

Other

Riverine

Freshwater Emergent Wetland

Freshwater Pond

Freshwater Forested/Shrub Wetland

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

Released to Imaging: 3/5/2024 11:07:34 AM

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

U.S. Fish and Wildlife Service National Wetlands Inventory

03 - Hackberry 18 Fed 2 Battery -Lakebed: 4,772 feet (0.89 miles)



Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland

Freshwater Emergent Wetland

Freshwater Pond

Lake Other Riverine 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.





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

6/30/23 11:23 AM

POINT OF DIVERSION SUMMARY



6 - Hackberry 18 Fed 2 Battery

360

量

Municipality

Loco Hills

earest municipality: 59,335 feet away (11.24 miles)

82)

Legend

6 mi

Hackberry 18 Fed 2
 Line Measure
 Municipality

Hackberry 18 Fed 2



Image © 2023 Airbus

U.S. Fish and Wildlife Service

National Wetlands Inventory

07 - Hackberry 18 Fed 2 Battery -Wetland: 4,936 feet (0.93 miles)



June 30, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

Lake Other Riverine

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

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08 - Hackberry 18 Fed 2 Battery - Mines







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



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Hackberry 18 Fed 2 Battery



Legend

Page 27 of 138



Basemap Imagery Source: USGS National Map 2023



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

Custom Soil Resource Report for Eddy Area, New Mexico



Preface

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

.

Custom Soil Resource Report

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

Soil Map

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

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Custom Soil Resource Report

	MAP L	EGEND)	MAP INFORMATION
Soils	NAP L Area of Interest (AOI) Soil Map Unit Polygons Soil Map Unit Polygons Soil Map Unit Lines Soil Map Unit Points Soil Map Unit Points Blowout Borrow Pit Clay Spot Clay Spot Closed Depression Gravel Pit Gravel Pit Landfill Lava Flow Marsh or swamp	EGEND	Spoil Area Stony Spot Very Stony Spot Wet Spot Other Special Line Features Streams and Canals Streams and Canals Interstate Highways US Routes Major Roads Local Roads	MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:20,000. Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale. Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Web Soil Survey URL: Coordinate System: Web Mercator (EPSG:3857) Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Abers equal-area conic projection, should be used if more
≪ ◎ ○ > + ∷ ♯ ◇ À ∞	Mine or Quarry Miscellaneous Water Perennial Water Rock Outcrop Saline Spot Sandy Spot Severely Eroded Spot Sinkhole Slide or Slip Sodic Spot			 accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Eddy Area, New Mexico Survey Area Data: Version 18, Sep 8, 2022 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020 The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (11 - Hackberry 18 Fed 2 Battery)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BA	Berino loamy fine sand, 0 to 3 percent slopes	29.9	100.0%
Totals for Area of Interest		29.9	100.0%

Map Unit Descriptions (11 - Hackberry 18 Fed 2 Battery)

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

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The

delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Eddy Area, New Mexico

BA—Berino loamy fine sand, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w42 Elevation: 2,000 to 5,700 feet Mean annual precipitation: 6 to 14 inches Mean annual air temperature: 57 to 70 degrees F Frost-free period: 180 to 260 days Farmland classification: Not prime farmland

Map Unit Composition

Berino and similar soils: 99 percent Minor components: 1 percent Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Berino

Setting

Landform: Plains, fan piedmonts Landform position (three-dimensional): Riser Down-slope shape: Convex Across-slope shape: Linear Parent material: Mixed alluvium and/or eolian sands

Typical profile

H1 - 0 to 12 inches: loamy fine sand H2 - 12 to 58 inches: sandy clay loam H3 - 58 to 60 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 7e Hydrologic Soil Group: B Ecological site: R070BC007NM - Loamy Hydric soil rating: No

.

Minor Components

Pajarito

Percent of map unit: 1 percent Ecological site: R070BD003NM - Loamy Sand Hydric soil rating: No

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Soil Information for All Uses

Ecological Sites

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

All Ecological Sites — (11 - Hackberry 18 Fed 2 Battery)

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

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

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

Received by OCD: 11/1/2023 1:09:31 PM



Released to Imaging: 3/5/2024 11:07:34 AM

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MAP LEGEND	MAP INFORMATION
Area of Interest (AOI)	The soil surveys that comprise your AOI were mapped at
Area of Interest (AOI)	1:20,000.
Soils	Warning: Soil Map may not be valid at this scale.
Soil Rating Polygons	Warning. Soir Map may not be valid at this scale.
R070BC007NM	Enlargement of maps beyond the scale of mapping can cause
Not rated or not available	misunderstanding of the detail of mapping and accuracy of soil
Soil Rating Lines	line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed
R070BC007NM	scale.
Not rated or not available	
Soil Rating Points	Please rely on the bar scale on each map sheet for map
R070BC007NM	measurements.
Not rated or not available	Source of Map: Natural Resources Conservation Service
Water Features	Web Soil Survey URL:
Streams and Canals	Coordinate System: Web Mercator (EPSG:3857)
Transportation	Maps from the Web Soil Survey are based on the Web Mercator
+++ Rails	projection, which preserves direction and shape but distorts
nterstate Highways	distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more
US Routes	accurate calculations of distance or area are required.
	This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
Local Roads	of the version date(s) listed below.
Background	Soil Survey Area: Eddy Area, New Mexico
Aerial Photography	Survey Area Data: Version 18, Sep 8, 2022
	Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.
	Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020
	The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Ecological Sites by Map Unit Component (11 - Hackberry 18 Fed 2 Battery)

Map unit symbol	Map unit name	Component name (percent)	Ecological site	Acres in AOI	Percent of AOI
BA	Berino loamy fine sand, 0 to 3	Berino (99%)	R070BC007NM — Loamy	29.9	100.0%
	percent slopes	Pajarito (1%)	R070BD003NM — Loamy Sand		
Totals for Area of In	terest	29.9	100.0%		

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-103.731 32.714 Degrees

2mi

ATTACHMENT 2



ATTACHMENT 3

Client Name: Devon Energy Production Company, LP Site Name: Hackberry 18 Federal 2 Battery NMOCD Tracking #: nAPP2317136603 Project #: 23E-03903 Lab Reports: 2308F22, 2308F19 and 2308F20

	Table	3. Initial Characte	erization S	ample Fie	ld Screen	creen and Laboratory Results - Depth to Groundwater 51 - 100 feet bgs							
9	ample Descrip	otion	Fie	eld Screeni	ng			Petrole	eum Hydro	carbons			
						Vola	atile			Extractable	5		Inorganic
Sample ID	Depth (ft)	Sample Date	편 Volatile Organic Compounds ૩ (PID)	Extractable Organic 3 Compounds (PetroFlag)	dd) Montation (Montation)	euseus (mg/kg)) m m m m m m m m m m m m m m m m m m m	ଇ Gasoline Range Organics ଅନ୍ଧ (GRO)	କ୍ଷି Diesel Range Organics ଅନୁ (DRO)	କ୍ଷି Motor Oil Range Organics (MRO)	(GRO + DRO) (mg/kg)	କ୍ଷି Total Petroleum କ୍ଷି Hydrocarbons (TPH)	ළ ක්රී Chloride Concentration කි
BH23-01	0	August 18, 2023	0	12	0	ND	ND	ND	ND	ND	ND	ND	ND
BH25-01	2	August 18, 2023	0	7	158	ND	ND	ND	ND	ND	ND	ND	320
BH23-02	0	August 18, 2023	0	245	558	ND	ND	ND	21	ND	21	21	880
01123-02	2	August 18, 2023	0	22	391	ND	ND	ND	ND	ND	ND	ND	550
BH23-03	0	August 18, 2023	0	-	1,568	ND	ND	ND	ND	ND	ND	ND	2400
51123 03	2	August 18, 2023	0	-	336	ND	ND	ND	ND	ND	ND	ND	430
BH23-04	0	August 18, 2023	0	31	655	ND	ND	ND	ND	ND	ND	ND	1000
51120 01	2	August 18, 2023	0	13	93	ND	ND	ND	ND	ND	ND	ND	280
BH23-05	0	August 18, 2023	0	-	3,296	ND	ND	ND	ND	ND	ND	ND	3500
	2	August 18, 2023	0	-	1,208	ND	ND	ND	ND	ND	ND	ND	1400
BH23-06	0	August 18, 2023	0	14	216	ND	ND	ND	ND	ND	ND	ND	260
	2	August 18, 2023	0	0	129	ND	ND	ND	ND	ND	ND	ND	250
BH23-07	0	August 18, 2023	0	33	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 18, 2023	0	3	0	ND	ND	ND	ND	ND	ND	ND	ND
BH23-08	0	August 18, 2023	0	90	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 18, 2023	0	4	0	ND	ND	ND	ND	ND	ND	ND	ND
BH23-09	0	August 19, 2023	0	31	44	ND	ND	ND	ND	ND	ND	ND	110
	2	August 19, 2023	0	29	305	ND	ND	ND	ND	ND	ND	ND	300
BH23-10	0	August 19, 2023	0	90	36	ND	ND	ND	ND	ND	ND	ND	120
		August 19, 2023	0	30	329	ND	ND	ND	ND	ND	ND	ND	180
BH23-11	0	August 19, 2023	0	72 59	2,085 1,258	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	2300 1000
	0	August 19, 2023 August 19, 2023	2	8,100	7,376	ND	ND	ND ND	2700	3500	2700	6200	8200
	2	August 19, 2023 August 19, 2023	0	28	311	ND	ND	ND	2700 ND	ND	ND	ND	300
BH23-12	3.5	August 19, 2023	0	92	923	ND	ND	ND	210	220	210	430	830
	4	August 19, 2023	0	-	775	ND	ND	ND	13	ND	ND	ND	540
	0	August 19, 2023	14	6,300	8,781	ND	ND	ND	4900	3700	4900	8600	9200
BH23-13	1	August 19, 2023	0	29	443	ND	ND	ND	ND	ND	ND	ND	320
	4	August 19, 2023	0	43	178	ND	ND	ND	12	ND	12	12	330
DU22 14	0	August 19, 2023	-	35	2,827	ND	ND	ND	230	180	230	410	2100
BH23-14	2	August 19, 2023	-	33	3,306	ND	ND	ND	80	62	80	142	2200
BH23-15	0	August 20, 2023	-	32	0	ND	ND	ND	ND	ND	ND	ND	84
вп23-13	2	August 20, 2023	-	46	936	ND	ND	ND	ND	ND	ND	ND	860
BH23-16	0	August 20, 2023	-	-	821	ND	ND	ND	100	140	100	240	1300
525 10	2	August 20, 2023	-	-	2,433	ND	ND	ND	ND	ND	ND	ND	1900
BH23-17	0	August 20, 2023	-	47	0	ND	ND	ND	ND	ND	ND	ND	ND
	2	August 20, 2023	-	22	0	ND	ND	ND	ND	ND	ND	ND	ND
BH23-18	0	August 20, 2023	-	-	5,755	ND	ND	ND	340	250	340	590	5000
	2	August 20, 2023	-	-	754	ND	ND	ND	ND	ND	ND	ND	550



Client Name: Devon Energy Production Company, LP Site Name: Hackberry 18 Federal 2 Battery NMOCD Tracking #: nAPP2317136603 Project #: 23E-03903 Lab Reports: 2308F22, 2308F19 and 2308F20

	Table 3. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater 51 - 100 feet bgs												
S	ample Descrip	otion	Fi	eld Screeni	ng			Petrole	um Hydroc	arbons			
						Vola	atile			Extractable	2		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
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH23-19	0	August 20, 2023	-	79	2	ND	ND	ND	ND	ND	ND	ND	200
BH25 15	2	August 20, 2023	-	31	826	ND	ND	ND	ND	ND	ND	ND	860
BH23-20	0	August 20, 2023	-	-	4,624	ND	ND	ND	ND	ND	ND	ND	5000
BH23-20	2	August 20, 2023	-	-	1,793	ND	ND	ND	ND	ND	ND	ND	1600
BH23-21	0	August 20, 2023	-	14	619	ND	ND	ND	ND	ND	ND	ND	540
DH23-21	2	August 20, 2023	-	49	411	ND	ND	ND	ND	ND	ND	ND	620
BH23-22	0	August 20, 2023	-	25	40	ND	ND	ND	ND	ND	ND	ND	97
DH23-22	2	August 20, 2023	-	38	41	ND	ND	ND	ND	ND	ND	ND	220

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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





September 11, 2023

Kent Stallings Devon Energy 6488 Seven Rivers Highway Artesia, NM 88210 TEL: (505) 350-1336 FAX:

RE: Hackberry 18 Fed 2 Battery

OrderNo.: 2308F22

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 8/29/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

2308F22-001

Project:

Lab ID:

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-01 0.0' Collection Date: 8/18/2023 9:00:00 AM

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	9/1/2023 1:55:47 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	9/1/2023 1:55:47 AM
Surr: DNOP	96.8	69-147	%Rec	1	9/1/2023 1:55:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/30/2023 8:40:02 PM
Surr: BFB	94.3	15-244	%Rec	1	8/30/2023 8:40:02 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	8/30/2023 8:40:02 PM
Toluene	ND	0.049	mg/Kg	1	8/30/2023 8:40:02 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/30/2023 8:40:02 PM
Xylenes, Total	ND	0.098	mg/Kg	1	8/30/2023 8:40:02 PM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	8/30/2023 8:40:02 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	8/31/2023 9:19:43 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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 1 of 21

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023
Client Sample ID: BH23-01 2.0'

Project:	Hackberry 18 Fed 2 Battery	Collection Date: 8/18/2023 9:10:00 AM						
Lab ID:	2308F22-002	Matrix: SOIL	Rec	eived Date:	8/29/2	023 7:55:00 AM		
Analyses		Result	RL Q	ual Units	DF	Date Analyzed		
EPA ME	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD		
Diesel R	ange Organics (DRO)	ND	9.6	mg/Kg	1	9/1/2023 2:06:44 AM		
Motor O	il Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2023 2:06:44 AM		
Surr:	DNOP	98.8	69-147	%Rec	1	9/1/2023 2:06:44 AM		
EPA ME	THOD 8015D: GASOLINE RAN	GE				Analyst: JJP		
Gasoline	e Range Organics (GRO)	ND	4.7	mg/Kg	1	8/30/2023 9:50:43 PM		
Surr:	BFB	96.7	15-244	%Rec	1	8/30/2023 9:50:43 PM		
EPA ME	THOD 8021B: VOLATILES					Analyst: JJP		
Benzene	9	ND	0.024	mg/Kg	1	8/30/2023 9:50:43 PM		
Toluene		ND	0.047	mg/Kg	1	8/30/2023 9:50:43 PM		
Ethylber	nzene	ND	0.047	mg/Kg	1	8/30/2023 9:50:43 PM		
Xylenes.	, Total	ND	0.094	mg/Kg	1	8/30/2023 9:50:43 PM		
Surr:	4-Bromofluorobenzene	108	39.1-146	%Rec	1	8/30/2023 9:50:43 PM		
EPA ME	THOD 300.0: ANIONS					Analyst: SNS		
Chloride		320	60	mg/Kg	20	8/31/2023 9:32:08 PM		

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

Qualifiers:

Value exceeds Maximum Contaminant Level. 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 standard limits. If undiluted results may be estimated.

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

Page 2 of 21

Analytical Report Lab Order 2308F22

8/31/2023 9:44:33 PM

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-02 0.0' Collection Date: 8/18/2023 9:20:00 AM

Project:	Hackberry 18 Fed 2 Battery	Collection Date: 8/18/2023 9:20:00 AM						
Lab ID:	2308F22-003	Matrix: SOIL	Rece	Received Date: 8/29/2023 7:55:00 A				
Analyses		Result	RL Qu	al Units	DF	Date Analyzed		
EPA ME	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD		
Diesel R	ange Organics (DRO)	21	9.1	mg/Kg	1	9/1/2023 2:17:47 AM		
Motor O	il Range Organics (MRO)	ND	45	mg/Kg	1	9/1/2023 2:17:47 AM		
Surr:	DNOP	97.1	69-147	%Rec	1	9/1/2023 2:17:47 AM		
EPA ME	THOD 8015D: GASOLINE RANG	E				Analyst: JJP		
Gasoline	e Range Organics (GRO)	ND	4.6	mg/Kg	1	8/30/2023 11:01:07 PM		
Surr:	BFB	93.0	15-244	%Rec	1	8/30/2023 11:01:07 PM		
EPA ME	THOD 8021B: VOLATILES					Analyst: JJP		
Benzene	9	ND	0.023	mg/Kg	1	8/30/2023 11:01:07 PM		
Toluene		ND	0.046	mg/Kg	1	8/30/2023 11:01:07 PM		
Ethylber	izene	ND	0.046	mg/Kg	1	8/30/2023 11:01:07 PM		
Xylenes,	Total	ND	0.092	mg/Kg	1	8/30/2023 11:01:07 PM		
Surr:	4-Bromofluorobenzene	104	39.1-146	%Rec	1	8/30/2023 11:01:07 PM		
EPA ME	THOD 300.0: ANIONS					Analyst: SNS		

880

60

mg/Kg

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 PQL Practical Quanitative Limit

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

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range Reporting Limit

RL

Page 3 of 21

2308F22-004

Project:

Lab ID:

Analytical Report Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Client Sample ID: BH23-02 2.0' Collection Date: 8/18/2023 9:30:00 AM Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/1/2023 2:39:33 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2023 2:39:33 AM
Surr: DNOP	99.7	69-147	%Rec	1	9/1/2023 2:39:33 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/30/2023 11:24:32 PM
Surr: BFB	93.4	15-244	%Rec	1	8/30/2023 11:24:32 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	8/30/2023 11:24:32 PM
Toluene	ND	0.049	mg/Kg	1	8/30/2023 11:24:32 PM
Ethylbenzene	ND	0.049	mg/Kg	1	8/30/2023 11:24:32 PM
Xylenes, Total	ND	0.097	mg/Kg	1	8/30/2023 11:24:32 PM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	8/30/2023 11:24:32 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	550	60	mg/Kg	20	8/31/2023 9:56:58 PM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level. Sample Diluted Due to Matrix

- D н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 21

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-03 0.0'

				-				
Project:	Hackberry 18 Fed 2 Battery	Collection Date: 8/18/2023 9:40:00 AM						
Lab ID:	2308F22-005	Matrix: SOIL	Rece	ived Date:	8/29/2	023 7:55:00 AM		
Analyses		Result	RL Qu	al Units	DF	Date Analyzed		
EPA ME	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD		
Diesel R	Range Organics (DRO)	ND	9.6	mg/Kg	1	9/1/2023 2:50:27 AM		
Motor O	il Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2023 2:50:27 AM		
Surr:	DNOP	97.0	69-147	%Rec	1	9/1/2023 2:50:27 AM		
EPA ME	THOD 8015D: GASOLINE RAN	GE				Analyst: JJP		
Gasoline	e Range Organics (GRO)	ND	4.8	mg/Kg	1	8/30/2023 11:47:55 PM		
Surr:	BFB	92.2	15-244	%Rec	1	8/30/2023 11:47:55 PM		
EPA ME	THOD 8021B: VOLATILES					Analyst: JJP		
Benzene	e	ND	0.024	mg/Kg	1	8/30/2023 11:47:55 PM		
Toluene		ND	0.048	mg/Kg	1	8/30/2023 11:47:55 PM		
Ethylber	nzene	ND	0.048	mg/Kg	1	8/30/2023 11:47:55 PM		
Xylenes	, Total	ND	0.095	mg/Kg	1	8/30/2023 11:47:55 PM		
Surr:	4-Bromofluorobenzene	104	39.1-146	%Rec	1	8/30/2023 11:47:55 PM		
EPA ME	THOD 300.0: ANIONS					Analyst: SNS		
Chloride	2	2400	150	mg/Kg	50	9/1/2023 7:48:38 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
- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

Analytical Report Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Client Sample ID: BH23-03 2.0' Collection Date: 8/18/2023 9:50:00 AM Received Date: 8/29/2023 7:55:00 AM

Lab ID: 2308F22-006	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	9/1/2023 3:01:19 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2023 3:01:19 AM
Surr: DNOP	93.4	69-147	%Rec	1	9/1/2023 3:01:19 AM
EPA METHOD 8015D: GASOLINE RANG	GE				Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2023 12:11:23 AM
Surr: BFB	92.0	15-244	%Rec	1	8/31/2023 12:11:23 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	8/31/2023 12:11:23 AM
Toluene	ND	0.048	mg/Kg	1	8/31/2023 12:11:23 AM
Ethylbenzene	ND	0.048	mg/Kg	1	8/31/2023 12:11:23 AM
Xylenes, Total	ND	0.097	mg/Kg	1	8/31/2023 12:11:23 AM
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	8/31/2023 12:11:23 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	430	60	mg/Kg	20	8/31/2023 10:21:46 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range RL Reporting Limit

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Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-04 0.0' Collection Date: 8/18/2023 10:00:00 AM

Project:	Hackberry 18 Fed 2 Battery		Colle	ction Date:	8/18/2	023 10:00:00 AM	
Lab ID:	2308F22-007	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM				
Analyses		Result	RL Qu	al Units	DF	Date Analyzed	
EPA ME	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD	
Diesel R	ange Organics (DRO)	ND	9.0	mg/Kg	1	9/1/2023 3:12:11 AM	
Motor O	il Range Organics (MRO)	ND	45	mg/Kg	1	9/1/2023 3:12:11 AM	
Surr:	DNOP	93.9	69-147	%Rec	1	9/1/2023 3:12:11 AM	
EPA ME	THOD 8015D: GASOLINE RAN	GE				Analyst: JJP	
Gasoline	e Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2023 12:34:46 AM	
Surr:		92.1	15-244	%Rec	1	8/31/2023 12:34:46 AM	
EPA ME	THOD 8021B: VOLATILES					Analyst: JJP	
Benzene	e	ND	0.024	mg/Kg	1	8/31/2023 12:34:46 AM	
Toluene		ND	0.048	mg/Kg	1	8/31/2023 12:34:46 AM	
Ethylber	nzene	ND	0.048	mg/Kg	1	8/31/2023 12:34:46 AM	
Xylenes	, Total	ND	0.097	mg/Kg	1	8/31/2023 12:34:46 AM	
Surr:	4-Bromofluorobenzene	104	39.1-146	%Rec	1	8/31/2023 12:34:46 AM	
EPA ME	THOD 300.0: ANIONS					Analyst: SNS	
Chloride	9	1000	60	mg/Kg	20	8/31/2023 10:34:10 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

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

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

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range RL Reporting Limit

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Project: Hackberry 18 Fed 2 Battery

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-04 2.0' Collection Date: 8/18/2023 10:10:00 AM

Lab ID: 2308F22-008	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	9/1/2023 3:23:06 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	9/1/2023 3:23:06 AM
Surr: DNOP	93.2	69-147	%Rec	1	9/1/2023 3:23:06 AM
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/31/2023 12:58:08 AM
Surr: BFB	90.5	15-244	%Rec	1	8/31/2023 12:58:08 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	8/31/2023 12:58:08 AM
Toluene	ND	0.050	mg/Kg	1	8/31/2023 12:58:08 AM
Ethylbenzene	ND	0.050	mg/Kg	1	8/31/2023 12:58:08 AM
Xylenes, Total	ND	0.099	mg/Kg	1	8/31/2023 12:58:08 AM
Surr: 4-Bromofluorobenzene	102	39.1-146	%Rec	1	8/31/2023 12:58:08 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	280	60	mg/Kg	20	8/31/2023 11:11:24 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project: Hackberry 18 Fed 2 Battery

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-05 0.0' Collection Date: 8/18/2023 10:20:00 AM

Lab ID: 2308F22-009	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/1/2023 3:33:55 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/1/2023 3:33:55 AM
Surr: DNOP	96.4	69-147	%Rec	1	9/1/2023 3:33:55 AM
EPA METHOD 8015D: GASOLINE R	ANGE				Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/31/2023 1:21:34 AM
Surr: BFB	91.9	15-244	%Rec	1	8/31/2023 1:21:34 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	8/31/2023 1:21:34 AM
Toluene	ND	0.047	mg/Kg	1	8/31/2023 1:21:34 AM
Ethylbenzene	ND	0.047	mg/Kg	1	8/31/2023 1:21:34 AM
Xylenes, Total	ND	0.093	mg/Kg	1	8/31/2023 1:21:34 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	8/31/2023 1:21:34 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	3400	150	mg/Kg	50	9/1/2023 8:01:03 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL

Practical Quanitative Limit

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

Analyte detected in the associated Method Blank в

Above Quantitation Range/Estimated Value Е

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 9 of 21

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-05 2.0' Collection Date: 8/18/2023 10:30:00 AM

Project:	Hackberry 18 Fed 2 Battery	Collection Date: 8/18/2023 10:30:00 AM					
Lab ID:	2308F22-010	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM				
Analyses		Result	RL Qual	Units	DF	Date Analyzed	
EPA ME	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD	
Diesel R	ange Organics (DRO)	ND	9.9	mg/Kg	1	9/1/2023 3:44:47 AM	
Motor Oi	I Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2023 3:44:47 AM	
Surr: [ONOP	95.2	69-147	%Rec	1	9/1/2023 3:44:47 AM	
EPA ME	THOD 8015D: GASOLINE RANG	GE				Analyst: JJP	
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	8/31/2023 1:44:56 AM	
Surr: E	3FB	95.2	15-244	%Rec	1	8/31/2023 1:44:56 AM	
EPA ME	THOD 8021B: VOLATILES					Analyst: JJP	
Benzene		ND	0.024	mg/Kg	1	8/31/2023 1:44:56 AM	
Toluene		ND	0.049	mg/Kg	1	8/31/2023 1:44:56 AM	
Ethylben	zene	ND	0.049	mg/Kg	1	8/31/2023 1:44:56 AM	
Xylenes,	Total	ND	0.097	mg/Kg	1	8/31/2023 1:44:56 AM	
Surr: 4	4-Bromofluorobenzene	107	39.1-146	%Rec	1	8/31/2023 1:44:56 AM	
EPA ME	THOD 300.0: ANIONS					Analyst: SNS	
Chloride		1400	60	mg/Kg	20	8/31/2023 11:36:13 PM	

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

Qualifiers:

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

н

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL

Practical Quanitative Limit

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

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 10 of 21

2308F22-011

Project:

Lab ID:

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-06 0.0' Collection Date: 8/18/2023 10:40:00 AM

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: PRD				
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	9/1/2023 3:55:36 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	9/1/2023 3:55:36 AM
Surr: DNOP	98.4	69-147	%Rec	1	9/1/2023 3:55:36 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/31/2023 2:31:46 AM
Surr: BFB	93.5	15-244	%Rec	1	8/31/2023 2:31:46 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	8/31/2023 2:31:46 AM
Toluene	ND	0.049	mg/Kg	1	8/31/2023 2:31:46 AM
Ethylbenzene	ND	0.049	mg/Kg	1	8/31/2023 2:31:46 AM
Xylenes, Total	ND	0.097	mg/Kg	1	8/31/2023 2:31:46 AM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	8/31/2023 2:31:46 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	260	60	mg/Kg	20	8/31/2023 11:48:38 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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

Analyte detected in the associated Method Blank в

Above Quantitation Range/Estimated Value Е

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 11 of 21

Project:

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-06 2.0' Collection Date: 8/18/2023 10:50:00 AM

Lab ID: 2308F22-012 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.0 mg/Kg 1 9/1/2023 4:06:21 AM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 9/1/2023 4:06:21 AM Surr: DNOP 99.7 69-147 %Rec 1 9/1/2023 4:06:21 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 2:55:14 AM 4.9 mg/Kg 1 Surr: BFB 91.9 15-244 %Rec 1 8/31/2023 2:55:14 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 2:55:14 AM 0.025 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 2:55:14 AM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 2:55:14 AM Xylenes, Total ND mg/Kg 1 8/31/2023 2:55:14 AM 0.099 Surr: 4-Bromofluorobenzene 103 39.1-146 %Rec 1 8/31/2023 2:55:14 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 6:42:41 PM 250 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. 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range RL Reporting Limit

RL Reportin

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2308F22-013

Project:

Lab ID:

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-07 0.0' Collection Date: 8/18/2023 11:00:00 AM

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	9/1/2023 4:17:06 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	9/1/2023 4:17:06 AM
Surr: DNOP	93.8	69-147	%Rec	1	9/1/2023 4:17:06 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	8/31/2023 3:18:46 AM
Surr: BFB	93.1	15-244	%Rec	1	8/31/2023 3:18:46 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.023	mg/Kg	1	8/31/2023 3:18:46 AM
Toluene	ND	0.047	mg/Kg	1	8/31/2023 3:18:46 AM
Ethylbenzene	ND	0.047	mg/Kg	1	8/31/2023 3:18:46 AM
Xylenes, Total	ND	0.094	mg/Kg	1	8/31/2023 3:18:46 AM
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	8/31/2023 3:18:46 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	ND	60	mg/Kg	20	8/31/2023 6:55:06 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

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2308F22-014

Project:

Lab ID:

Analytical Report Lab Order 2308F22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Client Sample ID: BH23-07 2.0' Collection Date: 8/18/2023 11:10:00 AM Received Date: 8/29/2023 7:55:00 AM

	Result	RL (Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	9/1/2023 4:27:49 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	9/1/2023 4:27:49 AM
Surr: DNOP	92.7	69-147	%Rec	1	9/1/2023 4:27:49 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2023 3:42:15 AM
Surr: BFB	90.5	15-244	%Rec	1	8/31/2023 3:42:15 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	8/31/2023 3:42:15 AM
Toluene	ND	0.048	mg/Kg	1	8/31/2023 3:42:15 AM
Ethylbenzene	ND	0.048	mg/Kg	1	8/31/2023 3:42:15 AM
Xylenes, Total	ND	0.097	mg/Kg	1	8/31/2023 3:42:15 AM
Surr: 4-Bromofluorobenzene	101	39.1-146	%Rec	1	8/31/2023 3:42:15 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	ND	60	mg/Kg	20	8/31/2023 8:21:58 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range Reporting Limit

RL

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2308F22-015

Project:

Lab ID:

Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Hackberry 18 Fed 2 Battery

Date Reported: 9/11/2023 Client Sample ID: BH23-08 0.0' Collection Date: 8/18/2023 11:20:00 AM

Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/1/2023 4:38:32 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/1/2023 4:38:32 AM
Surr: DNOP	109	69-147	%Rec	1	9/1/2023 4:38:32 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/31/2023 4:05:39 AM
Surr: BFB	92.2	15-244	%Rec	1	8/31/2023 4:05:39 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	8/31/2023 4:05:39 AM
Toluene	ND	0.050	mg/Kg	1	8/31/2023 4:05:39 AM
Ethylbenzene	ND	0.050	mg/Kg	1	8/31/2023 4:05:39 AM
Xylenes, Total	ND	0.10	mg/Kg	1	8/31/2023 4:05:39 AM
Surr: 4-Bromofluorobenzene	104	39.1-146	%Rec	1	8/31/2023 4:05:39 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	ND	60	mg/Kg	20	8/31/2023 8:34:23 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
- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Analytical Report Lab Order 2308F22

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 Client Sample ID: BH23-08 2.0' Collection Date: 8/18/2023 11:30:00 AM

Project:	Hackberry 18 Fed 2 Battery	8 Fed 2 Battery Collection Date: 8/18/2023 11:30:00 AM						
Lab ID:	2308F22-016	Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM						
Analyses		Result	RL Qual	Units	DF	Date Analyzed		
EPA ME	THOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD		
Diesel R	ange Organics (DRO)	ND	9.6	mg/Kg	1	9/1/2023 4:49:25 AM		
Motor Oi	I Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2023 4:49:25 AM		
Surr: I	DNOP	96.9	69-147	%Rec	1	9/1/2023 4:49:25 AM		
EPA ME	THOD 8015D: GASOLINE RANG	GE				Analyst: JJP		
Gasoline	Range Organics (GRO)	ND	4.9	mg/Kg	1	8/31/2023 4:29:04 AM		
Surr: E	BFB	93.7	15-244	%Rec	1	8/31/2023 4:29:04 AM		
EPA ME	THOD 8021B: VOLATILES					Analyst: JJP		
Benzene		ND	0.024	mg/Kg	1	8/31/2023 4:29:04 AM		
Toluene		ND	0.049	mg/Kg	1	8/31/2023 4:29:04 AM		
Ethylben	zene	ND	0.049	mg/Kg	1	8/31/2023 4:29:04 AM		
Xylenes,	Total	ND	0.098	mg/Kg	1	8/31/2023 4:29:04 AM		
Surr: 4	4-Bromofluorobenzene	106	39.1-146	%Rec	1	8/31/2023 4:29:04 AM		
EPA ME	THOD 300.0: ANIONS					Analyst: RBC		
Chloride		ND	60	mg/Kg	20	8/31/2023 8:46:48 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

- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 16 of 21

Prep Date:

8/31/2023

QC SUMMARY REPORT Hall E

Analysis Date: 8/31/2023

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Hall Environmental Analysis Laboratory, Inc.				WO#:	2308F22 11-Sep-23
Client: Project:		Energy erry 18 Fed 2 Battery			
Sample ID:	MB-77246	SampType: MBLK	TestCode: EPA Method 300.0: Anions		
Client ID:	PBS	Batch ID: 77246	RunNo: 99401		

SeqNo: 3627582

Units: mg/Kg

		5.5
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Chloride	ND 1.5	
Sample ID: LCS-77246	SampType: LCS TestCode: EPA Method 30	0.0: Anions
Client ID: LCSS	Batch ID: 77246 RunNo: 99401	
Prep Date: 8/31/2023	Analysis Date: 8/31/2023 SeqNo: 3627583 U	Jnits: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Chloride	14 1.5 15.00 0 93.7 90	110
Sample ID: MB-77241	SampType: MBLK TestCode: EPA Method 30	0.0: Anions
Client ID: PBS	Batch ID: 77241 RunNo: 99389	
Prep Date: 8/31/2023	Analysis Date: 8/31/2023 SeqNo: 3628254 U	Jnits: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Chloride	ND 1.5	
Sample ID: LCS-77241	SampType: LCS TestCode: EPA Method 30	0.0: Anions
Client ID: LCSS	Batch ID: 77241 RunNo: 99389	
Prep Date: 8/31/2023	Analysis Date: 8/31/2023 SeqNo: 3628255 U	Jnits: mg/Kg
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Chloride		

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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Released to Imaging: 3/5/2024 11:07:34 AM

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	WO#:	2308F22
nalysis Laboratory, Inc.		11-Sep-23

Client: Project:	Devon En Hackberry	ergy / 18 Fed 2	Batter	у							
Sample ID:	LCS-77177	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	LCSS	Batch	ID: 77	177	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/	31/2023	5	SeqNo: 3	627016	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.7		5.000		114	69	147			
Sample ID:	MB-77177	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	PBS	Batch	ID: 77	177	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/	31/2023	Ş	SeqNo: 3	627018	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		12		10.00		116	69	147			
Sample ID: 2308F22-016AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics											
Client ID:	BH23-08 2.0'	Batch	ID: 77	175	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 9/	1/2023	S	SeqNo: 3	627538	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Drganics (DRO)	42	9.1	45.37	0	93.5	54.2	135			
Surr: DNOP		4.1		4.537		89.9	69	147			
Sample ID:	2308F22-016AMSD	SampT	ype: MS	SD	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	BH23-08 2.0'	Batch	ID: 77	175	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 9/	1/2023	S	SeqNo: 3	627540	Units: mg/Kg	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	41	8.9	44.56	0	91.5	54.2	135	3.87	29.2	
Surr: DNOP		4.0		4.456		89.4	69	147	0	0	
Sample ID:	LCS-77175	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	LCSS	Batch	ID: 77	175	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/	31/2023	Ş	SeqNo: 3	627542	Units: mg/Kg	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (Organics (DRO)	43	10	50.00	0	87.0	61.9	130			
Surr: DNOP		4.7		5.000		93.3	69	147			
Sample ID:	LCS-77176	SampT	pe: LC	S	Tes	tCode: Ef	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	LCSS	Batch	ID: 77	176	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/	31/2023	S	SeqNo: 30	627544	Units: %Rec			
		Decult		SPK value	SPK Ref Val		Loudinait	Light imit	0/ 000	RPDLimit	Qual
Analyte		Result	PQL	SFR value	SER REI Val	%REC	LowLimit	HighLimit	%RPD	REDLIIIII	Qual

Qualifiers:

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

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KEPUKI	WO#:	2308F22	
l Analysis Laboratory, Inc.		11-Sep-23	

Client: Devon E Project: Hackber	Energy ry 18 Fed 2 Battery	
Sample ID: LCS-77208	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 77208	RunNo: 99380
Prep Date: 8/30/2023	Analysis Date: 8/31/2023	SeqNo: 3627545 Units: %Rec
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.9 5.00	0 119 69 147
Sample ID: LCS-77213	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 77213	RunNo: 99380
Prep Date: 8/30/2023	Analysis Date: 8/31/2023	SeqNo: 3627547 Units: %Rec
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.3 5.00	0 105 69 147
Sample ID: MB-77175	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 77175	RunNo: 99380
Prep Date: 8/29/2023	Analysis Date: 8/31/2023	SeqNo: 3627550 Units: mg/Kg
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10	
Motor Oil Range Organics (MRO) Surr: DNOP	ND 50 11 10.0	0 114 69 147
Sample ID: MB-77176	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 77176	RunNo: 99380
Prep Date: 8/29/2023	Analysis Date: 8/31/2023	SeqNo: 3627552 Units: %Rec
Analyte	-	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	13 10.0	
Sample ID: MB-77208	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 77208	RunNo: 99380
Prep Date: 8/30/2023	Analysis Date: 8/31/2023	SeqNo: 3627556 Units: %Rec
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	13 10.0	
Sample ID: MB-77213	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 77213	RunNo: 99380
Prep Date: 8/30/2023	Analysis Date: 8/31/2023	SeqNo: 3627557 Units: %Rec
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.0	

Qualifiers:

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

Client: Project:	Devon En Hackberry	nergy y 18 Fed 2	Battery	1									
Sample ID:	lcs-77140	SampT	ype: LC	s	Tes	tCode: EF	A Method	8015D: Gasoli	ne Range				
Client ID:	LCSS	Batch	ID: 771	140	F	RunNo: 9 9	342						
Prep Date:	8/28/2023	Analysis D	ate: 8/ 3	30/2023	S	SeqNo: 36	24717	Units: %Rec					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		1900		1000		192	15	244					
Sample ID:	mb-77140	SampT	ype: ME	BLK	Tes	tCode: EF	A Method	8015D: Gasoli	ne Range				
Client ID:	D: PBS Batch ID: 77140 RunNo: 99342												
Prep Date:	8/28/2023	Analysis D	ate: 8/ 3	30/2023	S	SeqNo: 36	24718	Units: %Rec					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: BFB		950		1000		94.7	15	244					
Sample ID: Ics-77168 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range													
Client ID: LCSS Batch ID: 77168 RunNo: 99342													
Prep Date:	8/29/2023	Analysis D	ate: 8/3	30/2023	S	SeqNo: 3625866 Units: m							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
-	e Organics (GRO)	22	5.0	25.00	0	88.6	70	130					
Surr: BFB		1900		1000		195	15	244					
Sample ID:	mb-77168	SampT	ype: ME	BLK	Tes	tCode: EF	A Method	8015D: Gasoli	ne Range				
Client ID:	PBS	Batch	ID: 771	168	F	RunNo: 9 9	342						
Prep Date:	8/29/2023	Analysis D	ate: 8/3	30/2023	5	SeqNo: 36	25867	Units: mg/Kg	9				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang Surr: BFB	e Organics (GRO)	ND 960	5.0	1000		06.0	15	244					
		960		1000		96.0	15	244					
	2308f22-001ams		ype: MS					8015D: Gasoli	ne Range				
Client ID:	BH23-01 0.0'		ID: 771			RunNo: 99	-	11-1-					
Prep Date:	8/29/2023	Analysis D	ate: 8/;			SeqNo: 36	25880	Units: mg/Kg	9				
Analyte		Result	PQL		SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang Surr: BFB	e Organics (GRO)	24 2000	4.9	24.56 982.3	0	96.0 203	70 15	130 244					
	2308f22-001amsd		ype: MS					8015D: Gasoli	ne Range				
Client ID:	BH23-01 0.0'		ID: 771			RunNo: 99							
Prep Date:	8/29/2023	Analysis D	ate: 8/3	30/2023	S	SeqNo: 36	625881	Units: mg/Kg	9				
Analyte	0 1 (252)	Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Gasoline Rang	e Organics (GRO)	22	4.9	24.39	0	91.9	70	130	5.03	20			

Qualifiers:

Surr: BFB

- 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 standard limits. If undiluted results may be estimated. S

1900

Analyte detected in the associated Method Blank в

198

244

15

0

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

975.6

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2308F22

11-Sep-23

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WO#:	2308F22

11-Sep-23

Client:	Devon En	ergy									
Project:	Hackberry	y 18 Fed 2	2 Battery	7							
Sample ID:	1 CS 77169	Samo	Type: LC	6	Tee	tCode: EE	A Mothod	8021B: Volati	ilos		
		•		-					lies		
	LCSS		h ID: 771			RunNo: 99		1.			
Prep Date:	8/29/2023	Analysis [Date: 8/3	30/2023	2	SeqNo: 36	25922	Units: mg/K	g		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.0	0.025	1.000	0	102	70	130			
Toluene		1.0	0.050	1.000	0	103	70	130			
Ethylbenzene		1.1	0.050	1.000	0	105	70	130			
Xylenes, Total		3.2	0.10	3.000	0	107	70	130			
Surr: 4-Brome	ofluorobenzene	1.1		1.000		107	39.1	146			
Sample ID:	mb-77168	Samp	Гуре: МВ	LK	Tes	tCode: EF	A Method	8021B: Volati	iles		
Client ID:	PBS Batch ID: 77168					RunNo: 99	342				
Prep Date:	8/29/2023	Analysis [Date: 8/3	30/2023	S	SeqNo: 36	25923	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								
	<i>a</i> 1										
Surr: 4-Brome	ofluorobenzene	1.1		1.000		107	39.1	146			
	2308f22-002ams		Гуре: МS		Tes			146 8021B: Volati	iles		
Sample ID:		Samp	Гуре: MS h ID: 77 1	;			A Method		iles		
Sample ID:	2308f22-002ams	Samp	h ID: 771	68	F	tCode: EF	A Method				
Sample ID: Client ID:	2308f22-002ams BH23-01 2.0'	Samp ⁻ Batc	h ID: 771	68 30/2023	F	tCode: EF	A Method	8021B: Volati		RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte	2308f22-002ams BH23-01 2.0'	Samp Batc Analysis [h ID: 77 1 Date: 8/ 3	68 30/2023	F	ttCode: EF RunNo: 99 SeqNo: 36	A Method 342 25940	8021B: Volati Units: mg/K	g	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene	2308f22-002ams BH23-01 2.0'	Samp ⁻ Batc Analysis I Result	h ID: 771 Date: 8/: PQL	68 30/2023 SPK value	F S SPK Ref Val	tCode: EF RunNo: 99 SeqNo: 36 %REC	PA Method 9342 935940 LowLimit	8021B: Volati Units: mg/K HighLimit	g	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene	2308f22-002ams BH23-01 2.0'	Samp Batc Analysis I Result 1.0	h ID: 771 Date: 8/: PQL 0.023	68 30/2023 SPK value 0.9398	F SPK Ref Val 0	tCode: EF RunNo: 99 SeqNo: 36 %REC 106	A Method 342 525940 LowLimit 70	8021B: Volati Units: mg/K HighLimit 130	g	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene	2308f22-002ams BH23-01 2.0'	Samp Batc Analysis I Result 1.0 1.0	h ID: 771 Date: 8/ PQL 0.023 0.047	68 30/2023 SPK value 0.9398 0.9398	F SPK Ref Val 0 0	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108	A Method 342 25940 LowLimit 70 70	8021B: Volati Units: mg/K HighLimit 130 130	g	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	2308f22-002ams BH23-01 2.0'	Samp Batc Analysis I Result 1.0 1.0 1.0	h ID: 77 1 Date: 8/ <u>PQL</u> 0.023 0.047 0.047	68 30/2023 SPK value 0.9398 0.9398 0.9398	F SPK Ref Val 0 0 0	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109	A Method 342 225940 LowLimit 70 70 70 70	8021B: Volati Units: mg/K HighLimit 130 130 130	g	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brome	2308f22-002ams BH23-01 2.0' 8/29/2023	Samp Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99	h ID: 77 1 Date: 8/ <u>PQL</u> 0.023 0.047 0.047	68 30/2023 SPK value 0.9398 0.9398 0.9398 2.820 0.9398	F SPK Ref Val 0 0 0 0	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105	24 Method 342 225940 LowLimit 70 70 70 70 39.1	8021B: Volati Units: mg/K HighLimit 130 130 130 130	g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brome Sample ID:	2308f22-002ams BH23-01 2.0' 8/29/2023	Samp Batc Analysis I Result 1.0 1.0 3.1 0.99 Samp	h ID: 771 Date: 8/3 PQL 0.023 0.047 0.047 0.094	68 30/2023 SPK value 0.9398 0.9398 0.9398 2.820 0.9398 2.820	F SPK Ref Val 0 0 0 0 0 Tes	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105	2A Method 3342 525940 2000 70 70 70 70 70 39.1	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146	g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brome Sample ID:	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd	Samp Batc Analysis I Result 1.0 1.0 3.1 0.99 Samp	h ID: 771 Date: 8/3 PQL 0.023 0.047 0.047 0.094 Type: MS h ID: 771	68 30/2023 SPK value 0.9398 0.9398 0.9398 2.820 0.9398 50 68	F SPK Ref Val 0 0 0 0 Tes F	ttCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105	A Method 342 225940 LowLimit 70 70 70 39.1 A Method 342	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146	g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromo Sample ID: Client ID:	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd BH23-01 2.0'	Samp Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99 Samp Batc	h ID: 771 Date: 8/3 PQL 0.023 0.047 0.047 0.094 Type: MS h ID: 771	68 30/2023 SPK value 0.9398 0.9398 2.820 0.9398 2.820 0.9398 50 68 30/2023	F SPK Ref Val 0 0 0 0 Tes F	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105 tCode: EF RunNo: 99	A Method 342 225940 LowLimit 70 70 70 39.1 A Method 342	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati	g %RPD	RPDLimit	Qual
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brome Sample ID: Client ID: Prep Date: Analyte	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd BH23-01 2.0'	Samp Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99 Samp Batc Analysis I	h ID: 771 Date: 8/3 0.023 0.047 0.047 0.094 Type: MS h ID: 771 Date: 8/3	68 30/2023 SPK value 0.9398 0.9398 2.820 0.9398 2.820 0.9398 50 68 30/2023	F SPK Ref Val 0 0 0 0 0 Tes F	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105 tCode: EF RunNo: 99 SeqNo: 36	A Method 342 225940 LowLimit 70 70 70 39.1 A Method 342 225941	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: mg/K	g %RPD iles		
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromo Sample ID: Client ID: Prep Date: Analyte Benzene	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd BH23-01 2.0'	Samp Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99 Samp Batc Analysis I Result	h ID: 771 Date: 8/3 PQL 0.023 0.047 0.047 0.094 Type: MS h ID: 771 Date: 8/3 PQL	68 30/2023 SPK value 0.9398 0.9398 2.820 0.9398 2.820 0.9398 5D 68 30/2023 SPK value	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105 tCode: EF RunNo: 99 SeqNo: 36 %REC	A Method 342 225940 LowLimit 70 70 70 39.1 A Method 342 225941 LowLimit	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: mg/K HighLimit	59 %RPD iles 59 %RPD	RPDLimit	
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Bromo Sample ID: Client ID: Prep Date: Analyte Benzene Toluene	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd BH23-01 2.0'	Samp Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99 Samp Batc Analysis I Result 0.97	h ID: 771 Date: 8/3 0.023 0.047 0.047 0.094 Type: MS h ID: 771 Date: 8/3 PQL 0.024	68 30/2023 SPK value 0.9398 0.9398 0.9398 2.820 0.9398 2.820 0.9398 50 68 30/2023 SPK value 0.9407	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val 0	tCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105 tCode: EF RunNo: 99 SeqNo: 36 %REC 104	A Method 342 225940 2000 200 70 70 70 70 39.1 A Method 342 25941 LowLimit 200	8021B: Volati Units: mg/K HighLimit 130 130 130 146 8021B: Volati Units: mg/K HighLimit 130	5g %RPD iles 5g %RPD 2.56	RPDLimit 20	
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd BH23-01 2.0'	Samp ^T Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99 Samp ^T Batc Analysis I Result 0.97 0.98	h ID: 771 Date: 8/3 0.023 0.047 0.047 0.094 Type: MS h ID: 771 Date: 8/3 PQL 0.024 0.047	68 30/2023 SPK value 0.9398 0.9398 0.9398 2.820 0.9398 2.820 0.9398 50 68 30/2023 SPK value 0.9407 0.9407	F SPK Ref Val 0 0 0 0 Tes 5 SPK Ref Val 0 0	ttCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105 ttCode: EF RunNo: 99 SeqNo: 36 %REC 104 104	A Method 342 225940 225940 70 70 70 70 39.1 A Method 342 225941 LowLimit 70 70 70 70	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: mg/K HighLimit 130 130	5 g %RPD 5 iles 5 g 2.56 2.91	RPDLimit 20 20	
Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total	2308f22-002ams BH23-01 2.0' 8/29/2023 ofluorobenzene 2308f22-002amsd BH23-01 2.0'	Samp ^T Batc Analysis I Result 1.0 1.0 1.0 3.1 0.99 Samp ^T Batc Analysis I Result 0.97 0.98 1.0	h ID: 771 Date: 8/3 0.023 0.047 0.047 0.094 Type: MS h ID: 771 Date: 8/3 PQL 0.024 0.047 0.047	68 30/2023 SPK value 0.9398 0.9398 2.820 0.9398 2.820 0.9398 2.820 0.9398 50 68 30/2023 SPK value 0.9407 0.9407 0.9407	F SPK Ref Val 0 0 0 0 0 Tes 5 SPK Ref Val 0 0 0 0	ttCode: EF RunNo: 99 SeqNo: 36 %REC 106 108 109 110 105 ttCode: EF RunNo: 99 SeqNo: 36 %REC 104 104 104 107	2A Method 342 225940 LowLimit 70 70 70 70 39.1 2A Method 342 2325941 LowLimit 70 70 70 70 70 70 70 70 70 70	8021B: Volati Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: mg/K HighLimit 130 130 130	5g %RPD iles 5g %RPD 2.56 2.91 1.91	RPDLimit 20 20 20	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY	Hall Environmental . Albu TEL: 505-345-3975 . Website: www.hal	4901 querqu FAX: 5	Hawkins NE 1e. NM 87109 505-345-4107	S	San	nple Log-In Check List
Client Name: Devon Energy	Work Order Number:	2308	F22			RcptNo: 1
Received By: Tracy Casarrubias	8/29/2023 7:55:00 AM					
Completed By: Tracy Casarrubias	8/29/2023 9:08:29 AM					
Reviewed By: 18-29-23						
Chain of Custody						
1. Is Chain of Custody complete?		Yes		No	\checkmark	Not Present
2. How was the sample delivered?		<u>Couri</u>	ier			
Log In					_	
3. Was an attempt made to cool the samples?		Yes	\checkmark	No		NA 🗌
4. Were all samples received at a temperature of	of >0° C to 6.0°C	Yes	\checkmark	No		NA 🗌
5. Sample(s) in proper container(s)?		Yes	\checkmark	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	\checkmark	NA 🗌
9. Received at least 1 vial with headspace <1/4"	for AQ VOA?	Yes	_	No		NA 🔽
10. Were any sample containers received broker	<u>1</u> ?	Yes		No	\checkmark	# of preserved bottles checked
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 C	Sustody?	Yes	\checkmark	No		Adjusted?
13. Is it clear what analyses were requested?		Yes	\checkmark	No		
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes		No		Checked by: 2-8/29/23
Special Handling (if applicable)						
15. Was client notified of all discrepancies with t	nis order?	Yes		No		NA 🗹
Person Notified: By Whom: Regarding: Client Instructions: Mailing address.p	Date: Via:] eMa Fax ar			Fax C- TM	[] In Person IC 8/29/23
16. Additional remarks:						
17. <u>Cooler Information</u> Cooler No Temp °C Condition Se 1 5.6 Good Yes		eal Da	ate Sigr	ned	Ву	
Page 1 of 1						

Page 82 of 138

Received	l by OCD	: 11/1/202	23 1:09:31 PM							I												Page	83 of 138
С	hain-	of-Cu	stody Reco	ord	Turn-	Around							н	A	L	EN	V	IR	0	M	EN	ITA	L
Client:	Ī	Devo	n			tandard		Rush	3 DAY		ANALYSIS LABORATO							TOF	۲S				
	N	rect			Proje	ct Name	Dan	Hack	berry 18	www.hallenvironmental.com													
Mailing	Address:				Distandard Rush 3 DAY Project Name: Hackberry 18 BBBBB Fed 2 Bartlery					490)1 Ha	awki	ns N	Ε-					1 871	09			
6	. <u></u>				Proje	ect #: 236				Tel. 505-345-3975 Fax 505-345-4107													
Phone	Phone #:									Analysis Request													
email o	email or Fax#:				Proje	ect Mana Ker	iger:	<u>.</u>	00 5	121)	DRO / MRO)	_s		s		, SO4			sent				
QA/QC	Package:					ner	10-0	p ~///		80	N/O	PCB's		SIM		PO4,			ItAb				
Star			🗆 Level 4 (Full Va		0	A	A			TMB's (8021)	NA NA		÷	8270SIMS		NO ₂ ,			eser				
Accred □ NEL		□ Az Co □ Other	mpliance		Sam On I	pler: A	V Ye	s	No uogi	-		8081 Pesticides/8082	504.1)	5	S			8270 (Semi-VOA)	Total Coliform (Present/Absent)				
	AC (Type)_				# of	# of Coolers: \			MTBE	TPH 8015D(GRO	icide	por	PAHs by 8310	RCRA 8 Metals	CI F, Br, NO ₃ ,	R	ni-<	E L	2				
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					Con	lainer	Prese	ervative		BTEX	E	81	EDB (Method	AHs	CRA	Ľ,	8260 (VOA)	270	otal				
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11613	Propos poor acrimon				X	1		4	8/29/23						ad dat			arly no	tated o	n the a	nalvtica	i report.	

Released to Imaging: 3/3/2024 11:07:34 AM

Received by OCD: 11/1/2023 1:09:31 PM		Page 84 of 1.
Chain-of-Custody Record	Turn-Around Time: D Standard Rush <u>3</u> DAY Project Name: Hackberry 18 Fel 2 Battery Project #: 23E-03903	HALL ENVIRONMENTAL ANALYSIS LABORATORY
Direct Bill	Project Name:	www.hallenvironmental.com
Mailing Address:	Hackberry 18 Her	4901 Hawkins NE - Albuquerque, NM 87109
	Project #:	Tel. 505-345-3975 Fax 505-345-4107
	- 23E-03903	Analysis Request
Phone #: email or Fax#:		
QA/QC Package:	Project Manager:	MRC 2021
□ Standard □ Level 4 (Full Validation)	,	's (802 PCB's PCB's PCB's NI PCB's P
Accreditation: Accreditation: Accreditation	Sampler:	BTEX) MTBE / TMB's (8021) TPH:8015D(GRO / DRO / MRO) 8081 Pesticides/8082 PCB's EDB (Method 504.1) PAHs by 8310 or 8270SIMS RCRA 8 Metals RCRA 8 Metals RCRA 8 Metals CJ F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄ 8260 (VOA) 8260 (VOA) 10tal Coliform (Present/Absent) Total Coliform (Present/Absent)
NELAC Other	On loo: IV Yes I No 1100	BTEX) MTBE / TMB TPH:8015D(GRO / DR 8081 Pesticides/8082 EDB (Method 504.1) PAHs by 8310 or 827 RCRA 8 Metals CH F, Br, NO ₃ , NO ₂ 8260 (VOA) 8260 (VOA) 8270 (Semi-VOA) Total Coliform (Prese
EDD (Type)	# of Coolers: 1 Cooler Temp(including CF): 5.7-0.1= 5.6 (°C)	MTBE / I5D(GResticides ethod 5/ ethod 5/ S Metals S Metals S Metals (OA) (OA) (OA) (emi-VO
		BTEX) MTBE / TPH:8015D(GRO 8081 Pesticides/ EDB (Method 50 PAHs by 8310 ol RCRA 8 Metals CH F, Br, NO ₃ , 8260 (VOA) 8270 (Semi-VOA Total Coliform (P
	Container Preservative HEAL No.	BTEX) 8081 Pe EDB (M PAHs b RCRA 8 8270 (S S270 (S Ch F, E Total C
Date Time Matrix Sample Name	11.0	
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128/23 1900 acumus	3/29/27 7:55	



September 11, 2023

Kent Stallings Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Hackberry 18

OrderNo.: 2308F19

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 15 sample(s) on 8/29/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-09 0 **Project:** Hackberry 18 Collection Date: 8/19/2023 9:00:00 AM Lab ID: 2308F19-001 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: PRD Diesel Range Organics (DRO) ND 8.6 mg/Kg 1 8/31/2023 9:57:59 PM Motor Oil Range Organics (MRO) ND 43 mg/Kg 1 8/31/2023 9:57:59 PM Surr: DNOP 94.9 69-147 %Rec 1 8/31/2023 9:57:59 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 4:52:30 AM 4.8 mg/Kg 1 Surr: BFB 92.9 15-244 %Rec 1 8/31/2023 4:52:30 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 4:52:30 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 8/31/2023 4:52:30 AM Ethylbenzene ND 0.048 mg/Kg 1 8/31/2023 4:52:30 AM Xylenes, Total ND 0.095 mg/Kg 1 8/31/2023 4:52:30 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 8/31/2023 4:52:30 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 5:03:26 PM 110 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. 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 standard limits. If undiluted results may be estimated.

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

P Sample pH Not In Range RL Reporting Limit

Page 1 of 23

CLIENT: Vertex Resources Services, Inc.

Hackberry 18

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-09 2' Collection Date: 8/19/2023 9:15:00 AM Received Date: 8/29/2023 7:55:00 AM

Lab ID: 2308F19-002	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: PRD			
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	8/31/2023 10:09:13 PM			
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/31/2023 10:09:13 PM			
Surr: DNOP	92.5	69-147	%Rec	1	8/31/2023 10:09:13 PM			
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: JJP			
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2023 5:15:55 AM			
Surr: BFB	94.1	15-244	%Rec	1	8/31/2023 5:15:55 AM			
EPA METHOD 8021B: VOLATILES					Analyst: JJP			
Benzene	ND	0.024	mg/Kg	1	8/31/2023 5:15:55 AM			
Toluene	ND	0.048	mg/Kg	1	8/31/2023 5:15:55 AM			
Ethylbenzene	ND	0.048	mg/Kg	1	8/31/2023 5:15:55 AM			
Xylenes, Total	ND	0.096	mg/Kg	1	8/31/2023 5:15:55 AM			
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	8/31/2023 5:15:55 AM			
EPA METHOD 300.0: ANIONS					Analyst: RBC			
Chloride	300	60	mg/Kg	20	8/31/2023 5:15:51 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 2 of 23

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-10 0 **Project:** Hackberry 18 Collection Date: 8/19/2023 9:30:00 AM Lab ID: 2308F19-003 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 8/31/2023 10:20:23 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/31/2023 10:20:23 PM Surr: DNOP 107 69-147 %Rec 1 8/31/2023 10:20:23 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 5:39:14 AM 4.9 mg/Kg 1 Surr: BFB 95.8 15-244 %Rec 1 8/31/2023 5:39:14 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 5:39:14 AM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 5:39:14 AM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 5:39:14 AM Xylenes, Total ND 0.098 mg/Kg 1 8/31/2023 5:39:14 AM Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 8/31/2023 5:39:14 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 5:28:15 PM 120 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. 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 standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 3 of 23

CLIENT: Vertex Resources Services, Inc.

Hackberry 18

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-10 2' Collection Date: 8/19/2023 9:45:00 AM **Deceived Deter** 8/20/2022 7:55:00 AM

Lab ID: 2308F19-004	Matrix: SOIL	Rece	Received Date: 8/29/2023 7:55:00 AM							
Analyses	Result	RL Qu	al Units	DF	Date Analyzed					
EPA METHOD 8015M/D: DIESEL RANG	E ORGANICS				Analyst: PRD					
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/31/2023 10:31:40 PM					
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/31/2023 10:31:40 PM					
Surr: DNOP	94.1	69-147	%Rec	1	8/31/2023 10:31:40 PM					
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: JJP					
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/31/2023 6:02:43 AM					
Surr: BFB	94.7	15-244	%Rec	1	8/31/2023 6:02:43 AM					
EPA METHOD 8021B: VOLATILES					Analyst: JJP					
Benzene	ND	0.024	mg/Kg	1	8/31/2023 6:02:43 AM					
Toluene	ND	0.049	mg/Kg	1	8/31/2023 6:02:43 AM					
Ethylbenzene	ND	0.049	mg/Kg	1	8/31/2023 6:02:43 AM					
Xylenes, Total	ND	0.097	mg/Kg	1	8/31/2023 6:02:43 AM					
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	8/31/2023 6:02:43 AM					
EPA METHOD 300.0: ANIONS					Analyst: RBC					
Chloride	180	60	mg/Kg	20	8/31/2023 5:40:40 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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 4 of 23

Lab ID:

CLIENT: Vertex Resources Services, Inc.

Hackberry 18

2308F19-005

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-11 0' Collection Date: 8/19/2023 10:00:00 AM Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL (Qual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	8/31/2023 10:42:51 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/31/2023 10:42:51 PM
Surr: DNOP	99.5	69-147	%Rec	1	8/31/2023 10:42:51 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	8/31/2023 5:27:32 PM
Surr: BFB	98.9	15-244	%Rec	1	8/31/2023 5:27:32 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	8/31/2023 5:27:32 PM
Toluene	ND	0.048	mg/Kg	1	8/31/2023 5:27:32 PM
Ethylbenzene	ND	0.048	mg/Kg	1	8/31/2023 5:27:32 PM
Xylenes, Total	ND	0.097	mg/Kg	1	8/31/2023 5:27:32 PM
Surr: 4-Bromofluorobenzene	108	39.1-146	%Rec	1	8/31/2023 5:27:32 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	2300	150	mg/Kg	50	9/1/2023 7:36:56 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

н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit

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

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 5 of 23

CLIENT: Vertex Resources Services, Inc.

Hackberry 18

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-11 2' Collection Date: 8/19/2023 10:15:00 AM Received Date: 8/29/2023 7:55:00 AM

Lab ID: 2308F19-006	Matrix: SOIL	Received Date: 8/29/2023 7:55:00 AM						
Analyses	Result	RL Qu	al Units	DF	Date Analyzed			
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: PRD			
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	8/31/2023 10:54:01 PM			
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/31/2023 10:54:01 PM			
Surr: DNOP	101	69-147	%Rec	1	8/31/2023 10:54:01 PM			
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: JJP			
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/31/2023 5:51:29 PM			
Surr: BFB	100	15-244	%Rec	1	8/31/2023 5:51:29 PM			
EPA METHOD 8021B: VOLATILES					Analyst: JJP			
Benzene	ND	0.025	mg/Kg	1	8/31/2023 5:51:29 PM			
Toluene	ND	0.049	mg/Kg	1	8/31/2023 5:51:29 PM			
Ethylbenzene	ND	0.049	mg/Kg	1	8/31/2023 5:51:29 PM			
Xylenes, Total	ND	0.098	mg/Kg	1	8/31/2023 5:51:29 PM			
Surr: 4-Bromofluorobenzene	110	39.1-146	%Rec	1	8/31/2023 5:51:29 PM			
EPA METHOD 300.0: ANIONS					Analyst: RBC			
Chloride	1000	60	mg/Kg	20	8/31/2023 6:05:29 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

Not Detected at the Reporting Limit

ND PQL Practical Quanitative Limit

- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 6 of 23

Project: Hackberry 18

CLIENT: Vertex Resources Services, Inc.

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-12 0' Collection Date: 8/19/2023 10:30:00 AM Received Date: 8/29/2023 7:55:00 AM

Lab ID: 2308F19-007	Matrix: SOIL	R	eceive	ed Date:	8/29/2	023 7:55:00 AM
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst: PRD
Diesel Range Organics (DRO)	2700	100		mg/Kg	10	8/31/2023 11:05:10 PM
Motor Oil Range Organics (MRO)	3500	500		mg/Kg	10	8/31/2023 11:05:10 PM
Surr: DNOP	0	69-147	S	%Rec	10	8/31/2023 11:05:10 PM
EPA METHOD 8015D: GASOLINE RANG	E					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/31/2023 6:15:21 PM
Surr: BFB	95.6	15-244		%Rec	1	8/31/2023 6:15:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	8/31/2023 6:15:21 PM
Toluene	ND	0.048		mg/Kg	1	8/31/2023 6:15:21 PM
Ethylbenzene	ND	0.048		mg/Kg	1	8/31/2023 6:15:21 PM
Xylenes, Total	ND	0.097		mg/Kg	1	8/31/2023 6:15:21 PM
Surr: 4-Bromofluorobenzene	104	39.1-146		%Rec	1	8/31/2023 6:15:21 PM
EPA METHOD 300.0: ANIONS						Analyst: SNS
Chloride	8200	300		mg/Kg	100	9/1/2023 7:49:21 AM

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

Qualifiers:

* Value exceeds Maximum Contaminant Level.D Sample Diluted Due to Matrix

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

Page 7 of 23

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Date Reported: 9/11/2023

8/31/2023 6:50:48 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-12 2' **Project:** Hackberry 18 Collection Date: 8/19/2023 10:45:00 AM Lab ID: 2308F19-008 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 8/31/2023 11:46:23 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 11:46:23 PM Surr: DNOP 124 69-147 %Rec 1 8/31/2023 11:46:23 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 6:39:08 PM 5.0 mg/Kg 1 Surr: BFB 97.6 15-244 %Rec 1 8/31/2023 6:39:08 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 6:39:08 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 6:39:08 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 6:39:08 PM Xylenes, Total ND mg/Kg 1 8/31/2023 6:39:08 PM 0.10 Surr: 4-Bromofluorobenzene 108 39.1-146 %Rec 1 8/31/2023 6:39:08 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS

300

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

Qualifiers:

Chloride

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 standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

mg/Kg

20

60

Р Sample pH Not In Range

RL Reporting Limit Page 8 of 23

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-12 3.5' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:00:00 AM Lab ID: 2308F19-009 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 210 9.3 mg/Kg 1 9/1/2023 1:57:19 PM Motor Oil Range Organics (MRO) 220 46 mg/Kg 1 9/1/2023 1:57:19 PM Surr: DNOP 117 69-147 %Rec 1 9/1/2023 1:57:19 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 7:02:50 PM 5.0 mg/Kg 1 Surr: BFB 97.4 15-244 %Rec 1 8/31/2023 7:02:50 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 7:02:50 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 7:02:50 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 7:02:50 PM Xylenes, Total ND mg/Kg 1 8/31/2023 7:02:50 PM 0.099 Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 8/31/2023 7:02:50 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 8/31/2023 7:28:02 PM 830 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. 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 standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 9 of 23

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-12 4' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:15:00 AM Lab ID: 2308F19-010 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 13 9.2 mg/Kg 1 9/1/2023 12:19:34 AM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 9/1/2023 12:19:34 AM Surr: DNOP 126 69-147 %Rec 1 9/1/2023 12:19:34 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 7:26:32 PM 4.9 mg/Kg 1 Surr: BFB 96.4 15-244 %Rec 1 8/31/2023 7:26:32 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 7:26:32 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 7:26:32 PM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 7:26:32 PM Xylenes, Total ND 0.097 mg/Kg 1 8/31/2023 7:26:32 PM Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 8/31/2023 7:26:32 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 8/31/2023 7:40:26 PM 540 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. 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 standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 10 of 23

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-13 0' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:30:00 AM Lab ID: 2308F19-011 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 4900 100 mg/Kg 10 9/1/2023 12:30:37 AM Motor Oil Range Organics (MRO) 3700 500 mg/Kg 10 9/1/2023 12:30:37 AM Surr: DNOP 0 69-147 S %Rec 10 9/1/2023 12:30:37 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 7:50:12 PM 4.9 mg/Kg 1 Surr: BFB 129 15-244 %Rec 1 8/31/2023 7:50:12 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 7:50:12 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 8/31/2023 7:50:12 PM Ethylbenzene ND 0.049 mg/Kg 1 8/31/2023 7:50:12 PM Xylenes, Total ND 0.097 mg/Kg 1 8/31/2023 7:50:12 PM Surr: 4-Bromofluorobenzene 110 39.1-146 %Rec 1 8/31/2023 7:50:12 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 8:01:45 AM 9200 600 200

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 standard limits. If undiluted results may be estimated. S

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

RL

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Date Reported: 9/11/2023

8/31/2023 8:05:15 PM

20

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-13 1' **Project:** Hackberry 18 Collection Date: 8/19/2023 11:45:00 AM Lab ID: 2308F19-012 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.8 mg/Kg 1 9/1/2023 1:11:37 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/1/2023 1:11:37 AM Surr: DNOP 109 69-147 %Rec 1 9/1/2023 1:11:37 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 8:37:32 PM 4.7 mg/Kg 1 Surr: BFB 95.4 15-244 %Rec 1 8/31/2023 8:37:32 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 8:37:32 PM 0.023 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 8/31/2023 8:37:32 PM Ethylbenzene ND 0.047 mg/Kg 1 8/31/2023 8:37:32 PM Xylenes, Total ND 0.093 mg/Kg 1 8/31/2023 8:37:32 PM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 8/31/2023 8:37:32 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg

320

60

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

Qualifiers:

Chloride

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 standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 12 of 23

Released to Imaging: 3/5/2024 11:07:34 AM

EPA METHOD 300.0: ANIONS

Chloride

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-13 4' **Project:** Hackberry 18 Collection Date: 8/19/2023 1:00:00 PM Lab ID: 2308F19-013 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) 12 9.3 mg/Kg 1 9/1/2023 1:22:42 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 9/1/2023 1:22:42 AM Surr: DNOP 112 69-147 %Rec 1 9/1/2023 1:22:42 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 9:01:05 PM 5.0 mg/Kg 1 Surr: BFB 95.1 15-244 %Rec 1 8/31/2023 9:01:05 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 9:01:05 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 9:01:05 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 9:01:05 PM Xylenes, Total ND mg/Kg 1 8/31/2023 9:01:05 PM 0.099 Surr: 4-Bromofluorobenzene 105 39.1-146 %Rec 1 8/31/2023 9:01:05 PM

330

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

Qualifiers:

Value exceeds Maximum Contaminant Level.
 D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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

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

mg/Kg

20

60

P Sample pH Not In Range

RL Reporting Limit

Page 13 of 23

Analyst: SNS

8/31/2023 8:42:30 PM

CLIENT: Vertex Resources Services, Inc.

Hackberry 18

Analytical Report Lab Order 2308F19

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-14 0' Collection Date: 8/19/2023 1:15:00 PM Received Date: 8/29/2023 7:55:00 AM

Lab ID: 2308F19-014	Matrix: SOIL	Rece	eived Date:	8/29/2	023 7:55:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	9/1/2023 1:33:45 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	9/1/2023 1:33:45 AM
Surr: DNOP	127	69-147	%Rec	1	9/1/2023 1:33:45 AM
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: JJP
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/31/2023 9:24:41 PM
Surr: BFB	96.6	15-244	%Rec	1	8/31/2023 9:24:41 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	8/31/2023 9:24:41 PM
Toluene	ND	0.050	mg/Kg	1	8/31/2023 9:24:41 PM
Ethylbenzene	ND	0.050	mg/Kg	1	8/31/2023 9:24:41 PM
Xylenes, Total	ND	0.10	mg/Kg	1	8/31/2023 9:24:41 PM
Surr: 4-Bromofluorobenzene	107	39.1-146	%Rec	1	8/31/2023 9:24:41 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	2100	60	mg/Kg	20	8/31/2023 8:54:54 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level. D Sample Diluted Due to Matrix

- н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

9/1/2023 8:14:10 AM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-14 2' **Project:** Hackberry 18 Collection Date: 8/19/2023 1:30:00 PM Lab ID: 2308F19-015 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: PRD EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 9/1/2023 1:44:47 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 9/1/2023 1:44:47 AM Surr: DNOP 94.0 69-147 %Rec 1 9/1/2023 1:44:47 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 8/31/2023 10:11:38 PM 5.0 mg/Kg 1 Surr: BFB 92.5 15-244 %Rec 1 8/31/2023 10:11:38 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 8/31/2023 10:11:38 PM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 8/31/2023 10:11:38 PM Ethylbenzene ND 0.050 mg/Kg 1 8/31/2023 10:11:38 PM Xylenes, Total ND mg/Kg 1 8/31/2023 10:11:38 PM 0.099 Surr: 4-Bromofluorobenzene 102 39.1-146 %Rec 1 8/31/2023 10:11:38 PM **EPA METHOD 300.0: ANIONS** Analyst: SNS

2200

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

Qualifiers:

Chloride

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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

mg/Kg

50

150

Р Sample pH Not In Range RL

Reporting Limit

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Client: Project:	Vertex R Hackberr	esources Services y 18	, Inc.							
Sample ID:	MB-77235	SampType: MI	BLK	Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	PBS	Batch ID: 77	235	F	RunNo: 9 9	9401				
Prep Date:	8/31/2023	Analysis Date: 8/	/31/2023	S	SeqNo: 36	627541	Units: mg/Kg	9		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-77235	SampType: LC	s	Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 77	235	F	RunNo: 9 9	9401				
Prep Date:	8/31/2023	Analysis Date: 8/	/31/2023	S	SeqNo: 36	627543	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	95.8	90	110			
Sample ID:	MB-77241	SampType: MI	BLK	Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	PBS	Batch ID: 77	241	F	RunNo: 9 9	9389				
Prep Date:	8/31/2023	Analysis Date: 8 /	/31/2023	S	SeqNo: 36	628254	Units: mg/Kg	9		
Analyte		Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1.5								
Sample ID:	LCS-77241	SampType: LC	s	Tes	tCode: EF	PA Method	300.0: Anions			
Client ID:	LCSS	Batch ID: 77	241	F	RunNo: 9 9	9389				
Prep Date:	8/31/2023	Analysis Date: 8 /	/31/2023	S	SeqNo: 36	628255	Units: mg/Kg	9		
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			

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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Client: Project:	Vertex Resource Hackberry 18	s Services	, Inc.							
Sample ID: LCS-	77177 Sa	трТуре: LC	s	Test	tCode: EP	PA Method	8015M/D: Dies	el Range	Organics	
Client ID: LCSS	S B	atch ID: 77	177	R	unNo: 99	380				
Prep Date: 8/29	9/2023 Analys	sis Date: 8/	/31/2023	S	eqNo: 36	627016	Units: %Rec			
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.	7	5.000		114	69	147			
Sample ID: LCS-	77185 Sa	mpType: LC	s	Test	tCode: EP	A Method	8015M/D: Dies	el Range	Organics	
Client ID: LCSS	S B	atch ID: 77	185	R	unNo: 9 9	380				
Prep Date: 8/30	0/2023 Analys	sis Date: 8/	/31/2023	S	eqNo: 36	627017	Units: mg/Kg	I		
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics	s (DRO) 6	1 10	50.00	0	121	61.9	130			
Surr: DNOP	6.	ô	5.000		131	69	147			
Sample ID: MB-7	7177 Sa	mpType: M I	BLK	Test	tCode: EP	A Method	8015M/D: Dies	el Range	Organics	
Client ID: PBS	В	atch ID: 77	177	R	unNo: 9 9	380				
Prep Date: 8/29	9/2023 Analys	sis Date: 8/	/31/2023	S	eqNo: 36	627018	Units: %Rec			
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	1:	2	10.00		116	69	147			
Sample ID: MB-7	7 7185 Sa	mpType: M I	BLK	Test	tCode: EP	A Method	8015M/D: Dies	el Range	Organics	
Client ID: PBS	В	atch ID: 77	185	R	unNo: 9 9	380				
Prep Date: 8/30	0/2023 Analys	sis Date: 8/	/31/2023	S	eqNo: 36	627019	Units: mg/Kg	I		
Analyte	Resu	lt PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics	, ,	D 10								
Notor Oil Range Orgai										
			10.00		106	60	4 4 7			
Surr: DNOP	nics (MRO) NI		10.00		126	69	147			
	77175 Sa	3 mpType: LC	s		tCode: EP	PA Method	147 8015M/D: Dies	el Range	Organics	
Surr: DNOP	77175 Sa	3	s			PA Method		el Range	Organics	
Surr: DNOP Sample ID: LCS- Client ID: LCSS	1: -77175 Sai S B	3 mpType: LC	:S 175	R	tCode: EP	PA Method 8 9380		-	Organics	
Surr: DNOP Sample ID: LCS- Client ID: LCSS	1: .77175 Sa S B	3 mpType: LC atch ID: 77 sis Date: 8, It PQL	S 175 /31/2023	R	tCode: EP	PA Method 8 9380	8015M/D: Dies	-	Organics RPDLimit	Qual
Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics	11 777175 Sau 5 B D/2023 Analys Resu s (DRO) 4	3 mpType: LC latch ID: 77 sis Date: 8/ It PQL 3 10	25 175 /31/2023 SPK value 50.00	R	tCode: EP tunNo: 99 teqNo: 36 %REC 87.0	PA Method 8 9380 627542 LowLimit 61.9	8015M/D: Dies Units: mg/Kg HighLimit 130	J	-	Qual
Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte	11 77175 Sau 5 B 0/2023 Analys Resu	3 mpType: LC latch ID: 77 sis Date: 8/ It PQL 3 10	CS 175 /31/2023 SPK value	R S SPK Ref Val	tCode: EP tunNo: 99 seqNo: 36 %REC	PA Method 8 9380 627542 LowLimit	8015M/D: Dies Units: mg/Kg HighLimit	J	-	Qual
Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics	11 777175 Sau 5 B D/2023 Analys Resu s (DRO) 4 4.	3 mpType: LC latch ID: 77 sis Date: 8/ It PQL 3 10	2S 175 /31/2023 SPK value 50.00 5.000	R S SPK Ref Val 0	tCode: EP tunNo: 99 SeqNo: 36 %REC 87.0 93.3	PA Method 3 9380 527542 LowLimit 61.9 69	8015M/D: Dies Units: mg/Kg HighLimit 130	N KRPD	RPDLimit	Qual
Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics Surr: DNOP	11 777175 Sau 5 B 9/2023 Analys Resu s (DRO) 4 4. 77176 Sau	3 mpType: LC latch ID: 77 sis Date: 8/ lt PQL 3 10 7	CS 175 /31/2023 SPK value 50.00 5.000	R SPK Ref Val 0 Test	tCode: EP tunNo: 99 SeqNo: 36 %REC 87.0 93.3	PA Method 3 9380 327542 LowLimit 61.9 69 PA Method 3	8015M/D: Dies Units: mg/Kg HighLimit 130 147	N KRPD	RPDLimit	Qual
Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics Surr: DNOP Sample ID: LCSS Client ID: LCSS	11 777175 Sau 5 B 0/2023 Analys Resu s (DRO) 4 4. 777176 Sau 5 B	3 mpType: LC atch ID: 77 sis Date: 8 , lt PQL 3 10 7 mpType: LC	CS 175 /31/2023 SPK value 50.00 5.000 CS 176	R S <u>SPK Ref Val</u> 0 Test R	tCode: EP (unNo: 99 GeqNo: 36 %REC 87.0 93.3 tCode: EP	PA Method 3 9380 527542 LowLimit 61.9 69 PA Method 3 9380	8015M/D: Dies Units: mg/Kg HighLimit 130 147	N KRPD	RPDLimit	Qual
Surr: DNOP Sample ID: LCS- Client ID: LCSS Prep Date: 8/29 Analyte Diesel Range Organics Surr: DNOP Sample ID: LCSS Client ID: LCSS	11 777175 Sau 5 B 0/2023 Analys Resu s (DRO) 4 4. 777176 Sau 5 B	3 mpType: LC atch ID: 77 bis Date: 8, lt PQL 3 10 7 mpType: LC satch ID: 77 bis Date: 8,	2S 175 /31/2023 SPK value 50.00 5.000 5.000 2S 176 /31/2023	R S <u>SPK Ref Val</u> 0 Test R	tCode: EP tunNo: 99 SeqNo: 36 %REC 87.0 93.3 tCode: EP	PA Method 3 9380 527542 LowLimit 61.9 69 PA Method 3 9380	8015M/D: Dies Units: mg/Kg HighLimit 130 147 8015M/D: Dies	N KRPD	RPDLimit	Qual

Qualifiers:

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Client: Project:	Vertex R Hackberr	esources Se y 18	ervices	, Inc.							
Sample ID:	LCS-77208	SampT	ype: LC	S	Tes	tCode: Ef	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	LCSS	Batch	n ID: 77	208	F	RunNo: 9 9	9380				
Prep Date:	8/30/2023	Analysis D	ate: 8/	31/2023	5	SeqNo: 3	627545	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.9		5.000		119	69	147			
Sample ID:	LCS-77213	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	LCSS	Batch	n ID: 77	213	F	RunNo: 9 9	9380				
Prep Date:	8/30/2023	Analysis D	ate: 8/	31/2023	S	SeqNo: 3	627547	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		5.3		5.000		105	69	147			
Sample ID:	MB-77175	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	PBS	Batch	n ID: 77	175	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/	31/2023	S	SeqNo: 3	627550	Units: mg/Kg	l		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C		ND	10 50								
Surr: DNOP	e Organics (MRO)	ND 11	50	10.00		114	69	147			
Sample ID:	MB-77176	SampT	ype: ME	SI K	Tes	tCode: F	PA Method	8015M/D: Dies	el Range	Organics	
	PBS	•	n ID: 77						ormango	erganiee	
Prep Date:					ч	lunNo: 9	9380				
	8/29/2023	Analysis D		-		8unNo: 9 9 SeqNo: 3 0		Units: %Rec			
Analyte	8/29/2023	Analysis D Result		31/2023					%RPD	RPDLimit	Qual
Analyte Surr: DNOP	8/29/2023	-)ate: 8/	31/2023	S	SeqNo: 30	627552	Units: %Rec HighLimit 147	%RPD	RPDLimit	Qual
Surr: DNOP		Result 13)ate: 8/	31/2023 SPK value 10.00	SPK Ref Val	SeqNo: 3 %REC 126	627552 LowLimit 69	HighLimit 147			Qual
		Result 13 SampT	0ate: 8/ PQL	31/2023 SPK value 10.00 BLK	SPK Ref Val	SeqNo: 3 %REC 126	627552 LowLimit 69 PA Method	HighLimit			Qual
Surr: DNOP	MB-77208	Result 13 SampT	PQL PQL ype: ME DD: 77	31/2023 SPK value 10.00 BLK 208	SPK Ref Val Tes	SeqNo: 36 %REC 126 tCode: EF	627552 LowLimit 69 PA Method 8	HighLimit 147			Qual
Surr: DNOP Sample ID: Client ID:	MB-77208 PBS	Result 13 SampT Batch	PQL PQL ype: ME DD: 77	31/2023 SPK value 10.00 3LK 208 31/2023	SPK Ref Val Tes	SeqNo: 3 <u>%REC</u> 126 tCode: EF RunNo: 99 SeqNo: 36	627552 LowLimit 69 PA Method 9380 627556	HighLimit 147 8015M/D: Dies			Qual
Surr: DNOP Sample ID: Client ID: Prep Date:	MB-77208 PBS	Result 13 SampT Batch Analysis D	PQL PQL ype: ME DD: 77 Date: 8 /	31/2023 SPK value 10.00 3LK 208 31/2023	SPK Ref Val Tes F S	SeqNo: 3 <u>%REC</u> 126 tCode: EF RunNo: 99 SeqNo: 36	627552 LowLimit 69 PA Method 9380 627556	HighLimit 147 8015M/D: Dies Units: %Rec	el Range	Organics	
Surr: DNOP Sample ID: Client ID: Prep Date: Analyte	MB-77208 PBS 8/30/2023	Result 13 SampT Batch Analysis D Result 13	PQL PQL ype: ME DD: 77 Date: 8 /	31/2023 SPK value 10.00 BLK 208 31/2023 SPK value 10.00	SPK Ref Val Tes F SPK Ref Val	SeqNo: 3 %REC 126 tCode: EF RunNo: 99 SeqNo: 3 %REC 131	627552 LowLimit 69 PA Method 9380 627556 LowLimit 69	HighLimit 147 8015M/D: Dies Units: %Rec HighLimit	el Range %RPD	Organics RPDLimit	
Surr: DNOP Sample ID: Client ID: Prep Date: Analyte Surr: DNOP Sample ID:	MB-77208 PBS 8/30/2023	Result 13 SampT Batch Analysis D Result 13 SampT	PQL PQL ype: ME DD: 77 PQL PQL	31/2023 SPK value 10.00 3LK 208 31/2023 SPK value 10.00 3LK	SPK Ref Val Tes F SPK Ref Val Tes	SeqNo: 3 %REC 126 tCode: EF RunNo: 99 SeqNo: 3 %REC 131	627552 LowLimit 69 PA Method 627556 LowLimit 69 PA Method	HighLimit 147 8015M/D: Dies Units: %Rec HighLimit 147	el Range %RPD	Organics RPDLimit	
Surr: DNOP Sample ID: Client ID: Prep Date: Analyte Surr: DNOP Sample ID:	MB-77208 PBS 8/30/2023 MB-77213	Result 13 SampT Batch Analysis D Result 13 SampT	Date: 8/ PQL	31/2023 SPK value 10.00 BLK 208 31/2023 SPK value 10.00 BLK 213	SPK Ref Val Tes SPK Ref Val SPK Ref Val Tes	SeqNo: 3 %REC 126 tCode: EF RunNo: 99 SeqNo: 30 %REC 131 tCode: EF	627552 LowLimit 69 PA Method 69 627556 LowLimit 69 PA Method 9380	HighLimit 147 8015M/D: Dies Units: %Rec HighLimit 147	el Range %RPD	Organics RPDLimit	
Surr: DNOP Sample ID: Client ID: Prep Date: Analyte Surr: DNOP Sample ID: Client ID:	MB-77208 PBS 8/30/2023 MB-77213 PBS	Result 13 SampT Batch Analysis D Result 13 SampT Batch	Date: 8/ PQL	31/2023 SPK value 10.00 BLK 208 31/2023 SPK value 10.00 BLK 213	SPK Ref Val Tes SPK Ref Val SPK Ref Val Tes Fi S	SeqNo: 3 %REC 126 tCode: EF RunNo: 99 SeqNo: 30 %REC 131 tCode: EF RunNo: 99	627552 LowLimit 69 PA Method 69 627556 LowLimit 69 PA Method 9380	HighLimit 147 8015M/D: Dies Units: %Rec HighLimit 147 8015M/D: Dies	el Range %RPD	Organics RPDLimit	

Qualifiers:

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- RL Reporting Limit

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Client:	Vertex R	esources Services, Inc.	
Project:	Hackberr	y 18	
Sample ID:	lcs-77140	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
Client ID:	LCSS	Batch ID: 77140 RunNo: 99342	
Prep Date:	8/28/2023	Analysis Date: 8/30/2023 SeqNo: 3624717 Units: % Rec	
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	ı
Surr: BFB		1900 1000 192 15 244	
Sample ID:	mb-77140	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range	
Client ID:	PBS	Batch ID: 77140 RunNo: 99342	
Prep Date:	8/28/2023	Analysis Date: 8/30/2023 SeqNo: 3624718 Units: %Rec	
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	ı
Surr: BFB		950 1000 94.7 15 244	
Sample ID:	lcs-77168	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
	LCSS	Batch ID: 77168 RunNo: 99342	
	8/29/2023	Analysis Date: 8/30/2023 SeqNo: 3625866 Units: mg/Kg	
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	ı
	e Organics (GRO)	22 5.0 25.00 0 88.6 70 130	
Surr: BFB		1900 1000 195 15 244	
Sample ID:	mb-77168	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range	
Client ID:	PBS	Batch ID: 77168 RunNo: 99342	
Prep Date:	8/29/2023	Analysis Date: 8/30/2023 SeqNo: 3625867 Units: mg/Kg	
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	I
-	e Organics (GRO)	ND 5.0	
Surr: BFB		960 1000 96.0 15 244	
Sample ID:	lcs-77179	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
Client ID:	LCSS	Batch ID: 77179 RunNo: 99366	
Prep Date:	8/29/2023	Analysis Date: 8/31/2023 SeqNo: 3627634 Units: mg/Kg	
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	
-	e Organics (GRO)	23 5.0 25.00 0 93.6 70 130	
Surr: BFB		2000 1000 203 15 244	
Sample ID:	lcs-77198	SampType: LCS TestCode: EPA Method 8015D: Gasoline Range	
Client ID:	LCSS	Batch ID: 77198 RunNo: 99366	
Prep Date:	8/30/2023	Analysis Date: 9/1/2023 SeqNo: 3627635 Units: %Rec	
Analyte		Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	ł
Surr: BFB		1900 1000 193 15 244	

Qualifiers:

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D Sample Diluted Due to Matrix

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P Sample pH Not In Range

RL Reporting Limit

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11-Sep-23

Client: Project:	Vertex Re Hackberr	esources S y 18	ervices,	Inc.							
Sample ID:	mb-77198	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	PBS	Batch	n ID: 77 ′	198	F	RunNo: 9 9	9366				
Prep Date:	8/30/2023	Analysis D	0ate: 9/	1/2023	5	SeqNo: 3	627636	Units: %Rec	;		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		940		1000		93.9	15	244			
Sample ID:	2308f19-005ams	SampT	уре: МS	6	Tes	tCode: EF	PA Method	8015D: Gasol	ine Range		
Client ID:	BH23-11 0'	Batch	n ID: 77 ′	179	F	RunNo: 9 9	9366				
Prep Date:	8/29/2023	Analysis D	Date: 8/	31/2023	S	SeqNo: 3	627638	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	23	4.8	24.04	0	95.2	70	130			
Surr: BFB		1900		961.5		200	15	244			
Sample ID:	2308f19-005amsd	SampT	уре: МЗ	SD.	Tes	tCode: El	PA Method	8015D: Gasol	ine Range		
Client ID:	BH23-11 0'	Batch	n ID: 77 ′	179	F	RunNo: 9 9	9366				
Prep Date:	8/29/2023	Analysis D	Date: 8/	31/2023	S	SeqNo: 30	627639	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	ge Organics (GRO)	23	4.8	24.13	0	93.8	70	130	1.10	20	
Surr: BFB		1900		965.3		200	15	244	0	0	
Sample ID:	mb-77179	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gasol	ine Range		
Client ID:	PBS	Batch	n ID: 77 ′	179	F	RunNo: 9 9	9366				
Prep Date:	8/29/2023	Analysis D	Date: 8/	31/2023	S	SeqNo: 3	627706	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang Surr: BFB	ge Organics (GRO)	ND 980	5.0	1000		98.3	15	244			
		980		1000		90.3	15	244			
	lcs-77172	•	ype: LC					8015D: Gasol	ine Range		
Client ID:	LCSS		ו ID: 77 ′		F	RunNo: 9 9	9411				
Prep Date:	8/29/2023	Analysis D	Date: 9/	2/2023	ç	SeqNo: 3	628857	Units: %Rec	;		
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1900		1000		191	15	244			
Sample ID:	mb-77172	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015D: Gasol	ine Range		
Client ID:	PBS	Batch	n ID: 77 ′	172	F	RunNo: 9 9	9411				
Offerit ID.											
Prep Date:	8/29/2023	Analysis D	Date: 9/	2/2023	e e e e e e e e e e e e e e e e e e e	SeqNo: 3	628859	Units: %Rec	;		
	8/29/2023	Analysis D Result	0ate: 9/ : PQL		SPK Ref Val	SeqNo: 30 %REC	628859 LowLimit	Units: %Rec HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

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- P Sample pH Not In Range
- P Sample pH Not In RL Reporting Limit

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	/ertex Resources	Services,	Inc.							
Project: H	Hackberry 18									
Sample ID: LCS-7716	58 Sam	pType: LC	s	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Bat	tch ID: 771	168	F	RunNo: 9 9	9342				
Prep Date: 8/29/202	23 Analysis	Date: 8/3	30/2023	S	SeqNo: 36	625922	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	102	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.1	0.050	1.000	0	105	70	130			
(ylenes, Total	3.2	0.10	3.000	0	107	70	130			
Surr: 4-Bromofluorobenz	ene 1.1		1.000		107	39.1	146			
Sample ID: mb-77168	B Sam	рТуре: МВ	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Bat	tch ID: 771	168	F	RunNo: 9 9	9342				
Prep Date: 8/29/202	23 Analysis	Date: 8/3	30/2023	Ş	SeqNo: 36	625923	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
oluene	ND	0.050								
thylbenzene	ND	0.050								
(ylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenz	ene 1.1		1.000		107	39.1	146			
Sample ID: LCS-7717	79 Sam	pType: LC	e	Таа	+Codo: EE			laa		
	e eun		3	Tes		'A Method	8021B: Volati	les		
		tch ID: 771			RunNo: 9 9		8021B: Volati	ies		
Client ID: LCSS	Bat		179	F		9366	Units: mg/K			
Client ID: LCSS Prep Date: 8/29/202	Bat	tch ID: 771	179	F	RunNo: 9 9	9366			RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte	Bat 23 Analysis	tch ID: 771 Date: 8/3	179 31/2023	F	RunNo: 9 9 SeqNo: 36	9366 627739	Units: mg/K	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene	Bat 23 Analysis Result	tch ID: 771 Date: 8/3 PQL	1 79 31/2023 SPK value	F SPK Ref Val	RunNo: 99 SeqNo: 36 %REC	9366 527739 LowLimit	Units: mg/K HighLimit	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Jenzene Joluene	Bat 23 Analysis Result 1.1	tch ID: 771 Date: 8/ PQL 0.025	179 31/2023 SPK value 1.000	F SPK Ref Val 0	RunNo: 99 SeqNo: 36 %REC 108	9366 527739 LowLimit 70	Units: mg/K HighLimit 130	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte enzene foluene thylbenzene	Bat 23 Analysis Result 1.1 1.1	tch ID: 771 Date: 8/3 PQL 0.025 0.050	31/2023 SPK value 1.000 1.000	F SPK Ref Val 0 0	RunNo: 99 SeqNo: 36 %REC 108 108	9366 527739 LowLimit 70 70	Units: mg/K HighLimit 130 130	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene oluene thylbenzene	Bat 23 Analysis Result 1.1 1.1 1.1 3.3	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050	31/2023 SPK value 1.000 1.000 1.000	F SPK Ref Val 0 0 0	RunNo: 99 SeqNo: 36 <u>%REC</u> 108 108 111	2366 527739 LowLimit 70 70 70 70	Units: mg/K HighLimit 130 130 130	g	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenz	Bat 23 Analysis Result 1.1 1.1 1.1 3.3 ene 1.1	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050	179 31/2023 SPK value 1.000 1.000 1.000 3.000 1.000	F SPK Ref Val 0 0 0 0	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110	2366 327739 LowLimit 70 70 70 70 39.1	Units: mg/K HighLimit 130 130 130 130	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Ethylbenzene Kylenes, Total	Bat 23 Analysis Result 1.1 1.1 1.1 3.3 ene 1.1 98 Sam	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050 0.10	31/2023 SPK value 1.000 1.000 1.000 3.000 1.000 S	F SPK Ref Val 0 0 0 0 0 Tes	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110	2366 527739 LowLimit 70 70 70 70 70 39.1 24 Method	Units: mg/K HighLimit 130 130 130 130 130 146	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenz Sample ID: LCS-7715	Bat 23 Analysis <u>Result</u> 1.1 1.1 1.1 3.3 ene 1.1 98 Sam Bat	tch ID: 771 5 Date: 8/3 9 QL 0.025 0.050 0.050 0.10 0.10	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 198	F SPK Ref Val 0 0 0 0 Tes F	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 tCode: EF	2366 527739 LowLimit 70 70 70 70 39.1 24 Method 3366	Units: mg/K HighLimit 130 130 130 130 130 146	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenz Sample ID: LCS-7719 Client ID: LCSS	Bat 23 Analysis <u>Result</u> 1.1 1.1 1.1 3.3 ene 1.1 98 Sam Bat	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.10 pType: LC tch ID: 771	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 198 1/2023	F SPK Ref Val 0 0 0 0 Tes F	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 ttCode: EF RunNo: 99	2366 527739 LowLimit 70 70 70 70 39.1 24 Method 3366	Units: mg/K HighLimit 130 130 130 130 130 146 8021B: Volati	g %RPD	RPDLimit	Qual
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenz Sample ID: LCS-7719 Client ID: LCSS Prep Date: 8/30/202	Bai 23 Analysis Result 1.1 1.1 1.1 3.3 ene 1.1 98 Sam Bai 23 Analysis Result	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050 0.10 pType: LC tch ID: 771 Date: 9/7	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 198 1/2023	F SPK Ref Val 0 0 0 0 0 Tes F	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 etCode: EF RunNo: 99 SeqNo: 36	2366 527739 LowLimit 70 70 70 39.1 24 Method 2366 527740	Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: %Rec	g %RPD		
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Sthylbenzene Kylenes, Total Surr: 4-Bromofluorobenz Client ID: LCS-7719 Client ID: LCSS Prep Date: 8/30/202 Analyte Surr: 4-Bromofluorobenz	Bai 23 Analysis Result 1.1 1.1 1.1 3.3 ene 1.1 98 Sam Bai 23 Analysis Result ene 1.1	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050 0.10 pType: LC tch ID: 771 Date: 9/7	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 198 1/2023 SPK value 1.000	F SPK Ref Val 0 0 0 0 Tes F SPK Ref Val	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 ttCode: EF RunNo: 99 SeqNo: 36 %REC 106	2366 227739 LowLimit 70 70 70 39.1 24 Method 2366 527740 LowLimit 39.1	Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: %Rec HighLimit	g %RPD les %RPD		
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Bromofluorobenz Sample ID: LCS-7719 Client ID: LCSS Prep Date: 8/30/202 Analyte	Bat 23 Analysis Result 1.1 1.1 1.1 1.1 3.3 ene 1.1 28 Sam Bat 23 Analysis Result ene 1.1 38 Sam	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050 0.10 pType: LC: tch ID: 771 Date: 9/2 PQL	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 198 1/2023 SPK value 1.000	F SPK Ref Val 0 0 0 0 Tes SPK Ref Val	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 ttCode: EF RunNo: 99 SeqNo: 36 %REC 106	2366 527739 LowLimit 70 70 70 70 39.1 24 Method 39.1 24 Method	Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: %Rec HighLimit 146	g %RPD les %RPD		
Client ID: LCSS Prep Date: 8/29/202 Analyte Benzene Foluene Chylbenzene Kylenes, Total Surr: 4-Bromofluorobenz Client ID: LCSS Prep Date: 8/30/202 Analyte Surr: 4-Bromofluorobenz Sample ID: mb-77194	Bai 23 Analysis Result 1.1 1.1 1.1 3.3 ene 1.1 98 Sam Bai 23 Analysis Result ene 1.1 8 Sam Bai	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050 0.10 pType: LC tch ID: 771 pOte: 9/2 PQL	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 198 1/2023 SPK value 1.000 SLK 198	F SPK Ref Val 0 0 0 0 Tes SPK Ref Val Tes F	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 etCode: EF RunNo: 99 SeqNo: 36 %REC 106	2366 527739 LowLimit 70 70 70 39.1 24 Method 366 527740 LowLimit 39.1 24 Method 39.6	Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: %Rec HighLimit 146	g %RPD les %RPD les		
Client ID: LCSS Prep Date: 8/29/202 Analyte enzene oluene thylbenzene ylenes, Total Surr: 4-Bromofluorobenz Client ID: LCS-7719 Client ID: LCSS Prep Date: 8/30/202 Analyte Surr: 4-Bromofluorobenz Sample ID: mb-77194 Client ID: PBS	Bai 23 Analysis Result 1.1 1.1 1.1 3.3 ene 1.1 98 Sam Bai 23 Analysis Result ene 1.1 8 Sam Bai	tch ID: 771 Date: 8/3 PQL 0.025 0.050 0.050 0.10 pType: LC tch ID: 771 Date: 9/ PQL pType: MB tch ID: 771	179 31/2023 SPK value 1.000 1.000 3.000 1.000 S 1/2023 SPK value 1.000 3.000 1.000 S 1/2023 SPK value 1.000	F SPK Ref Val 0 0 0 0 Tes SPK Ref Val Tes F	RunNo: 99 SeqNo: 36 %REC 108 108 111 112 110 ttCode: EF RunNo: 99 SeqNo: 36 KREC 106 ttCode: EF RunNo: 99 SeqNo: 36	2366 527739 LowLimit 70 70 70 39.1 24 Method 366 527740 LowLimit 39.1 24 Method 39.6	Units: mg/K HighLimit 130 130 130 130 146 8021B: Volati Units: %Rec HighLimit 146 8021B: Volati	g %RPD les %RPD les		

Qualifiers:

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

WO#: **2308F19**

11-Sep-23

Client: Project:	Vertex Re Hackberry		ervices,	Inc.							
-											
Sample ID: mb	o-77198	SampT	ype: MB	LK	Tes	tCode: EP	'A Method	8021B: Volatil	es		
Client ID: PB	S	Batch	n ID: 771	98	F	RunNo: 99)366				
Prep Date: 8/	/30/2023	Analysis D)ate: 9/ *	1/2023	S	SeqNo: 36	527741	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromoflue	orobenzene	1.1		1.000		106	39.1	146			
Sample ID: mb	o-77179	SampT	уре: МВ	LK	Tes	tCode: EF	'A Method	8021B: Volatil	es		
Client ID: PB	S	Batch	n ID: 771	79	F	RunNo: 99	366				
Prep Date: 8/	/29/2023	Analysis D	ate: 8/ 3	31/2023	S	SeqNo: 36	27742	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 Surr: 4-Bromoflue	orobenzeno	ND 1.1	0.10	1.000		107	39.1	146			
	loiobelizerie	1.1		1.000		107	39.1	140			
Sample ID: 230	08f19-006ams	SampT	ype: MS	;	Tes	tCode: EP	A Method	8021B: Volatil	les		
Client ID: BH	123-11 2'	Batch	n ID: 771	79	F	RunNo: 99)366				
Prep Date: 8/	/29/2023	Analysis D	ate: 8/3	31/2023	S	SeqNo: 36	27828	Units: mg/Kg	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	0.9833	0	108	70	130			
Toluene		1.1	0.049	0.9833	0	109	70	130			
Ethylbenzene		1.1	0.049	0.9833	0	110	70	130			
Xylenes, Total		3.3	0.098	2.950	0	112	70	130			
Surr: 4-Bromoflue	orobenzene	1.0		0.9833		105	39.1	146			
Sample ID: 230	08f19-006amsd	SampT	ype: MS	D	Tes	tCode: EF	A Method	8021B: Volatil	es		
Client ID: BH	123-11 2'	Batch	n ID: 771	79	F	RunNo: 99	366				
Prep Date: 8/	/29/2023	Analysis D	ate: 8/3	31/2023	5	SeqNo: 36	27829	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	0.9843	0	112	70	130	3.45	20	
Toluene		1.1	0.049	0.9843	0	112	70	130	3.04	20	
Ethylbenzene		1.1	0.049	0.9843	0	114	70	130	3.30	20	
Xylenes, Total		3.4	0.098	2.953	0	116	70	130	3.72	20	
Surr: 4-Bromoflue	orobenzene	1.0		0.9843		104	39.1	146	0	0	
Sample ID: LC	S-77172	SampT	ype: LC	S	Tes	tCode: EF	'A Method	8021B: Volatil	es		
Client ID: LC	ss	Batch	n ID: 771	72	F	RunNo: 99	9411				
Prep Date: 8/	/29/2023	Analysis D)ate: 9/2	2/2023	5	SeqNo: 36	528971	Units: %Rec			
1 10p Date. 0											

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

2308F19

11-Sep-23

	ex Resources Servic kberry 18	es, Inc.							
Sample ID: LCS-77172	SampType:	LCS	Test	Code: EP	A Method	8021B: Volatil	es		
Client ID: LCSS	Batch ID:	77172	R	unNo: 99	411				
Prep Date: 8/29/2023	Analysis Date:	9/2/2023	S	eqNo: 36	28971	Units: %Rec			
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1	1.000		108	39.1	146			
Sample ID: mb-77172	SampType:	MBLK	Test	Code: EP	A Method	8021B: Volatil	es		
Client ID: PBS	Batch ID:	77172	R	unNo: 99	411				
Prep Date: 8/29/2023	Analysis Date:	9/2/2023	S	eqNo: 36	28973	Units: %Rec			
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0	1.000		105	39.1	146			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
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- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#: 2308F19 11-Sep-23
HALL ENVIRONMENTAL ANALYSIS LABORATORY	L TEL: 505-345	nental Analysis Laborator 4901 Hawkins N Albuquerque. NM 8716 5-3975 FAX: 505-345-416 ww.hallenvironmental.co.	79 99 Sam 97	ple Log-In (Check List
Client Name: Vertex Resou Services, Inc		mber: 2308F19		RcptNo	: 1
Received By: Tracy Casa	rrubias 8/29/2023 7:55:0	0 AM			
Completed By: Tracy Casa	rrubias 8/29/2023 8:29:1	2 AM			
Reviewed By: H 8-2	9-23				
Chain of Custody					
1. Is Chain of Custody comple	te?	Yes	No 🔽	Not Present	
2. How was the sample deliver	red?	Courier			
Log In 3. Was an attempt made to co	ol the samples?	Yes 🔽	No 🗌	NA 🗌	
4. Were all samples received a	at a temperature of >0° C to 6.0°C	Yes 🔽	No 🗌	na 🗆	
5. Sample(s) in proper contain	er(s)?	Yes 🔽	No 🗌		
6. Sufficient sample volume for	r indicated test(s)?	Yes 🔽	No 🗌		
7. Are samples (except VOA a	nd ONG) properly preserved?	Yes 🗹	No 🗌	_	
8. Was preservative added to b	pottles?	Yes	No 🗹	NA 🗌	
9. Received at least 1 vial with	headspace <1/4" for AQ VOA?	Yes	No 🗌	NA 🗹	
10. Were any sample container	s received broken?	Yes	No 🗹	# of preserved bottles checked	
11. Does paperwork match bottl (Note discrepancies on chai		Yes 🗹	No 🗌	for pH:	or >12 unless noted)
12. Are matrices correctly identi	fied on Chain of Custody?	Yes 🔽	No 🗌	Adjusted?	
13. Is it clear what analyses wer	e requested?	Yes 🖌	No 🗌		7~8/29/23
14. Were all holding times able (If no, notify customer for au		Yes 🗹	No 🗌	Enecked by:	mojeges
Special Handling (if appl	licable)				
15. Was client notified of all dis		Yes	No 🗌	NA 🗹	
Person Notified:	Da	ate:			
By Whom:	Via	a: eMail Pho	one 🗌 Fax	In Person	
Regarding:					
	Mailing address.phone number and I	Email/Fax are missing o	on COC- TM	C 8/29/23	
16. Additional remarks:					
Client did not relinquis	sh chain of custody				
17. <u>Cooler Information</u>					
Cooler No Temp °C 1 5.6	Condition Seal Intact Seal No Good Yes Yogi	o Seal Date S	igned By		
. 0.0					

Received by OCD: 11/1/2023 1:09:31 PM

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Received by OCD: 11/1/2023 1:09:31 PM

Turn-Around Time: Chain-of-Custody Record 3 Day HALL ENVIRONMENTAL Client: Vertex CDEVON Standard Rush 3 DAY ANALYSIS LABORATORY Project Name: www.hallenvironmental.com Hackberry 18 Mailing Address: onfile 4901 Hawkins NE - Albuquerque, NM 87109 Project #: Tel. 505-345-3975 Fax 505-345-4107 23E-03903 **Analysis Request** Phone #: SO4 7PH)\$015D(GR0 / DR0 / MR0) Total Coliform (Present/Absent) Project Manager: email or Fax#: TMB's (8021) 8081 Pesticides/8082 PCB's PAHs by 8310 or 8270SIMS NO₂, PO₄, Kent Stallings QA/QC Package: □ Level 4 (Full Validation) □ Standard EDB (Method 504.1) Sampler: Zach Englander Accreditation: □ Az Compliance 8270 (Semi-VOA) Yes J I No Br, NO₃, On Ice: □ Other 4091 BTEX MTBE / □ NELAC **RCRA 8 Metals** # of Coolers: □ EDD (Type) 8260 (VOA) (°C) Cooler Temp(including CF): 5.7-0.1=5.6 ц, HEAL No. Preservative Container බ් 2308F19 Sample Name Type and # Type Date Time Matrix 9:00 BH23-01 0 501 TP 8-19-23 100 19r RH23-09 002 9:15 0 1-123-10 003 30 2 9 BH23-11 45 004 0 10 00 12H23-005 2 15 000 10 0 0 30 RH23-12 007 2 12 45 RH23 000 3. 5 00 12 009 4 12 15 RH23-010 BH23-13 0 110 30 V 2 13 1423-13 612 45 Remarks: Direct Bill to Devon CC: Kstallings @ vertex.cg aharris Quertex.cg Date Time Received by: Via: Relinguished by: Time: Date: 8/28/23 845 CIALL Date Time Relinguished by: Received by: Via: Courr 8/29/23 7:55 Time: Date: 1⁸h8h3 900 ammys

of :

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Mailing	Addres	s:	on file	5	Hackl	erry 19												ntal.c				
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□ Star			Level 4 (Full Vali	dation)					TMB's (8021)	RO	2 5		70S		2, P		ľ	ent/			1.5	
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Date	Time	Matrix	Sample Name		Container Type and #	Preservative Type	THE REPORT OF THE OWNER AND A DECK	L No.	BTEX/MTBE /	4PB:8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	CIJF, Br, NO3,	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)				
	13:00		BH23 - 13	4-	1 1	1	23081		H	¥		<u> </u>	-		<u>-</u>		- 00					+
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Released to Imaging: 3/5/2024 11:07:34 AM



September 11, 2023

Kent Stallings Vertex Resources Services, Inc. 3101 Boyd Drive Carlsbad, NM 88220 TEL: FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

OrderNo.: 2308F20

RE: Hackberry 18 Fed 2

Dear Kent Stallings:

Hall Environmental Analysis Laboratory received 16 sample(s) on 8/29/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

ander

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-15 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 9:00:00 AM Lab ID: 2308F20-001 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 1:32:00 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 1:32:00 PM Surr: DNOP 123 69-147 %Rec 1 8/31/2023 1:32:00 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 11:42:17 AM 5.0 mg/Kg 1 Surr: BFB 92.2 15-244 %Rec 1 9/1/2023 11:42:17 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 11:42:17 AM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 9/1/2023 11:42:17 AM Ethylbenzene ND 0.050 mg/Kg 1 9/1/2023 11:42:17 AM Xylenes, Total ND mg/Kg 9/1/2023 11:42:17 AM 0.099 1 Surr: 4-Bromofluorobenzene 105 39.1-146 %Rec 1 9/1/2023 11:42:17 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 10:50:53 PM

84

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. 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 1 of 22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-15 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 9:15:00 AM Lab ID: 2308F20-002 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.6 mg/Kg 1 8/31/2023 1:55:55 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 8/31/2023 1:55:55 PM Surr: DNOP 126 69-147 %Rec 1 8/31/2023 1:55:55 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 12:05:44 PM 4.9 mg/Kg 1 Surr: BFB 92.1 15-244 %Rec 1 9/1/2023 12:05:44 PM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 12:05:44 PM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 9/1/2023 12:05:44 PM Ethylbenzene ND 0.049 mg/Kg 1 9/1/2023 12:05:44 PM Xylenes, Total ND 0.097 mg/Kg 1 9/1/2023 12:05:44 PM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 12:05:44 PM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 11:03:18 PM 860 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. 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 standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Project:

CLIENT: Vertex Resources Services, Inc.

Hackberry 18 Fed 2

Analytical Report Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-16 0' Collection Date: 8/20/2023 9:30:00 AM Received Date: 8/29/2023 7:55:00 AM

Lab ID: 2308F20-003	Matrix: SOIL	Rece	eived Date:	8/29/2	2023 7:55:00 AM
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	100	9.9	mg/Kg	1	8/31/2023 2:19:49 PM
Motor Oil Range Organics (MRO)	140	50	mg/Kg	1	8/31/2023 2:19:49 PM
Surr: DNOP	84.1	69-147	%Rec	1	8/31/2023 2:19:49 PM
EPA METHOD 8015D: GASOLINE RANG	E				Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/1/2023 1:19:12 AM
Surr: BFB	89.6	15-244	%Rec	1	9/1/2023 1:19:12 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	9/1/2023 1:19:12 AM
Toluene	ND	0.048	mg/Kg	1	9/1/2023 1:19:12 AM
Ethylbenzene	ND	0.048	mg/Kg	1	9/1/2023 1:19:12 AM
Xylenes, Total	ND	0.096	mg/Kg	1	9/1/2023 1:19:12 AM
Surr: 4-Bromofluorobenzene	100	39.1-146	%Rec	1	9/1/2023 1:19:12 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	1300	60	mg/Kg	20	8/31/2023 11:15:42 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 3 of 22

Hackberry 18 Fed 2

2308F20-004

Project:

Lab ID:

Analytical Report Lab Order 2308F20

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 9/11/2023 **CLIENT:** Vertex Resources Services, Inc. Client Sample ID: BH23-16 2' Collection Date: 8/20/2023 9:45:00 AM Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM

Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/31/2023 2:43:46 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/31/2023 2:43:46 PM
Surr: DNOP	101	69-147	%Rec	1	8/31/2023 2:43:46 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	9/1/2023 1:42:34 AM
Surr: BFB	91.5	15-244	%Rec	1	9/1/2023 1:42:34 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	9/1/2023 1:42:34 AM
Toluene	ND	0.048	mg/Kg	1	9/1/2023 1:42:34 AM
Ethylbenzene	ND	0.048	mg/Kg	1	9/1/2023 1:42:34 AM
Xylenes, Total	ND	0.096	mg/Kg	1	9/1/2023 1:42:34 AM
Surr: 4-Bromofluorobenzene	103	39.1-146	%Rec	1	9/1/2023 1:42:34 AM
EPA METHOD 300.0: ANIONS					Analyst: RBC
Chloride	1900	60	mg/Kg	20	8/31/2023 11:28:06 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

н Holding times for preparation or analysis exceeded

- Not Detected at the Reporting Limit
- ND PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

Hackberry 18 Fed 2

2308F20-005

Analytical Report Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-17 0' Collection Date: 8/20/2023 10:00:00 AM Received Date: 8/29/2023 7:55:00 AM

		_			0/=//=	020 /100100 /1101
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: DGH
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/31/2023 3:07:39 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/31/2023 3:07:39 PM
Surr: DNOP	148	69-147	S	%Rec	1	8/31/2023 3:07:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/1/2023 2:06:01 AM
Surr: BFB	93.3	15-244		%Rec	1	9/1/2023 2:06:01 AM
EPA METHOD 8021B: VOLATILES						Analyst: JJP
Benzene	ND	0.023		mg/Kg	1	9/1/2023 2:06:01 AM
Toluene	ND	0.047		mg/Kg	1	9/1/2023 2:06:01 AM
Ethylbenzene	ND	0.047		mg/Kg	1	9/1/2023 2:06:01 AM
Xylenes, Total	ND	0.093		mg/Kg	1	9/1/2023 2:06:01 AM
Surr: 4-Bromofluorobenzene	105	39.1-146		%Rec	1	9/1/2023 2:06:01 AM
EPA METHOD 300.0: ANIONS						Analyst: RBC
Chloride	ND	60		mg/Kg	20	8/31/2023 11:40:30 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-17 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 10:15:00 AM Lab ID: 2308F20-006 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 10 mg/Kg 1 8/31/2023 3:31:38 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 3:31:38 PM Surr: DNOP 121 69-147 %Rec 1 8/31/2023 3:31:38 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 2:29:22 AM 5.0 mg/Kg 1 Surr: BFB 91.3 15-244 %Rec 1 9/1/2023 2:29:22 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 2:29:22 AM 0.025 mg/Kg 1 Toluene ND 0.050 mg/Kg 1 9/1/2023 2:29:22 AM Ethylbenzene ND 0.050 mg/Kg 1 9/1/2023 2:29:22 AM Xylenes, Total ND mg/Kg 1 9/1/2023 2:29:22 AM 0.099 Surr: 4-Bromofluorobenzene 103 39.1-146 %Rec 1 9/1/2023 2:29:22 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 8/31/2023 11:52:55 PM ND 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. 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 standard limits. If undiluted results may be estimated.

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 6 of 22

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

Hackberry 18 Fed 2

2308F20-007

Analytical Report Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-18 0' Collection Date: 8/20/2023 10:30:00 AM Received Date: 8/29/2023 7:55:00 AM

				0	
Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/31/2023 3:55:31 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	8/31/2023 3:55:31 PM
Surr: DNOP	117	69-147	%Rec	1	8/31/2023 3:55:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/1/2023 2:52:49 AM
Surr: BFB	93.6	15-244	%Rec	1	9/1/2023 2:52:49 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.025	mg/Kg	1	9/1/2023 2:52:49 AM
Toluene	ND	0.049	mg/Kg	1	9/1/2023 2:52:49 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/1/2023 2:52:49 AM
Xylenes, Total	ND	0.098	mg/Kg	1	9/1/2023 2:52:49 AM
Surr: 4-Bromofluorobenzene	105	39.1-146	%Rec	1	9/1/2023 2:52:49 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	5000	150	mg/Kg	50	9/1/2023 7:24:32 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

- н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

Page 7 of 22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-18 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 10:45:00 AM Lab ID: 2308F20-008 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 9.4 mg/Kg 1 8/31/2023 4:19:22 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 8/31/2023 4:19:22 PM Surr: DNOP 136 69-147 %Rec 1 8/31/2023 4:19:22 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 4.7 9/1/2023 3:16:31 AM mg/Kg 1 Surr: BFB 92.8 15-244 %Rec 1 9/1/2023 3:16:31 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 3:16:31 AM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 9/1/2023 3:16:31 AM Ethylbenzene ND 0.047 mg/Kg 1 9/1/2023 3:16:31 AM Xylenes, Total ND 0.095 mg/Kg 1 9/1/2023 3:16:31 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 3:16:31 AM **EPA METHOD 300.0: ANIONS** Analyst: RBC mg/Kg Chloride 9/1/2023 12:42:33 AM 550 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. 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 8 of 22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-19 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 11:00:00 AM Lab ID: 2308F20-009 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: DGH Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 4:43:15 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 4:43:15 PM Surr: DNOP 136 69-147 %Rec 1 8/31/2023 4:43:15 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 3:40:00 AM 4.9 mg/Kg 1 Surr: BFB 91.0 15-244 %Rec 1 9/1/2023 3:40:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 3:40:00 AM 0.024 mg/Kg 1 Toluene ND 0.049 mg/Kg 1 9/1/2023 3:40:00 AM Ethylbenzene ND 0.049 mg/Kg 1 9/1/2023 3:40:00 AM Xylenes, Total ND 0.098 mg/Kg 1 9/1/2023 3:40:00 AM Surr: 4-Bromofluorobenzene 102 39.1-146 %Rec 1 9/1/2023 3:40:00 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 12:34:08 PM 200 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. 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 9 of 22

Project:

Lab ID:

CLIENT: Vertex Resources Services, Inc.

Hackberry 18 Fed 2

2308F20-010

Analytical Report Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH23-19 2' Collection Date: 8/20/2023 11:15:00 AM Received Date: 8/29/2023 7:55:00 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	10	mg/Kg	1	8/31/2023 5:07:20 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	8/31/2023 5:07:20 PM
Surr: DNOP	121	69-147	%Rec	1	8/31/2023 5:07:20 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	9/1/2023 4:03:23 AM
Surr: BFB	94.4	15-244	%Rec	1	9/1/2023 4:03:23 AM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	9/1/2023 4:03:23 AM
Toluene	ND	0.049	mg/Kg	1	9/1/2023 4:03:23 AM
Ethylbenzene	ND	0.049	mg/Kg	1	9/1/2023 4:03:23 AM
Xylenes, Total	ND	0.097	mg/Kg	1	9/1/2023 4:03:23 AM
Surr: 4-Bromofluorobenzene	106	39.1-146	%Rec	1	9/1/2023 4:03:23 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	860	60	mg/Kg	20	9/1/2023 1:11:22 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. Sample Diluted Due to Matrix
- D н
- Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- Above Quantitation Range/Estimated Value Е
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-20 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 11:30:00 AM Lab ID: 2308F20-011 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 5:31:39 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 5:31:39 PM Surr: DNOP 127 69-147 %Rec 1 8/31/2023 5:31:39 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 4:26:46 AM 4.8 mg/Kg 1 Surr: BFB 95.0 15-244 %Rec 1 9/1/2023 4:26:46 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 4:26:46 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2023 4:26:46 AM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2023 4:26:46 AM Xylenes, Total ND 0.096 mg/Kg 1 9/1/2023 4:26:46 AM Surr: 4-Bromofluorobenzene 107 39.1-146 %Rec 1 9/1/2023 4:26:46 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/5/2023 9:55:04 AM 5000 150 50

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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits

Р Sample pH Not In Range

RL Reporting Limit Page 11 of 22

Date Reported: 9/11/2023

9/1/2023 2:01:01 PM

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-20 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 11:45:00 AM Lab ID: 2308F20-012 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 5:56:18 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 5:56:18 PM Surr: DNOP 70.3 69-147 %Rec 1 8/31/2023 5:56:18 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 5:13:34 AM 4.7 mg/Kg 1 Surr: BFB 92.6 15-244 %Rec 1 9/1/2023 5:13:34 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 5:13:34 AM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 9/1/2023 5:13:34 AM Ethylbenzene ND 0.047 mg/Kg 1 9/1/2023 5:13:34 AM Xylenes, Total ND 0.094 mg/Kg 1 9/1/2023 5:13:34 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 5:13:34 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS

1600

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

Qualifiers:

Chloride

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 standard limits. If undiluted results may be estimated. S

Analyte detected in the associated Method Blank в

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

mg/Kg

20

60

Р Sample pH Not In Range

RL Reporting Limit Page 12 of 22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-21 0' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:00:00 PM Lab ID: 2308F20-013 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Analyst: DGH Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 8/31/2023 6:46:17 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 6:46:17 PM Surr: DNOP 83.3 69-147 %Rec 1 8/31/2023 6:46:17 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 5:37:03 AM 4.8 mg/Kg 1 Surr: BFB 91.8 15-244 %Rec 1 9/1/2023 5:37:03 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 5:37:03 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2023 5:37:03 AM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2023 5:37:03 AM Xylenes, Total ND 0.097 mg/Kg 1 9/1/2023 5:37:03 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 5:37:03 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 2:13:25 PM 540 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. 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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-21 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:15:00 PM Lab ID: 2308F20-014 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 7:11:12 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 8/31/2023 7:11:12 PM Surr: DNOP 138 69-147 %Rec 1 8/31/2023 7:11:12 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 6:00:36 AM 4.8 mg/Kg 1 Surr: BFB 92.6 15-244 %Rec 1 9/1/2023 6:00:36 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 6:00:36 AM 0.024 mg/Kg 1 Toluene ND 0.048 mg/Kg 1 9/1/2023 6:00:36 AM Ethylbenzene ND 0.048 mg/Kg 1 9/1/2023 6:00:36 AM Xylenes, Total ND 0.095 mg/Kg 1 9/1/2023 6:00:36 AM Surr: 4-Bromofluorobenzene 104 39.1-146 %Rec 1 9/1/2023 6:00:36 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 2:25:50 PM 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. 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 standard limits. If undiluted results may be estimated. S

- Analyte detected in the associated Method Blank в
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 14 of 22

2308F20-015

Project:

Lab ID:

Analyses

Analytical Report Lab Order 2308F20

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-22 0' Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:30:00 PM Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** EDA METHOD MARMID, DIEGEL DANGE ODOANIO ۸... - 1. . et. DGH

BANICS				Analyst: DGH
ND	9.7	mg/Kg	1	8/31/2023 7:35:58 PM
ND	48	mg/Kg	1	8/31/2023 7:35:58 PM
74.8	69-147	%Rec	1	8/31/2023 7:35:58 PM
				Analyst: JJP
ND	4.8	mg/Kg	1	9/1/2023 6:24:03 AM
95.4	15-244	%Rec	1	9/1/2023 6:24:03 AM
				Analyst: JJP
ND	0.024	mg/Kg	1	9/1/2023 6:24:03 AM
ND	0.048	mg/Kg	1	9/1/2023 6:24:03 AM
ND	0.048	mg/Kg	1	9/1/2023 6:24:03 AM
ND	0.095	mg/Kg	1	9/1/2023 6:24:03 AM
107	39.1-146	%Rec	1	9/1/2023 6:24:03 AM
				Analyst: SNS
97	60	mg/Kg	20	9/1/2023 3:03:05 PM
	ND ND 74.8 ND 95.4 ND ND ND ND 107	ND 9.7 ND 48 74.8 69-147 ND 4.8 95.4 15-244 ND 0.024 ND 0.048 ND 0.048 ND 0.095 107 39.1-146	ND 9.7 mg/Kg ND 48 mg/Kg 74.8 69-147 %Rec ND 4.8 mg/Kg 95.4 15-244 %Rec ND 0.024 mg/Kg ND 0.048 mg/Kg ND 0.048 mg/Kg ND 0.095 mg/Kg 107 39.1-146 %Rec	ND 9.7 mg/Kg 1 ND 48 mg/Kg 1 74.8 69-147 %Rec 1 ND 4.8 mg/Kg 1 95.4 15-244 %Rec 1 ND 0.024 mg/Kg 1 ND 0.048 mg/Kg 1 ND 0.048 mg/Kg 1 ND 0.095 mg/Kg 1 107 39.1-146 %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

н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

ND PQL

Practical Quanitative Limit

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

- Analyte detected in the associated Method Blank в
- Е Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range

RL Reporting Limit Page 15 of 22

Date Reported: 9/11/2023

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. Client Sample ID: BH23-22 2' **Project:** Hackberry 18 Fed 2 Collection Date: 8/20/2023 12:45:00 PM Lab ID: 2308F20-016 Matrix: SOIL Received Date: 8/29/2023 7:55:00 AM Result **RL** Qual Units DF **Date Analyzed** Analyses Analyst: DGH EPA METHOD 8015M/D: DIESEL RANGE ORGANICS Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 8/31/2023 8:00:44 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 8/31/2023 8:00:44 PM Surr: DNOP 98.0 69-147 %Rec 1 8/31/2023 8:00:44 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: JJP Gasoline Range Organics (GRO) ND 9/1/2023 6:47:28 AM 4.7 mg/Kg 1 Surr: BFB 97.5 15-244 %Rec 1 9/1/2023 6:47:28 AM **EPA METHOD 8021B: VOLATILES** Analyst: JJP Benzene ND 9/1/2023 6:47:28 AM 0.023 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 9/1/2023 6:47:28 AM Ethylbenzene ND 0.047 mg/Kg 1 9/1/2023 6:47:28 AM Xylenes, Total ND 0.094 mg/Kg 1 9/1/2023 6:47:28 AM Surr: 4-Bromofluorobenzene 105 39.1-146 %Rec 1 9/1/2023 6:47:28 AM **EPA METHOD 300.0: ANIONS** Analyst: SNS mg/Kg Chloride 9/1/2023 3:15:30 PM 220 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. 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 standard limits. If undiluted results may be estimated. S

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

RL

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Client: Project:		ex Resources Services, Inc. kberry 18 Fed 2	
Sample ID:	MB-77246	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID:	PBS	Batch ID: 77246	RunNo: 99401
Prep Date:	8/31/2023	Analysis Date: 8/31/2023	SeqNo: 3627582 Units: mg/Kg
Analyte			e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride		ND 1.5	
Sample ID:	LCS-77246	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID:	LCSS	Batch ID: 77246	RunNo: 99401
Prep Date:	8/31/2023	Analysis Date: 8/31/2023	SeqNo: 3627583 Units: mg/Kg
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride		14 1.5 15.00	0 93.7 90 110
Sample ID:	MB-77256	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID:	PBS	Batch ID: 77256	RunNo: 99424
Prep Date:	9/1/2023	Analysis Date: 9/1/2023	SeqNo: 3629903 Units: mg/Kg
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride		ND 1.5	
Sample ID:	LCS-77256	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID:	LCSS	Batch ID: 77256	RunNo: 99424
Prep Date:	9/1/2023	Analysis Date: 9/1/2023	SeqNo: 3629904 Units: mg/Kg
Analyte		Result PQL SPK value	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride		16 1.5 15.00	0 105 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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е Above Quantitation Range/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 Environmental Analysis Laboratory, Inc.

Client: Project:		ex Resources Se kberry 18 Fed 2		Inc.							
Sample ID:	LCS-77177	SampT	ype: LC	s	Tes	tCode: EF	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	LCSS	Batch	ID: 771	177	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/ 3	31/2023	5	SeqNo: 36	627016	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	5.7		5.000		114	69	147			
Sample ID:	MB-77177	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	PBS	Batch	ID: 771	177	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/ 3	31/2023	S	SeqNo: 36	627018	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	12		10.00		116	69	147			
Sample ID:	LCS-77176	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	LCSS	Batch	ID: 771	176	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/ 3	31/2023	S	SeqNo: 36	627544	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	5.5		5.000		109	69	147			
Sample ID:	LCS-77208	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	LCSS	Batch	ID: 772	208	F	RunNo: 9 9	9380				
Prep Date:	8/30/2023	Analysis D	ate: 8/ 3	31/2023	S	SeqNo: 36	627545	Units: mg/Kg	9		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
-	Organics (DRO)	55	10	50.00	0	110	61.9	130			
Surr: DNOP)	5.9		5.000		119	69	147			
Sample ID:	LCS-77213	SampT	ype: LC	S	Tes	tCode: EF	PA Method	8015M/D: Dies	el Range	Organics	
Client ID:	LCSS	Batch	ID: 772	213	F	RunNo: 9 9	9380				
Prep Date:	8/30/2023	Analysis D	ate: 8/ 3	31/2023	S	SeqNo: 36	627547	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	5.3		5.000		105	69	147			
Sample ID:	MB-77176	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Dies	sel Range	Organics	
Client ID:	PBS	Batch	ID: 771	176	F	RunNo: 9 9	9380				
Prep Date:	8/29/2023	Analysis D	ate: 8/ 3	31/2023	S	SeqNo: 36	627552	Units: %Rec			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP)	13		10.00		126	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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WO#:

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	Resources Services, Inc. rry 18 Fed 2	
Sample ID: MB-77208	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 77208	RunNo: 99380
Prep Date: 8/30/2023	Analysis Date: 8/31/2023	SeqNo: 3627556 Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10	
Motor Oil Range Organics (MRO)	ND 50	
Surr: DNOP	13 10.00	131 69 147
Sample ID: MB-77213	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 77213	RunNo: 99380
Prep Date: 8/30/2023	Analysis Date: 8/31/2023	SeqNo: 3627557 Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	11 10.00	108 69 147

Qualifiers:

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

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11-Sep-23

WO#:

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Vertex Reso Hackberry 1		vices,	Inc.							
-	· · · · · ·										
Sample ID: Ics-7		SampTyp	-	-				8015D: Gasol	ine Range		
Client ID: LCS	-	Batch I				RunNo: 9					
Prep Date: 8/3	60/2023 A	Analysis Dat	ie: 9/ 1	1/2023		SeqNo: 3	627635	Units: mg/K	g		
Analyte			PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Orga Surr: BFB	anics (GRO)	22 1900	5.0	25.00 1000	0	88.2 193	70 15	130 244			
Sample ID: mb-	77198	SampTyp	be: MB	BLK	Tes	tCode: El	PA Method	8015D: Gasol	ine Range		
Client ID: PBS	;	Batch I	D: 771	198	F	RunNo: 9	9366				
Prep Date: 8/3	60/2023 A	Analysis Dat	ie: 9/ 1	1/2023	S	SeqNo: 3	627636	Units: mg/K	g		
Analyte	l	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Orga Surr: BFB	anics (GRO)	ND 940	5.0	1000		93.9	15	244			
Sample ID: Ics-7	77172	SampTyp	be: LC	s	Tes	tCode: El	PA Method	8015D: Gasol	ine Range		
Client ID: LCS	S	Batch I	D: 771	172	F	RunNo: 9	9411				
Prep Date: 8/2	9/2023 A	Analysis Dat	ie: 9/2	2/2023	S	SeqNo: 3	628857	Units: %Rec			
Analyte	l	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB		1900		1000		191	15	244			
Sample ID: mb-	77172	1900 SampTyp	De: MB		Tes			244 8015D: Gasol	ine Range		
				BLK			PA Method		ine Range		
Sample ID: mb-	;	SampTyp	D: 771	BLK 172	F	tCode: E	PA Method 9411		•		
Sample ID: mb-	9 /2023 A	SampTyr Batch I	D: 771	BLK 172	F	tCode: El RunNo: 9	PA Method 9411	8015D: Gasol	•	RPDLimit	Qual
Sample ID: mb- Client ID: PBS Prep Date: 8/2	9 /2023 A	SampTyp Batch I Analysis Dat	D: 771 :e: 9/2	BLK 172 2/2023	F	tCode: El RunNo: 9 SeqNo: 3	PA Method 9411 628859	8015D: Gasol Units: %Rec	·		Qual
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte	9 /2023 A	SampTyp Batch I Analysis Dat Result	D: 771 re: 9/2 PQL	BLK 172 2/2023 SPK value 1000	F SPK Ref Val	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5	PA Method 9411 628859 LowLimit 15	8015D: Gasol Units: %Rec HighLimit	%RPD	RPDLimit	Qual
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308	9 /2023 A	SampTyp Batch I Analysis Dat Result 940	D: 771 re: 9/2 PQL De: MS	BLK 172 2/2023 SPK value 1000	F SPK Ref Val Tes	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5	PA Method 9411 628859 LowLimit 15 PA Method	8015D: Gasol Units: %Rec HighLimit 244	%RPD	RPDLimit	Qual
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2	3 19/2023 A 19/20-001ams 13-15 0'	SampTyr Batch I Analysis Dat Result 940 SampTyr	D: 771 re: 9/2 PQL De: MS D: 771	BLK 172 2/2023 SPK value 1000	F SPK Ref Val Tes F	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El	PA Method 9411 628859 LowLimit 15 PA Method 9411	8015D: Gasol Units: %Rec HighLimit 244	%RPD	RPDLimit	Qual
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2	3 9/2023 A 3f20-001ams 13-15 0' 10/2023 A	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat	D: 771 re: 9/2 PQL De: MS D: 771	3LK 172 2/2023 SPK value 1000 5 1998 1/2023	F SPK Ref Val Tes F	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3	PA Method 9411 628859 LowLimit 15 PA Method 9411	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol	%RPD	RPDLimit	Qual
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3	3 9/2023 A 3f20-001ams 13-15 0' 10/2023 A	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat	D: 771 PQL De: MS D: 771 de: 9/1	3LK 172 2/2023 SPK value 1000 5 1998 1/2023	F SPK Ref Val Tes F S	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit 70	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/K	%RPD	RPDLimit	
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3 Analyte	3 9/2023 A 3f20-001ams 13-15 0' 10/2023 A	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat Result	D: 771 PQL De: MS D: 771 re: 9/1 PQL	BLK 172 2/2023 SPK value 1000 3 198 1/2023 SPK value	F SPK Ref Val Tes F SPK Ref Val	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3 %REC	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/Kg HighLimit	%RPD	RPDLimit	
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3 Analyte Gasoline Range Orga	3720-001ams 3720-001ams 3-15 0' 30/2023 A anics (GRO)	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat Result 23	D: 771 PQL De: MS D: 771 re: 9/1 PQL 5.0	BLK 172 2/2023 SPK value 1000 3 198 1/2023 SPK value 24.85 994.0	F SPK Ref Val Tes F SPK Ref Val 0	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3 %REC 92.8 203	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit 70 15	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/Ke HighLimit 130	%RPD ine Range g %RPD	RPDLimit RPDLimit	
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3 Analyte Gasoline Range Orga Surr: BFB	3720-001ams 3720-001ams 3-15 0' 30/2023 A anics (GRO)	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat Result 23 2000	D: 771 re: 9/2 PQL De: MS D: 771 re: 9/1 PQL 5.0 De: MS	BLK 172 2/2023 SPK value 1000 5 198 1/2023 SPK value 24.85 994.0 5	F SPK Ref Val Tes SPK Ref Val 0 Tes	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3 %REC 92.8 203	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit 70 15 PA Method	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/Ke HighLimit 130 244	%RPD ine Range g %RPD	RPDLimit RPDLimit	
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3 Analyte Gasoline Range Orga Surr: BFB Sample ID: 2308 Client ID: BH2	3720-001ams 3720-001ams 33-15 0' 30/2023 A anics (GRO) 3720-001amsd 33-15 0'	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat Result 23 2000 SampTyr	D: 771 re: 9/2 PQL De: MS D: 771 re: 9/1 PQL 5.0 De: MS D: 771	3LK 172 2/2023 SPK value 1000 3 198 1/2023 SPK value 24.85 994.0 3 5 198	F SPK Ref Val Tes SPK Ref Val 0 Tes F	tCode: E RunNo: 9 SeqNo: 3 %REC 93.5 tCode: E RunNo: 9 SeqNo: 3 %REC 92.8 203 tCode: E	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit 70 15 PA Method 9411	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/Ke HighLimit 130 244	%RPD ine Range %RPD ine Range	RPDLimit RPDLimit	
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3 Analyte Gasoline Range Orga Surr: BFB Sample ID: 2308 Client ID: BH2	3720-001ams 33-15 0' 30/2023 A anics (GRO) 3720-001amsd 33-15 0' 30/2023 A	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat SampTyr Batch I Analysis Dat	D: 771 re: 9/2 PQL De: MS D: 771 re: 9/1 PQL 5.0 De: MS D: 771	3LK 172 2/2023 SPK value 1000 3 198 1/2023 SPK value 24.85 994.0 3 5 198	F SPK Ref Val Tes SPK Ref Val 0 Tes F S	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3 %REC 92.8 203 tCode: El RunNo: 9	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit 70 15 PA Method 9411	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/Kg HighLimit 130 244 8015D: Gasol	%RPD ine Range %RPD ine Range	RPDLimit RPDLimit	
Sample ID: mb- Client ID: PBS Prep Date: 8/2 Analyte Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3 Analyte Gasoline Range Orga Surr: BFB Sample ID: 2308 Client ID: BH2 Prep Date: 8/3	3720-001ams 33-15 0' 36/2023 A anics (GRO) 3720-001amsd 33-15 0' 36/2023 A	SampTyr Batch I Analysis Dat Result 940 SampTyr Batch I Analysis Dat SampTyr Batch I Analysis Dat	D: 771 re: 9/2 PQL De: MS D: 771 re: 9/1 PQL 5.0 De: MS D: 771 re: 9/1	BLK 172 2/2023 SPK value 1000 198 1/2023 SPK value 24.85 994.0 50 198 1/2023	F SPK Ref Val Tes SPK Ref Val 0 Tes F S	tCode: El RunNo: 9 SeqNo: 3 %REC 93.5 tCode: El RunNo: 9 SeqNo: 3 %REC 92.8 203 tCode: El RunNo: 9 SeqNo: 3	PA Method 9411 628859 LowLimit 15 PA Method 9411 628886 LowLimit 70 15 PA Method 9411 628887	8015D: Gasol Units: %Rec HighLimit 244 8015D: Gasol Units: mg/Kg HighLimit 130 244 8015D: Gasol Units: mg/Kg	%RPD ine Range %RPD ine Range	RPDLimit	Qual

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 standard limits. If undiluted results may be estimated. S
- Analyte detected in the associated Method Blank В
- Е
- J
- Sample pH Not In Range
- RL Reporting Limit

2308F20

11-Sep-23

WO#:

Above Quantitation Range/Estimated Value

- Analyte detected below quantitation limits
- Р

QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: Project:	Vertex Re Hackberry		,	Inc.							
Sample ID:	LCS-77198	Samp	Гуре: LC	s	Tes	tCode: EF	A Method	8021B: Volat	iles		
Client ID:	LCSS	Batc	h ID: 77 1	198	F	RunNo: 9 9	366				
Prep Date:	8/30/2023	Analysis [Date: 9/ *	1/2023	S	SeqNo: 36	627740	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene		1.1	0.025	1.000	0	106	70	130			
Toluene		1.0	0.050	1.000	0	105	70	130			
Ethylbenzene		1.1	0.050	1.000	0	106	70	130			
Xylenes, Total		3.2	0.10	3.000	0	106	70	130			
Surr: 4-Brom	ofluorobenzene	1.1		1.000		106	39.1	146			
Sample ID:	mb-77198	Samp	Гуре: МЕ	BLK	Tes	tCode: EF	A Method	8021B: Volat	iles		
Client ID:	PBS	3S Batch ID: 77198 RunNo: 99366									
Prep Date:	8/30/2023	Analysis [Date: 9/ *	1/2023	5	SeqNo: 36	627741	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-Brom	ofluorobenzene	1.1		1.000		106	39.1	146			
Sample ID:	2308f20-002ams	Samp	Гуре: МS	;	Tes	tCode: EF	PA Method	8021B: Volat	iles		
Client ID:	BH23-15 2'	Batc	h ID: 771	198	F	RunNo: 9 9	9411				
Client ID: Prep Date:	BH23-15 2' 8/30/2023	Batc Analysis [RunNo: 99 SeqNo: 36		Units: mg/K	ģ		
Prep Date:				1/2023 SPK value	S			Units: mg/K HighLimit	⁄g %RPD	RPDLimit	Qual
Prep Date: Analyte		Analysis I Result 1.0	Date: 9/ PQL 0.024	1/2023 SPK value 0.9756	SPK Ref Val	SeqNo: 36 %REC 105	528941 LowLimit 70	HighLimit 130	-	RPDLimit	Qual
Prep Date: Analyte Benzene Foluene		Analysis I Result 1.0 1.0	Date: 9/ * PQL 0.024 0.049	1/2023 SPK value 0.9756 0.9756	SPK Ref Val 0 0	SeqNo: 36 %REC 105 106	28941 LowLimit 70 70	HighLimit 130 130	-	RPDLimit	Qual
Prep Date: Analyte Benzene Foluene		Analysis I Result 1.0 1.0 1.0	Date: 9/ PQL 0.024	1/2023 SPK value 0.9756	SPK Ref Val	SeqNo: 36 %REC 105	528941 LowLimit 70	HighLimit 130	-	RPDLimit	Qual
Prep Date: Analyte Benzene Foluene Ethylbenzene		Analysis I Result 1.0 1.0	Date: 9/ * PQL 0.024 0.049	1/2023 SPK value 0.9756 0.9756	SPK Ref Val 0 0	SeqNo: 36 %REC 105 106	28941 LowLimit 70 70	HighLimit 130 130	-	RPDLimit	Qual
Prep Date: Analyte Benzene Foluene Ethylbenzene Kylenes, Total		Analysis I Result 1.0 1.0 1.0	Date: 9/ PQL 0.024 0.049 0.049	1/2023 SPK value 0.9756 0.9756 0.9756	SPK Ref Val 0 0 0	SeqNo: 36 %REC 105 106 107	28941 LowLimit 70 70 70	HighLimit 130 130 130	-	RPDLimit	Qual
Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom	8/30/2023	Analysis I Result 1.0 1.0 1.0 3.2 1.0	Date: 9/ PQL 0.024 0.049 0.049	1/2023 SPK value 0.9756 0.9756 0.9756 2.927 0.9756	SPK Ref Val 0 0 0 0	SeqNo: 36 %REC 105 106 107 109 107	28941 LowLimit 70 70 70 70 39.1	HighLimit 130 130 130 130	%RPD	RPDLimit	Qual
Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID:	8/30/2023	Analysis I Result 1.0 1.0 1.0 3.2 1.0 Samp ⁻	Date: 9 / PQL 0.024 0.049 0.049 0.098	1/2023 SPK value 0.9756 0.9756 0.9756 2.927 0.9756	SPK Ref Val 0 0 0 0 0 Tes	SeqNo: 36 %REC 105 106 107 109 107	228941 LowLimit 70 70 70 70 70 39.1 24 Method	HighLimit 130 130 130 130 130 146	%RPD	RPDLimit	Qual
Prep Date: Analyte Benzene Foluene Ethylbenzene Kylenes, Total Surr: 4-Brom Sample ID: Client ID:	8/30/2023 hofluorobenzene 2308f20-002amsd	Analysis I Result 1.0 1.0 1.0 3.2 1.0 Samp ⁻	Date: 9/ PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 771	1/2023 SPK value 0.9756 0.9756 0.9756 2.927 0.9756 5D	SPK Ref Val 0 0 0 0 0 Tes F	SeqNo: 36 %REC 105 106 107 109 107 tCode: EF	289941 LowLimit 70 70 70 70 39.1 PA Method 9411	HighLimit 130 130 130 130 130 146	%RPD	RPDLimit	Qual
Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID:	8/30/2023 tofluorobenzene 2308f20-002amsd BH23-15 2'	Analysis I Result 1.0 1.0 1.0 3.2 1.0 Samp Batc Analysis I Result	Date: 9/ PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 771 Date: 9/ PQL	1/2023 SPK value 0.9756 0.9756 2.927 0.9756 5D 198 1/2023 SPK value	SPK Ref Val 0 0 0 0 0 Tes F	SeqNo: 36 %REC 105 106 107 109 107 tCode: EF RunNo: 99 SeqNo: 36 %REC	228941 LowLimit 70 70 70 70 39.1 24 A Method 0411 528942 LowLimit	HighLimit 130 130 130 130 146 8021B: Volat Units: mg/K HighLimit	%RPD iles %g %RPD	RPDLimit	Qual
Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte	8/30/2023 tofluorobenzene 2308f20-002amsd BH23-15 2'	Analysis I Result 1.0 1.0 1.0 3.2 1.0 Samp ^T Batc Analysis I	Date: 9/ PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 771 Date: 9/	1/2023 SPK value 0.9756 0.9756 2.927 0.9756 50 198 1/2023	SPK Ref Val 0 0 0 0 0 Tes F	SeqNo: 36 %REC 105 106 107 109 107 tCode: EF RunNo: 99 SeqNo: 36 %REC 105	228941 LowLimit 70 70 70 70 39.1 24 Method 9411 528942	HighLimit 130 130 130 130 146 8021B: Volat Units: mg/K	%RPD		
Prep Date: Analyte Benzene Toluene Ethylbenzene Kylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte Benzene	8/30/2023 tofluorobenzene 2308f20-002amsd BH23-15 2'	Analysis I Result 1.0 1.0 1.0 3.2 1.0 Samp Batc Analysis I Result	Date: 9/ PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 771 Date: 9/ PQL	1/2023 SPK value 0.9756 0.9756 2.927 0.9756 5D 198 1/2023 SPK value	SPK Ref Val 0 0 0 0 0 Tes F SPK Ref Val	SeqNo: 36 %REC 105 106 107 109 107 tCode: EF RunNo: 99 SeqNo: 36 %REC	228941 LowLimit 70 70 70 70 39.1 24 A Method 0411 528942 LowLimit	HighLimit 130 130 130 130 146 8021B: Volat Units: mg/K HighLimit	%RPD iles %g %RPD	RPDLimit	
Prep Date: Analyte Benzene Toluene Ethylbenzene Kylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date: Analyte Benzene Toluene	8/30/2023 tofluorobenzene 2308f20-002amsd BH23-15 2'	Analysis I Result 1.0 1.0 1.0 3.2 1.0 Samp ^T Batc Analysis I Result 1.0	Date: 9/ PQL 0.024 0.049 0.049 0.098 Type: MS h ID: 771 Date: 9/ PQL 0.024	1/2023 SPK value 0.9756 0.9756 2.927 0.9756 198 1/2023 SPK value 0.9737	SPK Ref Val 0 0 0 0 Tes FR SPK Ref Val 0	SeqNo: 36 %REC 105 106 107 109 107 tCode: EF RunNo: 99 SeqNo: 36 %REC 105	228941 LowLimit 70 70 70 70 39.1 24 Method 9411 528942 LowLimit 70	HighLimit 130 130 130 130 146 8021B: Volat Units: mg/K HighLimit 130	%RPD iles 59 %RPD 0.586	RPDLimit 20	
Prep Date: Analyte Benzene Toluene Ethylbenzene Xylenes, Total Surr: 4-Brom Sample ID: Client ID: Prep Date:	8/30/2023 tofluorobenzene 2308f20-002amsd BH23-15 2'	Analysis I Result 1.0 1.0 3.2 1.0 Samp Batcl Analysis I Result 1.0 1.0	Date: 9/ PQL 0.024 0.049 0.049 0.098 Fype: MS h ID: 771 Date: 9/ PQL 0.024 0.049	1/2023 SPK value 0.9756 0.9756 2.927 0.9756 30 30 30 30 30 30 30 30 30 30	SPK Ref Val 0 0 0 0 Tes F SPK Ref Val 0 0	SeqNo: 36 %REC 105 106 107 109 107 tCode: EF RunNo: 99 SeqNo: 36 %REC 105 107	228941 LowLimit 70 70 70 70 39.1 24 Method 0411 528942 LowLimit 70 70 70 70 70 70 70 70 70 70	HighLimit 130 130 130 130 146 8021B: Volat Units: mg/k HighLimit 130 130 130	%RPD iles 59 0.586 0.690	RPDLimit 20 20	

Qualifiers:

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

WO#: 2308F20

Client: Project:	Vertex Resources S Hackberry 18 Fed 2	,						
Sample ID: LCS-77		Type: LCS			8021B: Volatile	es		
Client ID: LCSS Prep Date: 8/29/2		h ID: 77172 Date: 9/2/2023	RunNo: SeqNo:	99411 3628971	Units: %Rec			
Analyte	Result	PQL SPK value	SPK Ref Val %REC	C LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorober	izene 1.1	1.000	108	3 39.1	146			
Sample ID: mb-771	72 Samp1	Гуре: MBLK	TestCode:	EPA Method	8021B: Volatile	s		
Client ID: PBS	Batcl	h ID: 77172	RunNo:	99411				
Prep Date: 8/29/2	023 Analysis [Date: 9/2/2023	SeqNo:	3628973	Units: %Rec			
Analyte	Result	PQL SPK value	SPK Ref Val %REC	C LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorober	izene 1.0	1.000	10	5 39.1	146			

Qualifiers:

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

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2308F20

11-Sep-23

WO#:

Released to Imaging: 3/5/2024 11:07:34 AM

HALL ENVIRONMENTAL ANALYSIS LABORATORY	TEL: 505-345-3975	4901 Hawkins Ni querque, NM 8710	e 9 San 7	nple Log-In C	Check List
Client Name: Vertex Resources Services, Inc.	Work Order Number:	2308F20		RcptNo	: 1
Received By: Tracy Casarrubias 8	/29/2023 7:55:00 AM	2. ·			
Completed By: Tracy Casarrubias 8	/29/2023 8:40:51 AM				
Reviewed By: 18 8-24-23					
Chain of Custody			_	_	
1. Is Chain of Custody complete?		Yes 🗌	No 🗹	Not Present	
2. How was the sample delivered?		Courier			
Log In 3. Was an attempt made to cool the samples?		Yes 🔽	No 🗌	NA 🗌	
4. Were all samples received at a temperature of	>0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗌	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
6. Sufficient sample volume for indicated test(s)?		Yes 🗹	No 🗌		
$7_{\rm \cdot}$ Are samples (except VOA and ONG) properly p	reserved?	Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
9. Received at least 1 vial with headspace <1/4" fo	or AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
10. Were any sample containers received broken?		Yes	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗌	bottles checked for pH: (<2 c	or >12 unless noted)
12. Are matrices correctly identified on Chain of Cu	stody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyses were requested?		Yes 🗹	No 🗌		Alachan
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗌	Checked by:	1~8/29/23
Special Handling (if applicable)					
15. Was client notified of all discrepancies with this	s order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:				
By Whom:	Via:	🗋 eMail 🔄 Pho	ne 🗌 Fax	In Person	
Regarding:					
Client Instructions: Mailing address.pho	one number and Email/	Fax are missing c	on COC- TN	IC 8/29/23	
16. Additional remarks:					
17. <u>Cooler Information</u> Cooler No Temp ⁰C Condition Seal 1 0 Good Yes	Intact Seal No S Yogi	Seal Date Si	igned By		

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ceived by OCD: 11/1/2023 1:09:31 PM		Page 136 of 1.
Chain-of-Custody Record	Turn-Around Time:	HALL ENVIRONMENTAL
client: Vertex (Devan)	Standard Rush 5 DAM	ANALYSIS LABORATORY
VELIER LDEVUNS	Project Name:	www.hallenvironmental.com
Nailing Address: On file	Hackberry 18 Fed 2	4901 Hawkins NE - Albuquerque, NM 87109
Oh Gile	Project #:	Tel. 505-345-3975 Fax 505-345-4107
	23E-03903	Analysis Request
hone #: mail or Fax#:	Project Manager:	sent) SO4
A/QC Package:		s (802 0 / MR PCB's PO ₄ , 9
Standard Level 4 (Full Validation)	Kent Stallings	TMB's (8021) / DRO / MRO) 8082 PCB's 4.1) - 8270SIMS NO ₂ , PO ₄ , SO NO ₂ , PO ₄ , SO
ccreditation: Az Compliance	Sampler: Zach Englishert	F 2 8 4 2 2 2 5 5
NELAC 🗆 Other		
EDD (Type)	# of Coolers: 1 Cooler Temp(including CF): 0.1-0.1=0 (°C)	BTEX) MTBE / TI TPH:8915D(GRO / 8081 Pesticides/80 EDB (Method 504. PAHs by 8310 or 8 RCRA 8 Metals CI, F, Br, NO ₃ , N 8260 (VOA) 8270 (Semi-VOA) 8270 (Semi-VOA)
	ContainerPreservativeHEAL No.Type and #Type2308F20	808 B21 CC CC B4 EDE 808 B1E
ate Time Matrix Sample Name		
9:15 BH23-15 2	500	
9:31 BH23-16 0	003	
9:45 BH23-16 2	004	
10:00 BH23-17 0-	005	
10:15 BH23-17 2'	006	
10:30 BH23-18 0'	f 00	
10:45 BH23-18 2	008	
11:00 BH23-19 0-	009	
11:15 BH23- 19 2	010	
11:30 BH23-20 0	011	
V 1145 V BH23-20 2	Received by: Via: Date Time	Remarks:
Date: Time: Relinquished by:	hereinen of	(c) aharris Gvertex.ca
	Received by: Via:Court Date Time	Kstallings Qvertex.ca
Date: Time: Relinquished by:	8/29/27 7: SJ	Direct Bill to Devon
120/3 1900 Circum	The source of th	this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 3/5/2024 11:07:34 AM

Received	by	OCD:	11/1/2023	1:09:31 PM
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eceived l	by OCD:	11/1/202	3 1:09:31 PM														Page	e 137 o	f 138
Client:			stody Record	Turn-Around		5 Davi													,
	Client: Vertex (Devon)			Project Name	Project Name:								nviron				~ ` `		
Mailing	Address	: or	file	Project #:	eriy 18	ted 2										/1 8710	9		
					02000		-	Te	el. 50	5-34	5-397	_			-345-4	4107			
Phone #	<i>t</i> :	1.0-			-03903				1000				alysis +	Req			a second		
email or	Fax#:			Project Mana	iger:		3	l Ő	s				500		sent				
QA/QC F □ Stan	-		Level 4 (Full Validation	n) Kent	Stallin	95	TMB's (8021)	N/OS	PCB's		OSIM:		, rO4,		ent/Abs	- 310			
	tation:	□ Az Co □ Other	mpliance	Sampler: 2 On Ice:	1ch ₽ Ves	DNO MOGI		SO / DF	s/8082	504.1)	or 827	5	" NO2	(Y	(Prese	5 - 15			
				# of Coolers:	and the second se			5	cide	po	310	etal		l-ĭ	E				
		Matrix	Sample Name	Cooler Temp Container Type and #)(Including CF): 0 Preservative Type		BTEX) MTBE /	TPA: 8015D(GRO / DRO / MRO)	8081 Pesticides/8082	EDB (Method	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	UI)F, Br, NU3, NU2, F 8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)				
			BH23-21 0-	liar	ice	013	TY	\square						197243		201			
0-2023		soil	0.101	- Jui	100			\square								echaran'i			
	12:15		RA23-21 2' B 1+23-22 0			014							\mathbf{H}			12 2			
	12:45		BH73-22 2		V	016	V	V					4						-
											+	+	_	-	\square				+
											\neg					i se			
																			_
						on sel8 ≥ 1000 - • 12 0		<u> </u>						_	-				+
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				-0								_		-					
																	-		
Date:	Time:	Relinquis		Received by: MMMM Received by:	Via:	Date Time 8/28/23 845 Date Time	Re	mark	s:										
Date:	Time:	Relinquis	$AAAAA = \infty$	Received by:	Via: Caun-	8/29/27 7:55	5			D				di.					

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District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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

Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

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Action 281842

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	281842
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By Condition Condition Date rhamlet The Remediation Plan is Conditionally Approved. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation 3/5/2024 samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site assessment/characterization/proven depth to water determination. Sidewall/Edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Please collect confirmation samples, representing no more than 200 ft2. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined. All off pad areas must meet reclamation standards set forth in the OCD Spill Rule. The work will need to occur in 90 days after the report has been reviewed.