

May 27, 2021 Vertex Project #: 21E-00087-001

Spill Closure Report: Stebbins Federal SWD Slot 4 20-204

Unit M, Section 20, Township 20 South, Range 29 East

County: Eddy

NMOCD Tracking Number: nAPP2102534956

**Prepared For:** Matador Production Company

5400 Lyndon B Johnson Freeway

**Suite 1500** 

Dallas, Texas 75240

New Mexico Oil Conservation Division - District 2 - Artesia

811 South First Street

Artesia, New Mexico 88210

Matador Production Company (Matador) retained Vertex Resource Services Inc. (Vertex) to conduct a spill assessment and remediation for a produced water release that occurred on January 12, 2021, at Stebbins Federal SWD Slot 4 20-204 (hereafter referred to as "Stebbins"). Matador provided notification of the spill to New Mexico Oil Conservation Division (NMOCD) District 2 and the Bureau of Land Management (BLM), who own the land, via submission of an initial C-141 Release Notification (Attachment 1) on January 13, 2021. The NMOCD tracking number assigned to this incident is nAPP2102534956.

This letter provides a description of the spill assessment and remediation activities, and demonstrates that closure criteria established in 19.15.29.12 *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) have been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release.

### **Incident Description**

On January 12, 2021, a release occurred at Matador's Stebbins site when a nipple on the sand filter inlet broke. This incident resulted in the release of approximately 293 barrels (bbls) of produced water onto the engineered pad. A vacuum truck arrived on-site to recover free fluids; approximately 250 bbls of produced water were recovered. The spill was contained within the boundaries of the engineered pad. No produced water was released into undisturbed areas or waterways.

### **Site Characterization**

The release at Stebbins occurred on federally-owned land, N 32.55263, W 104.10536, approximately 10 miles northeast of Carlsbad, New Mexico. The legal description for the site is Unit M, Section 20, Township 20 South, Range 29 East, Eddy County, New Mexico. This location is within the Permian Basin in southeast New Mexico and has historically been used for oil and gas exploration and production, and rangeland. An aerial photograph and site schematic are included in Attachment 2 (Figure 1).

2021 Spill Assessment and Closure May 2021

The Stebbins complex consists of saltwater disposal (SWD) equipment, a tank battery, and nearby oil and gas exploration and production wellpads, and is typical of oil and gas-related sites in the western portion of the Permian Basin. The following sections specifically describe the release area on the northern edge of the tank battery containment and toward the fence line of the lease at the north edge of the pad.

The surrounding landscape is associated with the hills, plains and ridges typical of elevations between 1,250 and 5,000 feet above sea level. The climate is semi-arid with an average annual precipitation ranging between 10 and 25 inches. Historically, the plant communities in this area have been dominated by black grama, dropseeds and bluestems with scattered shinnery oak. Perennial and annual forb abundance and distribution are dependent on precipitation. Litter and, to a lesser extent, bare ground make up a significant proportion of ground cover (United States Department of Agriculture, Natural Resources Conservation Service, 2020). Limited to no vegetation is allowed to grow on the compacted facility and disposal pad area.

The Geological Map of New Mexico indicates the surface geology at Stebbins is comprised of Qp — Piedmont alluvial deposits (New Mexico Bureau of Geology and Mineral Resources, 2020). The Natural Resources Conservation Service Web Soil Survey characterizes the soil at Stebbins as Reeves-Gypsum, which is characterized by loam, clay loam and gypsiferous material. This soil tends to be well drained with high runoff and very low water storage in the soil profile (United States Department of Agriculture, Natural Resources Conservation Service, 2020). There is low potential for karst geology to be present near Stebbins (United States Department of the Interior, Bureau of Land Management, 2020).

There is no surface water located on-site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is Lake Avalon, located approximately 8.5 miles southwest of the site (United States Fish and Wildlife Service, 2020). There are no continuously flowing watercourses, lakebeds, sinkholes, playa lakes, or other critical water or community features at Stebbins, as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

The nearest recent well to the site is a test borehole that was drilled on the northeast corner of the site to determine depth to ground water by Atkins Engineering. Depth to groundwater was at 44 feet below ground surface (bgs). Documentation pertaining to site characterization and depth to groundwater determination is included in Attachment 3.

### **Closure Criteria Determination**

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

Based on data included in the closure criteria determination worksheet, the release at Stebbins is not subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 NMAC and the closure criteria for the site are determined to be associated with the following constituent concentration limits based on depth to groundwater.

2021 Spill Assessment and Closure May 2021

Table 1. Closure Criteria for Soils Impacted by a Release		
Depth to Groundwater Constituent Limit		
<50 feet	Chloride	600 mg/kg
	TPH <sup>1</sup>	100 /1
	(GRO + DRO + MRO)	100 mg/kg
	BTEX <sup>2</sup>	50 mg/kg
	Benzene	10 mg/kg

<sup>&</sup>lt;sup>1</sup>Total petroleum hydrocarbons (TPH) = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO) <sup>2</sup>Benzene, toluene, ethylbenzene and xylenes (BTEX)

### **Remedial Actions**

On January 12, 2021, Matador contracted with Vertex to complete release delineation and remediation at Stebbins through field screening procedures, oversight of the remediation fieldwork and final confirmatory sampling. The initial spill inspection and site characterization activities at Stebbins were completed by Vertex on January 14, 2021. The Daily Field Report (DFR) and field screening data associated with the visit are included in Attachment 4. The release extent was determined to be approximately 45,249 square feet. Using initial field screening data (Attachment 2 – Table 2), the release was delineated horizontally and vertically, and remediation was started. Excavation of impacted soils was conducted between March 24 and 30, 2021, with a Vertex representative on-site to conduct field screening procedures to determine final horizontal and vertical extents of the excavation area. The final excavation extent was 46,812 square feet.

On March 22, 2021, and April 15, 2021, during excavation and following the completion of excavation activities, respectively, Vertex provided notification of confirmation sampling to NMOCD (Attachment 5), as required by Subparagraph (a) of Paragraph (1) of Subsection D 19.15.29.12 NMAC.

Between March 24 and 30, 2021, Vertex collected a total of 220 five-point composite confirmatory samples from the base and side walls of the excavation, at depths ranging between ground surface and 1.5 feet bgs. Each composite sample was representative of no more than 200 square feet per the alternate sampling method outlined in Subparagraph (c) of Paragraph (1) of Subsection D 19.15.29.12 NMAC, which does not require prior NMOCD approval.

Vertex requested an extension via email on March 30, 2021, with approval from NMOCD for an additional 60 days to complete excavation, confirmation sampling and final reporting (Attachment 8). Additional sampling was completed on April 20, 2021, for three sample areas to assess samples above criteria with five-point composite confirmatory samples. The composite samples were placed into laboratory-provided containers, preserved on ice, and submitted to a National Environmental Laboratory Accreditation Program-approved laboratory for chemical analysis.

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

A GeoExplorer 7000 Series Trimble global positioning system (GPS) unit, or equivalent, was used to map the approximate center of each of the five-point composite samples. The confirmatory sampling locations are presented on Figure 2 (Attachment 2). Relevant equipment and prominent features/reference points at the site are mapped as well.

2021 Spill Assessment and Closure May 2021

### **Closure Request**

Vertex recommends no additional action to address the release at Stebbins. Laboratory analyses of the final confirmatory samples showed constituent of concern concentration levels below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs as presented in Table 1. There are no anticipated risks to human, ecological or hydrological receptors associated with the release site.

Vertex requests that this incident (nAPP2102534956) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Matador certifies that all information in this report and the attachments is correct, and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the January 12, 2021, release at Stebbins.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 575.361.9880 or mpeppin@vertex.ca.

Sincerely,

Monica Peppin
PROJECT MANAGER

### **Attachments**

Attachment 1.	NMOCD C-141 Report
Attaciiiieii 1.	MINIOCO C-141 MEDOLI

Attachment 2. Figures

Attachment 3. Closure Criteria for Soils Impacted by a Release Research Determination Documentation

Attachment 4. Daily Field Report(s) with Photographs

Attachment 5. Required 48-hr Notification of Confirmation Sampling to Regulatory Agencies

Attachment 6. Characterization and Confirmatory Sampling Laboratory Results Tables

Attachment 7. Laboratory Data Reports/Chain of Custody Forms

Attachment 8. Extension Request and Approval

2021 Spill Assessment and Closure May 2021

### References

- New Mexico Bureau of Geology and Mineral Resources. (2020). *Interactive Geologic Map.* Retrieved from http://geoinfo.nmt.edu
- New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.
- United States Department of Agriculture, Natural Resources Conservation Service. (2020). *Web Soil Survey*. Retrieved from https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx
- United States Department of the Interior, Bureau of Land Management. (2020). *New Mexico Cave/Karsts*. Retrieved from https://www.blm.gov/programs/recreation/recreation-programs/caves/new-mexico
- United States Department of the Interior, United States Geological Survey. (2020). *Groundwater for New Mexico: Water Levels*. Retrieved from https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?
- United States Fish and Wildlife Service. (2020). *National Wetlands Inventory*. Retrieved from https://www.fws.gov/wetlands/Data/Mapper.html

2021 Spill Assessment and Closure May 2021

### Limitations

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

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

### **ATTACHMENT 1**

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

### **Release Notification**

### **Responsible Party**

				Loanen		
Responsible Party Matador Production Company			ompany	OGRID	228937	
Contact Name Arsenio Jones				Contact Te	Γelephone <sub>575-361-4333</sub>	
Contact email arsenio.jones@matadorresources.com		Incident #	# (assigned by OCD) nAPP2102534956			
Contact mailing	address	5400 LBJ Freewa	ay, Suite 1500 Dal	llas, TX 75240		
			Location	of Release So	Source	
Latitude: 32.	.55263			Longitude:	: -104.10536	
			(NAD 83 in dec	imal degrees to 5 decim	imal places)	_
Site Name: Ste	ebbins Fed	leral SWD Slot 4	20-204	Site Type:	: swD	
Date Release Dis				API#: (if app	applicable) N/A	
		01/12/2021			IV/A	
Unit Letter S	Section	Township	Range	Coun	inty	
M	20	20S	29E	Eddy	ly	
			Nature and	Volume of I	ic justification for the volumes provided below)	
Crude Oil		Volume Release			Volume Recovered (bbls)	
X Produced Wa	ater	Volume Release	d (bbls) 293 bbls	S	Volume Recovered (bbls) 250 bbls	
Is the concentration of dissolved chloride in the produced water >10,000 mg/l?		nloride in the	X Yes No			
Condensate Volume Released (bbls)			Volume Recovered (bbls)			
☐ Natural Gas Volume Released (Mcf)			Volume Recovered (Mcf)			
Other (descri	ther (describe) Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)			
Cause of Release		ilter inlet broke.				

Page	9	01	f 525
- 0	_		

Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the responsible party consider this a major release?
release as defined by	
19.15.29.7(A) NMAC?	Release was greater than 25 bbls.
X Yes No	
If VES was immediate n	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
	· · · · · · · · · · · · · · · · · · ·
Immediate notification was pro January 13, 2021 at approxima	ovided to NMOCD, and the BLM, by Natalie Gordon of Vertex Resource Group via email on Wednesday,
<b>J</b> -7 - 11	
	Initial Response
The responsible	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury
X The source of the rele	ease has been stopped.
	as been secured to protect human health and the environment.
	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.
	•
	ecoverable materials have been removed and managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain why:
Dar 10 15 20 8 D (4) NM	IAC the responsible party may commence remediation immediately after discovery of a release. If remediation
	a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred
	nt area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the info	rmation 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
	ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have atteand remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In
	f 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:	ones Title: RES Specialist
Arsenio Jo	. 1
Signature:	Date: 6/12/2021
	T la la constant
email:arsenio.jones@mata	dorresources.com Telephone: 575-361-4333
OCD Only	
OCD Only	
Received by:	Date:

	Page 10 of 525
Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

### **Site Assessment/Characterization**

This information must be provided to the appropriate district office no taler than 20 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release?	(ft bgs)	
Did this release impact groundwater or surface water?	Yes X No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X 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 X No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Yes X 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 X No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes X No	
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No	
Are the lateral extents of the release overlying a subsurface mine?	Yes X No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	Yes X No	
Are the lateral extents of the release within a 100-year floodplain?	Yes X No	
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	Yes X 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.

- X Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- X Field data
- X Data table of soil contaminant concentration data
- X Depth to water determination
- X Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- NA Boring or excavation logs
- X Photographs including date and GIS information
- Topographic/Aerial maps
- X 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.

Received by OCD: 6/24/2021 10:20:36 AM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Page 11	of 525

Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

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: Arsenio Jones	Title: RES Specialist	
Signature:	Date: 6/12/2021	
email: <u>arsenio.jones@matadorresources.com</u>	Telephone:575-361-4333	
OCD Only		
Received by:	Date:	

Page 12 of 525

Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

### Closure

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

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

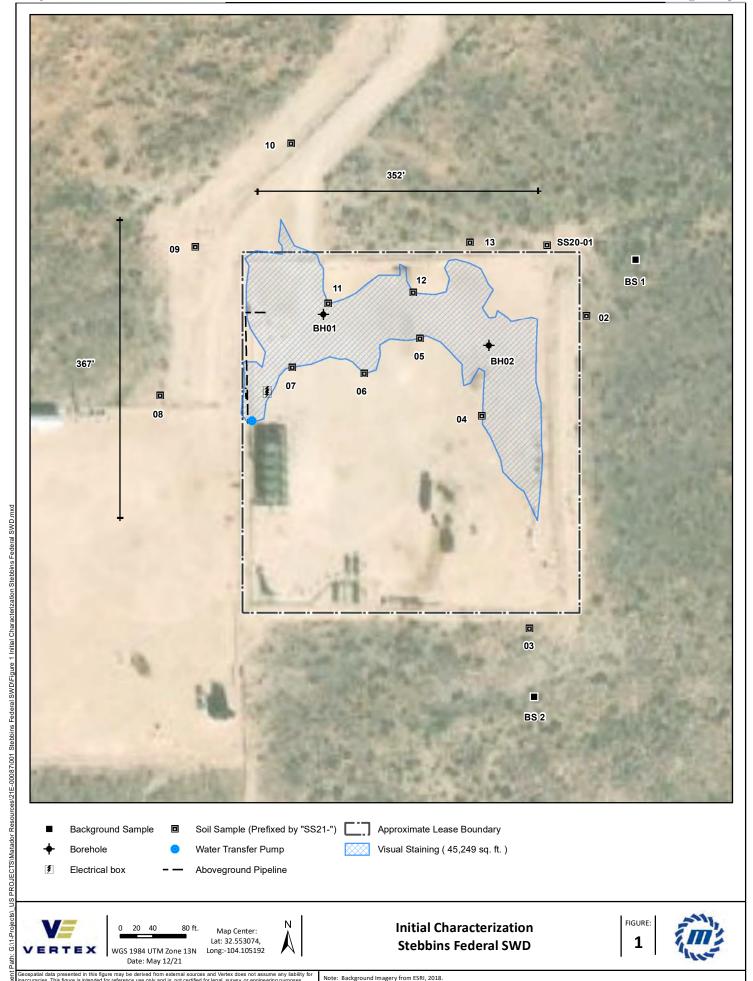
	•
X A scaled site and sampling diagram as described in 19.15.2	9.11 NMAC
X Photographs of the remediated site prior to backfill or phot must be notified 2 days prior to liner inspection)	tos of the liner integrity if applicable (Note: appropriate OCD District office
X Laboratory analyses of final sampling (Note: appropriate O	DDC District office must be notified 2 days prior to final sampling)
X Description of remediation activities	
may endanger public health or the environment. The acceptance should their operations have failed to adequately investigate and human health or the environment. In addition, OCD acceptance compliance with any other federal, state, or local laws and/or regrestore, reclaim, and re-vegetate the impacted surface area to the accordance with 19.15.29.13 NMAC including notification to the	Title:
OCD Only	
Received by:	Date:
	rty of liability should their operations have failed to adequately investigate and ce water, human health, or the environment nor does not relieve the responsible nd/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:

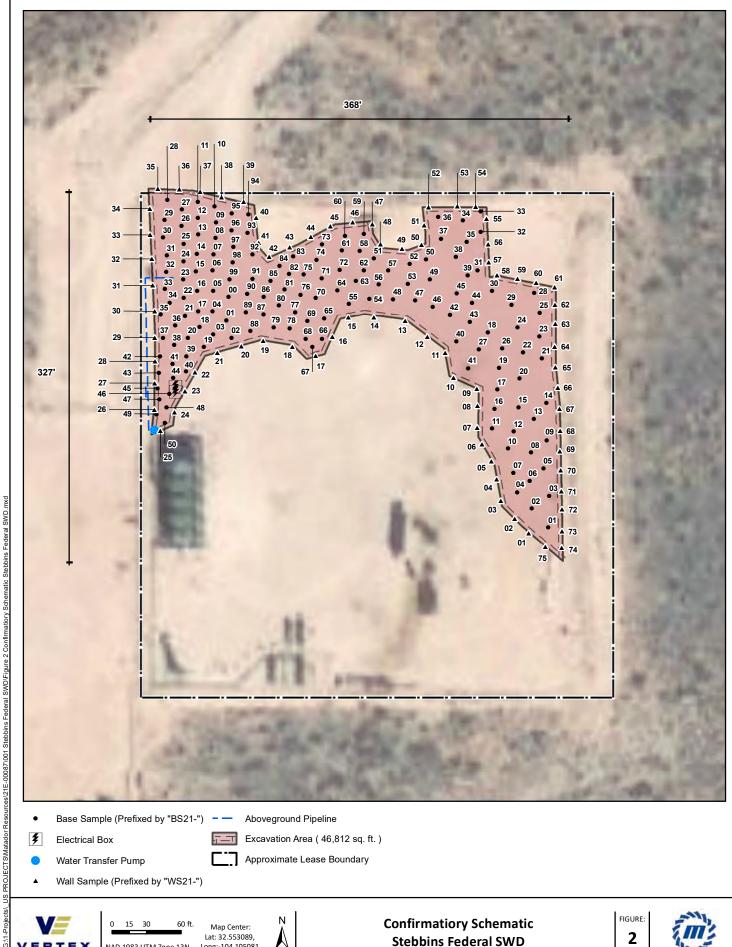
Equation (1) Inputs	(LxW)/43560sqft		Equation (1) Assumptions
Area 37	Length (ft) 361 Width (ft)	1.0388 Acres	1 acre =43560 sqft
Equation (2) Inputs	Ksat*27,154gal/(42gal)		Equation (2) Assumptions
Ksat 0.872	in Inches per hour located at	https://websoilsurvey.nrcs.usda.gov	1 acre/inch =27,154 gal 1bbl = 42gal
		564.35 BBL/Acre/hr	
Equation (3)	(Eq2)X(Eq1) Area adjusted volume	•	
		586.23 BBI/hr max	
Equation (4) Inputs	(Eq3)X release duration (hours)+rec	overed volume	Equation (4) Assumptions
	BBL		recovered fluids are not in soil solution
0.	5 Duration (hr)		
			293.12 BBL

<sup>&</sup>lt;sup>1</sup> infiltratration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface: (National Soil Survey Handobook (USDA)

<sup>&</sup>lt;sup>2</sup> (Ksat) Hydraulic Conductivity. (National Soil Survey Handobook (USDA) conductivity is often referred to as coefficient of permeability, most commonly shortened to permeability

### **ATTACHMENT 2**





Water Transfer Pump

Approximate Lease Boundary

Wall Sample (Prefixed by "WS21-")



NAD 1983 UTM Zone 13N Date: Apr 20/21

Map Center: Lat: 32.553089, Long:-104.105081



**Confirmatiory Schematic Stebbins Federal SWD** 

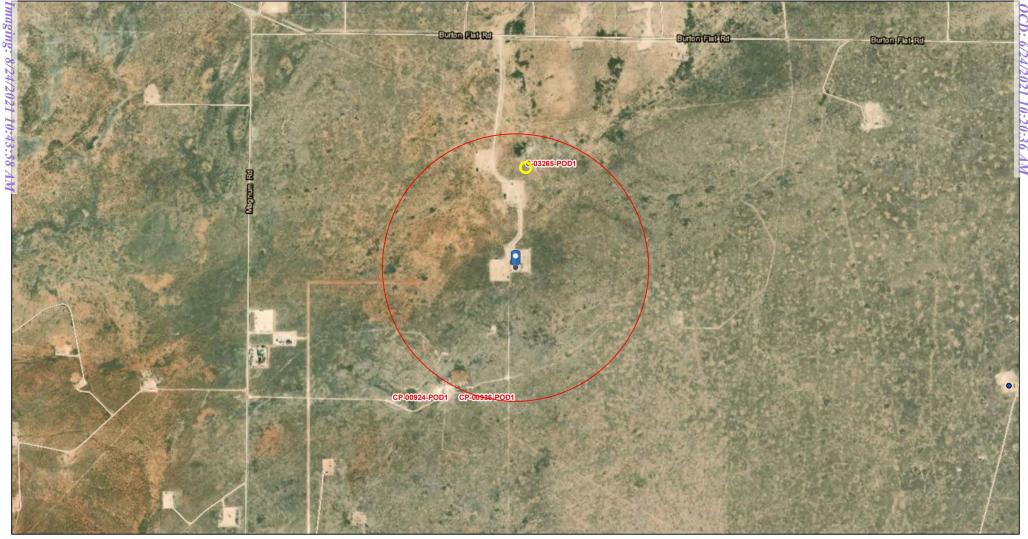
FIGURE: 2



### **ATTACHMENT 3**

Site Nam	e: Stebbins Federal SWD		
Spill Coo	rdinates:	X: 32.55263	Y: -104.10536
Site Spec	ific Conditions	Value	Unit
1	Depth to Groundwater	44	feet
2	Within 300 feet of any continuously flowing	45,177	feet
2	watercourse or any other significant watercourse	45,177	Teet
3	Within 200 feet of any lakebed, sinkhole or playa lake	15,548	feet
3	(measured from the ordinary high-water mark)	13,346	leet
4	Within 300 feet from an occupied residence, school,	17,641	feet
4	hospital, institution or church	17,041	leet
	i) Within 500 feet of a spring or a private, domestic		
5	fresh water well used by less than five households for	17,641	feet
,	domestic or stock watering purposes, or		
	ii) Within 1000 feet of any fresh water well or spring	17,641	feet
	Within incorporated municipal boundaries or within a		
	defined municipal fresh water field covered under a		(Y/N)
6	municipal ordinance adopted pursuant to Section 3-27-	No	
	3 NMSA 1978 as amended, unless the municipality		
	specifically approves		
7	Within 300 feet of a wetland	8,432	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
			Critical
9	Within an unctable area (Varct Man)	Low	High
9	Within an unstable area (Karst Map)	LOW	Medium
			Low
10	Within a 100 year Floodalain	>100	oor
10	Within a 100-year Floodplain	>100	year
11	Soil Type	Reeves-Gypsum	
12	Ecological Classification	Lo	oamy
13	Geology	Piedmont a	lluvial deposits
		501	<50'
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	51-100'
			>100'

### Stebbins Federal SWD

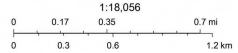


1/26/2021, 9:13:26 AM GIS WATERS PODs

Active

OSE District Boundary

SiteBoundaries



USDA FSA, GeoEye, Maxar, Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC



### New Mexico Office of the State Engineer

### **Point of Diversion Summary**

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** 

UNKNOWN

Q64 Q16 Q4 Sec Tws Rng

 $\mathbf{X}$ 

C 03265 POD1

20S 29E 20

584052 3602648\*

**Driller License:** 122 **Driller Company:** 

UNKNOWN

**Driller Name:** 

**Drill Finish Date:** 

12/31/1920

**Plug Date:** 

**Drill Start Date:** Log File Date:

**PCW Rcv Date:** 

Source:

Pump Type:

Pipe Discharge Size:

**Estimated Yield:** 

**Casing Size:** 

6.00 **Depth Well:** 

89 feet Depth Water: 52 feet

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

1/26/21 9:15 AM

POINT OF DIVERSION SUMMARY

<sup>\*</sup>UTM location was derived from PLSS - see Help



**National Water Information System: Web Interface** 

**USGS** Water Resources

USGS Home Contact USGS Search USGS

ata Category:		Geographic Area:		
Groundwater	~	United States	~	GC

#### Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

#### Search Results -- 1 sites found

site\_no list =

• 323245104064501

#### Minimum number of levels = 1

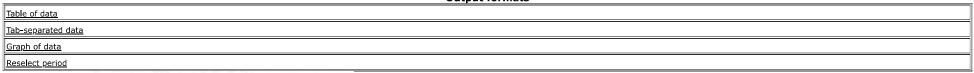
Save file of selected sites to local disk for future upload

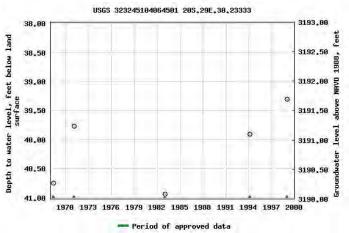
### USGS 323245104064501 20S.29E.30.23333

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°32'45", Longitude 104°06'45" NAD27
Land-surface elevation 3,231 feet above NAVD88
The depth of the well is 70 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

#### **Output formats**





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

Questions about sites/data? Feedback on this web site Automated retrievals <u>Help</u> Data Tips **Explanation of terms** Subscribe for system changes **News** 

Accessibility

FOIA

Privacy

Policies and Notices

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

Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2021-01-26 11:05:57 EST

0.66 0.58 nadww01





**National Water Information System: Web Interface** 

**USGS** Water Resources

USGS Home Contact USGS Search USGS

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

#### Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

#### Search Results -- 1 sites found

site\_no list =

• 323407104051001

### Minimum number of levels = 1

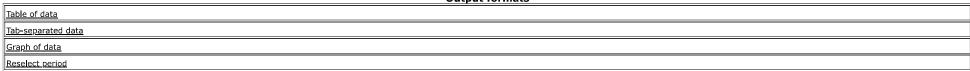
Save file of selected sites to local disk for future upload

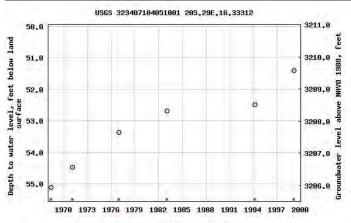
### USGS 323407104051001 20S.29E.16.33312

Available data for this site Groundwater: Field measurements GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°34'07", Longitude 104°05'10" NAD27
Land-surface elevation 3,261 feet above NAVD88
This well is completed in the Rustler Formation (312RSLR) local aquifer.

### **Output formats**





- Period of approved data

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

<u>Questions about sites/data?</u> <u>Feedback on this web site</u> **Automated retrievals** Help Data Tips
Explanation of terms
Subscribe for system changes

Accessibility

FOIA

Privacy

Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2021-01-26 11:09:00 EST

0.66 0.57 nadww01





2904 W 2nd St. Roswell, NIM 88201 voice: 575.624.2420 fax: 575.624.2421 www.atkinseng.com

02/10/2021

DII-NMOSE 1900 W 2<sup>nd</sup> Street Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Application to Drill a Well with No Water Right for Groundwater Determination

To whom it may concern:

Atkins Engineering Associates, Inc. (AEA) has been contracted to install one (1) Soil boring at 32.553583, -104.104611 in Eddy County, NM.

Please find, in triplicate, an Application to Drill a Well with No Water Right.

A check is attached for \$5.00 to process the application.

If you, have any questions, please contact me at 575.499.9244 or <u>lucas@atkinseng.com</u>.

Sincerely,

Lucas Middleton lucas@atkinseng.com

Enclosures: As noted above.

Gum Modelin

SANCAN SANCAN

OSE DIT FEB 12 2021 AM 10:08

Office of the State Engineer Water Rights District II— Roswell: 1900 W 2nd St Roswell, NM 88201

RE: Agent Authorization for Atkins Engineering Associates, Inc.

To whom it may concern:

John Hurt (Matador Resources) authorizes Atkins Engineering Associates, Inc. to act as his agent for Plugging Plan of Operations.

John Hurt

E/10/2021

Date

DSE DT FEB 12 2021 #410:09

**ACKNOWLEDGEMENT:** 

STATE OF TEXAS

COUNTY OF DALLAS

This instrument was acknowledged before me this 10th day of February,2021, John Hurt

**Notary Public:** 

My Commission Expires:

DIANE E. STRICKLING ID #290370-9 My Commission Expires March 28, 2022 Carlsbad Field Office **Operator Copy** 

Form 3160-3 (March 2012) \*WC-015 G-04 S202920D; BONE SPRING

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

**HIGH CAVEKARST** 

FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014

5. Lease Serial No. NMNM-003677

6. If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO	N/A					
1a. Type of work:  DRILL  REENTE	7 If Unit or CA Agreement, Name and No. N/A		me and No.			
lb. Type of Well: Oil Well Gas Well Other	8. Lease Name and Well No. STEBBINS 20 FED 124H					
2. Name of Operator MATADOR PRODUCTION COMPANY				9. API Well No. 30-015-		
3a. Address 5400 LBJ FREEWAY, SUITE 1500	3b. Ph	none No. (include area code)		10. Field and Pool, or Exploratory		
DALLAS, TX 75240	972	371 5241		WILDCAT; BONE S	PRING	
4. Location of Well (Report location clearly and in accordance with an	y State	requirements.*)		11. Sec., T. R. M. or Bl	k. and Su	vey or Area
At surface 361' FSL & 130' FWL 20-20S-29E				SHL: SWSW 20-20 BHL: SESE 20-209		
At proposed prod. zone 330' FSL & 240' FEL 20-20S-29E				10.0 - B.11		13 Facts
14. Distance in miles and direction from nearest town or post office* 11 MILES NE OF CARLSBAD, NM				12. County or Parish EDDY		NM
15. Distance from proposed* SHL: 2279' location to nearest property or lease line, ft. BHL: 408' (Also to nearest drig. unit line, if any)	16. No. of acres in lease BLM lease = 2150.97 acres 17. Spacing Unit dedicated to this well S2S2 20-20S-29E			vell		
18. Distance from proposed location* SHL: 30' Steb. 20 114H to nearest well, drilling, completed, BHL: 615' (ditto)	19. I	19. Proposed Depth 20. BLM/		BIA Bond No. on file		
to nearest well, drilling, completed, BHL: 615' (dittto) applied for, on this lease, ft.	MD:	): 7710' : 12336'		MB-001079		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	1	Approximate date work will start*  23. Estimated duration				
3244' UNGRADED	1	02/2017	3 MONTHS			
		Attachments				
The following, completed in accordance with the requirements of Onsho	re Oil a	and Gas Order No.1, must be at	ttached to th	is form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>		Item 20 above).		ns unless covered by an	existing l	oond on file (see
<ol> <li>A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).</li> <li>Operator certification</li> <li>Such other site specific information and/or plans as may be required by the BLM.</li> </ol>					equired by the	
23. Signature		Name (Printed/Typed)         Date           BRIAN WOOD         (PHONE: 505 466-8120)         11/05/20*		2016		
Title CONSULTANT	_	(FA	X: 505 46	6-9682)		
Approved by (Signature) Con Pluyt		Name (Printed Typed)	1.1	ayter	Date 05	103/17
Title A FIELD MANAGER		Office CARI	SBAI	FIELD OF	FICE	
Application approval does not warrant or certify that the applicant hold	ds lega	l or equitable title to those righ	is in the sub	oject lease which would e	ntitle the	applicant to
conduct operations thereon. Conditions of approval, if any, are attached.		AP	PROVA	L FOR TWO	YEAK	ა

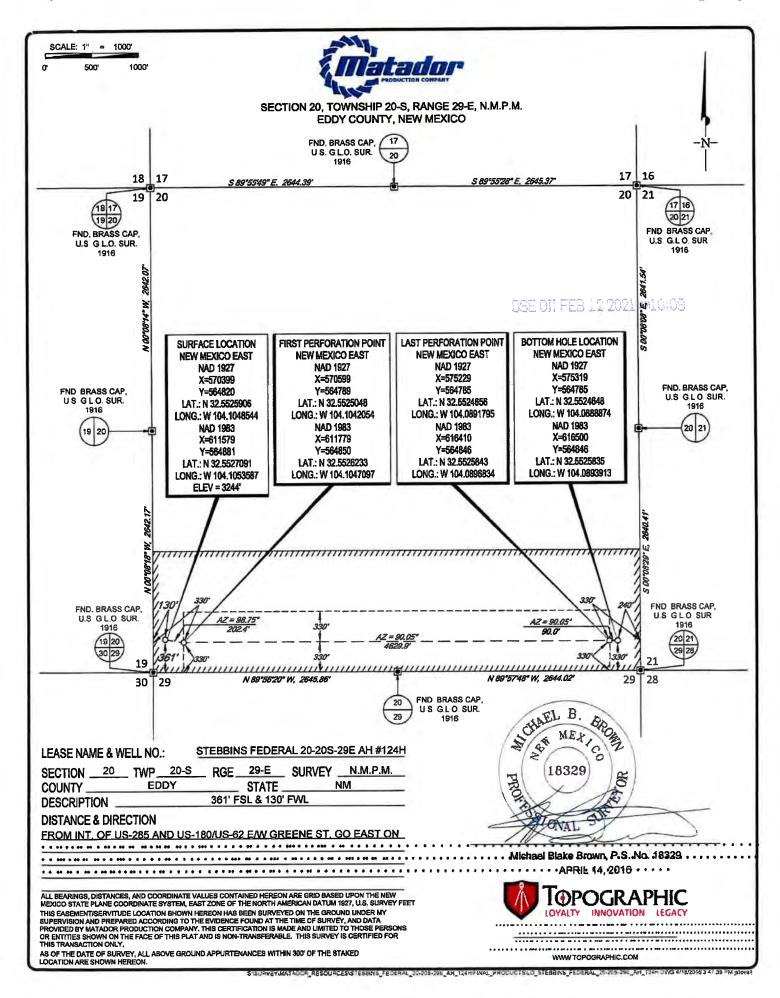
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

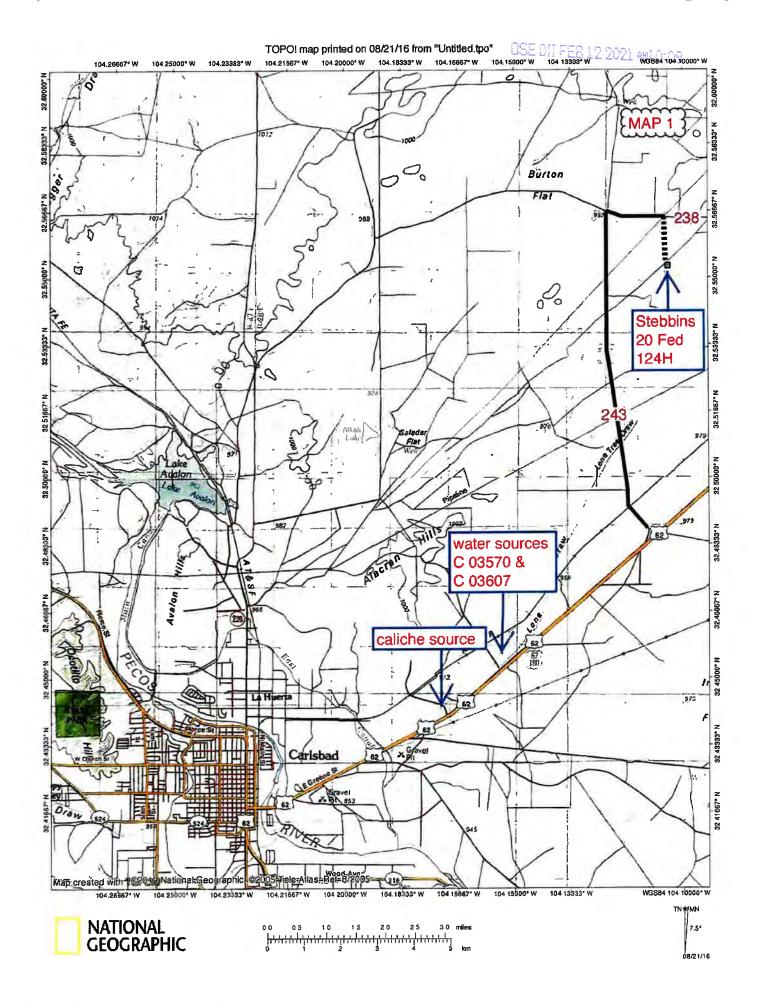
(Continued on page 2)

\*(Instructions on page 2)

0SE DI FEB 12 2021 9410:03

SEE ATTACHED FOR CONDITIONS OF APPROVAL







# WELL PLUGGING PLAN OF OPERATIONS



NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo.nmt.edu/resources/water/cgmn/ if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

1. FILING FEE: There is no filing fee for this form.				
II. GENERAL / WELL OWNERSHIP: Check h	ere if proposing one	plan for multiple monitoring	wells on the sar	
Existing Office of the State Engineer POD Number ( Name of well owner: Matador Production Company at	Well Number) : ttn John Hurt	for well to be plugged:	CP-	POD1 (BH-01)
Mailing address: 5400 LBJ Freeway, Suite 1500		County:	Dallas	
City: Dallas	State:	Texas	Z	ip code: 75240
Phone number: (972) 371-5200	E-mail:	jhurt@matadorresource		
III. WELL DRILLER INFORMATION:				
Well Driller contracted to provide plugging services: Je	ackie D. Atkins (	Atkins Engineering Asso	ciates, Inc.)	
New Mexico Well Driller License No.: 1249		Expiration Dat		
1) GPS Well Location: Latitude: 32° Longitude: -104  2) Reason(s) for plugging well(s):	deg, 4°deg,	33' min, 12.9" 06' min, 16.6"	sec _sec, NAD	0 83
Soil boring to determine groundwater level				
Soft				
Was well used for any type of monitoring progr what hydrogeologic parameters were monitore water, authorization from the New Mexico Envi	ed. If the well	was used to monitor	contaminate	d or poor quality
Does the well tap brackish, saline, or otherwise		ater? <u>n/a</u> If	yes, provid	e additional detail,
including analytical results and/or laboratory rej	port(s):			
5) Static water level:unknownfeet below l	land surface / fe	et above land surface (	(circle one)	
5) Depth of the well:feet				

WD-08 Well Plugging Plan Version: July 31, 2019 Page 1 of 5

7)	Inside diameter of innermost casing:inches.				
8)	Casing material: Temporary PVC SCH 40				
9)	The well was constructed with:  an open-hole production interval, state the open interval:  a well screen or perforated pipe, state the screened interval(s):				
10)	What annular interval surrounding the artesian casing of this well is cement-grouted?				
11)	Was the well built with surface casing?noIf yes, is the annulus surrounding the surface casing grouted or otherwise sealed? If yes, please describe:				
12)	Has all pumping equipment and associated piping been removed from the well?If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.				
V. DES	SCRIPTION OF PLANNED WELL PLUGGING: If plugging method differs between multiple wells on same site, a separate form must be completed for each method.				
diagram	this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such specifical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.				
Also, if th	is planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.				
1)	Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology				
	proposed for the well:  The temporary 2" well material will be removed. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite. If ground water is encountered the boring will be plugged tremie from bottom to a slurry of Portland TYPE I/II Neat cement in lifts				
2)	Will well head be cut-off below land surface after plugging? n/a				
VI. PL	UGGING AND SEALING MATERIALS:				
Note: The	te plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recipe cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.				
1)	For plugging intervals that employ cement grout, complete and attach Table A.				
2)	For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.				
3)	Theoretical volume of grout required to plug the well to land surface: 208				
4)	Type of Cement proposed: Type I/II Neat Cement				
5)	Proposed cement grout mix: <a href="#">&lt;6.0</a> gallons of water per 94 pound sack of Portland cement.				
6)	Will the grout be:batch-mixed and delivered to the site mixed on site				

WD-08 Well Plugging Plan Version: July 31, 2019 Page 2 of 5

OSE DIT FEB 1/2/2021 ##10:09

7)	Grout additives requested, and percent by dry weigh	ght relative to cement:	
	N/A		
8)	Additional notes and calculations:		
	N/A		
	· ·		
VII. A	DITIONAL INFORMATION: List additional in	nformation below, or on separate sheet(s):	
Volume	s calculated on an up to an approximate 8.5" boring	•	
VIII S	IGNATURE:		
		that I have constilly used the foregoing Well Dive	-aina Dlan of
	ons and any attachments, which are a part hereof; the	that I have carefully read the foregoing Well Plug	
Enginee	r pertaining to the plugging of wells and will complete	ly with them, and that each and all of the statemen	nts in the Well
Pluggin	g Plan of Operations and attachments are true to the	best of my knowledge and belief.	
	-		
	Jack Atkins		02/10/2021
		Signature of Applicant	Date
		Signature of Applicant	Date
IX. AC	TION OF THE STATE ENGINEER:		
This We	ell Plugging Plan of Operations is:		
	Approved subject to the attached condition	ons.	
	Not approved for the reasons provided or	n the attached letter.	
	Witness my hand and official seal this	day of	
	witness my nand and official seal this		
		John R. D'Antonio Jr. P.E., New Mexico State	Engineer
		Ву:	

WD-08 Well Plugging Plan Version: July 31, 2019 Page 3 of 5

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	N/A	N/A	0
Bottom of proposed interval of grout placement (ft bgl)	N/A	N/A	51
Theoretical volume of grout required per interval (gallons)	N/A	N/A	208
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	N/A	N/A	<6.0
Mixed on-site or batch- mixed and delivered?	N/A	N/A	On-Site
Grout additive 1 requested	N/A	N/A	N/A
Additive 1 percent by dry weight relative to cement	N/A	N/A	N/A
Grout additive 2 requested	N/A	N/A	N/A
Additive 2 percent by dry weight relative to cement	N/A	N/A	N/A

WD-08 Well Plugging Plan Version: July 31, 2019 Page 4 of 5

OSE DIJ FEB 12 2021 9M10:09

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

MATERIAL SCHOOL STATE	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	N/A	N/A	0
Bottom of proposed sealant of grout placement (ft bgl)	N/A	N/A	10
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	26
Proposed abandonment sealant (manufacturer and trade name)	N/A	N/A	Bariod Hole Plug

WD-08 Well Plugging Plan Version: July 31, 2019 Page 5 of 5

# 2020-02-09\_CP-XXX\_Stebbins\_PPOO-Form-for sign

Final Audit Report 2021-02-10

Created: 2021-02-10

By: Lucas Middleton (lucas@atkinseng.com)

Status: Signed

Transaction ID: CBJCHBCAABAAYKr8cTx3xA6WHxAaSfa3juXpZwTUUQD\_

### "2020-02-09\_CP-XXX\_Stebbins\_PPOO-Form-forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2021-02-10 11:01:32 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-02-10 11:02:04 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com) 2021-02-10 11:39:26 PM GMT- IP address: 74.50.153.115
- Document e-signed by Jack Atkins (jack@atkinseng.com)

  Signature Date: 2021-02-10 11:40:40 PM GMT Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2021-02-10 - 11:40:40 PM GMT

🔼 Adobe Sign

File No.		



### NEW MEXICO OFFICE OF THE STATE ENGINEER

## WR-07 APPLICATION FOR PERMIT TO DRILL A WELL WITH NO WATER RIGHT

(check applicable box):



For fees, see State Engineer website: http://www.ose.state.nm.us/ **Pollution Control** Purpose: ☐ Ground Source Heat Pump And/Or Recovery Other(Describe): Groundwater Determination Construction Site/Public Works Dewatering ☐ Exploratory Well (Pump test) Mine Dewatering A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive. ☐ Temporary Request - Requested Start Date: Requested End Date: Plugging Plan of Operations Submitted? □ No 1. APPLICANT(S) Name: Name: Matador Production Company check here if Agent check here if Agent Contact or Agent: Contact or Agent: John Hurt Mailing Address: Mailing Address: 5400 LBJ Freeway, Suite 1500 City: City: Dallas State: Zip Code: State: Zip Code: 75240 Phone: (972)371-5200 ☐ Home ☐ Cell Phone: ☐ Home ☐ Cell Phone (Work): Phone (Work): E-mail (optional): E-mail (optional): jhurt@matadorresources.com

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16					
File No.:	Trn. No.:		Receipt No.:		
Trans Description (optional):					
Sub-Basin:		PCW/LOG Due Date:			

Page 1 of 3

### 2. WELL(S) Describe the well(s) applicable to this application.

☐ NM We ☐ NM Eas			JTM (NAD83) (Mete ]Zone 12N ]Zone 13N	ers) Lat/Long (WGS84) (to the nearest 1/10 <sup>th</sup> of second)
	er (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves , Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
CP-	POD1	104° 6′16.60"W	32°33'12.90"N	M-20-20S-29E
		s need to be describ s are attached:		n WR-08 (Attachment 1 – POD Descriptions) If yes, how many
		I to common landmark		
Vell is on lan	d owned by: BU	REAU OF LAND MAN	IAGEMENT	
	tion: NOTE: If r	more than one (1) we	ell needs to be des	scribed, provide attachment. Attached? 🔲 Yes 🔳 No
pproximate	depth of well (fe	et): 51		Outside diameter of well casing (inches): 2.375
riller Name:	Jackie D. Atkins			Driller License Number: 1249
ADDITIONAL	STATEMENTS	S OR EXPLANATION	s	
nd a slurry of	Portland TYPE	o 51 feet. If ground wa 1/11 Neat cement les and surface and plugg	s than 6.0 gallons o	he boring will be plugged immediately using augers as tremie to of water per 94 lb sack. If no water is encountered then drill cuttin bentonite.

Page 2 of 3

File No.:

Trn No.:

**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

141			
Exploratory:	Pollution Control and/or Recovery:	Construction	Mine De-Watering:
│	│	De-Watering:	│
description of	control/recovery, that includes the	☐ Include a description of the	control/recovery, that includes the following:
any proposed	following:	proposed dewatering	A description of the need for mine
pump test, if	A description of the need for the	operation,	dewatering.
applicable.	pollution control or recovery operation.	The estimated duration of	☐ The estimated maximum period of time
l ''	☐ The estimated maximum period of	the operation,	for completion of the operation.
	time for completion of the operation.	☐ The maximum amount of	☐ The source(s) of the water to be diverted.
	☐ The annual diversion amount.	water to be diverted,	The geohydrologic characteristics of the
	☐ The annual consumptive use	☐ A description of the need	aguifer(s).
	amount.	for the dewatering operation,	The maximum amount of water to be
	The maximum amount of water to be	and,	diverted per annum.
	diverted and injected for the duration of	A description of how the	☐The maximum amount of water to be
	the operation.	diverted water will be disposed	diverted for the duration of the operation.
	The method and place of discharge.	of.	The quality of the water.
Monitoring:	The method of measurement of	Ground Source Heat Pump:	The method of measurement of water
	water produced and discharged.	☐ Include a description of the	diverted.
Include the reason for the			☐The recharge of water to the aquifer.
	The source of water to be injected.	geothermal heat exchange	
monitoring	☐ The method of measurement of	project,	Description of the estimated area of
well, and,	water injected.	☐ The number of boreholes	hydrologic effect of the project.
☐ The	The characteristics of the aquifer.	for the completed project and	The method and place of discharge.
duration	☐ The method of determining the	required depths.	☐An estimation of the effects on surface
of the planned	resulting annual consumptive use of	☐ The time frame for	water rights and underground water rights
monitoring.	water and depletion from any related	constructing the geothermal	from the mine dewatering project.
	stream system.	heat exchange project, and,	☐A description of the methods employed to
	☐ Proof of any permit required from the	☐ The duration of the project.	estimate effects on surface water rights and
	New Mexico Environment Department.	☐ Preliminary surveys, design	underground water rights.
	☐ An access agreement if the	data, and additional	☐Information on existing wells, rivers,
	applicant is not the owner of the land on	information shall be included to	springs, and wetlands within the area of
	which the pollution plume control or	provide all essential facts	hydrologic effect.
	recovery well is to be located.	relating to the request.	
I, We (name of a		n Company) rint Name(s)	·
affirm that the fo	regoing statements are true to the best of (	my, our) knowledge and belief.	
John M	Digitally signed by John M Hurt. DN: cn=John M Hurt, email=jhurt@metadorresource c=US	us.com,	
	Date: 2021.02.10 09:07:31 -06'00'		
Applicant Signat	ture	Applicant Signature	
	ACTION	OF THE STATE ENGINEER	
		This application is:	
	☐ approved	partially approved	denied
provided it is n			ontrary to the conservation of water in New
Mexico nor det	trimental to the public welfare and further su	ubject to the <u>attached</u> conditions of	f approval.
Witness my han	d and seal this day of		for the State Engineer,
		, State Engineer	
Ву:			
Signature		Print	
Title:			
Print			
	FOR OS	E INTERNAL USE	Application for Permit, Form WR-07
	File No.:		Trn No.:
	II.W		Page 3 of 3



2904 W 2nd St. Roswell, NM 88201 voice: 575.624.2420 fox: 575.624.2421 www.atkinseng.com

04/06/2020

**DII-NMOSE** 1900 W 2<sup>nd</sup> Street Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record CP-1866 Pod1

To whom it may concern:

Attached please find a well record, in duplicate, for CP-1866 Pod1, a boring that encountered water, not converted permanently and plugged.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

Lucas Middleton

**Enclosures:** as noted above

Gaoon Modelin

PAGE 1 OF 2

WELL TAG ID NO.



NSE DIT PPR 5 2021 #42/110

NC	OSE POD NO. ( POD-1 (BH)		.)		WELL TAG ID NO. n/a			OSE FILE NO CP-1866	(S).		1
H	WELL OWNER	NAME(S)				_		PHONE (OPT	IONAL)		
C	Matador Pro	duction	Company Attn. Joh	n Hurt							
77	WELL OWNER							CITY		STATE	ZIP
WEI	5400 LBJ Fr	eeway, S	Suite 1500					Dallas		TX 75240	
2	WELL		DE	GREES	MINUTES	SECOND					
K.A	LOCATION	LAT	TITUDE	32	33	12.90	N	* ACCURACT	Y REQUIRED: ONE TEN	TH OF A SECOND	
GENERAL AND WELL LOCATION	(FROM GPS)	LO	NGITUDE	104	6	6.60	W	* DATUM RE	QUIRED: WGS 84		
GEN	DESCRIPTION	RELATIN	IG WELL LOCATION TO	STREET ADD	RESS AND COMMON	I LANDMAR	KS – PLS	S (SECTION, TO	)WNSHJIP, RANGE) WH	ERE AVAILABLE	
1	NW SW SW	Sec. 20	0 T20S R29E								
	LICENSE NO.		NAME OF LICENSED	DRILLER					NAME OF WELL DR	ILLING COMPANY	
	1249				Jackie D. Atkins				Atkins Eng	ineering Associates, I	nc.
	DRILLING STA		DRILLING ENDED		MPLETED WELL (FI			LE DEPTH (FT)	DEPTH WATER FIRS	ST ENCOUNTERED (FT)	
	03/17/20	)21	03/17/2021	Tem	porary-Removed			±52		±44	
z	COMPLETED	VELL IS:	ARTESIAN	DRY HO	LE SHALLO	W (UNCONI	FINED)		STATIC WATER LEV	EL IN COMPLETED WE 44.0	LL (FT)
TIO	DRILLING FLU	ID:	AIR	MUD	ADDITIV	ES – SPECIF	Y:				
2. DRILLING & CASING INFORMATION	DRILLING ME	THOD:	ROTARY	НАММЕ	R CABLE TO	OOL	✓ OTHE	R – SPECIFY:	Hollo	w Stem Auger	
(FO	DEPTH (fe	et hel)		CASING	MATERIAL AND	O/OR			GASTAG		
G II	FROM	TO	BORE HOLE DIAM		GRADE			ASING NECTION	CASING INSIDE DIAM.	CASING WALL THICKNESS	SLOT SIZE
VIST			(inches)		each casing string, sections of screen)		1	YPE ling diameter)	(inches)	(inches)	(inches)
% C/	0	32	±6.5	Temp	orary well material			hread 2 TPI	2.067	0.154	_
NG	32	52	±6.5	Temp	orary well material	ls	Flush T	hread 2 TPI	2.067	0.154	.010
IT											
DR						-					
7						-					
						-	-				-
- 3			1			-					
	DEPTH (fe	eet bgl)	BORE HOLE	L	ST ANNULAR SE	EAL MATI	ERIAL A	AND	AMOUNT	метно	D OF
<b>I</b> ¥I	FROM	то	DIAM. (inches)	GRA	VEL PACK SIZE-	-RANGE E	Y INTE	RVAL	(cubic feet)	PLACEN	
ANNULAR MATERIAL											
MA.											
AR											
NUI											
						_					
e,			1					_			
EOP	OOF DEEDLY	AT TIOP	-1					un c	IN WELL BECORD	R I OG (Version 06/2	0/17)
FOR	OSE INTERN	AL USE			POD NO	)	_	TRN	NO WELL RECORD A	x LOG (version 06/3	0/1/)

LOCATION

	DEPTH (	feet bgl)		COLOR AN	D TYPE OF MATERIAL E	NCOUN	TTERED -		WATER	ESTIMATED
	FROM	то	THICKNESS (feet)	INCLUDE WATE	R-BEARING CAVITIES O	R FRAC	TURE ZONE	s	BEARING? (YES / NO)	YIELD FOR WATER- BEARING ZONES (gpm)
	0	4	4	San	d, medium grained, poorly-so	orted, Re	d		Y /N	
	4	19	15	Sand, mediu	ım grained, poorly-sorted, wi	th calich	ie, Brown		Y √N	
	19	34	15	Sand, med	ium grained, poorly-sorted, v	vith calid	che, Tan		Y √N	
	34	39	5	Sand, mediu	ım grained, poorly-sorted, wi	th calich	ie, Brown		y √n	
	40	44	4		Caliche, with sand, Brow	n,			Y ✓N	
ų	44	52	8	Sand	l, Cemented, medium graine	i, Brow	n,		✓Y N	
4. HYDROGEOLOGIC LOG OF WELL									Y N	
OF									Y N	
OG									Y N	
ICI									Y N	
9									Y N	
EO									Y N	
ROC									Y N	
EX									Y N	
4.									Y N	
									Y N	
									Y N	
									Y N	
									Y N	
									Y N	
									Y N	
	METHOD U			OF WATER-BEARING	G STRATA: THER – SPECIFY:				AL ESTIMATED LL YIELD (gpm):	0.00
		_								
NOI	WELL TES	STAR	T TIME, END TI	ME, AND A TABLE SI	A COLLECTED DURING HOWING DISCHARGE AN	D DRA	WDOWN OV	ER TH	NG DISCHARGE I E TESTING PERIC	METHOD, DD.
TEST; RIG SUPERVISION	MISCELLA	NEOUS IN	03	3/17/2021 -Landed ter 3/23/2021-Removed w ar 94 lb. sack cement)	nporary well materials well materials,abandoned b	oring t	ısing Portlan	d Typ	e I/II Neat Cemen	t(5.6 gal water
EST	PRINT NAM	Æ(S) OF D	RILL RIG SUPER	RVISOR(S) THAT PRO	VIDED ONSITE SUPERVI:	SION O	F WELL CON	STRU	CTION OTHER TH	IAN LICENSEE:
5. T	Shane Eldri									
6. SIGNATURE	CORRECT I	RECORD O ERMIT HO	F THE ABOVE I	DESCRIBED HOLE AN	EST OF HIS OR HER KNO ID THAT HE OR SHE WIL PLETION OF WELL DRILL	LFILE	GE AND BEI THIS WELL	JEF, T	HE FOREGOING I	S A TRUE AND ATE ENGINEER
6. SIGN	Jack A	Atkins		Jac	ckie D. Atkins	1			04/06/2021	
		SIGNAT	URE OF DRILLE	ER / PRINT SIGNEE	NAME				DATE	
FO	R OSE INTER	NAL USE					WR-20 WE	LL RE	CORD & LOG (Ve	rsion 06/30/2017)
FIL	E NO.				POD NO.		TRN NO.			
LO	CATION					WELL	TAG ID NO.			PAGE 2 OF 2

# and Log\_stibbins-forsign

Final Audit Report 2021-04-06

Created: 2021-04-06

By: Lucas Middleton (lucas@atkinseng.com)

Status: Signed

Transaction ID: CBJCHBCAABAA9bFwGd\_n5rSgFk9c3sVHe2TugRXozYBM

# "2021\_03-31\_CP-1866-POD1\_OSE\_Well Record and Log\_stibbi ns-forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2021-04-06 5:01:35 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-04-06 5:01:51 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com)
  2021-04-06 5:04:14 PM GMT- IP address: 74.50.153.115
- Document e-signed by Jack Atkins (jack@atkinseng.com)

  Signature Date: 2021-04-06 5:04:30 PM GMT Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2021-04-06 - 5:04:30 PM GMT





## PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

		WELL OWNER							
State	Engineer W	ell Number: CP	-1866- POD1						
			Company Attn. J	ohn Hurt		Phone	: No.:		
Maili	ng address:	5400 LBJ Freev	vay, Suite 1500						
City:	Dallas			State:		TX		_ Zip code	e:
<u>II. W</u>	ELL PLU	GGING INFOR	MATION:  npany that plugge	ed well: J	lackie D. A	utkins ( Atkins E	ngineering A	Associates	: Inc.)
2)			r License No.: 1						
3)		gging activities	were supervised b						
4)	Date we	ll plugging begar	os/23/2021		_ Date	well plugging c	oncluded: _	03/23/202	21
5)	GPS We	ell Location:	Latitude: Longitude:	32 -103	_deg, _deg,	33 min, 6 min,	12.90 6.60	_ sec _ sec, WGS	S 84
6)			at initiation of plu water level prob		52	ft below grou	und level (b	ogl),	
7)	Static w	ater level measur	ed at initiation of	plugging:	44.0	_ ft bgl			
8)	Date we	ll plugging plan (	of operations was	approved	by the Sta	te Engineer: _	02/18/2021	:	
9)	Were all	plugging activit	ies consistent with pproved plugging	h an appro g plan and	ved pluggi the well a	ing plan? s it was plugged	Yes i (attach ad	_ If not, ditional pa	please describe ges as needed):

Version: September 8, 2009

Page 1 of 2

DSE DIT APRS 2021 PKS/15

10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

### For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging <u>Material Used</u> (include any additives used)	Volume of <u>Material Placed</u> (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement  Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
n <u>-</u>	0-52' Portland TYPE I/II Neat Cement	108 gallons	89 gallons	Augers	(5.6 gallons water per 94 lb. sack cement
-					
8					
.n <del>-</del>					
-					
() <del></del>					
79 <del></del>					
19-					
-					
-		MILL TIOL V	BY AND OBTAIN		
		MULTIPLY E cubic feet x 7.4 cubic yards x 201.5	805 = gallons		

### III. SIGNATURE:

I, Jackie D. Atkins , say that I am fa	miliar with the rules of the Office of the State
Engineer pertaining to the plugging of wells and that each and all of the st	tatements in this Plugging Record and attachments
are true to the best of my knowledge and belief.	
Jack Atkins	04/06/2021
Signature of	Well Driller Date

Version: September 8, 2009

Page 2 of 2

# 2021\_03-31\_CP-1866-POD1\_Plugging Record-forsign

Final Audit Report 2021-04-06

Created: 2021-04-06

By: Lucas Middleton (lucas@atkinseng.com)

Status: Signed

Transaction ID: CBJCHBCAABAANjA2g9gdfhMRNhe77gJbBZ9H5BYX6Sra

### "2021\_03-31\_CP-1866-POD1\_Plugging Record-forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com)
  2021-04-06 4:36:11 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-04-06 4:38:17 PM GMT
- Email viewed by Jack Atkins (jack@atkinseng.com)
  2021-04-06 4:57:56 PM GMT- IP address: 74.50.153.115
- Document e-signed by Jack Atkins (jack@atkinseng.com)

  Signature Date: 2021-04-06 4:58:40 PM GMT Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2021-04-06 - 4:58:40 PM GMT





Dhugal Hanton <vertexresourcegroupusa@gmail.com>

### (Extension Approval) Stebbins Federal SWD nAPP2102534956

1 message

Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>

Tue, Mar 30, 2021 at 9:59 AM

To: Dhugal Hanton <vertexresourcegroupusa@gmail.com>, "mpeppin@vertex.ca" <mpeppin@vertex.ca>, "Hensley, Chad, EMNRD" <Chad.Hensley@state.nm.us>, "Enviro, OCD, EMNRD" <OCD.Enviro@state.nm.us>

Cc: "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, "jhurt@matadorresources.com"

<jhurt@matadorresources.com>, "arsenio.jones@matadorresources.com" <arsenio.jones@matadorresources.com>

RE: Incident #NAPP2102534956

Monica,

Your request for an extension to **May 30th, 2021** is approved. Vertex Resources is requesting a 60-day extension for the Stebbins Federal SWD. Field work is ongoing with confirmation sampling underway. Vertex is expecting to have excavation and confirmation sampling completed this week and will be waiting on lab analysis. Closure report will be underway as soon as lab analysis is received.

Robert Hamlet • Environmental Specialist - Advanced

**Environmental Bureau** 

EMNRD - Oil Conservation Division

811 S. First Street | Artesia, NM 88210

575.909.0302 | robert.hamlet@state.nm.us

http://www.emnrd.state.nm.us/OCD/



From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>

Sent: Tuesday, March 30, 2021 9:46 AM

To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; mpeppin@vertex.ca; Hensley, Chad, EMNRD

<Chad.Hensley@state.nm.us>; Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>

Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; jhurt@matadorresources.com; arsenio.jones@

matadorresources.com

Subject: [EXT] Stebbins Federal SWD nAPP2102534956 Extension Request

Good morning,

Vertex Resources is requesting a 60-day extension for the Stebbins Federal SWD. Field work is ongoing with confirmation sampling underway. We are expecting to have excavation and confirmation sampling completed this week and will be waiting on lab analysis.

Closure report will be underway as soon as lab analysis is received.

Incident # nAPP2102534956 DOR: January 12, 2021.

Thank you,

Monica

### **Monica Peppin**

Project Manager in Training

Vertex Resource Group Ltd. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 Ext. 711 C 575.361.9880 F

### www.vertex.ca

Confidentiality Notice: This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachment is prohibited. If you have received this communication in error, please notify us by reply email and immediately and permanently delete this message and any attachments. Thank you.

John R. D Antonio, Jr., P.E. State Engineer



Roswell Office 1900 WEST SECOND STREET ROSWELL, NM 88201

# STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER

Trn Nbr: 688129 File Nbr: CP 01866

Feb. 19, 2021

JOHN HURT
MATADOR PRODUCTION COMPANY
5400 LBJ FREEWAY SUITE 1500
DALLAS, TX 75240

### Greetings:

Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during well drilling activities.

Carefully review the attached conditions of approval for all specific permit requirements.

- \* If use of this well is temporary in nature and the well will be plugged at the end of the well usage, the OSE must initially approve of the plugging. If plugging approval is not conditioned in this permit, the applicant must submit a Plugging Plan of Operations for approval prior to the well being plugged. The Plugging Record must be properly completed and submitted to the OSE within 30 days of the well plugging.
- \* If the final intended purpose and condition requires a well ID tag and meter installation, the applicant must immediately send a completed meter report form to this office.
- \* The well record and log must be submitted within 30 days of the completion of the well or if the attempt was a dry hole.
- \* This permit expires and will be cancelled if no well is drilled and/or a well log is not received by the date set forth in the conditions of approval.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us.

Sincerely,

Andrew Dennis (575)622-6521

Enclosure

explore

File No. CP-1866

### **NEW MEXICO OFFICE OF THE STATE ENGINEER**



# WR-07 APPLICATION FOR PERMIT TO DRILL A WELL WITH NO WATER RIGHT



Released to Imaging: 8/24/2021 10:43:58 AM

(check applicable box):

	For fees, see State Engi	ineer website: http://www.ose.state.nm.us/
Purpose:	Pollution Control And/Or Recovery	
Exploratory Well (Pump test)	Construction Site Works Dewatering	/Public Other(Describe): Groundwater Determination
☐ Monitoring Well	Mine Dewatering	-
A separate permit will be required	d to apply water to benefici	ial use regardless if use is consumptive or nonconsumptive.
☐ Temporary Request - Request	ted Start Date:	Requested End Date:
Plugging Plan of Operations Subs	mitted? Yes No	
. APPLICANT(S)		
Name: Matador Production Company		Name:
Contact or Agent:	check here if Agent	Contact or Agent: check here if Agent
John Hurt		
Mailing Address: 5400 LBJ Freeway, Suite 1500		Mailing Address:
City: Dallas		City:
State:	Zip Code: 75240	State: Zip Code:
Phone: (972)371-5200 Phone (Work):	☐ Home ☐ Cell	Phone:
E-mail (optional) hurt@matadorresources.com		E-mail (optional):
		- T
	FOR OSE INTERNAL US	
	File No.: CP - 1866-	
	Trans Description (option	- CXI - DOTONOTO
	Sub-Basin:	PCW/LOG Due Date:

-	
2	
₹	
9	
$\ddot{x}$	
0	
Ü	
0	
7	
8	
Ñ	
4	
O	
6	
٠.	
9	
$\simeq$	
0	
2	
-	
Z	
2	
e.	
2	
2	

2. WELL(S) Describe the well(s) applicable to this application	2. V	WELL(S	3) Describe	the well(s)	applicable	to this	applicatio
--	------	--------	-------------	-------------	------------	---------	------------

(Lat/Long - WGS84).			tate Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude		
District II (Roswell) and Dist	rict VII (Cimarron) c	ustomers, provide	a PLSS location in addition to above.		
NM State Plane (NAD83)  NM West Zone  NM East Zone  NM Central Zone		JTM (NAD83) (Mete ]Zone 12N ]Zone 13N	Ers) ■ Lat/Long (WGS84) (to the nearest 1/10 <sup>th</sup> of second)		
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name		
CP-1866-POD1	104° 6'16.60"W	32°33'12.90"N	NW 14 SW14 M-20-208-29E		
NOTE: If more well location Additional well descriptions Other description relating well	are attached: 🔲	Yes No	WR-08 (Attachment 1 – POD Descriptions) If yes, how many		
Well is on land owned by: BUF	REAU OF LAND MAN	IAGEMENT			
			cribed, provide attachment. Attached?   Yes No		
Approximate depth of well (fee	et): 51	C	Outside diameter of well casing (inches): 2,375		
Driller Name: Jackie D. Atkins			Driller License Number: 1249		

### 3. ADDITIONAL STATEMENTS OR EXPLANATIONS

A Soil Boring to determine up to 51 feet. If ground water is encounterd the boring will be plugged immediately using augers as tremie to land a slurry of Portland TYPE 1/11 Neat cement less than 6.0 gallons of water per 94 lb sack. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite.

Application for Permit, Form WR-07

File No.: 67-1866- PODI

Tm No.: 688129

4. SPECIFIC REC boxes, to indicate	QUIREMENTS the information	: The applicant must include n has been included and/or a	the following, as applicable to eac attached to this application:	h well type. Please check the appropriate
Exploratory: ☐ Include a description of any proposed pump test, if applicable.  Monitoring: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.	☐ Include a control/recorfollowing: ☐ A descrip pollution cor☐ The estintime for com☐ The annuamount. ☐ The max diverted and the operatio☐ The methwater produced in the sour☐ The methwater injecte☐ The methwater and distream syste☐ Proof of a New Mexico☐ An accessapplicant is which the pollowing in the policy of the polic	and place of discharge.  and of measurement of  bed and discharged.  ce of water to be injected.  and of measurement of  d.  acteristics of the aquifer.  and of determining the  aual consumptive use of  appletion from any related	Construction De-Watering:	Mine De-Watering:  ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
I, We (name of	applicant(s)).	AC ohn Hurt (Matador Production	CKNOWLEDGEMENT n Company)	
			int Name(s)	
John M		TIERIS are true to the pest of ( Digitally signed by John M Hurt DN on-John M Hurt, emile-pluri@maladomeouror e-U8 Deleo, 2021-02-10 09:07:31 -0000*	(my, our) knowledge and belief	
Applicant Signa	ture	D886. 2021.02.10 00:07:31 -08:00*	Applicant Signature	
		ACTION	OF THE STATE ENGINEER	
provided it is n Mexico nor de	ot exercised to	approved the detriment of any others public welfare and further su		☐ denied ontrary to the conservation of water in New f approval.
Witness my han	d and seal this	1 <u>9t</u> hdayof <u>lieb</u>	ruary 20 21 ,	for the State Engine
John R.	Antoni	o Jr.J. P.F.	, State Engineer	E AGO.
By: Signature	On	46	<u>luan He</u> Print	rnande
Title: Wate	r Resour	ces Manager I		

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

le No.: CP-1866 - POD 1 Tm No.: 688129

### NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

### SPECIFIC CONDITIONS OF APPROVAL

- Depth of the well shall not exceed the thickness of the valley fill.
- 17-4 No water shall be appropriated and beneficially used under this permit.
- 17-6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging.
- 17-7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

Trn Desc: CP-1866 POD1

File Number: CP 01866

## NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

### SPECIFIC CONDITIONS OF APPROVAL (Continued)

- 17-B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record.

  The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 17-P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between hydrogeologic zones.
- 17-Q The State Engineer retains jurisdiction over this permit.
- 17-R Pursuant to section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.
- LOG The Point of Diversion CP 01866 POD1 must be completed and the Well Log filed on or before 02/19/2022.

### ACTION OF STATE ENGINEER

Notice of Intention Rcvd: Date Rcvd. Corrected:
Formal Application Rcvd: 02/12/2021 Pub. of Notice Ordered:
Date Returned - Correction: Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific contract the previously.

Witness my hand and seal this

A.D., 2021

John R. D Antonio, Jr/, P.E.

By:

Trn Desc: CP-1866 POD1

ile Number: <u>CP 01866</u> Trn Number: 688129

page: 2

# Released to Imaging: 8/24/2021 10:43:58 AM

### NEW MEXICO STATE ENGINEER OFFICE PERMIT TO EXPLORE

JUAN HERNANDEZ

Trn Desc: CP-1866 POD1

Received by OCD: 6/24/2021 10:20:36 AM

File Number: CP 01866 Trn Number: 688129

page: 3

Office of the State Engineer Water Rights District II— Roswell: 1900 W 2nd St Roswell, NM 88201

RE: Agent Authorization for Atkins Engineering Associates, Inc.

To whom it may concern:

John Hurt (Matador Resources) authorizes Atkins Engineering Associates, Inc. to act as his agent for Plugging Plan of Operations.

John Hurt

-110/20

Date

**ACKNOWLEDGEMENT:** 

STATE OF \_\_\_\_exas

COUNTY OF Dallas

This instrument was acknowledged before me this 10th day of February, 2021, John Hurt

**Notary Public:** 

My Commission Expires: 3/28/2022

DIANE E. STRICKLING ID #290370-9 My Commission Expires March 26, 2022



Carlsbad Field Office **Operator Copy** 

Form 3160-3 (March 2012)

\*WC-015 G-04 S202920D; BONE SPRING

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** 

### APPLICATION FOR PERMIT TO DRILL OR REENTER

HIGH CAVEKARST

FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014

_	
5.	Lease Serial No.
	NMNM-003677

If Indian, Allotee or Tribe Name

la. Type of work: ☑ DRILL ☐ REENTER			7 If Unit or CA Agreement, Name and No. N/A			
ib. Type of Well:			8. Lease Name and Well No. STEBBINS 20 FED 124H			
2. Name of Operator MATADOR PRODUCTION COMPANY			9. API Well No. 30-015-			
3a. Address 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240		3b. Phone No. (include area code) 972 371 5241		10. Field and Pool, or Exploratory WILDCAT: BONE SPRING*		
4. Location of Well (Report location clearly and in accordance with a	mi Stote introductions	<del></del>				v or Area
At surface 361' FSL & 130' FWL 20-20S-29E	ly case requirem	sec regularereurss. J		SHL: SWSW 20-20S-29E NMPM BHL: SESE 20-20S-29E NMPM		
At proposed prod. zone 330' FSL & 240' FEL 20-20S-29E						
14. Distance in miles and direction from nearest town or post office?  11 MILES NE OF CARLSBAD, NM				12. County or Parish EDDY		3. State
15. Distance from proposed* SHL: 2279' location to nearest property or lease line, ft. BHL: 408' (Also to nearest drig. unit line, if any)	16. No. of a BLM lease	cres in lease = 2150.97 acres		acing Unit dedicated to this well 20-20S-29E		
<ol> <li>Distance from proposed location* SHL: 30' Steb. 20 114H to nearest well, drilling, completed, BHL: 615' (dittto) applied for, on this lease, ft.</li> </ol>	TVD: 7710 MD: 12336	The state of the s		BIA Bond No. on file MB-001079		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3244' UNGRADED	1	22. Approximate date work will start* 01/02/2017		23. Estimated durat 3 MONTHS	ion	
	24. Attac	hments				
The following, completed in accordance with the requirements of Onsho	ore Oil and Gas	Order No.1, must be a	ttached to th	is form:	•	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System</li> </ol>	Lande the	Bond to cover t Item 20 above).     Operator certification.		ns unless covered by a	an existing bor	nd on file (se
SUPO must be filed with the appropriate Forest Service Office)	Laios, iie			ormation and/or plans	as may be req	uired by the
25. Signature Klader		(Printed/Typed) N WOOD (PH	ONE: 505	466-8120)	Date 11/05/20	16
Title CONSULTANT	_	(FA	X: 505 46	6-9682)		,
Approved by (Signature) Con Muyt	Name	(Printed Typed)	1.	ayeer	Date 05/8	13/17
Tille A FIELD MANAGER	Office	CARI	SBAI	FIELD O	FFICE	
Application approval does not warrant or certify that the applicant hol conduct operations thereon.  Conditions of approval, if any, are attached.	ds legal or equit			rject lease which would LFOR TWO		

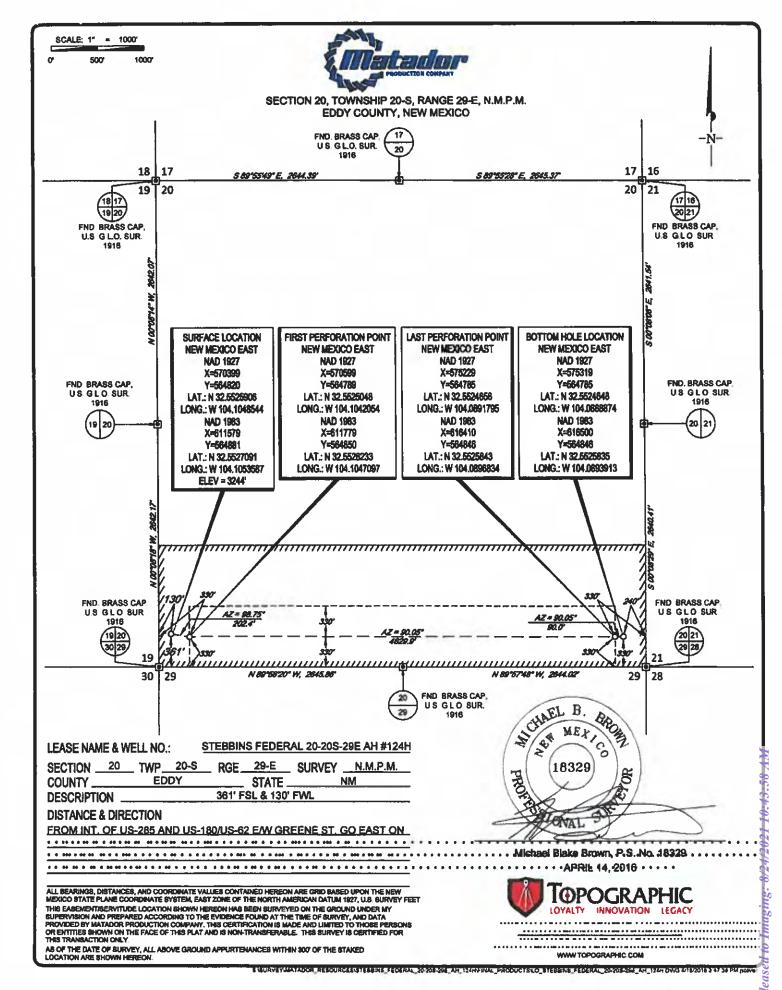
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

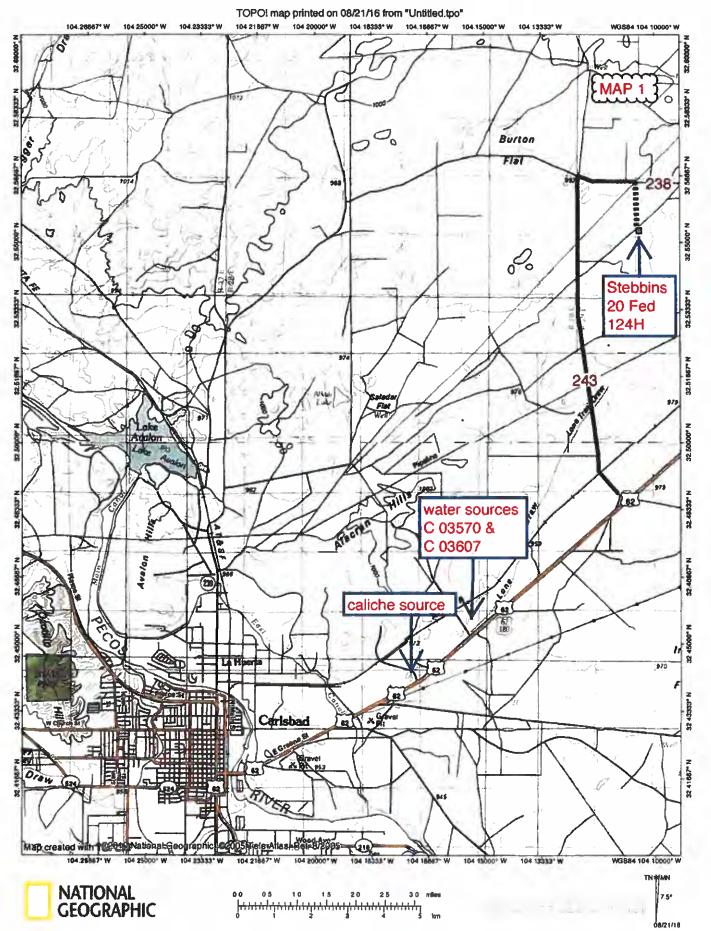
(Continued on page 2)

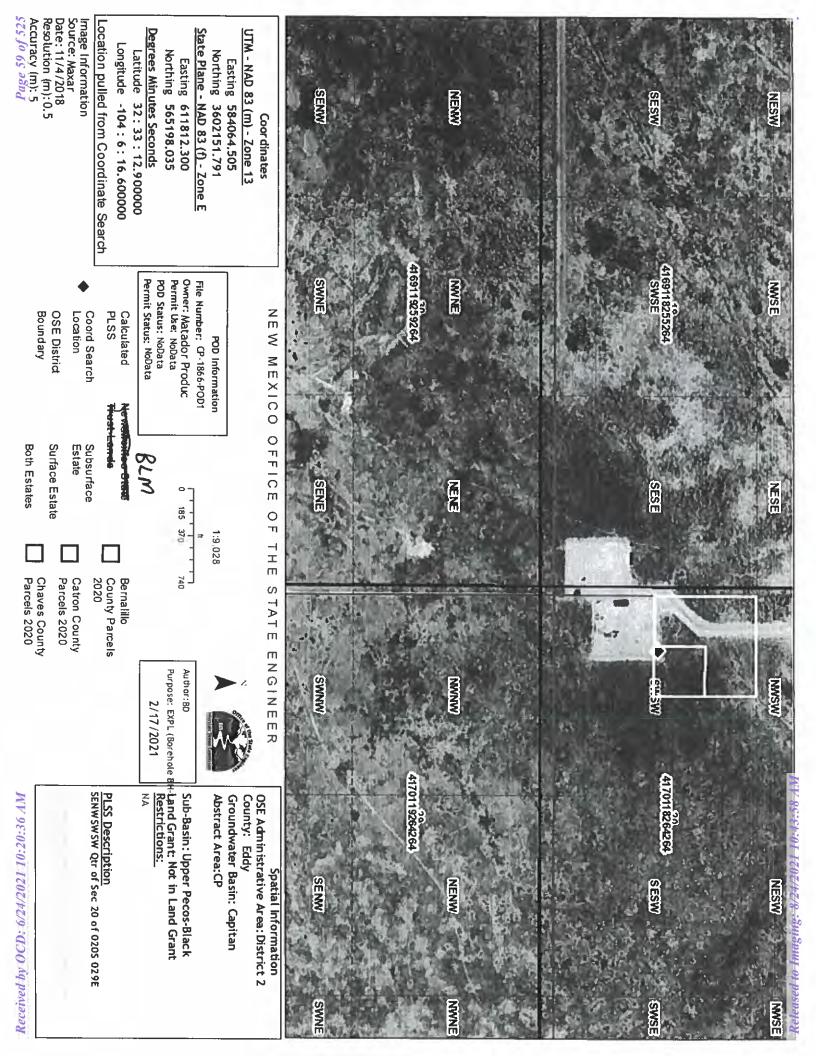
\*(Instructions on page 2)

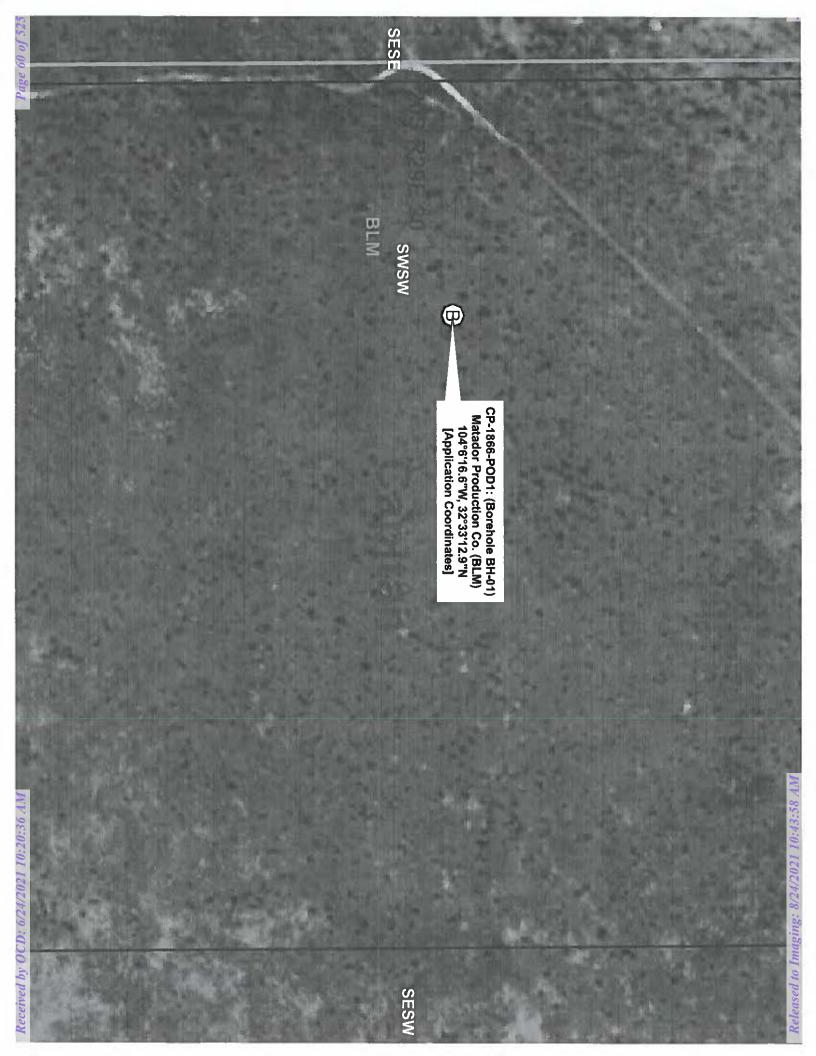
Released to Imaging: 8/24/2021 10:43:58 AM

SEE ATTACHED FOR CONDITIONS OF APPROVAL









# STATE OF NEW MEXICO OFFICE OF THE STATE ENGINEER District 2 Office, Roswell, NM

John R. D'Antonio Jr., P.E. State Engineer

1900 West Second Street Roswell, New Mexico 88201 (575) 622-6521 FAX: (575) 623-8559

February 18, 2021

Matador Production Company c/o John Hurt 5400 LBJ Freeway, Suite 1500 Dallas, TX 75240

RE:

Well Plugging Plan of Operations for CP-1866-POD1

Greetings:

Enclosed is your copy of Well Plugging Plan of Operations for the above referenced project, which has been approved subject to the attached Specific Conditions of Approval. The following conditions of approval have been developed to ensure compliance with the Rules and Regulations Governing Well Driller Licensing; Construction, Repair and Plugging of Wells 19.27.4 NMAC adopted June 13, 2017, by the State Engineer.

Aggrieval of this permit, or any of the conditions of approval therein, suspends the permit. No plugging operations shall occur while a permit is aggrieved.

Sincerely,

Christopher Angel, PG

Water Resources Professional II Water Resource Allocation Program

enci



# WELL PLUGGING PLAN OF OPERATIONS



NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging. This form may be used to plug a single well, or if you are plugging multiple monitoring wells on the same site using the same plugging methodology.

Alert! Your well may be eligible to participate in the Aquifer Mapping Program (AMP)-NM Bureau of Geology geoinfo,nmt.edu/resources/water/cgmn/if within an area of interest and meets the minimum construction requirements, such as there is still water in your well, and the well construction reflected in a well record and log is not compromised, contact AMP at 575-835-5038 or -6951, or by email nmbg-waterlevels@nmt.edu, prior to completing this prior form. Showing proof to the OSE that your well was accepted in this program, may delay the plugging of your well until a later date.

I. FILI	NG FEE: There is no filing fee for this form.			
				on the same site and attaching WD-08m
Existing	g Office of the State Engineer POD Number (	Well Number)	for well to be plugged: CP	- <u>1866</u> -POD1 (BH-01)
Name o	f well owner: Matador Production Company a	ttn John Hurt		
_	address: 5400 LBJ Freeway, Suite 1500		County:Da	allas
City: D	Pallas	State;	Texas	Zip code: 75240
Phone n	umber: (972) 371-5200	E-mail:	jhurt@matadorresources.co	<u>m</u>
	LL DRILLER INFORMATION: iller contracted to provide plugging services:	ackie D. Atkins (	Atkins Engineering Associate	es, Inc.)
	exico Well Driller License No.: 1249		Expiration Date:	
	CLL INFORMATION:   supplemental form Will a copy of the existing Well Record for the well(s  GPS Well Location:   Latitude:   32°     Longitude:   -10     Reason(s) for plugging well(s):	to be plugged s  deg,  deg,	hould be attached to this pla	ec, NAD 83
	Soil boring to determine groundwater level	<u> </u>		
3)	Was well used for any type of monitoring prog what hydrogeologic parameters were monitor water, authorization from the New Mexico Env	ed. If the well	was used to monitor cont	aminated or poor quality
4)	Does the well tap brackish, saline, or otherwise including analytical results and/or laboratory re	· -	ater? <u>n/a</u> If yes,	, provide additional detail,
5) —	Static water level:unknownfeet below	land surface / fe	et above land surface (circ	le one)
6)	Depth of the well:feet			

20.29.20.331

WD-08 Well Plugging Plan Version: July 31, 2019 Page 1 of 5

L .
~
Name and
7
~ ~
9
~
00
17.7
-
0
~
(1
_
-
_
0
-
9
0
2.4
-
1
C)
5/1
_
0
-
( )
$\sim$
_
-
5
~
-
2
0
- 5
-5
-
9
C
2
-

7)	Inside diameter of innermost casing:inches.				
8)	Casing material: Temporary PVC SCH 40				
9)	The well was constructed with:  an open-hole production interval, state the open interval:  a well screen or perforated pipe, state the screened interval(s):				
10)	What annular interval surrounding the artesian casing of this well is cement-grouted?				
11)	Was the well built with surface casing?noIf yes, is the annulus surrounding the surface casing grouted or otherwise sealed? if yes, please describe:				
12)	Has all pumping equipment and associated piping been removed from the well?If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.				
Y. DES	SCRIPTION OF PLANNED WELL PLUGGING: If plugging method differs between multiple wells on same site, a separate form must be completed for each method.				
diagram	this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such visical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.				
	is planned plugging plan requires a variance to 19.27.4 NMAC, attach a detailed variance request signed by the applicant.				
1)	Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology				
	proposed for the well:				
	The temporary 2" well material will be removed. If no water is encountered then drill cuttings will be used to (10) ten feet of land surface and plugged using hydrated bentonite. If ground water is encountered the boring will be plugged tremie from bottom to a slurry of Portland TYPE I/II Neat cement in lifts				
2)	Will well head be cut-off below land surface after plugging?				
VI. PL	UGGING AND SEALING MATERIALS:				
	ie plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant. Attach a copy of the batch mix recij cement company and/or product description for specialty cement mixes or any sealant that deviates from the list of OSE approved sealants.				
1)	For plugging intervals that employ cement grout, complete and attach Table A.				
2)	For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.				
3)	Theoretical volume of grout required to plug the well to land surface: 208				
4)	Type of Cement proposed: Type I/II Neat Cement				
5)	Proposed cement grout mix: <a href="#">&lt;6.0</a> gallons of water per 94 pound sack of Portland cement.				
6)	Will the grout be:batch-mixed and delivered to the site				
	X   mixed on site     0SE DIT FEB 12 2021 №3012				

	$\leq$	
	5	
	_	
	9	
	٠.	
	٠,	
	٠,	
	-	
	•	
	4	
	1	
	>	
	d	
	٠,	
,		
6	-	
6	-	
6		
É		
4		
4	-	
4		
Carry Co		
Carried Co.		
Carried Co.		
200		
200		
000		
000		
000		
000		
100		
400		
400	00000	
400 11	00000	
41 000	00000	
11	00000	
11	00000	
41	00000	
470	00000	
11	00000	
400	( )( ) ad poa	
11 000	( )( ) ad poa	
400 11 .	C )() an poar	
400 11 .	C )() an poar	
400 11 .	( )() an poar	
400	( )() an poar	
	( )() an poar	
400 11 .	( )() an poar	
400 11 .	( )() an poar	
400 11 .	( )() an poar	
400 11 .	Ocorved by Of	
400 11 .	Ocorved by Of	
	Ocorved by Of	
400 11	Ocorved by Of	
W	( )() an poar	
. II OCE	Ocorved by Of	

Jackle D. Alkins	N/A	nd percent by dry weight relative to cement:	
IL SIGNATURE:  Jackie D. Alkins			
IL SIGNATURE:  lackie D. Atkins  say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State inneer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date   Date   Date			
ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):  The second of the state			
ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):  umes calculated on an up to an approximate 8.5° boring.  L SIGNATURE: ackle D. Altdns	Additional notes and calculat	iona:	
L. SIGNATURE:    Say that I have carefully read the foregoing Well Plugging Plan of Plans of the State pineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Signature of Applicant   Date		ions:	
L. SIGNATURE:  ackie D. Aktions			
L. SIGNATURE:  Jackie D. Altdins  Jackie D. Altdins			
L. SIGNATURE:  ackie D. Aktions			
L SIGNATURE:  ackie D. Altins  , say that I have carefully read the foregoing Well Plugging Plan of practions and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State interpertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    O2/10/2021			
L. SIGNATURE:  ackie D. Atkins  , say that I have carefully read the foregoing Well Plugging Plan of rations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State timeer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    O2/10/2021	ADDITIONAL INFORMATION	ON: List additional information below, or on separate sheet(	s):
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State timeer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gring Plan of Operations and attachments are true to the best of my knowledge and belief.    Date	umes calculated on an up to an ap	proximate 8.5" boring.	
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date   Date			
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date			
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date			
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date   Date			
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date   Date			
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date   Date			
say that I have carefully read the foregoing Well Plugging Plan of crations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    Date			
Jackle D. Alkins			
erations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.			<del></del>
erations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State gineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well gging Plan of Operations and attachments are true to the best of my knowledge and belief.    O2/10/2021	II. SIGNATURE:		
gging Plan of Operations and attachments are true to the best of my knowledge and belief.    O2/10/2021		, say that I have carefully read the foregoing	Well Plugging Plan of
Signature of Applicant  Date  ACTION OF THE STATE ENGINEER:  Sewell Plugging Plan of Operations is:  XX Approved subject to the attached conditions.  Not approved for the reasons provided on the attached letter.  Witness my hand and official seal this 18th day of February 2021  John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional II WD-08 Well Plugging Plan	Jackie D. Atkins erations and any attachments, whic	h are a part hereof; that I am familiar with the rules and regul	lations of the State
Signature of Applicant  Date  ACTION OF THE STATE ENGINEER:  See Well Plugging Plan of Operations is:	gineer pertaining to the plugging of	h are a part hereof; that I am familiar with the rules and regul f wells and will comply with them, and that each and all of the	lations of the State
ACTION OF THE STATE ENGINEER:  Solve Well Plugging Plan of Operations is:	Jackie D. Atkins erations and any attachments, whic gineer pertaining to the plugging of	th are a part hereof; that I am familiar with the rules and regul f wells and will comply with them, and that each and all of the hments are true to the best of my knowledge and belief.	lations of the State e statements in the Well
Witness my hand and official seal this 18th day of February , 2021  John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional III  WD-08 Well Plugging Plan	Jackie D. Atkins erations and any attachments, whic gineer pertaining to the plugging of	th are a part hereof; that I am familiar with the rules and regul f wells and will comply with them, and that each and all of the hments are true to the best of my knowledge and belief.	lations of the State e statements in the Well
Witness my hand and official seal this 18th day of February , 2021  John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional III  WD-08 Well Plugging Plan	ackie D. Atkins erations and any attachments, whic gineer pertaining to the plugging of	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.   Jack Atkins	lations of the State e statements in the Well  02/10/2021
	ackie D. Atkins crations and any attachments, whice gineer pertaining to the plugging of	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.   Jack Atkins	lations of the State e statements in the Well  02/10/2021
Witness my hand and official seal this 18th day of February , 2021  John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional II  WD-08 Well Plugging Plan	ackie D. Atkins erations and any attachments, whice ineer pertaining to the plugging of gging Plan of Operations and attack	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.   Jack Atkins  Signature of Applicant	lations of the State e statements in the Well  02/10/2021
Witness my hand and official seal this 18th day of February , 2021  John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional II  WD-08 Well Plugging Plan	ackie D. Atkins crations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.   Jack Atkins  Signature of Applicant  GINEER:	lations of the State e statements in the Well  02/10/2021
Witness my hand and official seal this 18th day of February , 2021  John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional II  WD-08 Well Plugging Plan	Packie D. Atkins crations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENGLY.	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:	lations of the State e statements in the Well  02/10/2021
John R. D'Antonio Jr. P.E., New Mexico State Engineer  By:  Christopher Angel, PG Water Resource Professional II  WD-08 Well Plugging Plan	ackie D. Atkins crations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENG S Well Plugging Plan of Operation: X X Approved subject to	the are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  o the attached conditions.	lations of the State e statements in the Well  02/10/2021
By:  Christopher Angel, PG Water Resource Professional II  WD-08 Well Plugging Plan	Packie D. Atkins crations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENG S Well Plugging Plan of Operation  XX Approved subject to	the are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  o the attached conditions.	lations of the State e statements in the Well  02/10/2021
Christopher Angel, PG Water Resource Professional II WD-08 Well Plugging Plan	Packie D. Atkins  crations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENG SERVICE SERVIC	the are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  of the attached conditions.  we reasons provided on the attached letter.	ations of the State e statements in the Well  02/10/2021  Date
Christopher Angel, PG Water Resource Professional II WD-08 Well Plugging Plan	Packie D. Atkins erations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENGINEERS Well Plugging Plan of Operation: XX Approved subject toNot approved for the process of t	the are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  of the attached conditions.  the reasons provided on the attached letter.  I seal this 18th day of February	dations of the State e statements in the Well  O2/10/2021  Date
WD-08 Well Plugging Plan	Packie D. Atkins  erations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENG SERVICE SERVIC	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  o the attached conditions.  the reasons provided on the attached letter.  I seal this 18 t h day of February  John R. D'Antonio Jr. P.E., New Me	dations of the State e statements in the Well  O2/10/2021  Date
WD-08 Well Plugging Plan	Jackie D. Atkins  erations and any attachments, whice gineer pertaining to the plugging of agging Plan of Operations and attack attacks.  ACTION OF THE STATE ENGINEER ACTION OF THE STATE ENG	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  s is:  the attached conditions.  the reasons provided on the attached letter.  I seal this 18th day of February  John R. D'Antonio Jr. P.E., New Me	dations of the State e statements in the Well  02/10/2021  Date  2021  exico State Engineer
	Packie D. Atkins  erations and any attachments, whice gineer pertaining to the plugging of the ging Plan of Operations and attack  ACTION OF THE STATE ENGINEERS Well Plugging Plan of Operations  XX Approved subject to Not approved for the	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  s is:  the attached conditions.  the reasons provided on the attached letter.  I seal this 18th day of February  John R. D'Antonio Jr. P.E., New Me	dations of the State e statements in the Well  02/10/2021  Date  2021  exico State Engineer
Version: July 31, 201: Page 3 of:	Packie D. Atkins erations and any attachments, whice gineer pertaining to the plugging of gging Plan of Operations and attack  ACTION OF THE STATE ENGINEERS Well Plugging Plan of Operation: XX Approved subject toNot approved for the process of t	th are a part hereof; that I am familiar with the rules and regulf wells and will comply with them, and that each and all of the himents are true to the best of my knowledge and belief.  Signature of Applicant  GINEER:  s is:  the attached conditions.  the reasons provided on the attached letter.  I seal this 18th day of February  John R. D'Antonio Jr. P.E., New Me	Date  2021  vice State Engineer

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)	N/A	N/A	0
Bottom of proposed interval of grout placement (ft bgl)	N/A	N/A	51
Theoretical volume of grout required per interval (gallons)	N/A	N/A	208
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement	N/A	N/A	<6.0
Mixed on-site or batch- mixed and delivered?	N/A	N/A	On-Site
Grout additive 1 requested	N/A	N/A	N/A
Additive 1 percent by dry weight relative to cement	N/A	N/A	N/A
Grout additive 2 requested	N/A	N/A	N/A
Additive 2 percent by dry weight relative to cement	N/A	N/A	N/A

TABLE B - For plugging intervals that will employ approved non-cement based scalant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)	N/A	N/A	0
Bottom of proposed sealant of grout placement (ft bgl)	N/A	N/A	10
Theoretical volume of sealant required per interval (gallons)	N/A	N/A	26
Proposed abandonment sealant (manufacturer and trade name)	N/A	N/A	Bariod Hole Plug

# 2020-02-09\_CP-XXX\_Stebbins\_PPOO-Form-for sign

**Final Audit Report** 

2021-02-10

Created:

2021-02-10

By:

Lucas Middleton (lucas@atkinseng.com)

Status:

Signed

Transaction ID:

CBJCHBCAABAAYKr8cTx3xA6WHxAaSfa3juXpZwTUUQD\_

# "2020-02-09\_CP-XXX\_Stebbins\_PPOO-Form-forsign" History

- Document created by Lucas Middleton (lucas@atkinseng.com) 2021-02-10 - 11:01:32 PM GMT- IP address: 69.21.248.123
- Document emailed to Jack Atkins (jack@atkinseng.com) for signature 2021-02-10 - 11:02:04 PM GMT
- 🖰 Email viewed by Jack Atkins (jack@atkinseng.com) 2021-02-10 - 11:39:26 PM GMT- IP address: 74.50.153.115
- Composition 
  Document e-signed by Jack Atkins (jack@atkinseng.com) Signature Date: 2021-02-10 - 11:40:40 PM GMT - Time Source: server- IP address: 74.50.153.115
- Agreement completed. 2021-02-10 - 11:40:40 PM GMT

Office of the State Engineer Water Rights District II—Roswell: 1900 W 2nd St Roswell, NM 88201

RE: Agent Authorization for Atkins Engineering Associates, Inc.

To whom it may concern:

John Hurt (Matador Resources) authorizes Atkins Engineering Associates, Inc. to act as his agent for Plugging Plan of Operations.

John Hurt

**Date** 

**ACKNOWLEDGEMENT:** 

STATE OF LEXAS

COUNTY OF Dallas

This instrument was acknowledged before me this 10th day of February, 2021, John Hurt

Notary Public: Aiane E Strubling

My Commission Expires: 3/88/2022



### **Carlsbad Field Office Operator Copy**

Form 3160-3 (March 2012) HIGH CAVEKARST

FORM APPROVED \*WC-015 G-04 S202920D; BONE SPRING OMB No. 1004-0137 Expires October 31, 2014 UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR NMNM-003677 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No. **V** DRILL la. Type of work: REENTER 8. Lease Name and Well No. lb. Type of Well: ✓ Oil Well Gas Well Other ✓ Single Zone STEBBINS 20 FED 124H Multiple Zone Name of Operator MATADOR PRODUCTION COMPANY 9. API Well No. 30-015-3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 5400 LBJ FREEWAY, SUITE 1500 972 371 5241 **DALLAS, TX 75240** WILDCAT; BONE SPRING\* 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface 361' FSL & 130' FWL 20-20S-29E SHL: SWSW 20-20S-29E NMPM BHL: SESE 20-20S-29E NMPM At proposed prod. zone 330' FSL & 240' FEL 20-20S-29E 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office\* 11 MILES NE OF CARLSBAD, NM **EDDY** NM Distance from proposed\* 16. No. of acres in lease BLM lease = 2150.97 acres 17. Spacing Unit dedicated to this well SHL: 2279' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) S2S2 20-20S-29E 18. Distance from proposed location\* SHL: 30' Steb. 20 114H to nearest well, drilling, completed, BHL: 615' (ditto) 19. Proposed Depth 20. BLM/BIA Bond No. on file TVD: 7710' BLM NMB-001079 applied for, on this lease, ft MD: 12336' Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 3244' UNGRADED 01/02/2017 3 MONTHS 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate/Forest Service Office) 5. Operator certification Such other site specific information and/or plans as may be required by the 25. Signature Name (Printed/Typed) **BRIAN WOOD** (PHONE: 505 466-8120) 11/05/2016

	(	
Title		
CONSULTANT	(FAX: 505 466-9	(682)
Approved by (Signature) Con Muyt	Name (Printed Typed)	yter 05/03/17
TILL DE MANAGER	Office CARL SRAD	FIELD OFFICE

CARLSBAD FIELD OFFICE Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

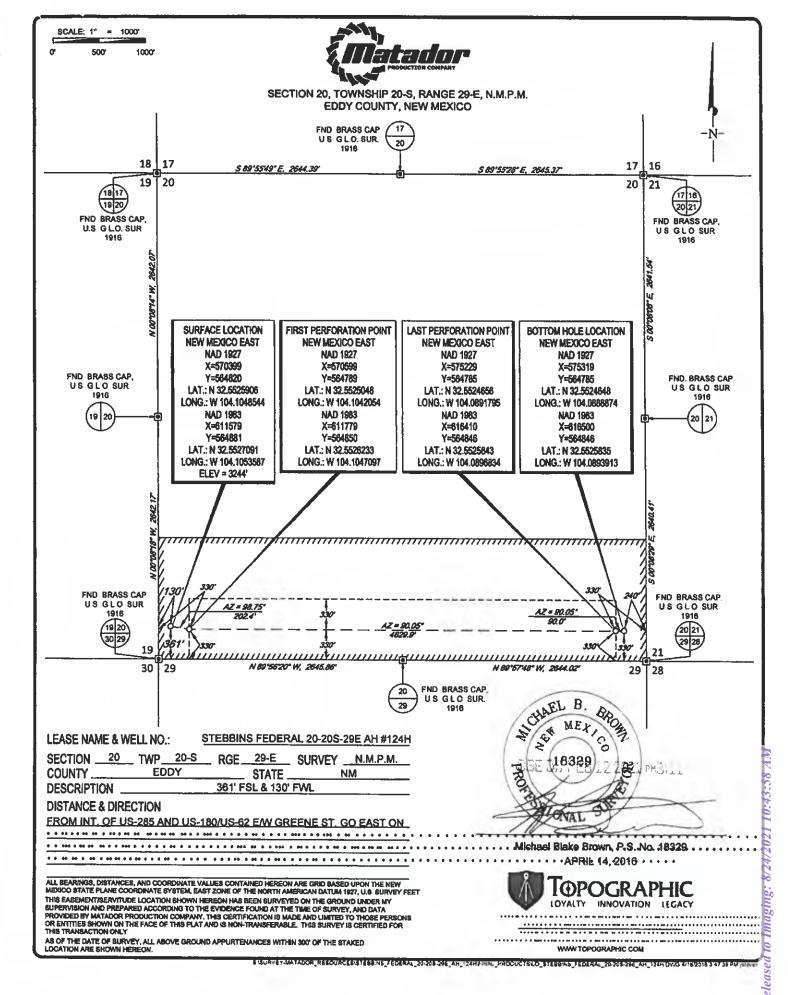
(Continued on page 2)

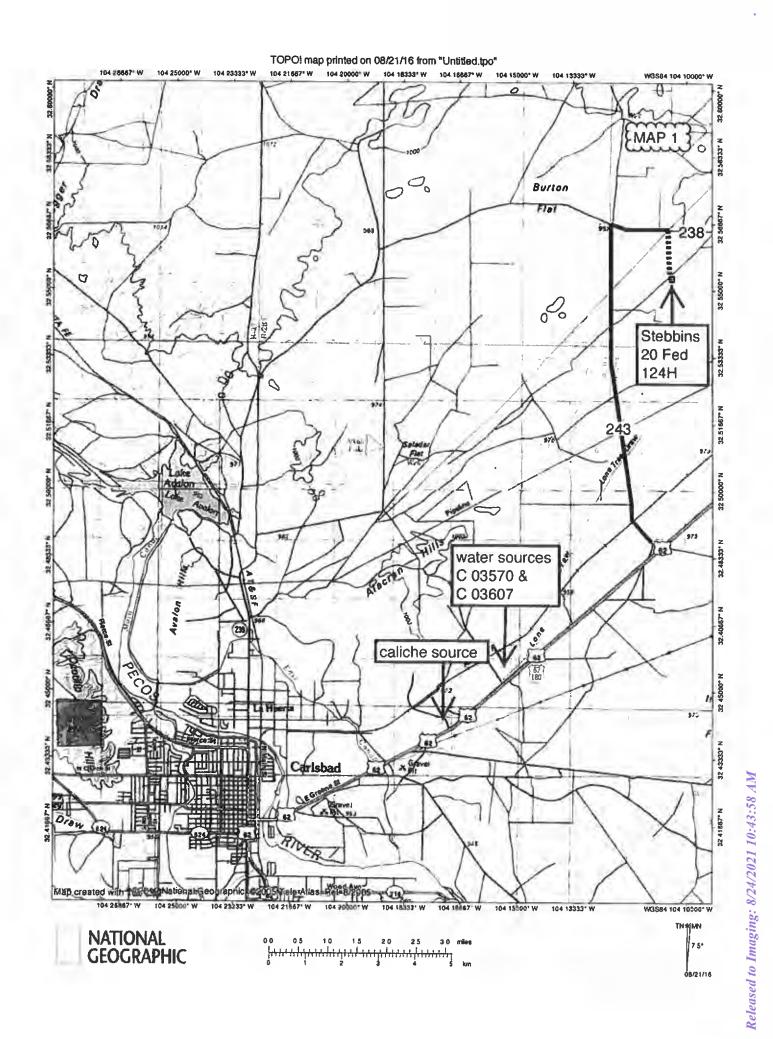
\*(Instructions on page 2)

Released to Imaging: 8/24/2021 10:43:58 AM

SEE ATTACHED FOR CONDITIONS OF APPROVAL







### Specific Conditions of Approval for CP-1866-POD1

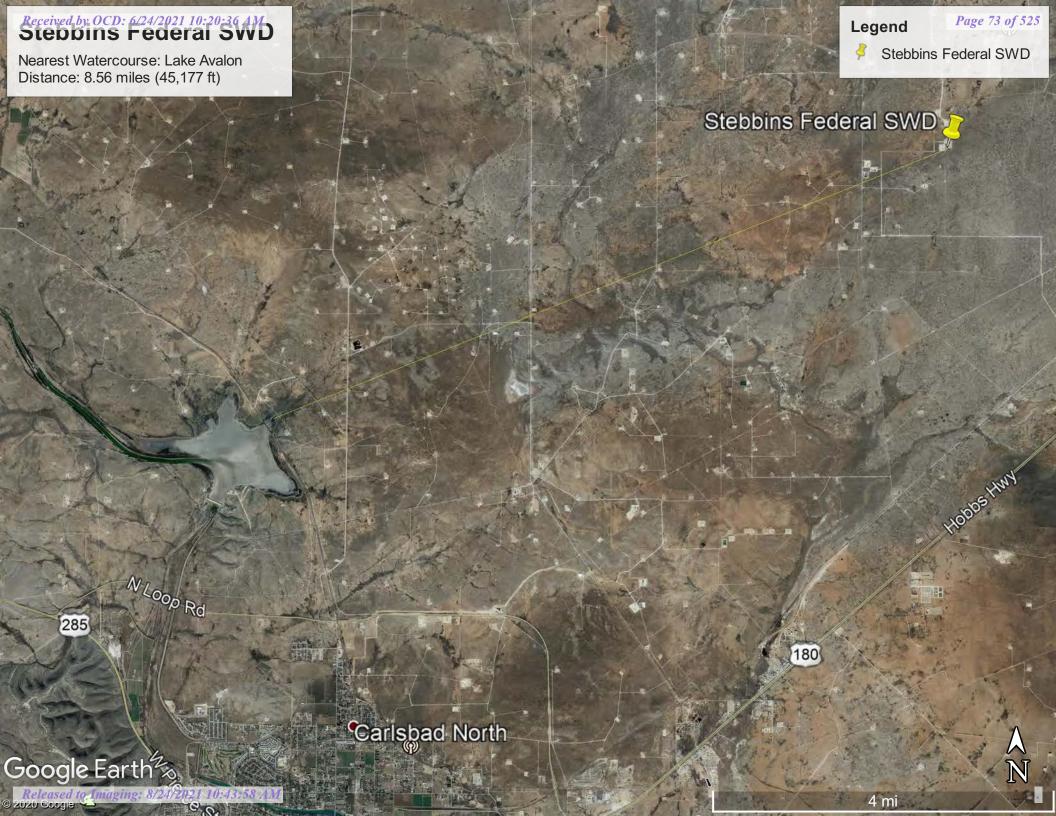
- If groundwater is <u>not</u> encountered the borehole can be filled with drill cuttings up to 10 feet below ground surface. From 10 feet below ground surface to ground surface the borehole will be filled with bentonite. Bentonite chips shall be hydrated with 5 gallons of water per 50 pound sack.
- 2) If groundwater is encountered, a Type I/II neat Portland cement slurry with no more than 6.0 gallons water per 94-pound sack of Portland cement is approved.
  - a) Grout shall be tremied from the bottom up.
- 3) A completed Plugging Record form shall be submitted no later than 30 days after completion of the plugging.
- 4) Before any attempts are made to plug this well, the O.S.E. District II Office shall be notified 48 hours in advance of the anticipated schedule for plugging, so that an O.S.E. representative has the opportunity to witness the procedures, if deemed necessary.
- 5) Any deviation from this plan <u>must</u> obtain an approved variance from this office prior to implementation.
- 6) Aggrieval of this permit, or any of the conditions of approval therein, suspends the permit. No plugging operations shall occur while a permit is aggrieved.

Witness my hand and seal this 18th day of February A.D., 2021

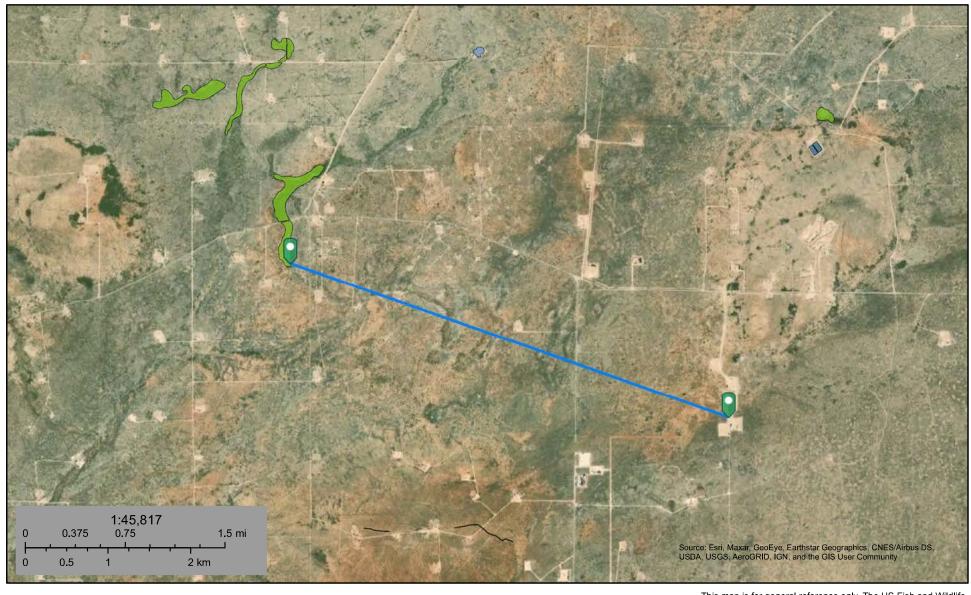
John R. D'Antonio Jr., P.E., State Engineer

By:

Christopher Angel, PG Water Resources Professional II



## Stebbins Federal SWD Lakebed



January 26, 2021

#### Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

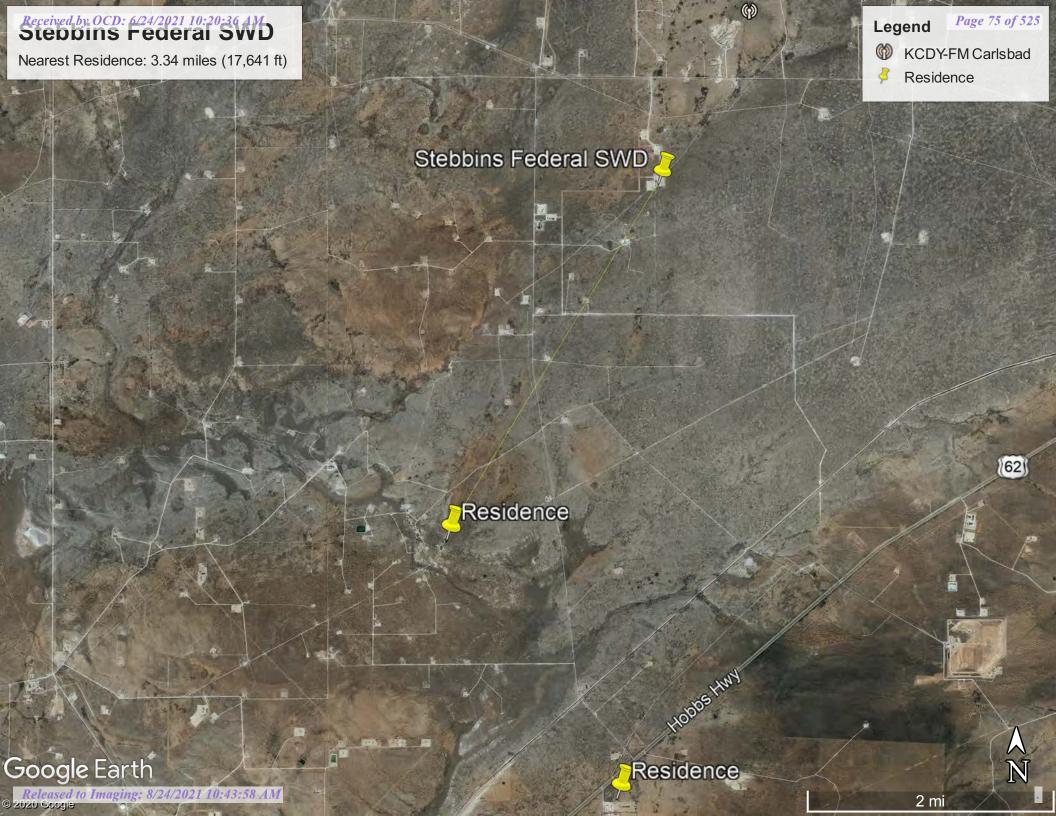


Lake

Other

Riverine

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

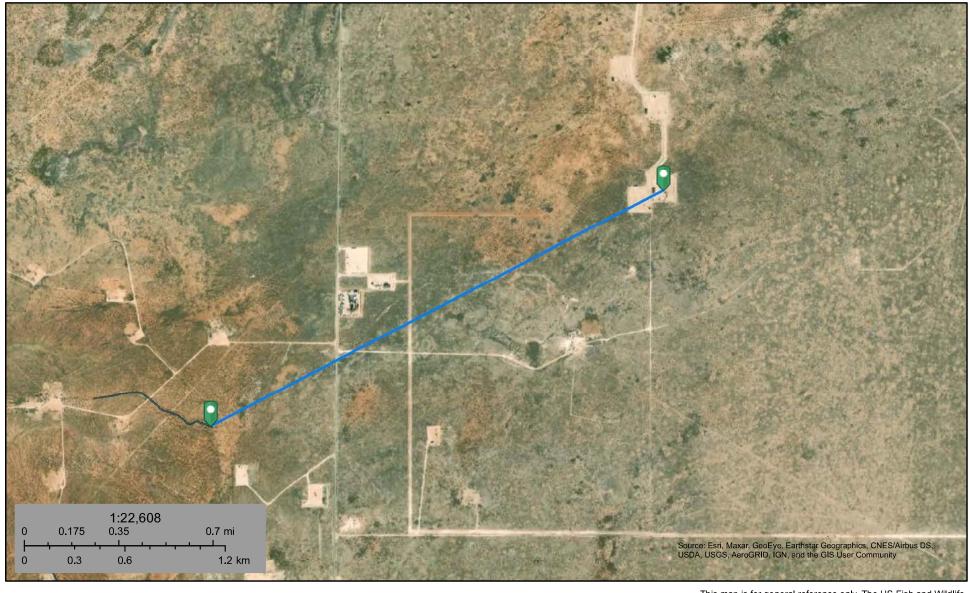




### U.S. Fish and Wildlife Service

## **National Wetlands Inventory**

## Stebbins Federal SWD Wetlands



January 26, 2021

#### Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Lake

Freshwater Forested/Shrub Wetland

Freshwater Pond



Riverine

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

# National Flood Hazard Layer FIRMette





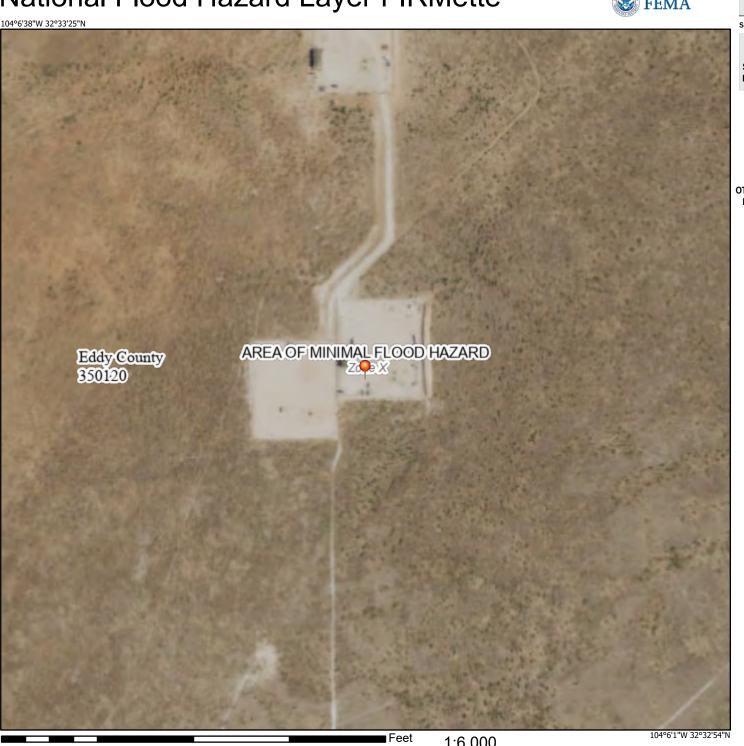
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation **Coastal Transect** ----- Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary — --- Coastal Transect Baseline OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available MAP PANELS Unmapped The pin displayed on the map is an approximate point selected by the user and does not represent

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

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/22/2021 at 5:32 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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





#### Soil Map-Eddy Area, New Mexico

#### MAP LEGEND

Spoil Area

Stony Spot

Wet Spot

Other

Rails

**US Routes** 

Major Roads

Local Roads

Δ

**Water Features** 

Transportation

+++

Background

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

#### **Special Point Features**

ဖ

**Blowout** 

 $\bowtie$ 

Borrow Pit

36

Clay Spot

Closed Depression

Gravel Pit

**Gravelly Spot** 

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

#### 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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

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

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

Date(s) aerial images were photographed: Feb 27, 2020—Feb 28, 2020

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

## **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	34.2	100.0%
Totals for Area of Interest		34.2	100.0%

### **Eddy Area, New Mexico**

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

### **Map Unit Setting**

National map unit symbol: 1w5f Elevation: 1,250 to 5,000 feet

Mean annual precipitation: 10 to 25 inches Mean annual air temperature: 57 to 70 degrees F

Frost-free period: 190 to 235 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Reeves and similar soils: 55 percent

Gypsum land: 30 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of

the mapunit.

### **Description of Reeves**

#### Setting

Landform: Hills, plains, ridges

Landform position (two-dimensional): Backslope, footslope,

shoulder, toeslope

Landform position (three-dimensional): Crest, nose slope, side

slope, head slope Down-slope shape: Convex Across-slope shape: Linear

Parent material: Residuum weathered from gypsum

#### Typical profile

H1 - 0 to 8 inches: loam H2 - 8 to 32 inches: clay loam

H3 - 32 to 60 inches: gypsiferous material

#### **Properties and qualities**

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low

to moderately low (0.00 to 0.06 in/hr) Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 25 percent

Gypsum, maximum content: 80 percent

Maximum salinity: Very slightly saline to moderately saline (2.0 to

8.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water capacity: Low (about 4.3 inches)



Map Unit Description: Reeves-Gypsum land complex, 0 to 3 percent slopes---Eddy Area, New Mexico

#### Interpretive groups

Land capability classification (irrigated): 3s Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Ecological site: R042XC007NM - Loamy

Hydric soil rating: No

#### **Description of Gypsum Land**

#### Setting

Landform: Hills, plains, ridges

Landform position (two-dimensional): Backslope, footslope,

shoulder, toeslope

Landform position (three-dimensional): Crest, nose slope, side

slope, head slope Down-slope shape: Convex Across-slope shape: Linear

Parent material: Residuum weathered from gypsum

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: No

### **Minor Components**

#### Cottonwood

Percent of map unit: 5 percent

Ecological site: R042XC033NM - Salty Bottomland

Hydric soil rating: No

#### Reagan

Percent of map unit: 5 percent

Ecological site: R042XC007NM - Loamy

Hydric soil rating: No

### Largo

Percent of map unit: 5 percent

Ecological site: R042XC007NM - Loamy

Hydric soil rating: No

### **Data Source Information**

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

### **Ecological Reference Worksheet**

Author(s) /	' participant(s):	John Tunberg,

Contact for lead author: 505-761-4488 Reference site used? Yes/No No

**Date:** 2/12/2010 **MLRA:** 42.3 **Ecological Site:** Loamy This <u>must</u> be verified based on soils and climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

<u>Indicators:</u> For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for <u>each</u> community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.

#### 1. Number and extent of rills There should not be any rills.

After wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances rills may double in number on steeper slopes at the margins of this site after high-intensity summer thunderstorms. Any rills formed should not be long lived or interconnected and should heal rapidly.

2. Presence of water flow patterns: There can be evidence of sheet flow.

There can be a few flow patterns that should be short and discontinuous. There can be some sheet flow. Water flow patterns should only be present following intense storm events on upper slope limits at the margins of this site. Numerous obstructions alter flow paths. Flow pattern length and numbers may double after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances.

- 3. Number and height of erosional pedestals or terracettes: Pedestals should be rare. Terracettes can occure and should be discontinuous. There can be a few pedestals that should be less than 1 inch high. Terracettes can be common and should be discontinuous. If present plant or rock pedestals and terracettes are almost always in flow patterns. Wind caused pedestals are rare and only would be on the site following after wildfires, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. These would show signs of healing within 1 year after event.
- 4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground): Bare ground can make up to 50% of the ground cover on this site according to the ESD. Bare patch size should be small.
- 5. Number of gullies and erosion associated with gullies:

Gullies and erosion associated with gullies should be rare are infrequent. Typically, gullies if present will only follow the micro topography. Natural drainages with little to no active cutting are common on this site. There should not be any accelerated erosion. After high-intensity summer thunderstorms or after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances then gully formation would be accelerated for a year or two. Evidence of healing within 1 year of event and continuing after that.

#### 6. Extent of wind scoured, blowouts and/or depositional area

There should not be any wind scoured, blowouts and/or depositional areas. However there can be potential for depositional areas. Wind erosion is minimal when the site is in a well vegetated condition. Significant wind erosion would only be present following high-intensity summer thunderstorms, after wildfire, or abnormally high human or herbivore impacts or extended drought or combinations of these disturbances. After rain events, exposed soil surfaces form physical crusts that tend to reduce wind erosion. Deposition from off site sources can be common on this site and is in fact a primary soil forming process. This site is succeptable to wind erosion when vegetation is removed or significantly decreased.

#### 7. Amount of litter movement (describe size and distance expected to travel):

Litter should be small (less than "1 in diameter) and its movement should be minimal. This site has adequate vegetation to stop litter movement after short distances. Most of the litter movement on this site will be litter that has been transported onto the site from adjacent sites. Litter produced on this site stays on the site and only travels short distances.

8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different):

This site can be susceptible to alluvial erosion. Stability values are estimated to be 1-2 in interspaces and 3-5 at bases of vegetation. This would

9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different):

The SOM content should be less than 1%. A--0 to 6 inches; grayish brown (10YR 5/2) loam, dark grayish brown (10YR 4/2) moist; weak fine subangular blocky structure; hard, friable, slightly sticky; surface 1/2 to 2 inches has weak thin to medium platy structure; common very fine and fine pores; common very fine, fine and medium roots; strongly calcareous; slightly alkaline (pH 7.6); clear smooth boundary. (4 to 8 inches thick)

## 10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff:

Overall, infiltration rates should be slow for this site but can be higher around bases of grasses than in interspaces and around bases of shrubs. The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches. Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate.

1/26/2021, 9:45:12 AM

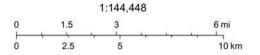
#### Faults

— Fault, Exposed

— Fault, Intermittent

Fault, Concealed

Shere Zone



NMBGMR, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset; and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data;

## **ATTACHMENT 4**



Client:	Matador Resources	Inspection Date:	1/13/2021
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	1/18/2021 2:15 PM
Client Contact Name:	John Hurt	API #:	30-015-44177
Client Contact Phone #:			
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	
		Summary of	Times
Arrived at Site	1/13/2021 10:10 AM		
Departed Site	1/13/2021 4:50 PM		

### **Field Notes**

**11:43** Arrived on site and filled out safety paperwork

11:44 Delineation of spill area, gather SS and BH

### **Next Steps & Recommendations**

1



### **Site Photos**



Spill area.



Spill area



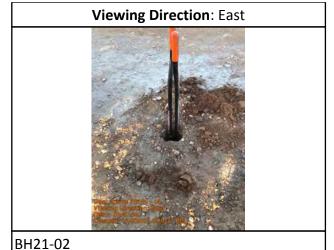
Spill area



Spill area







Spill area





Run on 1/18/2021 2:15 PM UTC Powered by www.krinkleldar.com Page 3 of 6





Spill area



Spill area





Viewing Direction: Northwest

Run on 1/18/2021 2:15 PM UTC Powered by www.krinkleldar.com Page 4 of 6









### **Daily Site Visit Signature**

**Inspector:** John Ramirez

Signature: Signature

Spill Respon	nse and	Sampling	5			V	ERTE		
Client:	1	Malada	er	A	Initial Spill Information - Record on First Visit				
Date:		Malada 1-14-2	?/	1,000	Spill Date:	SECOLO OIL LIEST AISIT			
Site Name:		1	1	***************************************	Spill Volume:	Series control of the			
Site Location:		Stebbil	ns Fed	SUP	Spill Cause:	The state of the s			
Project Owner:		1			Spill Product:				
Project Manager:	-			Marin proper storing to	Recovered Spill Volume:				
Project #:					Recovery Method:				
			Field Screening	Sampling					
					Data Collection	(Check for Yes)			
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	Chloride PPM	Notes	Trimble Coordinates	Marked on Site Sketch		
BE/WS/BH - Year - Number Ex. BE18-01	Ex. '2ft	Ех. 400 ррт	200 ppm	Method: Titration - EC Probe	-				
5521-03	0.5			2.20/					
554	0.5			0,73/16.6					
555	0.5			0,45	7				
556	0.5			0.25/18					
557	0.5			2,28/					
558	0.5			1.77/18.6		91			
559	0.5			18.1					
5510	0.5			0.79		The second secon			
55//	0,5			0.36					
5512	0.5			0.79/18.6					
55/3	0.5			2.75/14 7		1000			
3.1	0.5			2.59/23.7	Stepped 12' Stepped 41' Stepped 12' Stepped 12'				
4.1	0.5			0.79/22.1	Stepped u'				
7.1	0.5			2.38/22.0	SERPPLO 12	40.			
8.1	0.5			721/21.0	stepped 121				
9.1	05			1.43/28.7	STEPPED 12'				
10.1	0.5			2.20,	Stepped 41	1.00			
12,1	0.5			1.91	stepped ui				
13.1	0.5			1.55/20.7	Stepped 12' Stepped 16' Stepped 20'				
3.2	0.5		:	2.33/21.2	Stepped 16'				
3.3	0.5			0.45/21.2	stepped 20'				

Spill Respor	ise and	Sampling					V=
Client:	(n = 1)	Marad		And the state of t			ERIE
Date:		1-14.2	1	1	Initial Spill Information - Rec	ord on First Visit	
Site Name:					Spill Date:	THE RESIDENCE OF THE PARTY OF T	
Site Location:		Stabbine	Fed SI	, ,	Spill Volume:		
Project Owner:	- "	100000	rea )	NI	Spill Cause:		
Project Manager:					Spill Product:		
Project #:		, , , , , , , , , , , , , , , , , , ,			Recovered Spill Volume:		
				Sampling	Recovery Method:		
<u> Parantalan</u>			Field Screening		Data Collection (C	heck for Yes)	
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	Chloride PPM	Notes	Trimble Coordinates	Marked on Site Sketch
BE/WS/BH - Year - Number Ex. BE18-01	Ex. '2ft	Ex. 400 ppm	200 ppm	Method: Titration - EC Probe		and the second s	
8,7	0.5			2,27/21,7	Stepped 16'		***************************************
8.3	0.5			0.65/20.4	STEPPED ALPOSS 10	Here's a second	
8.4	0.5		2	0.24	Stepped 4'		
9,2	0.5		·	0.31		****	
10.2	0.5			0.59	Stepped 20'		No. 11.
10.3	0.5			110.0		1	
23.2	0,5			19.8	Stepped 12 1		
BH21-02	0'	Manager and the second		3.52/			
BHZ	11			0.66/	,		
BH3	2'			2.26			
BH4	3'	Ultra de la constanta de la co		2.26, 2.26, 18.5 2.14 17.7			
- Control of the Cont							
***							
Section of the sectio							
				and the second of the second o			

Spill Resp	onse an	d Sampling	or S					V	
Client;		Mata	the contract and indicate was printed and the second section of the second section of the sectio			garding amount of the second classics on this section of produce governor	MATERIAL STREET, STREE	EAT	
Date:		1-13.2	1-13.21		Initial Spill Information - Record on First Visit				
Site Name:		man and the second	- Care Constant Const	Transcript Statement	Spill Date:	No. 100 (comme ) of M	W. Bornell		
Site Location:		Stebbin	35 5 1	)	Spill Volume:	- Income	the contract of		
Project Owner;		150010	1) Tues		Spill Cause:		was a second state of the second state of		
Project Manager:		Village Company manufacture with Expense plan provider was	and their contract of the second of the seco		Spill Product:	* ******		and the support of the party.	
Project#:			P		Recovered Spill Volume	- Tree			
			Dadeg	round Samples	Recovery Method:				
Samula III	The state of the s	The second secon	riem screening			ion (Check for Yo	es)		
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	Quantab (High/Low) + or -	Lab Analysis	Picture	Trimble	Marked	
SS/TP/BIL - Year Number Ex. BH18-01	Ex. '2ft	Ex. 400 ppm	200 ppm	Ex. High+	Ex. Hydrocarbon Chloride		Coordinates	Site Ske	
B\$1	01	The state of the s	Account to the second s	0.16/20.8		11.0		***************************************	
BZ	0.5	- to the second	7	0.16/26.8 0.16/20° 0.15/19.8° 0.17/20.5°				And districtly our death allowing & Part districtly & &	
B < 3	1'	Addition to the state of the st		0.15/1000	The state of the s	SEALON STATE STATE OF THE SEALON STATE S	According between \$11,000 and the street	TITSOATIONAMINES ANALONISM	
B54	2	es and the production of the	1 - The Control of th	0.17/20.5	S-1		14		
551	0'	* ***		19.80		a to the second of the second	a contraction of		
552	0.5'	and the second of the second o		0.05/2010				W <del>. 19</del>	
553	1'			0.06/2010	Hill Land				
554	2'	S. S. Leader & Section (1) Associate Associate Associate (1) &		0.06/20.4					
27 (27 (27 (27 (27 (27 (27 (27 (27 (27 (		Market of the state of the stat	- Communication of the Communi	120,7	and the second s	on the second se			
Landon Control and State of the Control of the State of S			V						
a de la facilita de la compansa de la democrata de la facilitada de la fac	-AAA JARREEN A PORTON WARE BALLET AND	and and the same of the same o	100111111111111111111111111111111111111				(100.00) 1100. 440°-0-00099014.0000000000000000000000000000000		
Manager of Telephology and the Secretary of the Secretary	***************************************						to a control desired	ter personnel at most a language	
			11 - 11 - 11 - 12 - 13 - 13 - 13 - 13 -		At an online of providing 1	many at the state of the state	Section of the sectio	A. Company of the construction of the	
A Charles and a committee of the second or second as the second of the s	THE GOLD THAT AND ADDRESS OF THE PARTY OF TH	To think the States of the Park of the					**************************************	Normal passages a replace.	
de provincia de a seda se provincia ya San Spanosa e a resoluzio para dell'ancione di Sancia	the production of the state of	The state of the s	*******						
A transport of the second seco	and the same of th	the state of the s	and the second				A STATE OF THE STA	A comment of the second section for the second	
The state of the s	and the same of th				- + fee 11 m		*)	name in a second second	
					property of the second		and a contract to the second of the second of		
CONTRACTOR AND AREA OF A STATE OF	Control - California mond disease as server / control		THE PERSON NAMED IN					Marketon and Allindrich	
Managara of Colombia a Ladinova, a fig. and got Avel and	and desired the second state of the second s	and the first sent the sent to	the state of the s		-				
At a manuscript and seed good good administration of students of experiences.	modelle i i management en		entral distance interesting to the entral of	=			The state of the s	- Start Opt, Sand St. medical	
		Seat of the seat o			The state of the s	The second secon	(*************************************	The state of the s	
			The state of the s		The second section of the section of th		Approximate an entrance of 11 to 10	and the state of the state of the state of	
To Alberta (100 best 111 best on the base of the second	The statement is a consideration of all productions of the statements of the statement of t	(9 c) 4 c) (10) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4			and signal in		-10000 MARIE - 11	many without a farm	
The first 11st of the property of the AMAG is the	The last temporary of the Bridge of the State of the Stat	100 may 100 may 1 0 0 1 may 2 1	-						
isisumennum	unistamanan a	921/10:43:58	Maran					- and management of the convenience	

Spill Res	ponse and	d Samplin	g					W	
Client:		Marka		TTT BETTER COMMITTEE COMMI	VERT  biitial Spill Information - Record on First Visit				
Date:		1-13.	?1		The state of the s	Record on Firs	t Visit	- whose field formation of experience of the second second second	
Site Name:		1-13.8 Stebbn	- 84	0	Spill Date:	TI	in the distance of		
Site Location:		and the fundamental and a second		the second secon	Spill Volume:	- Mr == 10	* Caracana	and the same	
Project Owner:		producers ( ) models of the later of the lat	***************************************		Spill Cause:		and the second s		
Project Manage	r:	Filtration (Consultation Consultations)	Water residue to the part of t		Spill Product:		· · · · · · · · · · · · · · · · · · ·	and market to resistance they are the constraint	
Project#:		ESPANNING - TO THE WAS COMMON TO SERVE A	The second second second	The second of th	Recovered Spill Volume;	1010-0-100		extractional data of the contraction of the contrac	
				Sampling	Recovery Method:	and the same of th			
Sample ID	Depth (ft)	VOC (PID)	Field Screenin	The same of the sa	Data Collection	n (Check for Y	es)		
S5/TP/BIL year		V.V. ((11))	(ppm)	(High/Low) + or -	Lab Analysis	Picture	Trimble Coordinates	Marked on Site Sketch	
Number Ex. BH18-01	Ex. '2ft	Ех. 400 ррт	200 ppm	Ex. High-	Ex. Hydrocarbon Chloride	***************************************	***************************************		
BH21.01	0'	annual,		10.15	The state of the s	erine outling accuracy.	- In the second	TO WE THE STREET AND THE REAL PROPERTY OF A PARTY OF THE	
BHZ	0,5		No. 1 and the state of the stat	8.71			The state of the s	Legisland proprietty of produce   100 miles to 1,100 mg	
BHBZ	1.5	***	remain of the enteredant Manager	5166/17.2	and the state of t	The state of the s		***************************************	
BHAZ	2	and the state of t	A	0.66/19,4	\$ 17-11-16-11-10-1			** ** * * * ** ** ** ** ** ** ** ** **	
BHSI				0.94/	- 11 114 - 114		* Anthropagnia ( )	1	
BH&I		W. Marie I Harris I. I.		1.35					
13431-02		The state of the s		8.04,	Hit auger map dep	044			
BHZ	The desired order appears placed and the control of placed and the control of the			6.75 18.6		- Menoria	International Control of the Control		
			tion commences to the second s	(18,7					
BHZ	2'			0.00/9.3				The second of th	
	A Transit Mr. A feet Wall Land See (1986)	heliese in the			13	And the state of t	the state of the s	errore and an incomplete to the control of the cont	
n-179 kanna i nagyawaka (nganana na n	garatika meli anag sa Sana sanagan ang masa sa sa	A Company of the second	(p)				M		
	Destroite and American Statement Communication of the Communication of t	The state of the s						ALL or man and the strength of	
entranting for specific proof or a second section and section of the ex-							* dissipation to the second	e the second of	
to and personal to the local contraction.		The second second					7/4/4/4	110.00	
				f			***************************************		
and distributions on an east sign minority of more and a court of	a gale berg i manama Pamama 11 manama ya wakanda asak 18 mana ya wa		e superior and the superior	The state of the s	-				
the transfer of the plane of the transfer of the state of			- ne - trade - (1 - 8				and the season		
and Annual ( ) is the majorithm or company of Andrews (	Company (a.g.) have represented to the contract of the company of the contract	and the state of t	Approximate the contract of th			100 (000 000 000 000			
- Production of Editorial State State Control of the State Control of th	and the second section of the section						Ub a track of the later	and the contract of the contra	
- (* - to- 8 1800° Many-Aristy y wire Manufact Majores - (*	The second section of the second section of the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the section of	3			11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	and the same of the same of the		The Control of the Co	
and in comment of the	10194401144044140441404	***************************************							
	(Miniathananana)	Westumanssones	Notice and the second						

Spill Res	oonse an				- Personal		V	ERT
Client:		Makedo	A series (Commence (Company and Assessment A		Initial Spill Information	Record on ta		the state of the s
Date:		1-13-2	/		Spill Date:	**************************************	St. MISIT	Andrew Control of the
Site Name:		Slebbins	540		Spill Volume:	Howard and the second		
Site Location:	iş.	tioner - pro-man		The second section of	Spill (ause:		Links in Address of the Control of t	re-
Project Owner:	1	The second secon	The same of the sa		Spill Product:		TATAL TO STATE OF THE PARTY AND THE PARTY AN	The control of the control of
Project Manager:		Internation of the special production of	District New Johnson of States and States	andre to a servi	Recovered Spill Volume:		The second secon	Comments of the section of the secti
Project#:		The same of the sa			Recovery Method:		and the state of t	The state of the s
			Field Screening	Samplin	E Comments of the Comments of			
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	Quantah (High/Low)-t-or	Lab Analysis	on (Check for Y	es) Trimble	Marked
S/TP/BIL Year Number Ex. BH18-01	Ex. '2ft	Ex. 400 ppm	200 ppm	Ex. Tigh-	Ex. Hydrocarbon Chloride	Picture	Coordinates	Site Ske
5521-01	0-0.5		Armine and different and decisions	1.57/20.9	Stopped out 6' Stopped out 6' Hopped out 121	400		dies i Apogeni i Impania
5301.2	and the special control of the special	The second secon		0.62/80.1	Skepped out 6'			the december of the party of the
5501.3	Patterna de la companya de la compan	Name and the second of the last		1.60/172	Hopel out 121		and the second s	(1 Promorphishing) - And Sire Signi
5301,4	The state of the s		The state of the s	1.57/10,4	Stopped out 121	Self in the service of	(Section 1)	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
301.5	thereof entires . It medical a sale entire to			165	stepped out do	F (F - 1) to (1 - 1)	- contribution of	
501.6	Terramony and an allegations are a series of a series		1- 1 -	1.34/17.8	Stypel out 10'			President Control
501.7				2.22/18.3	Stepped out 10'	- I - II magana)	( <del></del> (	Males and projects
5501.8		7 300		0,481	Stepped GUZ 4'	-1 ( + ) a Convance	and the spreading of th	The state of the state of
501.9		And the second		0.28/16,7	Stepped out 41		Account to the same of the same	and the state of the same spirit
521-0Z		711	4	.48/1011	Stepped out 20'	Frank	It was about the robusticity is immedy to the same	yy'd arm ac fe Lunghousens by yes blonger ar es
5502,2	China de Million de Mariero Mariero de La Companyo			1.67/10.7	Stepped out 20'	or a transmission of	alanda ( or proposal de comp y man	e decimal to a second control of account of the con-
502. 3	The Commence of the Commence o		1	1.39/195.01	Stopped out 25'	Statement States ( second or p. )	Complete and the latest section of the section of	The same of the flowers of the same
302.4	Commence of the commence of th			.33/14.4	Stepped out 20' Stepped out 20' Stepped out 20' Stepped out 10' Stepped out 5'		remove opposite the first party of the party	
5025	Total Annual Property of the Control		1	.13/206	Steffed out 101	·	- II) managed - officer each decide	Profesional Vigo: Proposition
52.6	and amount of a sound opening and a sound of	*	C	2.49/193	Stepped out 5'		nie – – v minie kan	district to the set on princip
52.7			C	0.07/143	TEPPED OUT	1	- 1	Medical and Section according
503	X	The state of the s	1	62/105	Stepped out	and the second of the second	to amount his agent, to be of the control to the state of	water restaurance and
	and an enterminate physical enterminate of the state of t		Annahar management of the first	117.)	7.3 (0.), (1.0)			to make the second
COLUMN TOP AND PROPERTY OF THE	A C L C C C C C C C C C C C C C C C C C	DE STREET, CONTRACTOR OF THE STREET, CONTRAC		(	suffered and the second	- The Perforability Comment	Supremental to the supremental t	
The months of the property contributes and the contributes and	* 100 mm (Aymar Al) a						menu	1494 (1111)
- 1 (gard and a representative year agreements (year agreement )	over the section of t	and the second s				The State of	Manager and an arranger to the same and	110000 per - 11000 per 1100 per
at a contract of the state of t	and the state of t	Simple and distance the same of the same o				To the special section of the sectio		·/····································
					The same of the sa			



Client:	Matador Resources	Inspection Date:	2/9/2021
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	2/9/2021 10:23 PM
Client Contact Name:	John Hurt	API #:	30-015-44177
Client Contact Phone #:			
Unique Project ID	-Stebbins Federal SWD 20 -204	Project Owner:	John Hurt
Project Reference #	260 bbls PW Release	Project Manager:	Natalie Gordon
		Summary of <sup>-</sup>	<b>Fimes</b>
Arrived at Site	2/9/2021 2:25 PM		
Departed Site	2/9/2021 3:00 PM		

14:31 Mark/flag area for potential water well drill

## **Next Steps & Recommendations**

**Field Notes** 

1



### **Site Photos**



Potential water well drill



Viewing Direction: North



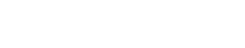
Potential water well drill



### **Daily Site Visit Signature**

**Inspector:** John Ramirez

Signature: Signature





Client:	Matador Resources	Inspection Date:	3/17/2021
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	3/17/2021 6:31 PM
Client Contact Name:	John Hurt	API #:	30-015-44177
Client Contact Phone #:			
Unique Project ID	-Stebbins Federal SWD 20 -204	Project Owner:	John Hurt
Project Reference #	260 bbls PW Release	Project Manager:	Natalie Gordon
		Summary of <sup>-</sup>	Times
Arrived at Site	3/17/2021 8:30 AM		
Departed Site	3/17/2021 11:45 AM		

#### **Field Notes**

- **8:32** Arrived on site to assist with water well drilling.
- **9:32** Crew has arrived and preparing to drill.
- 9:33 Well will be called BH21-01
- 9:50 Drilling has begun
- 11:00 They have drilled down to 51ft and are beginning to run casing
- 11:03 20ft screen was ran at the bottom from 31ft to 51ft
- 11:25 Hit water at 44 feet. Crew is coming back in 48 hours to grime it. Auger is left at 28 feet until then

## **Next Steps & Recommendations**

1



### **Site Photos**

Viewing Direction: East



Drilling area

Viewing Direction: Northeast



Drilling has begun

Viewing Direction: East



Preparing to begin drill

Viewing Direction: Northeast



Casing being ran







### **Daily Site Visit Signature**

**Inspector:** Chance Dixon

Signature:

## **Spill Response and Sampling**

VERTEX

Initial Spill Information - Record on First Visit

ient: Matador	* /				Ī			
10:00000 3 - 2	4-2021 ins 5W1				Ī	Spill Date:		
e Name: 5 1 C56	115 SW!	<u> </u>			ļ.	Spill Volume:		
ite Location:						Spill Cause:		
lient Contact:					ľ	Spill Product.		
roject Manager: ///o	nica Perp 00087	7//)				Recovered Spill Vo		
Project #: 216	<u> - 0008'7</u>					Recovery Method:		
API:	6.		Circle			On Lease/Off Lease Site Placard Picture	N /N	Circle
Site Wide Picture	Yes/No		n og negn danske	Samplir		Sec 1 (Beer a 1 let		Data Collection (Check
		carbon	Field Sci	reening Chlo	fide			for Yes)
Sample ID Depth	(ft) VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Picture Site Sketch
SS/TP/BH - Year -     Number	2ft 400.0	200.0	0.006	25	0		BTEX TPH None	
B521-01 11	0.0		2,53			1		
B521-02 1.	0.2		4.42	24.0	6150			
BSZ1: 03 1.			3.13	23,3	4319	1-1-		
BS21-04 12	0 0.7		2.62	23, 2	3587	475		
								•
		<u> </u>				<del> </del>		
1	*							
							<u> </u>	<u> </u>
	\							
	,) }		1					
	***							1
		<u> </u>						
	<u> </u>							
				:				
2) my market	\							
		,		e n.	1			
	·^··· 1	96.						
		44/1						
			·					
		n s	, V					
		1	<i>a</i>					
			1					
\								
						**************************************	VERSATILITY	

Arrived at Site

**Departed Site** 

## **Daily Site Visit Report**



Client:	Matador Resources	Inspection Date:	3/25/2021			
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	3/25/2021 10:38 PM			
Client Contact Name: Client Contact Phone #:	John Hurt	API #:	30-015-44177			
Unique Project ID		Project Owner:				
Project Reference #		Project Manager:				
	Summary of Times					

### Field Notes

15:35 Recollected and screened BS21-02 and BS21-03 to passing going to 2' depth.

Continued sampling and obtained BS21-05 through BS21-10.

3/25/2021 7:30 AM

3/25/2021 3:45 PM

Obtained WS21-01 and 02.

Seems to clean up at 1' depth but some areas need to go deeper.

Forty eight 20 yard loads and eight 12 yard loads hauled off site.

Titration run on all samples.

Ec run on sample BS21-02 that was recollected.

Approximately 1000 yards of contaminant hauled off site today.

Approximately 100 yards of contaminant staged on site today.

### **Next Steps & Recommendations**

1 Continue excavation and field screening.



### **Site Photos**

Viewing Direction: North



Excavation on Far East side of pad at 1' depth

Viewing Direction: South



Partial excavation near flare and tank battery. Not complete.

Viewing Direction: North



Partial excavation near flare.

Viewing Direction: East



Ongoing excavation on northern most side of site.

1' depth.





Excavation on Far East side of pad at 1' depth



Excavation on Far East side of pad at 1' depth



Excavation turning west towards access road where staging pile is located.



Northern most portion of excavation where spill bubbles out.
1' depth.





Spoil pile, approximately 100 yards.



North area of excavation



Spill area near access road.

Not fully excavated to desired 1' depth.

Making progress towards flare area and tank battery



Spoil pile approximately 20 yards near access road



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

**Inspector:** Austin Harris

Signature:



Client: Matador	Me	Nador			7	-	Initial Spill Info	ormation - Record on First Visit			
Date: 02:23:2021	3-	<u> 25-2</u>	102/		1		Spill Date:	ormation - Record on First visit	· · ·		
Sile Name:	Stebbra	13 Fed	5WD	20-204			Spill Volume:			****	
Site Location:							Spill Cause:				
Client Contact:		z Jelos					Spill Product:				
Project Manager:	Monte	ea Pro	1910								
Project #:		0008 T	)		_		Recovery Meth	nod:			
API:	50-6	015-44	<u> 1177                                  </u>		<b></b>		On Lease/Off Lo	case:			
Site Wide Picture		Yes/No		Circle	Same	ling	Site Placard Pic	lure: Yes/No		Circle	
		Hydr	ocarbon .	Field S	icreening	doride				ection (Check	
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)		Temp (°C)	Chloride (ppm)	Chloride	Lab Analysis		Yes) Marked or	
SS/TP/8H - Year - Number Ex. BH18-01	Ex. 'Zft	400.0	200.0	(d5/cm) 0.006	25	0	Titration (ppm	BTEX TPH None	Picture	Site Sketch	
B321-0Z	1.0	0.0					1700				
B521-03		0.1	16				375				
WS21-01	1.0	0.0	29				575				
WS21-02		0.0					825				
BSZ1-02	2,0			1,52	22.6	1986	44/2,	5			
							***	- James - Company			
B521-05	1.0	2.6					950				
3521-06	1,0	1,9	43			A Paris San	500				
3521-07	1,0	1,7	42				355	5			
3521-08	1.0	1,3					1187				
3521-09	1,0	2, 3	16	:		grann a vivi	$()$ $(\cup \cup \cup$				
352[-10	1.0	0.5				The second secon	1325			*****	
								`			
										,	
			ļ								

zerallech Oreallech



Client:	Matador Resources	Inspection Date:	3/26/2021				
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	3/27/2021 1:17 PM				
Client Contact Name:	John Hurt	API #:	30-015-44177				
Client Contact Phone #:							
Unique Project ID		Project Owner:					
Project Reference #		Project Manager:					
		Summary of	Times				
Arrived at Site	3/26/2021 7:30 AM						
Departed Site	3/26/2021 4:00 PM						

#### **Field Notes**

16:41 Continue excavation and field screening.

Obtained base samples 11-75 and obtained wall samples 3-32.

Running titration on all.

Thirty-four 20 yard loads hauled off site.

Approximately 30 yards remain on site.

Excavation mainly completed, field screening will determine if needed to go deeper in areas exceeding closure criteria.

One area showed higher elevated levels of chlorides and had operator excavate an additional 0.5' from the area and recollected samples

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

1 Continue sampling



#### **Site Photos**



Northern most areas taken to 1.5'



Approximately 30 yards of spoil on site



North area of excavation



Northern most portion of excavation moving west towards flare





Excavation just south of entryway



Excavation near tank battery



Excavation near flare



Excavation near entryway in northwest corner of site



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

**Inspector:** Austin Harris

Signature:



Client:	itador				7					AN HOLL BAR H			
Date: 3/2	16/21				-		Initial Spill In	formation - Record on First Visit					
Site Name: 5	16/21 tebbii	n 5	-	11 11 11 11 11 11 11 11 11 11 11 11 11	-		Spill Date:	The state of the s					
Sito Location							Spill Volume:		And the same of th	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Client Contact: 7	ohn H	urt	and a second		-		Spill Cause:		The second secon				
Project Manager:	nonice	Pepl	11/2			Spill Product:							
Project #:		- 7 6		100	, ,		Recovered Spill Volume:						
API:	A 1						Recovery Meti		-				
Site Wide Picture		Yes/No		Circle			On Lease/Off L						
	garana.			Field Sc	Samp creening	oling		TesyMo		Circle			
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH	EC Reading		loride	Chloride			ection (Check r Yes)			
SS/FP/BH = Year = Number Ex. BH18-01	Ex. '2ft	400.0	(ppm) 200.0	(dS/cm) 0.006	Temp ("C)	Chloride (ppm)	Titration (ppm	BTEX	Picture	Marked on Site Sketch			
BS21- 35	1		Alexandra et alexandra				3100	fPH None					
8521-36	13						3187	X					
	135		-11				7466	×					
BS21-38	2						850	X					
0201-00	1						1017	X					
3521-39	1.5	and a sel province of the selection of t			-		615	The second secon		***************************************			
BS21-40 BS21-41							420						
							586						
BS21 - 42							562						
8521-43		Carl Constitution of the C				Č	320						
8521-44	1						265						
3521-45							180						
BS21-46					William Community		1367	×		41			
3521-47	1	Annabay page years a consensative and a second					415			About the second second second second			
3521-48	1						337	44.		H-man - in high to the same of			
3521 - 49	1			7.000			337						
3521-50	1				P. P. S.	(	530			**************************************			
521-51	1						80			***************************************			
1521-52	1						070						
501-53	1					1	70			Manager and the same of			
521-54					The state of the s	1	90			and the second second			
521-55	1				errors and the contract of the	6	122	The state of the s		100000			
521-56	1		9900 to company to all district and \$1900 to \$200.			1	75		and the second s	through the section of the land and the section of			
521-57	1				Name of the last o	5	75			MARTIN CONTRACTOR OF THE PARTY			
521-58				41.1		3	75			Marylan Address and a			
		<b>明编程</b> 原位	St. 1977	WHO ENTRY	19 19 19								



VERSATILITY, EXPERTISE.

Date: 3/2	3/01/0						Initial Spill Info	rmation - Record on First Visit					
Site Name:	ubbin	ns fed	1 5W	0			Spill Volume:						
Site Location:							Spill Cause:						
Client Contact:	1001	0 '					Spill Product:						
Project Manager:	10xx ca	- Peppil					Recovered Spill Volume:						
Project #: API:							Recovery Metho						
Site Wide Picture		Yes/No		Circle			On Lease/Off Le Site Placard Pict	The state of the s		Circle			
				Field Sc	Samplereening				'Data Colle	ection (Check			
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride	Lab Analysis	for Picture	Yes) Marked on			
SS/TP/BH - Year - Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	Ó	Titration (ppm)	BTEX TPH None		Site Sketch			
BS21-11	1			2.32	13.8		605						
BS01-12	1			4.96	13.2		4972	X					
BS21-13	1			3.09	13.1		1867	X					
BS21-14	1						265						
BS21-15	1						2327	X					
B521-16	1				+ = [		105						
BS21-17	1						652						
BS21-18	1						227						
BS21-19	1						465						
BS21-20	1						3695	×					
BS21-21	1						54 a						
BS21-22	1						105						
BS21-23	- 1						315	5					
BS21-24	l						657						
BS21-25	1						175						
BS21-26	1						812	X					
BS21-27	١						547	•					
BS21-28	1						317						
BS21-29	1						445						
BS21-30	1						340						
3521-31	1						620			,			
Bs21-32	1 .						1262	X		ő			
352133	l						2922						
BS21-34	1			-597			925	V					



lient: 3-26-2021							Initial Spill Informa	tion - Record on First Visit					
Site Name:	J- U	1- 60 6			1		Spill Date:		The second secon				
Site Location:			10,000		-		Spill Valume:	# 14 A A A A A A A A A A A A A A A A A A	The state of the s				
Client Contact:		The second party of the se				Spill Cause:							
Project Manager:		The state of the s	North and the state of the stat	The second secon			Spill Product:	The second secon	***************************************	The state of the s			
roject #:		***************************************				Recovered Spill Volume:							
API:		111			-	Recovery Method:							
iite Wide Picture	***************************************	Yes/No		Circle			On Lease/Off Lease;	Maria and the second se	A Constitution of the Cons				
					Samp	ding	Site Placard Picture:	Yes/No		Circle			
		Hydro	carbon	Field Sc	reening	loride			'Data Colle	ection (Chec			
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp ("C)	Chloride (ppm)	Chloride		for	r Yes)			
SS/FP/BH - Year Number Ex. BH18-01	Ex. 'Zft	400.0	200.0	0.006	25	0	Titration (ppm)	Lab Analysis BTEX TPH	Picture	Marked of Site Sket			
59							190	None	American April and American Control				
60	1						360						
L1	1	The state of the s					422						
62	1						180	e de la companya del la companya de		******************************			
63							220		***************************************				
64	1						320						
65			minutes of the same of the sam		nter-		320	The state of the s	****				
66	!						350		Bernarden of Challen States and Advantage of the States Supplied to the States Supplied Sup	Service and Servic			
63	1						647		Andrews of the Control of the Contro				
<u>L8</u>							630						
69					What was provided the second		575						
70	1						420						
71	1						185						
73				-			530						
73 74		***************************************					220						
75							220	and the state of t					
76,	1						170						
777 X	1/					7							
7	X					-							
79/		***************************************					1						
80/	1					<b>A</b>		The second of th					
\$1	1					1	Hand						
183	11 ]							de contracto de la contracto d					

Client:				•	7	111111111111111111111111111111111111111			-	VER.
Date:	3-7	6-202					Initial Spill Information	n - Record on First Visit		
Site Name:	3 0	J V 2					Spill Date:		7.000	
Site Location:							Spill Volume:			Communication of the Communica
Client Contact:							Spill Cause:			THE PERSON NAMED IN COLUMN
Project Manager:	- Annual Control	4					Spill Product:			4-1-1-1
Project #:		110	RO				Recovered Spill Volume			
API:	ICE	COLLE	cted				Recovery Method:			17.00
Site Wide Picture		Yes/No		Circle		-,	On Lease/Off Lease:			
				tiatil c	Samp	olling	Site Placard Picture:	Yes/No		Circle
Sample ID	T	The state of the s	PetroFlag TPH		THE RESIDENCE OF THE PARTY OF T	loride			Data Colle	ection (Check 'Yes)
SS/FP/BH:=Year	Depth (ft)	VOC (PID)	(ppm)	EC Reading (dS/cm)	Temp ("C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Picture	Marked or
Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		BTEX TPH None		Site Sketci
BS21-05	l						547			i Samula anti-actiques
08	1				77		450	MA		
10	1		Parish Highertains				350			
12	1	**************************************						The second secon	***************************************	
13	1						190			
15	1						320			
		ergann lj.					360	The Parison of the Pa		
20							440	TO LIEU MANAGEMENT PROPERTY AND ADMINISTRATIVE CONTROL OF THE PARTY OF		
26	1			-			604			The second secon
32					***		590			
33	1						220	7,000		
35	1.5						180	or control of the second of th		
34	1.5						215	44.		
37 38	1.5						175 925 930 186			
38	1.5						225	Service to the service of the servic		
34	1.5						230		· · · · · · · · · · · · · · · · · · ·	
46	1						120	4/11		
			to the same to			(8000)	,00	the second state of the section state and the second section is a second section of the section of the second		
P. Commission of the Commissio								and the second s	***	
									The state of the s	
		****								
-										
***								The state of the s		
- A I										

VERSATILITY. EXPERTISE.

P	aga	e 1	20	oj	32
	,				
W	Name of the last	FR	Program .	-	X

Client:				1 1111111	7					
Date:	,	, ,			-		Initial Spill Infor	mation - Record on First Visit	The state of the s	
Site Name:	Colle	ected	3-	26-200	21		Spill Date:			
Site Location:	***************************************				7		Spill Volume:	Section 1977 - Section 1971		
Client Contact:					-		Spill Cause:	The second secon		
		Turn the second second second second					Spill Product:	And a second		
Project Manager:				1			Recovered Spill Vo	dume:		
Project #:				-			Recovery Method	The second secon		
API:	W						On Lease/Off Leas	The second secon		
Site Wide Picture		Yes/No		Circle			Site Placard Pictur	The same of the sa		
	7			Field S	Sam creening	pling				Circle
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH	EC Reading		iloride			'Data Colle	ection (Check Yes)
SS/TP/BH - Year -	DEPOT (10)	VOC (PID)	(ppm)	(dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Picture	Marked or
Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		втех три		Site Sketch
7231-01	0-1	50	ont -	9/100	dy		647	None	Sure Sure Sure Sure Sure Sure Sure Sure	-
	0-1	Se	7× -7	1000	1		0.7			and my hope and a sure way the man
03	0-1						285		***************************************	Market and the second
어					the court to the said large property accounts		495			
05			, manufacture de la companya de la c				185			**************************************
06	0-1						100			
11/	0-1						900	recollect		
	0-1						150			
15	0-1						165			
18	6-1						167			
< 20	0-1						187	// 6		
1 0 -	0-1						047	recollect		
24	0-1	11-1-1					635			
25	0-1						395	// L		
21/	5-1						145	recollect		
27	0-1						172		- the same of the	
27 28 29	0-1						392			
290	0-1					2	250	The state of the s	and the same of th	
3/	2-1					1	250		mental transcription and it made to be 1112 and 1112	-
32 (	9-1						65			
THE REAL PROPERTY OF THE PERSON OF THE PERSO		-					W. Carlotte		And the second s	The second of the second of the second of
			- data				4			
					/Anglesses					
				TELEVISION OF THE PARTY OF				VERSATILITY	. EXPERT	SE.

# Received by QCD: 6/24/2021 10:20:36 AM Spill Response and Sampling



Client: Matador				* ***	7		[			
Date: <del>02/28/202</del> 4	3	- 25 -	2021		]		1	rmation - Record on First Visit		
Site Name:		···			1		Spill Date:	744 AV 70 10 10 10 10		
Site Location:							Spill Volume:		<del></del>	
Client Contact:		-		. 1	1		Spill Cause:			-
Project Manager:			ollecs	ed	1		Spill Product:			
Project #:		(200	offers	,			Recovered Spill			
API:		100			1		Recovery Metho			
Site Wide Picture		Yes/No		Circle			On Lease/Off Le Site Placard Pict			
				Field Sc	Samp reening	ling	price deal of the	ule. Tes/IVO		Circle
Sample ID	David (6)		PetroFlag TPH	EC Reading		aride			'Data Colle for	ection (Check r Yes)
SS/TP/BH - Year -	Depth (ft)	VOC (PID)	(ppm)	(dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Picture	Marked on Site Sketch
Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		8ТЕХ ТРН None		
WS21-07	0-1						260			
08	0-1						580			
09	0-1						174			
10	0-1						195			
12	0-1				····		522			ļ
13	0-/						432			
17	0-1						316			
19	0-1						446			
22	0-1						528			
26	0-1					<u> </u>	164			
30	0-1						364			
							<u></u>	7.00		
				-						
				***************************************						

VERSATILITY. EXPERTISE.



Client:	Matador Resources	Inspection Date:	3/29/2021				
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	3/29/2021 10:13 PM				
Client Contact Name:	John Hurt	API #:	30-015-44177				
Client Contact Phone #:							
Unique Project ID		Project Owner:					
Project Reference #		Project Manager:					
		Summary of	Times				
Arrived at Site	3/29/2021 7:45 AM						
Departed Site	3/29/2021 2:00 PM						

#### **Field Notes**

- 9:27 Continue field screening to determine if excavation needs to go deeper
- 13:20 No excavation progress made today.

Only sampling and screening for titration.

Samples collected today include BS21-76 to BS21-120.

Approximately 30 yards of spoil remain on site

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

1 Continue sampling and field screening.



#### **Site Photos**





Excavation near tank battery and flare

Viewing Direction: North



Excavation in northwest corner

Viewing Direction: West



Excavation and scrape near entryway

Viewing Direction: East



Excavation going west to east across northern part of site



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

**Inspector:** Austin Harris

Signature:

VERTEX

Client: Matador					Initial Spill Inform	ation - Record on First Visit					
Dato+03-20212	<u> 3-:</u>		A				Spili Date:				
Site Name:	54rb	5195	Fed SI	(1)			Spill Volume:	,			
Site Location:	7-3						Spill Cause:				
Client Contact:	<u>    OM</u>	m	CYEV 5				Spill Product:				
Project Manager:	7 1 1 5 7 1 E	-000 g	<u> fropu</u> 3 7	}			Recovered Spill Vo		····		
Project #:	CIF	-000	7 8			Recovery Method: On Lease/Off Lease:					
API: Site Wide Picture		Yes/No		Circle			Site Placard Pictur	., /n.		Circle	
				Field Sci		ng			'Data Collec	tion (Check	
Sample ID	Depth (ft)	Hydro VOC (PID)	rarbon PetroFlag TPH (ppm)	EC Reading (dS/cm)	Chlo Temp (°C)	chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	for Y Picture	es) Marked on Site Sketch	
SS/TP/BH - Year - Number <b>Ex. BH18-01</b>	Ex. '2ft	400.0	200,0	0.006	25	0		BTEX TPH None			
B521-74	1,0						361				
B521-75	1,0						468				
BS21-76	1,0			···			220		,		
BS21-77	1,0						1125	RPT	ollec	·f-	
852 <i>1 - 78</i>	1,0						880				
BS21-79	1,0	•					125	<u> </u>			
B521-80	1,0	~*************************************					180				
B521-81	1,0						540				
BS21-82	1,0						444				
8 <i>521-8</i> -3	1,0						365				
BS21-84	1,0						5/5				
B521-85	1.0						275	/			
B52 / -77 -78	1.0						363				
-78	1,0						363 141	<i>V</i>			
B521-8B							257				
87							362				
88							410 223				
89	/						223				
90							46 b 590				
9/							5 90				

VERSATILITY, EXPERTISE.

VERTEX

Client: Matador							Initial Spill Inform	ation - Record on First Visit				
Date:								Spill Date:				
Site Name:		***************************************					Spill Volume:					
Site Location:						Spill Cause:						
Client Contact:							Spill Product:					
Project Manager:							Recovered Spill Volume:					
Project #:		***************************************					Recovery Method					
API: Site Wide Picture		Yes/No		Circle			On Lease/Off Leas Site Placard Pictur	4		Circle		
······						ing						
			carbon	Field Sc		oride			'Data Collec	tian (Check Yes)		
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Picture	Marked on Site Sketch		
55/TP/BH - Year - Number <b>Ex. BH18-01</b>	Ex. '2ft	400.0	200.0	0.006	25	o		BTEX TPH None				
B521-92	/						260					
93	/						577					
94	/						360					
95	1						545					
96	1						620					
97	1						950	~				
98	1						322					
99	/						1250	)				
100	/						1670	~				
B521-97	1/30						270					
99							368					
100	/						36 <u>8</u> 330					
BSZ1-101	/ /						615					
							420					
103	1						175					
102 103 104	/						175					
105	1						319 220 275					
105	1						220					
107							275					
100	<del>'</del> ,						500					

VERSATILITY EXPERTISE.

VERTEX

Client: Matador							Initial Spill Informa	tion - Record an First Visit		
Date: 087312001a							Spill Date:			****
Site Name:							Spili Volume:			
Site Location:			100 = 100 Miles				Spill Cause:			
Client Contact:							Spill Product:			
Project Manager:					(		Recovered Spill Vol	ume:		
Project #:							Recovery Method:			
API:							On Lease/Off Lease	2;		
Site Wide Picture		Yes/No		Circle			Site Placard Picture	: Yes/No	(	Circle
					Sampli reening				'Data Collect for Y	
Sample ID	Depth (ft)	Hydro VOC (PID)	cerbon PetroFlag TPH (ppm)	EC Reading (dS/cm)	Chk Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Dictura	Marked on Site Sketch
SS/TP/BH - Year - Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		BTEX TPH None		
B521-109	/						622			
110	1						3/9			
111	1						160	***************************************		
112	1						178			
113							205			
114	1						332			
115	1						419			
116	1						433			
117	1						560			
118	1						180			:
119	1						372			
120	1						265			
								.,,,,,,		
								•		
								ALL SERVICES TO THE SERVICES T		
							<u> </u>			
								444		

VERSATILITY EXPERTISE.



Client:	Matador Resources	Inspection Date:	3/30/2021						
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	3/30/2021 9:17 PM						
Client Contact Name:	John Hurt	API #:	30-015-44177						
Client Contact Phone #:									
Unique Project ID		Project Owner:							
Project Reference #		Project Manager:							
	Summary of Times								
Arrived at Site	3/30/2021 7:30 AM								

#### **Field Notes**

**15:14** Continued collecting samples.

**Departed Site** 

Obtained BS21-121 to BS21-150

And WS21-36 to WS21-75.

No excavation performed today only sample collection.

3/30/2021 1:00 PM

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

1 Continue running samples for chlorides with titration method at office.



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

**Inspector:** Austin Harris

Signature:



con Matro	da.				7					1	
Date 4-1-21	1		-				Initial Spill In	formation Record on First Visit		***************************************	
Site Name Steb	bins					Sull Date: 1/12/21					
Site Location: 32.	55263	-104.1	0536				Spill Volume:	293		10-10-10-10-10-10-10-10-10-10-10-10-10-1	
Client Contact: 6	mmy Je	ter					Spill Cause: 4	ripple on the sand f,	ilter ,	probe	
Project Manager:	h. Poppi	7	1-111-1-1				Spill Product	1~		The Salaran and the and	
Project 11 2/E - 0	000 87							II Valume 250	mileta - steers	- In the same	
API							On Lease/Off I	int Vac Truck			
Site Wide Picture		Yes/No	7	Circle			Site Placard Pro	the state of the s		Circle	
		Hydro	carbon	Field Sc	-		***************************************		T mars and		
Sample ID	Depth (ft)	voc (em)	PetroFlag TPH (ppm)	Ft. Reading	temp ("C)	Chloride (ppm)	Chloride			ection (Check r Yes)	
75/1P/BH - reg/ Miniaer Ex. BH18-01	Ex. '2ft	400.0	200.0	(rlS/cm) 0.006	25	a a	Titration (ppn	RTEX TPH	Picture	Marked on Site Sketch	
W521-36	0-1	A CONTRACTOR OF THE PROPERTY O					207	None			
ws21.37	0-1				-		185	lah			
ws21-38							155	Leh			
Vusal-39							122	Lab			
w521-40							145	Las		N - terpopoloment of a number	
W921:41		m-06-0					157	30 Lab			
NSA1-42	and the same of the same of the same of						157	Lab			
MSA1 43			4				130	las			
ush -44							200	Lop			
usx1 -45							142	Lab			
140 - 15en							205	Lab			
nsh1-147. Nsh1 '48							175	Leb			
NSX1 -49					1 =		222	Lab		The state of the s	
NS21 -50							15	Lob			
NSQ1 -51							12	Lob			
-JU1.29					- 100-0		367	L-b			
rs21.53							180	Lab	-		
NS21-54							110	lab		0.200	
-51-55					1 1000-000		137	Lab			
vsz1.56							195	lab	-		
NS21'57							145	Lak		·	
NSA1 58			-1111-111				210	Leb			
2581-59			111201111111111111111111111111111111111				97	Lak	-		

# VERTEX

	4sydroo OC (PID) 400.6	PetroFlag TPH (ppm)	Ef Reading (dS/cm) 0.006	C6I Temp (°C) 25	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis BTEX TPH	for Pirture	Yes) Marked on Site Sketch
0-1	400.0					Titration (ppm)	нтех	Picture	
0-1				ann a aght ann gann de gann de gan ta dhe gann de gan gan gan			None		
0-1					A CONTRACT OF THE STREET OF TH	167	Lab	<del>agt, ald en lineau e age, con cas</del> piero <del>cal</del> lo	Parimenth papermenths Manifestales desbies
0-1						135	Lak		
0-1	O.					162	Lab		
0-1						150	Lak		(innex)
						120	Los		· · · · · · · · · · · · · · · · · · ·
0-1				- bearings		142	der		
7.0							Lef		
						1			
0-1				) III (18-0-18-0-18-0-18-0-18-0-18-0-18-0-18-0					
							Lab	-	
							Lab		
0-1			,			162	Lab		The care the day of the care of
0-1						175	Lab		
0-1	-					190	Lab	-	THE OWNER WAS A CO.
0-1	1					150	Lab		
	7-1 7-1 7-1 7-1 7-1 7-1 7-1 7-1	2-  2-  2-  2-  2-	2-1 2-1 2-1 2-1 2-1	2-1 2-1 2-1 2-1	0-/ 2-/ 2-/ 2-/	2-1 2-1 2-1 2-1	165 167 168 167 167 167 167 167 167 167 167	165 Lcf 2-1 165 Laf 167 165 Laf 165 La	165 Lcf 2-1 165 Laf 165 Laf 165 Laf 165 Laf 165 Lab 177 Lab 197 Lab 197 Lab



Client: Matador (Natador) Date: Date							Initial Spill Information	- Record on First Visit			
Site Location: 32,	55263 nmy de	-10	y, 105	36 36			Spill Volume:  Spill Cause:	293 bbs Le brola on sans V	1 11	'for	
Project Manager: N	1. Pepp. 1 -0008		/				Recovered Spill Volume:	Recovered Spill Volume: Vac Truck  Recovery Method: 250			
API: Site Wide Picture		Yes/No		Circle			On Lease/Off Lease:				
		1		2000	Samp	oling	Site Placard Picture:	Yes/No		Circle	
The second second		Hydro	ocarbon	Field Scr		loride				tion (Check for (es)	
Sample ID  SS/TP/BH - Year - Number	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis BTEX	Picture	Marked on Site Sketch	
Ex. BH18-01						0		TPH None			
BSZI-RI	1				<u>VIII.</u>		337	Lab			
13221-122							162	Lab			
B521-123							92	Lah			
18521-124	1					*	115	Lab		=	
B521-125	1						155	Lab			
1521-126	1						175	Lab			
R521-127	1						160	166			
B=21-128	1			tan e			92	Lah			
18521-129	1						170	1 1			
13521-130	1						90	Las			
8521-131	1						135	1 h			
B521-132	1						135	Lab			
3251-133	1						80	Lab			
321-134	l						42	Lab			
B521-135	1						65	Las			
DZ1-18	1						95	Lab			
BZZ)-137	. 1						130	Lab			
3521-158	1						152	Lab			
13521-13							130	lab			
B521-140	1						137	Lab			
3501-141							130	Lab			
3521-142							175	Lab			
352-143	1						140	Jap			



thent Na 1900 thate: U-1-21 Site Name. Stebu Site Location: B2 c client Contact: TOP Project Manager: N Project B2115 OC API Site Wide Picture	A	t irele	Sampl	inn Record on First Visit  R/2/  97 bblk  gle of Sand fille  R  Do bblk  Vac Track  Ves/No	Circle				
	· · · · · · · · · · · · · · · · · · ·		ocarbon Tou	********************	***	orlde	**************************************		'Data Collection (Check for Yes)
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	tah Analysis	Picture Marked on Site Sketch
SS/117/GH - Your Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	O		RTFX TPH None	
B521-144	1						175	lab	
8521-145							162	Lab	
13521-146				÷		The state of the s	2.12	Lob	
B521-142		- (11)) =					170	Lab	
B21-149							165	losh	
B521-169 B521-150		**********	(				152 235	Lab	
							10-00		
	Maria dela men		\$\$\$\$\$\$\$\$\$\$\$\$		Table 10 and 10				



Client:	Matador Resources	Inspection Date:	re: 4/20/2021					
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	4/20/2021 9:38 PM					
Client Contact Name:	John Hurt	API#:	30-015-44177					
Client Contact Phone #:								
Unique Project ID	-Stebbins Federal SWD 20 -204	Project Owner:	John Hurt					
Project Reference #	260 bbls PW Release	Project Manager:	Natalie Gordon					
Summary of Times								
Arrived at Site	4/20/2021 12:25 PM							
Departed Site	4/20/2021 2:31 PM							

12:27 Over seeing backfill

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

**Field Notes** 

1 Continue backfill tomorrow



#### **Site Photos**



Backfill area



Viewing Direction: Northwest

Descriptive Photo -2

Altering Direction: Hordwest
Desc: Sacidill size
Create: 420/2021 12:30:13 PM

Backfill area



Backfill area





Backfill area



Backfill area



Backfill area



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

**Inspector:** John Ramirez

Signature: Signature



Client: Mo Date: 4/2C Site Name: 5+	tador 0/21 Unbine	- fo )	SIND CI	14			Initial Spill Information Spill Date:	ation - Record on First Visit			
Site Location: Client Contact:	Ton	45		01 (			Spill Cause:	apple on sono	The state of the s		
Project Manager: P	7. Py	ppin 087-(	201				Recovered Spill Valume: 258 Recovery Method: Vactruch				
Site Wide Picture		Yes/No		Circle			On Lease/Off Lease Site Placard Picture:		W		
				Field S	Samp creening	oling		Tes/No		Circle	
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH	EC Reading		loride	Chloride			ction (Check Yes)	
SS/EP/BH : Year Number Ex. BH18-01	Ex. '2ft	400.0	(ppm) 200.0	(dS/cm) 0.006	Temp (°C)	Chloride (ppm)	Titration (ppm)	Lab Analysis BTEX TPH	Picture	Marked on Site Sketch	
WS2F02 WS2F-09 BS2F-21	0-1			As contract to the Contract to	and the second s	&	617	None			
MS21-09	0-1						397	the second secon	The Control of the State of the		
BS21-21	1			*			180				
						-		,			
									desired and the second		
				Alma de la companya d							
- Section of the sect											
									The second secon		
									-		
				and the same of th							
							The state of the s				



Client:	Matador Resources	Inspection Date:	4/21/2021							
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	4/21/2021 10:08 PM							
Client Contact Name:	John Hurt	API #:	30-015-44177							
Client Contact Phone #:										
Unique Project ID		Project Owner:								
Project Reference #		Project Manager:								
	Summary of Times									
Arrived at Site	4/21/2021 7:35 AM									
Departed Site	4/21/2021 3:20 PM									
		Field Note	es							

7:37 Arrived on site, filled out safety paperwork and began dfr

7:49 Continue backfill of excavation

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

1 Complete backfill tomorrow. Should only have half a day left.



#### **Site Photos**



Backfill area



Viewing Direction: West

Backfill



Powered by www.krinkleldar.com Page 2 of 5

Run on 4/21/2021 10:08 PM UTC





Backfill area



Backfill area



Backfill area



Backfill area









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

**Inspector:** John Ramirez





Client:	Matador Resources	Inspection Date:	4/22/2021
Site Location Name:	Stebbins Federal SWD 20- 204	Report Run Date:	4/22/2021 9:54 PM
Client Contact Name:	John Hurt	API #:	30-015-44177
Client Contact Phone #:			
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

	Summary of Times							
Arrived at Site	4/22/2021 9:57 AM							
Departed Site	4/22/2021 3:20 PM							

#### **Field Notes**

9:59 Arrived on site and filled out safety paperwork and began dfr

15:20 Backfill is complete

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

1



#### **Site Photos**



Backfill



Viewing Direction: West

Completed backfill



Run on 4/22/2021 9:54 PM UTC Powered by www.krinkleldar.com Page 2 of 5







Backfill

Viewing Direction: East

| Secripting Bridge |

Viewing Direction: East

Description Photo- 7

Jean- Backfill

Backfill

Run on 4/22/2021 9:54 PM UTC Powered by www.krinkleldar.com Page 3 of 5







Completed backfill



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

**Inspector:** John Ramirez

Signature: Signature

### **ATTACHMENT 5**

#### **Monica Peppin**

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>

**Sent:** Thursday, April 15, 2021 1:28 PM

**To:** CFO\_Spill, BLM\_NM; Bratcher, Mike, EMNRD; Enviro, OCD, EMNRD; Monica Peppin;

Arsenio Jones

Cc: Hamlet, Robert, EMNRD; Amos, James A

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled additional remediation fieldwork to be completed at the Stebbins Federal SWD Slot 4 20-204 followed with confirmatory sampling.

Incident # nAPP2102534956, DOR: January 12, 2021.

This work will be completed on behalf of Matador Production Company.

On Tuesday April 20, 2021at approximately 8:00 a.m., John Ramirez will be onsite to complete additional confirmatory sampling and possible further excavation. He can be reached at 575-725-1809. If you need directions to the site, please do not hesitate to contact her. If you have any questions or concerns regarding this notification, please give me a call at 575-361-9880.

Thank you,

#### **Monica Peppin**

Project Manager

Vertex Resource Group Ltd. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 Ext. 711 C 575.361.9880

#### www.vertex.ca

Confidentiality Notice: This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachment is prohibited. If you have received this communication in error, please notify us by reply email and immediately and permanently delete this message and any attachments. Thank you.

#### **Monica Peppin**

From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>

**Sent:** Tuesday, March 23, 2021 1:14 PM

To: CFO\_Spill, BLM\_NM; Bratcher, Mike, EMNRD; Enviro, OCD, EMNRD; Amos, James A;

Monica Peppin; John Hurt

**Subject:** Re: nAPP2102534956 48 HR Notification for Confirmatory sampling

Correction on date of sampling. Wednesday March 24, 2021 excavation will begin along with confirmatory sampling. Confirmation sampling will last a few days going into next week.

All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled remediation fieldwork to be completed at the Stebbins Federal SWD Slot 4 20-204 followed with confirmatory sampling.

Incident # nAPP2102534956, DOR: January 12, 2021.

This work will be completed on behalf of Matador Production Company.

On Wednesday, <u>December</u> 24, 2021at approximately 8:00 a.m., Monica Peppin will be onsite to guide the excavation and collect confirmatory samples. This remediation will go into the following week so additional days of sampling will be needed. She can be reached at 575-361-9880. If you need directions to the site, please do not hesitate to contact her. If you have any questions or concerns regarding this notification, please give me a call at 575-361-9880.

Thank you,

On Mon, Mar 22, 2021 at 2:23 PM Dhugal Hanton < <a href="mailto:vertexresourcegroupusa@gmail.com">vertexresourcegroupusa@gmail.com</a>> wrote: All,

Please accept this email as 48-hr notification that Vertex Resource Services has scheduled remediation fieldwork to be completed at the Stebbins Federal SWD Slot 4 20-204 followed with confirmatory sampling.

Incident # nAPP2102534956, DOR: January 12, 2021.

This work will be completed on behalf of Matador Production Company.

On Wednesday, December 24, 2021at approximately 8:00 a.m., Monica Peppin will be onsite to guide the excavation and collect confirmatory samples. This remediation will go into the following week so additional days of sampling will be needed. She can be reached at 575-361-9880. If you need directions to the site, please do not hesitate to contact her. If you have any questions or concerns regarding this notification, please give me a call at 575-361-9880.

Thank you,

### **ATTACHMENT 6**

NM OCD Incident Tracking Numbers: nAPP2102534956

Project #: 21E-00038-001 Lab Report: 2101633

		Table 2. (	Characteriz	ation Samp	oling Labor	atory Resu	lts - Depth	to Ground	water <50	ft			
	Sample Descripti	on	F	ield Screenir	ng			Petrol	eum Hydroc	arbons			
						Vol	atile			Extractable	)		Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (Petro Flag)	Inorganics (Quantab - High/Low)	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride
			(ppm)	(ppm)	(+/-)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
SS21-01	0-0.5	January 14, 2021	-	-	422	<0.025	<0.222	<4.9	<8.5	<43	<13.4	<56.4	<60
SS21-02	0-0.5	January 14, 2021	-	-	119	<0.025	<0.225	<5.0	<9.4	<47	<14.4	<61.4	<60
SS21-03	0-0.5	January 14, 2021	1	-	542	<0.025	<0.224	<5.0	<8.5	<43	<13.5	<56.5	<60
SS21-04	0-0.5	January 14, 2021	1	-	993	<0.025	<0.224	<5.0	<9.0	<45	<14	<59	150
SS21-05	0-0.5	January 14, 2021	-	-	719	<0.025	<0.222	<4.9	<9.0	<45	<14.3	<59.3	86
SS21-06	0-0.5	January 14, 2021	-	-	392	<0.025	<0.221	<4.6	<9.7	<48	<14.3	<62.3	81
SS21-08	0-0.5	January 14, 2021	-	-	325	<0.024	<0.22	<4.9	<8.5	<43	<13.4	<56.4	<60
SS21-09	0-0.5	January 14, 2021	-	-	353	<0.025	<0.222	<4.9	<8.4	<42	<13.3	<55.3	<60
SS21-10	0-0.5	January 14, 2021	-	-	374	<0.025	<0.225	<5.0	<8.7	<43	<13.7	<56.7	<60
SS21-11	0-0.5	January 14, 2021	-	-	511	<0.025	<0.222	<4.9	<8.9	<44	<13.8	<57.8	<60
SS21-12	0-0.5	January 14, 2021	-	-	1,145	-	-	-	-	-	-	-	-
SS21-13	0-0.5	January 14, 2021	-	-	155	<0.025	<0.224	<5.0	<8.8	<44	<13.8	<57.8	<60
BH21-01	0	January 14, 2021	-	-	14,659	<0.024	<0.219	<4.9	<9.7	<49	<14.6	<63.6	13,000
BH21-01	1	January 14, 2021	-	-	8,177	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	1,200
BH21-01	2	January 14, 2021	-	-	859	<0.025	<0.225	<5.0	<8.8	<44	<13.8	<57.8	<60
BH21-01	3	January 14, 2021	-	-	1,854	<0.025	<0.224	<5.0	<9.0	<45	<14	<59	230
BH21-02	0	January 14, 2021	-	-	5,102	<0.024	<0.22	<4.9	470	2,000	475	2,475	5,700
BH21-02	1	January 14, 2021	-	-	975	<0.025	<0.222	<4.9	<9.7	79	<14.6	94	480
BH21-02	2	January 14, 2021		-	3,271	<0.024	<0.222	<4.9	15	<48	20	68	220
BH21-02	3	January 14, 2021		-	3,132	<0.024	<0.219	<4.9	<9.2	<46	<14.1	<60.1	<60

<sup>&</sup>quot;-" - Not applicable/assessed

Bold and shaded indicates exceedance outside of applied action level



NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

Lab Report: 2103C86, 2103D36, 2103D82, 2104073, 2104068, 2104919, 2104A33

	Sample Description		1		Petro	oleum Hydroca	rhons			
	Sample Bescription		Vol	atile	I	oicum riyaroca	Extractable			Inorgar
Sample ID	Depth (ft)	Sample Date	Benzene (mg/kg)	(sa/ga) (sa/ga)	Gasoline Range Organics (GRO)	Diesel Range	Motor Oil Range	(GRO + DRO)	Total Petroleum	(mg/k,
BS21-01	1'	March 24, 2021	<0.024	<0.217	<4.8	<9.8	<49	<14.6	<63.6	560
BS21-02	1'	March 24, 2021	<0.025	<0.224	<5.0	<9.8	<49	<14.8	<63.8	380
BS21-03	1'	March 24, 2021	<0.024	<0.213	<4.7	<9.6	<48	<14.3	<62.3	230
BS21-04	1'	March 24, 2021	<0.024	<0.216	<4.8	<9.6	<48	<14.4	<62.4	350
BS21-05	1'	March 26, 2021	<0.023	<0.21	<4.7	<9.6	<48	<14.3	<62.3	150
BS21-06	1'	March 25, 2021	<0.025	<0.225	<5.0	<9.1	<46	<14.1	<60.1	430
BS21-07	1'	March 25, 2021	<0.024	<0.217	<4.8	<10	<50	<14.8	<64.8	280
BS21-08	1'	March 26, 2021	<0.024	<0.22	<4.9	<9.6	<48	<14.5	<62.5	180
BS21-09	1'	March 25, 2021	<0.024	<0.22	<4.9	<9.9	<50	<14.8	<64.8	240
BS21-10	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.7	<48	<14.7	<62.7	220
BS21-11	1'	March 26, 2021	<0.024	<0.213	<4.7	<9.8	<49	<14.5	<63.5	420
BS21-12	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	220
BS21-13	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.4	<47	<14.2	<61.2	340
BS21-14	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.4	<47	<14.2	<61.2	96
BS21-15	1'	March 26, 2021	<0.024	<0.213	<4.7	<9.0	<45	<13.7	<58.7	370
BS21-16	1'	March 26, 2021	<0.024	<0.213	<4.7	<9.0	<45	<13.7	<58.7	<60
BS21-17	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.7	<48	<14.7	<62.7	310
BS21-18	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.3	<46	<14.1	<60.1	150 370
BS21-19	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	
BS21-20	1'	March 26, 2021	<0.024	<0.215	<4.8	<9.5	<48	<14.3	<62.3	72 <b>640</b>
BS21-21	1'	March 26, 2021	<0.025 <0.025	<0.221 <0.225	<4.9 <5.0	<9.7 <9.8	<48 <49	<14.6 <14.8	<62.6 <63.8	<b>640</b> <59
BS21-21 BS21-22	1' 1'	April 20, 2021	<0.023	<0.225	<4.8	<9.3	<47	<14.8	<61.1	<60
BS21-22 BS21-23	1'	March 26, 2021 March 26, 2021	<0.024	<0.216	<4.7	<9.1	<46	<13.8	<59.8	110
BS21-23	1'	March 26, 2021	<0.024	<0.213	<4.7	<8.7	<43	<13.4	<56.4	430
BS21-25	1'	March 26, 2021	<0.024	<0.219	<4.9	<9.6	<48	<14.5	<62.5	65
BS21-26	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.6	<48	<14.4	<62.4	67
BS21-27	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.4	<47	<14.3	<61.3	390
BS21-28	1'	March 26, 2021	<0.024	<0.219	<4.9	<10	<50	<14.9	<64.9	110
BS21-29	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.7	<49	<14.5	<63.5	250
BS21-30	1'	March 26, 2021	<0.024	<0.212	<4.7	<9.4	<47	<14.1	<61.1	160
BS21-31	1'	March 26, 2021	<0.024	<0.215	<4.8	<9.8	<49	<14.6	<63.6	450
BS21-32	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.4	<47	<14.2	<61.2	290
BS21-33	1.5'	March 26, 2021	<0.025	<0.224	<5.0	<9.3	<47	<14.3	<61.3	82
BS21-34	1.5'	March 26, 2021	<0.023	<0.211	<4.7	<9.2	<46	<13.9	<59.9	87
BS21-35	1.5'	March 26, 2021	<0.024	<0.216	<4.8	<9.5	<48	<14.3	<62.3	<60
BS21-36	1.5'	March 26, 2021	<0.025	<0.221	<4.9	<9.5	<48	<14.4	<62.4	63
BS21-37	1.5'	March 26, 2021	<0.025	<0.224	<5.0	<9.7	<48	<14.7	<62.7	67
BS21-38	1.5'	March 26, 2021	<0.025	<0.225	<5.0	<9.5	<47	<14.5	<61.5	78
BS21-39	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.9	<49	<14.7	<63.7	440
BS21-40	1'	March 26, 2021	<0.025	<0.222	<4.9	<9.4	<47 <47	<14.3	<61.3 <61.2	210 290
BS21-41	1' 1'	March 26, 2021	<0.024 <0.025	<0.217 <0.225	<4.8 <5.0	<9.4	<47 <45	<14.2 <14.1	<61.2 <59.1	290
BS21-42 BS21-43	1'	March 26, 2021 March 26, 2021	<0.025	<0.225	<4.9	<9.1 <9.8	<45 <49	<14.1	<63.7	94
BS21-43 BS21-44	1'	March 26, 2021	<0.025	<0.221	<5.0	<9.1	<45	<14.7	<59.1	150
BS21-44 BS21-45	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.1	<63.8	<60
BS21-46	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.8	<49	<14.6	<63.6	100
BS21-47	1'	March 26, 2021	<0.024	<0.215	<4.8	<9.8	<49	<14.6	<63.6	230
BS21-48	1'	March 26, 2021	<0.025	<0.225	<5.0	<10	<50	<15	<65	76
BS21-49	1'	March 26, 2021	<0.024	<0.22	<4.9	<9.3	<46	<14.2	<60.2	62
BS21-50	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.4	<47	<14.2	<61.2	<60
BS21-51	1'	March 26, 2021	<0.025	<0.222	<4.9	<9.2	<46	<14.1	<60.1	72
BS21-52	1'	March 26, 2021	<0.024	<0.22	<4.9	15	<48	15	15	200
BS21-53	1'	March 26, 2021	<0.024	<0.22	<4.9	<9.4	<47	<14.3	<61.3	65
BS21-54	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.7	<49	<14.5	<63.5	63
BS21-55	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.8	<49	<14.7	<63.7	87
BS21-56	1'	March 26, 2021	<0.025	<0.222	<4.9	<9.8	<49	<14.7	<63.7	76



NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

Lab Report: 2103C86, 2103D36, 2103D82, 2104073, 2104068, 2104919, 2104A33

Sample Description Petroleum Hydrocarbons										4
	Jampie Description	1	Vol	atile	I	oleum riyuroca	Extractable			Inorgan
Sample ID	Depth (ft)	Sample Date	Benzene (mg/kg)	(mg/kg)	Gasoline Range Ca Organics (GRO)	Diesel Range	Motor Oil Range (MRO) Organics (MRO)	(GRO + DRO)	স্ত্ৰ Total Petroleum ক্ৰি Hydrocarbons (TPH)	(mg/kg
BS21-58	1'	March 26, 2021	<0.024	<0.22	<4.9	63	<49	63	63	270
BS21-59	1'	March 26, 2021	<0.025	<0.222	<4.9	<9.3	<46	<14.2	<60.2	77
BS21-60	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.5	<48	<14.3	<62.3	120
BS21-61	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.3	<47	<14.2	<61.2	110
BS21-62	1'	March 26, 2021	<0.025	<0.222	<4.9	<9.3	<47	<14.2	<61.2	80
BS21-63	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.4	<47	<14.2	<61.2	100
BS21-64	1'	March 26, 2021	<0.024	<0.219	<4.9	<9.9	<49	<14.8	<63.8	310
BS21-65	1'	March 26, 2021	<0.024	<0.22	<4.9	<9.3	<46	<14.2	<60.2	190
BS21-66	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.5	<48	<14.3	<62.3	270
BS21-67	1'	March 26, 2021	<0.025	<0.224	<5.0	<10	<50	<15	<65	510
BS21-68	1'	March 26, 2021	<0.025	<0.222	<4.9	<9.2	<46	<14.1	<60.1	510
BS21-69	1'	March 26, 2021	<0.024	<0.22	<4.9	<9.7	<49	<14.6	<63.6	500
BS21-70	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.4	<47	<14.3	<61.3	77
BS21-71	1'	March 26, 2021	<0.024	<0.22	<4.9	<9.8	<49	<14.7	<63.7	74
BS21-72	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	77
BS21-73	1'	March 26, 2021	<0.024	<0.219	<4.9	<9.7	<49	<14.6	<63.6	71
BS21-74	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.7	<49	<14.5	<63.5	120
BS21-75	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.1	<46	<14	<60	330
BS21-76	1'	March 29, 2021	<0.024	<0.22	<4.9	<10	<50	<14.9	<64.9	110
BS21-77	1'	March 29, 2021	<0.023	<0.21	<4.7	<9.6	<48	<14.3	<62.3	130
BS21-78	1'	March 29, 2021	<0.024	<0.216	<4.8	<9.4	<47	<14.2	<61.2	130
BS21-79	1'	March 29, 2021	<0.024	<0.215	<4.8	<9.6	<48	<14.4	<62.4	120
BS21-80	1'	March 29, 2021	<0.024	<0.22	<4.9	<9.7	<48	<14.6	<62.6	110
BS21-81	1'	March 29, 2021	<0.025	<0.222	<4.9	<9.8	<49	<14.7	<63.7	140
BS21-82	1'	March 29, 2021	<0.025	<0.225	<5.0	<9.7	<49	<14.7	<63.7	120
BS21-83	1'	March 29, 2021	<0.024	<0.216	<4.8	<9.7	<49	<14.5	<63.5	110
BS21-84	1'	March 29, 2021	<0.024	<0.219	<4.9	<9.5	<47	<14.4	<61.4	100
BS21-85	1'	March 29, 2021	<0.025 <0.024	<0.224 <0.213	<5.0 <4.7	<9.2 <9.7	<46 <48	<14.2 <14.4	<60.2 <62.4	92 85
BS21-86 BS21-87	1'	March 29, 2021	<0.024	<0.213	<4.7	<8.9	<45	<13.8	<58.8	93
BS21-88	1'	March 29, 2021 March 29, 2021	<0.024	<0.22	<4.9	<9.5	<47	<14.4	<61.4	87
BS21-89	1'	March 29, 2021	<0.025	<0.221	<4.9	<9.2	<46	<14.1	<60.1	81
BS21-90	1'	March 29, 2021	<0.024	<0.219	<4.9	<9.7	<48	<14.6	<62.6	76
BS21-91	1'	March 29, 2021	<0.024	<0.215	<4.8	<10	<50	<14.8	<64.8	98
BS21-92	1'	March 29, 2021	<0.024	<0.216	<4.8	<10	<50	<14.8	<64.8	88
BS21-93	1'	March 29, 2021	<0.025	<0.221	<4.9	<10	<50	<14.9	<64.9	90
BS21-94	1'	March 29, 2021	<0.025	<0.222	<4.9	<10	<51	<14.9	<65.9	75
BS21-95	1'	March 29, 2021	<0.024	<0.215	<4.8	<9.6	<48	<14.4	<62.4	79
BS21-96	1'	March 29, 2021	<0.024	<0.215	<4.8	<9.8	<49	<14.6	<63.6	140
BS21-97	1'	March 29, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	170
BS21-98	1'	March 29, 2021	<0.024	<0.22	<4.9	<9.7	<49	<14.6	<63.6	81
BS21-99	1'	March 29, 2021	<0.024	<0.213	<4.7	<9.7	<49	<14.4	<63.4	83
BS21-100	1'	March 29, 2021	<0.024	<0.216	<4.8	<8.9	<45	<13.7	<58.7	88
BS21-101	1'	March 29, 2021	<0.024	<0.22	<4.9	<9.7	<49	<14.6	<63.6	80
BS21-102	1'	March 29, 2021	<0.024	<0.22	<4.9	<9.7	<48	<14.6	<62.6	82
BS21-103 BS21-104	1'	March 29, 2021 March 29, 2021	<0.024 <0.025	<0.217 <0.224	<4.8 <5.0	<9.3 <9.1	<46 <46	<14.1 <14.1	<60.1 <60.1	74 75
BS21-104 BS21-105	1'	March 29, 2021	<0.025	<0.224	<5.0	<9.1	<47	<14.1	<61.4	76
BS21-105 BS21-106	1'	March 29, 2021	<0.023	<0.223	<4.7	<9.7	<48	<14.4	<62.4	82
BS21-100	1'	March 29, 2021	<0.024	<0.215	<4.8	<9.6	<48	<14.4	<62.4	87
BS21-107	1'	March 29, 2021	<0.025	<0.224	<5.0	<9.3	<46	<14.3	<60.3	61
BS21-109	1'	March 29, 2021	<0.024	<0.217	<4.8	<9.8	<49	<14.6	<63.6	<60
BS21-110	1'	March 29, 2021	<0.024	<0.22	<4.9	<9.4	<47	<14.3	<61.3	<60
BS21-111	1'	March 29, 2021	<0.024	<0.22	<4.9	<9.3	<47	<14.2	<61.2	<60
BS21-112	1'	March 29, 2021	<0.024	<0.22	<4.9	<8.9	<45	<13.8	<58.8	<60
BS21-113	1'	March 29, 2021	<0.025	<0.222	<4.9	<9.1	<45	<14	<45	<61
BS21-114	1'	March 29, 2021	<0.024	<0.216	<4.8	<9.6	<48	<14.4	<62.4	<60
BS21-115	1'	March 29, 2021	<0.024	<0.212	<4.7	<9.9	<49	<14.6	<63.6	<60



NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

Lab Report: 2103C86, 2103D36, 2103D82, 2104073, 2104068, 2104919, 2104A33

Sample Description Petroleum Hydrocarbons										1
	Jampie Description	1	Vol	atile	I	oleum riyuroca	Extractable			Inorgar
Sample ID	Depth (ft)	Sample Date	euseuse (mg/kg)	(sa/ga) (sa/ga)	Gasoline Range Ca Organics (GRO)	Diesel Range	Motor Oil Range	(GRO + DRO)	স্ত্ৰ Total Petroleum ক্ৰি Hydrocarbons (TPH)	(mg/kg
BS21-116	1'	March 29, 2021	<0.024	<0.213	<4.7	<9.7	<49	<14.4	<63.4	<59
BS21-117	1'	March 29, 2021	<0.024	<0.215	<4.8	<9.9	<50	<14.7	<64.7	<60
BS21-118	1'	March 29, 2021	<0.024	<0.213	<4.7	<9.6	<48	<14.3	<62.3	<61
BS21-119	1'	March 29, 2021	<0.025	<0.225	<5.0	<9.1	<45	<14.1	<59.1	<60
BS21-120	1'	March 29, 2021	<0.024	<0.216	<4.8	<9.3	<46	<14.1	<60.1	<60
BS21-121	1'	March 30, 2021	<0.024	<0.22	<4.9	<9.4	<47	<14.3	<61.3	<60
BS21-122	1'	March 30, 2021	<0.025	<0.225	<5.0	<9.5	<48	<14.5	<62.5	<60
BS21-123	1'	March 30, 2021	<0.025	<0.224	<5.0	<8.6	<43	<13.6	<56.6	<60
BS21-124	1'	March 30, 2021	<0.024	<0.22	<4.9	<9.9	<49	<14.8	<63.8	<60
BS21-125	1'	March 30, 2021	<0.025	<0.224	<5.0	<9.6	<48	<14.6	<62.6	61
BS21-126	1'	March 30, 2021	<0.025	<0.225	<5.0	<9.3	<46	<14.3	<60.3	<60
BS21-127	1'	March 30, 2021	<0.025	<0.224	<5.0	<9.7	<49	<14.7	<63.7	<59
BS21-128	1'	March 30, 2021	<0.024	<0.219	<4.9	<9.1	<46	<14	<60	<60
BS21-129	1'	March 30, 2021	<0.025	<0.224	<5.0	<9.8	<49	<14.8	<63.8	<60
BS21-130	1'	March 30, 2021	<0.025	<0.222	<4.9	<9.5	<47	<14.4	<61.4	<60
BS21-131	1'	March 30, 2021	<0.025	<0.224	<5.0	<9.7	<48	<14.7	<62.7	<60
BS21-132	1'	March 30, 2021	<0.024	<0.22	<4.9	<9.8	<49	<14.7	<63.7	<60
BS21-133	1'	March 30, 2021	<0.024	<0.217	<4.8	<9.6	<48	<14.4	<62.4	<60
BS21-134	1'	March 30, 2021	<0.024	<0.217	<4.8	<9.4	<47	<14.2	<61.2	<60
BS21-135	1'	March 30, 2021	<0.024	<0.217	<4.8	<9.9	<49	<14.7	<63.7	<60
BS21-136	1'	March 30, 2021	<0.025	<0.222	<4.9	<9.5	<48	<14.4	<62.4	<60
BS21-137	1'	March 30, 2021	<0.025	<0.225	<5.0	<9.9	<50	<14.9	<50	<60
BS21-138	1'	March 30, 2021	<0.025	<0.222	<4.9	<9.6	<48	<14.5	<62.5	<61
BS21-139	1'	March 30, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	<60
BS21-140	1'	March 30, 2021	<0.024	<0.216	<4.8	<9.7	<48	<14.5	<62.5	<60
BS21-141	1'	March 30, 2021	<0.024	<0.219	<4.9	<9.7	<49	<14.6	<63.6	<60
BS21-142	1'	March 30, 2021	<0.024 <0.024	<0.22 <0.219	<4.9 <4.9	<9.6 <9.6	<48 <48	<14.5 <14.5	<62.5	<60
BS21-143	1'	March 30, 2021	<0.024	<0.219	<4.9 <4.9	<9.5	<48	<14.5	<62.5 <61.4	<60 <60
BS21-144 BS21-145	1'	March 30, 2021 March 30, 2021	<0.023	<0.222	<4.8	<9.7	<49	<14.5	<63.5	<60
BS21-145	1'	March 30, 2021	<0.024	<0.217	<4.9	<9.6	<48	<14.5	<62.5	<60
BS21-147	1'	March 30, 2021	<0.024	<0.219	<4.9	<9.5	<48	<14.4	<62.4	<60
BS21-148	1'	March 30, 2021	<0.024	<0.217	<4.8	<9.4	<47	<14.2	<61.2	220
BS21-149	1'	March 30, 2021	<0.025	<0.225	<5.0	<9.9	<49	<14.9	<63.9	<60
BS21-150	1'	March 30, 2021	<0.025	<0.221	<4.9	<9.9	<50	<14.8	<64.8	<59
WS21-01	0-1'	March 25, 2021	<0.023	<0.208	<4.6	<9.9	<50	<14.5	<64.5	500
WS21-02	0-1'	March 25, 2021	<0.025	<0.221	<4.9	<9.7	<48	<14.6	<62.6	830
WS21-02	0-1'	April 20, 2021	<0.025	<0.224	<5.0	<9.6	<48	<14.6	<62.6	220
WS21-03	0-1'	March 26, 2021	<0.025	<0.224	<5.0	<9.8	<49	<14.8	<63.8	350
WS21-04	0-1'	March 26, 2021	<0.025	<0.221	<4.9	<9.8	<49	<14.7	<63.7	450
WS21-05	0-1'	March 26, 2021	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	91
WS21-06	0-1'	March 26, 2021	<0.025	<0.224	<5.0	<9.8	<49	<14.8	<63.8	81
WS21-07	0-1'	March 26, 2021	<0.025	<0.225	<5.0	<10	<50	<15	<65	490
WS21-08	0-1'	March 26, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	290
WS21-09	0-1'	March 26, 2021	<0.025	<0.222	<4.9	<9.7	<48	<14.6	<62.6	730
WS21-09	0-1'	April 20, 2021	<0.024	<0.219	<4.9	<9.8	<49	<14.7	<63.7	250
WS21-10	0-1'	March 26, 2021	<0.024	<0.22	<4.9	<9.8	<49	<14.7	<63.7	130
WS21-11	0-1'	March 26, 2021	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	<60
WS21-12	0-1'	March 26, 2021	<0.025	<0.225	<5.0	<9.9	<50	<14.9	<64.9	<59
WS21-13	0-1'	March 26, 2021	<0.024	<0.22	<4.9	<9.7	<48	<14.6	<62.6	<60
WS21-14	0-1'	March 26, 2021	<0.024	<0.216	<4.8	<9.2	<46	<14	<60	<60
WS21-15	0-1'	March 26, 2021	<0.025	<0.225	<5.0	<9.3	<47	<14.3	<61.3	<60
WS21-16	0-1'	March 26, 2021	<0.025 <0.025	<0.222 <0.221	<4.9 <4.9	<9.7 <9.7	<48 <48	<14.6 <14.6	<62.6 <62.6	<60
WS21-17	0-1'	March 26, 2021	<0.025	<0.221	<4.9 <4.7	<9.7	<48 <47			<60 81
WS21-18	0-1'	March 26, 2021	<0.023	<0.21	<4.7 <4.8	<9.4	<47	<14.1 <14.3	<61.1 <61.3	83
WS21-19 WS21-20	0-1' 0-1'	March 26, 2021 March 26, 2021	<0.024	<0.215	<4.8 <4.6	<9.5	<47	<14.3	<61.1	<59
WS21-20 WS21-21	0-1	March 26, 2021	<0.025	<0.227	<4.9	<9.8	<49	<14.1	<63.7	<60



NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

Lab Report: 2103C86, 2103D36, 2103D82, 2104073, 2104068, 2104919, 2104A33

			I	g zaworatory m	esults - Depth to					
	Sample Description				Petro	oleum Hydroca				Inorgan
Sample ID	Depth (ft)	Sample Date	Benzene	atile  BIEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg
WS21-22	0-1'	March 26, 2021	<0.025	<0.224	<5.0	<9.7	<48	<14.7	<62.7	<61
WS21-23 WS21-24	0-1' 0-1'	March 26, 2021 March 26, 2021	<0.024 <0.024	<0.22 <0.22	<4.9 <4.9	<9.2 <9.7	<46 <44	<14.1 <13.6	<60.1 <57.6	440 310
WS21-25	0-1	March 26, 2021	<0.024	<0.22	<4.8	<9.2	<46	<14	<60	300
WS21-25 WS21-26	0-1	March 26, 2021	<0.024	<0.213	<4.7	<9.3	<46	<14	<60	380
WS21-20	0-1'	March 26, 2021	<0.024	<0.213	<4.7	<9.1	<45	<13.8	<58.8	<61
WS21-28	0-1'	March 26, 2021	<0.024	<0.216	<4.8	<9.4	<47	<14.2	<61.2	260
WS21-29	0-1'	March 26, 2021	<0.023	<0.207	<4.6	<8.8	<44	<13.4	<57.4	130
WS21-30	0-1'	March 26, 2021	<0.024	<0.22	<4.9	<9.4	<47	<14.3	<61.3	120
WS21-31	0-1'	March 26, 2021	<0.025	<0.222	<4.9	<10	<50	<14.9	<64.9	<60
WS21-32	0-1'	March 26, 2021	<0.025	<0.221	<4.9	<9.7	<49	<14.6	<63.6	<60
WS21-33	0-1'	March 26, 2021	<0.025	<0.222	<4.9	<9.6	<48	<14.5	<62.5	<60
WS21-34	0-1'	March 26, 2021	<0.025	<0.221	<4.9	<9.8	<49	<14.7	<63.7	240
WS21-35	0-1'	March 26, 2021	<0.024	<0.219	<4.9	<8.8	<44	<13.7	<57.7	90
WS21-36	0-1'	March 30, 2021	<0.024	<0.22	<4.9	<9.9	<50	<14.8	<64.8	<61
WS21-37	0-1'	March 30, 2021	<0.024	<0.216	<4.8	<8.8	<44	<13.6	<57.6	<60
WS21-38	0-1'	March 30, 2021	<0.025	<0.222	<4.9	<9.7	<48	<14.6	<62.6	<60
WS21-39	0-1'	March 30, 2021	<0.025	<0.222	<4.9	<9.5	<47	<14.4	<61.4	<60
WS21-40	0-1'	March 30, 2021	<0.025	<0.221	<4.9	<9.7	<49	<14.6	<63.6	<59
WS21-41	0-1'	March 30, 2021	<0.023	<0.21	<4.7	<8.8	<44	<13.5	<57.5	<60
WS21-42	0-1'	March 30, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	65
WS21-43	0-1'	March 30, 2021	<0.025	<0.224	<5.0	<9.7	<49	<14.7	<63.7	68
WS21-44	0-1'	March 30, 2021	<0.024	<0.213	<4.7	<9.8	<49	<14.5	<63.5	100
WS21-45	0-1'	March 30, 2021	<0.025	<0.221	<4.9	<9.8	<49	<14.7	<63.7	110
WS21-46	0-1'	March 30, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	95
WS21-47	0-1'	March 30, 2021	<0.025	<0.221	<4.9	<9.7	<48	<14.6	<62.6	110
WS21-48	0-1'	March 30, 2021	<0.024	<0.216	<4.8	<9.5	<48	<14.3	<62.3	150
WS21-49	0-1'	March 30, 2021	<0.023	<0.21	<4.7	<8.8	<44	<13.5	<57.5	130
WS21-50	0-1.5'	March 30, 2021	<0.024	<0.212	<4.7	<9.7	<48	<14.4	<62.4	160
WS21-51	0-1.5'	March 30, 2021	<0.024 <0.025	<0.216 <0.22	<4.8 <4.9	<9.6 <9.5	<48 <47	<14.4 <14.4	<62.4 <61.4	150 170
WS21-52	0-1.5' 0-1.5'	March 30, 2021	<0.023	<0.22	<4.8	<9.6	<48	<14.4	<62.4	93
WS21-53 WS21-54	0-1.5'	March 30, 2021	<0.024	<0.217	<4.8	<9.8	<49	<14.4	<63.6	62
WS21-55	0-1.5'	March 30, 2021 March 30, 2021	<0.024	<0.210	<4.7	<9.8	<49	<14.5	<63.5	<60
WS21-55 WS21-56	0-1.5'	March 30, 2021	<0.024	<0.215	<4.7	<9.9	<49	<14.5	<63.7	63
WS21-57	0-1.5'	March 30, 2021	<0.024	<0.216	<4.8	<9.6	<48	<14.7	<62.4	61
WS21-57 WS21-58	0-1.5	March 30, 2021	<0.024	<0.219	<4.9	<9.0	<45	<13.9	<58.9	72
WS21-59	0-1'	March 30, 2021	<0.024	<0.219	<4.9	<8.4	<42	<13.3	<55.3	77
WS21-60	0-1'	March 30, 2021	<0.024	<0.219	<4.9	<9.5	<47	<14.4	<61.4	85
WS21-61	0-1'	March 30, 2021	<0.024	<0.22	<4.9	<9.4	<47	<14.3	<61.3	66
WS21-62	0-1'	March 30, 2021	<0.025	<0.221	<4.9	<8.8	<44	<13.7	<57.7	<60
WS21-63	0-1'	March 30, 2021	<0.023	<0.21	<4.7	<9.7	<49	<14.4	<63.4	<59
WS21-64	0-1'	March 30, 2021	<0.025	<0.225	<5.0	<9.2	<46	<14.2	<60.2	<60
WS21-65	0-1'	March 30, 2021	<0.025	<0.222	<4.9	<8.7	<44	<13.6	<57.6	<60
WS21-66	0-1'	March 30, 2021	<0.025	<0.225	<5.0	<9.0	<45	<14	<59	<60
WS21-67	0-1'	March 30, 2021	<0.023	<0.207	<4.6	<9.8	<49	<14.4	<63.4	<59
WS21-68	0-1'	March 30, 2021	<0.024	<0.22	<4.9	<9.6	<48	<14.5	<62.5	62
WS21-69	0-1'	March 30, 2021	<0.024	<0.217	<4.8	<8.6	<43	<13.4	<56.4	63
WS21-70	0-1'	March 30, 2021	<0.025	<0.222	<4.9	<9.1	<45	<14	<59	64
WS21-71	0-1'	March 30, 2021	<0.023	<0.21	<4.7	<8.4	<42	<13.1	<55.1	72
WS21-72	0-1'	March 30, 2021	<0.025	<0.225	<5.0	<9.9	<50	<14.9	<64.9	60
WS21-73	0-1'	March 30, 2021	<0.025	<0.225	<5.0	<8.7	<43	<13.7	<56.7	<60
WS21-74	0-1'	March 30, 2021	<0.025	<0.221	<4.9	<9.4	<47	<14.3	<61.3	63

Bold and shaded indicates exceedance outside of applied action level

Bold and green-shaded indicates re-collection of sample previously in excedance of NMOCD Closure Criteria



### **ATTACHMENT 7**



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

January 25, 2021

Natalie Gordon Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX:

RE: Stebbins Fed SWD OrderNo.: 2101633

#### Dear Natalie Gordon:

Hall Environmental Analysis Laboratory received 19 sample(s) on 1/16/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-01 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 9:30:00 AM

 Lab ID:
 2101633-001
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS					Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.5		mg/Kg	1	1/19/2021 9:01:19 PM
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	1/19/2021 9:01:19 PM
Surr: DNOP	158	30.4-154	S	%Rec	1	1/19/2021 9:01:19 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	1/19/2021 4:13:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: <b>JMR</b>
Benzene	ND	0.025		mg/Kg	1	1/17/2021 3:45:16 PM
Toluene	ND	0.049		mg/Kg	1	1/17/2021 3:45:16 PM
Ethylbenzene	ND	0.049		mg/Kg	1	1/17/2021 3:45:16 PM
Xylenes, Total	ND	0.099		mg/Kg	1	1/17/2021 3:45:16 PM
Surr: 1,2-Dichloroethane-d4	98.4	70-130		%Rec	1	1/17/2021 3:45:16 PM
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	1/17/2021 3:45:16 PM
Surr: Dibromofluoromethane	105	70-130		%Rec	1	1/17/2021 3:45:16 PM
Surr: Toluene-d8	95.0	70-130		%Rec	1	1/17/2021 3:45:16 PM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/17/2021 3:45:16 PM
Surr: BFB	100	70-130		%Rec	1	1/17/2021 3:45:16 PM

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

Qualifiers:

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

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

Page 1 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-02 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 9:35:00 AM

 Lab ID:
 2101633-002
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGAN	NICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	1/19/2021 9:25:17 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	1/19/2021 9:25:17 PM
Surr: DNOP	137	30.4-154	%Rec	1	1/19/2021 9:25:17 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/19/2021 4:50:18 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>					Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	1/17/2021 4:13:49 PM
Toluene	ND	0.050	mg/Kg	1	1/17/2021 4:13:49 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/17/2021 4:13:49 PM
Xylenes, Total	ND	0.10	mg/Kg	1	1/17/2021 4:13:49 PM
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	1/17/2021 4:13:49 PM
Surr: 4-Bromofluorobenzene	99.5	70-130	%Rec	1	1/17/2021 4:13:49 PM
Surr: Dibromofluoromethane	102	70-130	%Rec	1	1/17/2021 4:13:49 PM
Surr: Toluene-d8	96.7	70-130	%Rec	1	1/17/2021 4:13:49 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/17/2021 4:13:49 PM
Surr: BFB	103	70-130	%Rec	1	1/17/2021 4:13:49 PM

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

Qualifiers:

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

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

Page 2 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-03 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 9:40:00 AM

 Lab ID:
 2101633-003
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	1/19/2021 9:49:02 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	1/19/2021 9:49:02 PM
Surr: DNOP	117	30.4-154	%Rec	1	1/19/2021 9:49:02 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/19/2021 5:02:42 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>	Г				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	1/17/2021 4:42:15 PM
Toluene	ND	0.050	mg/Kg	1	1/17/2021 4:42:15 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/17/2021 4:42:15 PM
Xylenes, Total	ND	0.099	mg/Kg	1	1/17/2021 4:42:15 PM
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	1/17/2021 4:42:15 PM
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	1/17/2021 4:42:15 PM
Surr: Dibromofluoromethane	105	70-130	%Rec	1	1/17/2021 4:42:15 PM
Surr: Toluene-d8	98.6	70-130	%Rec	1	1/17/2021 4:42:15 PM
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/17/2021 4:42:15 PM
Surr: BFB	105	70-130	%Rec	1	1/17/2021 4:42:15 PM

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

Qualifiers:

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

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

Page 3 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-04 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 9:45:00 AM

 Lab ID:
 2101633-004
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	1/19/2021 10:13:01 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	1/19/2021 10:13:01 PM
Surr: DNOP	131	30.4-154	%Rec	1	1/19/2021 10:13:01 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	150	60	mg/Kg	20	1/19/2021 5:15:07 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	ST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/17/2021 5:10:36 PM
Toluene	ND	0.050	mg/Kg	1	1/17/2021 5:10:36 PM
Ethylbenzene	ND	0.050	mg/Kg	1	1/17/2021 5:10:36 PM
Xylenes, Total	ND	0.099	mg/Kg	1	1/17/2021 5:10:36 PM
Surr: 1,2-Dichloroethane-d4	99.7	70-130	%Rec	1	1/17/2021 5:10:36 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	1/17/2021 5:10:36 PM
Surr: Dibromofluoromethane	104	70-130	%Rec	1	1/17/2021 5:10:36 PM
Surr: Toluene-d8	99.0	70-130	%Rec	1	1/17/2021 5:10:36 PM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/17/2021 5:10:36 PM
Surr: BFB	103	70-130	%Rec	1	1/17/2021 5:10:36 PM

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

Qualifiers:

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

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

Page 4 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-05 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 9:50:00 AM

 Lab ID:
 2101633-005
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	1/19/2021 10:36:51 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	1/19/2021 10:36:51 PM
Surr: DNOP	114	30.4-154	%Rec	1	1/19/2021 10:36:51 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	86	61	mg/Kg	20	1/19/2021 5:27:31 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/17/2021 5:38:53 PM
Toluene	ND	0.049	mg/Kg	1	1/17/2021 5:38:53 PM
Ethylbenzene	ND	0.049	mg/Kg	1	1/17/2021 5:38:53 PM
Xylenes, Total	ND	0.099	mg/Kg	1	1/17/2021 5:38:53 PM
Surr: 1,2-Dichloroethane-d4	87.3	70-130	%Rec	1	1/17/2021 5:38:53 PM
Surr: 4-Bromofluorobenzene	96.9	70-130	%Rec	1	1/17/2021 5:38:53 PM
Surr: Dibromofluoromethane	106	70-130	%Rec	1	1/17/2021 5:38:53 PM
Surr: Toluene-d8	100	70-130	%Rec	1	1/17/2021 5:38:53 PM
EPA METHOD 8015D MOD: GASOLINE RANG	Ε				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/17/2021 5:38:53 PM
Surr: BFB	102	70-130	%Rec	1	1/17/2021 5:38:53 PM

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

Qualifiers:

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

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

Page 5 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-06 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 9:55:00 AM

 Lab ID:
 2101633-006
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/19/2021 11:00:51 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/19/2021 11:00:51 PM
Surr: DNOP	102	30.4-154	%Rec	1	1/19/2021 11:00:51 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	81	60	mg/Kg	20	1/19/2021 5:39:56 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/20/2021 2:31:02 AM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 2:31:02 AM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 2:31:02 AM
Xylenes, Total	ND	0.098	mg/Kg	1	1/20/2021 2:31:02 AM
Surr: 1,2-Dichloroethane-d4	94.8	70-130	%Rec	1	1/20/2021 2:31:02 AM
Surr: 4-Bromofluorobenzene	95.1	70-130	%Rec	1	1/20/2021 2:31:02 AM
Surr: Dibromofluoromethane	108	70-130	%Rec	1	1/20/2021 2:31:02 AM
Surr: Toluene-d8	101	70-130	%Rec	1	1/20/2021 2:31:02 AM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 2:31:02 AM
Surr: BFB	103	70-130	%Rec	1	1/20/2021 2:31:02 AM

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

Qualifiers:

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

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

Page 6 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-08 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:00:00 AM

 Lab ID:
 2101633-007
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	RGANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	8.5	mg/Kg	1	1/19/2021 11:24:39 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	1/19/2021 11:24:39 PM
Surr: DNOP	99.8	30.4-154	%Rec	1	1/19/2021 11:24:39 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/19/2021 5:52:21 PM
<b>EPA METHOD 8260B: VOLATILES SHORT L</b>	IST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	1/20/2021 4:54:25 AM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 4:54:25 AM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 4:54:25 AM
Xylenes, Total	ND	0.098	mg/Kg	1	1/20/2021 4:54:25 AM
Surr: 1,2-Dichloroethane-d4	96.8	70-130	%Rec	1	1/20/2021 4:54:25 AM
Surr: 4-Bromofluorobenzene	97.6	70-130	%Rec	1	1/20/2021 4:54:25 AM
Surr: Dibromofluoromethane	105	70-130	%Rec	1	1/20/2021 4:54:25 AM
Surr: Toluene-d8	96.2	70-130	%Rec	1	1/20/2021 4:54:25 AM
EPA METHOD 8015D MOD: GASOLINE RAN	IGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 4:54:25 AM
Surr: BFB	103	70-130	%Rec	1	1/20/2021 4:54:25 AM

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

Qualifiers:

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

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

Page 7 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-09 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:05:00 AM

 Lab ID:
 2101633-008
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.4	mg/Kg	1	1/19/2021 11:48:39 PM
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	1/19/2021 11:48:39 PM
Surr: DNOP	101	30.4-154	%Rec	1	1/19/2021 11:48:39 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/20/2021 4:50:43 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	Т				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/20/2021 5:23:04 AM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 5:23:04 AM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 5:23:04 AM
Xylenes, Total	ND	0.099	mg/Kg	1	1/20/2021 5:23:04 AM
Surr: 1,2-Dichloroethane-d4	92.4	70-130	%Rec	1	1/20/2021 5:23:04 AM
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	1/20/2021 5:23:04 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	1/20/2021 5:23:04 AM
Surr: Toluene-d8	98.0	70-130	%Rec	1	1/20/2021 5:23:04 AM
EPA METHOD 8015D MOD: GASOLINE RANGE	<b>≣</b>				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 5:23:04 AM
Surr: BFB	100	70-130	%Rec	1	1/20/2021 5:23:04 AM

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

Qualifiers:

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

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

Page 8 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-10 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:10:00 AM

 Lab ID:
 2101633-009
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	1/20/2021 12:12:25 AM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	1/20/2021 12:12:25 AM
Surr: DNOP	130	30.4-154	%Rec	1	1/20/2021 12:12:25 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/20/2021 5:52:47 PM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/20/2021 5:51:43 AM
Toluene	ND	0.050	mg/Kg	1	1/20/2021 5:51:43 AM
Ethylbenzene	ND	0.050	mg/Kg	1	1/20/2021 5:51:43 AM
Xylenes, Total	ND	0.10	mg/Kg	1	1/20/2021 5:51:43 AM
Surr: 1,2-Dichloroethane-d4	92.8	70-130	%Rec	1	1/20/2021 5:51:43 AM
Surr: 4-Bromofluorobenzene	96.3	70-130	%Rec	1	1/20/2021 5:51:43 AM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	1/20/2021 5:51:43 AM
Surr: Toluene-d8	98.0	70-130	%Rec	1	1/20/2021 5:51:43 AM
EPA METHOD 8015D MOD: GASOLINE RAI	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/20/2021 5:51:43 AM
Surr: BFB	99.0	70-130	%Rec	1	1/20/2021 5:51:43 AM

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

Qualifiers:

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

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

Page 9 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-11 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:15:00 AM

 Lab ID:
 2101633-010
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: BRM
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	1/20/2021 12:36:27 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	1/20/2021 12:36:27 AM
Surr: DNOP	120	30.4-154	%Rec	1	1/20/2021 12:36:27 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/20/2021 6:05:11 PM
EPA METHOD 8260B: VOLATILES SHORT LI	ST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/20/2021 6:20:23 AM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 6:20:23 AM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 6:20:23 AM
Xylenes, Total	ND	0.099	mg/Kg	1	1/20/2021 6:20:23 AM
Surr: 1,2-Dichloroethane-d4	95.1	70-130	%Rec	1	1/20/2021 6:20:23 AM
Surr: 4-Bromofluorobenzene	97.6	70-130	%Rec	1	1/20/2021 6:20:23 AM
Surr: Dibromofluoromethane	108	70-130	%Rec	1	1/20/2021 6:20:23 AM
Surr: Toluene-d8	99.5	70-130	%Rec	1	1/20/2021 6:20:23 AM
EPA METHOD 8015D MOD: GASOLINE RANG	GE .				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 6:20:23 AM
Surr: BFB	98.4	70-130	%Rec	1	1/20/2021 6:20:23 AM

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

Qualifiers:

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

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

Page 10 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: SS21-13 0-0.5'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:20:00 AM

 Lab ID:
 2101633-011
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	1/20/2021 1:00:15 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	1/20/2021 1:00:15 AM
Surr: DNOP	123	30.4-154	%Rec	1	1/20/2021 1:00:15 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/20/2021 6:17:36 PM
EPA METHOD 8260B: VOLATILES SHORT LIST	Т				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	1/20/2021 6:49:04 AM
Toluene	ND	0.050	mg/Kg	1	1/20/2021 6:49:04 AM
Ethylbenzene	ND	0.050	mg/Kg	1	1/20/2021 6:49:04 AM
Xylenes, Total	ND	0.099	mg/Kg	1	1/20/2021 6:49:04 AM
Surr: 1,2-Dichloroethane-d4	95.6	70-130	%Rec	1	1/20/2021 6:49:04 AM
Surr: 4-Bromofluorobenzene	92.3	70-130	%Rec	1	1/20/2021 6:49:04 AM
Surr: Dibromofluoromethane	108	70-130	%Rec	1	1/20/2021 6:49:04 AM
Surr: Toluene-d8	98.1	70-130	%Rec	1	1/20/2021 6:49:04 AM
EPA METHOD 8015D MOD: GASOLINE RANGE	<b>=</b>				Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/20/2021 6:49:04 AM
Surr: BFB	102	70-130	%Rec	1	1/20/2021 6:49:04 AM

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

Qualifiers:

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

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

Page 11 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-01 0'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 11:00:00 AM

 Lab ID:
 2101633-012
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/20/2021 1:24:13 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/20/2021 1:24:13 AM
Surr: DNOP	105	30.4-154	%Rec	1	1/20/2021 1:24:13 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	13000	600	mg/Kg	200	1/21/2021 4:52:36 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	Т				Analyst: JMR
Benzene	ND	0.024	mg/Kg	1	1/20/2021 7:17:42 AM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 7:17:42 AM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 7:17:42 AM
Xylenes, Total	ND	0.097	mg/Kg	1	1/20/2021 7:17:42 AM
Surr: 1,2-Dichloroethane-d4	96.3	70-130	%Rec	1	1/20/2021 7:17:42 AM
Surr: 4-Bromofluorobenzene	97.3	70-130	%Rec	1	1/20/2021 7:17:42 AM
Surr: Dibromofluoromethane	106	70-130	%Rec	1	1/20/2021 7:17:42 AM
Surr: Toluene-d8	102	70-130	%Rec	1	1/20/2021 7:17:42 AM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 7:17:42 AM
Surr: BFB	107	70-130	%Rec	1	1/20/2021 7:17:42 AM

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

Qualifiers:

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

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

Page 12 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-01 1'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 11:05:00 AM

 Lab ID:
 2101633-013
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/20/2021 1:48:02 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/20/2021 1:48:02 AM
Surr: DNOP	105	30.4-154	%Rec	1	1/20/2021 1:48:02 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	1200	60	mg/Kg	20	1/20/2021 6:42:25 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	ST				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	1/20/2021 7:46:21 AM
Toluene	ND	0.050	mg/Kg	1	1/20/2021 7:46:21 AM
Ethylbenzene	ND	0.050	mg/Kg	1	1/20/2021 7:46:21 AM
Xylenes, Total	ND	0.10	mg/Kg	1	1/20/2021 7:46:21 AM
Surr: 1,2-Dichloroethane-d4	97.2	70-130	%Rec	1	1/20/2021 7:46:21 AM
Surr: 4-Bromofluorobenzene	94.9	70-130	%Rec	1	1/20/2021 7:46:21 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	1/20/2021 7:46:21 AM
Surr: Toluene-d8	100	70-130	%Rec	1	1/20/2021 7:46:21 AM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/20/2021 7:46:21 AM
Surr: BFB	101	70-130	%Rec	1	1/20/2021 7:46:21 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
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 13 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-01 2'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 11:10:00 AM

 Lab ID:
 2101633-014
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	1/20/2021 2:12:02 AM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	1/20/2021 2:12:02 AM
Surr: DNOP	140	30.4-154	%Rec	1	1/20/2021 2:12:02 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	1/20/2021 6:54:49 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	Т				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	1/20/2021 8:15:04 AM
Toluene	ND	0.050	mg/Kg	1	1/20/2021 8:15:04 AM
Ethylbenzene	ND	0.050	mg/Kg	1	1/20/2021 8:15:04 AM
Xylenes, Total	ND	0.10	mg/Kg	1	1/20/2021 8:15:04 AM
Surr: 1,2-Dichloroethane-d4	96.4	70-130	%Rec	1	1/20/2021 8:15:04 AM
Surr: 4-Bromofluorobenzene	97.1	70-130	%Rec	1	1/20/2021 8:15:04 AM
Surr: Dibromofluoromethane	115	70-130	%Rec	1	1/20/2021 8:15:04 AM
Surr: Toluene-d8	97.5	70-130	%Rec	1	1/20/2021 8:15:04 AM
EPA METHOD 8015D MOD: GASOLINE RANGI	E				Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/20/2021 8:15:04 AM
Surr: BFB	103	70-130	%Rec	1	1/20/2021 8:15:04 AM

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

Qualifiers:

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

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

Page 14 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-01 3'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 11:15:00 AM

 Lab ID:
 2101633-015
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	1/20/2021 2:35:54 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	1/20/2021 2:35:54 AM
Surr: DNOP	132	30.4-154	%Rec	1	1/20/2021 2:35:54 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	230	60	mg/Kg	20	1/20/2021 7:07:14 PM
EPA METHOD 8260B: VOLATILES SHORT LIST	Γ				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	1/20/2021 8:43:35 AM
Toluene	ND	0.050	mg/Kg	1	1/20/2021 8:43:35 AM
Ethylbenzene	ND	0.050	mg/Kg	1	1/20/2021 8:43:35 AM
Xylenes, Total	ND	0.099	mg/Kg	1	1/20/2021 8:43:35 AM
Surr: 1,2-Dichloroethane-d4	92.5	70-130	%Rec	1	1/20/2021 8:43:35 AM
Surr: 4-Bromofluorobenzene	96.9	70-130	%Rec	1	1/20/2021 8:43:35 AM
Surr: Dibromofluoromethane	106	70-130	%Rec	1	1/20/2021 8:43:35 AM
Surr: Toluene-d8	99.1	70-130	%Rec	1	1/20/2021 8:43:35 AM
EPA METHOD 8015D MOD: GASOLINE RANGE	į				Analyst: JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/20/2021 8:43:35 AM
Surr: BFB	106	70-130	%Rec	1	1/20/2021 8:43:35 AM

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

Qualifiers:

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

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

Page 15 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-02 0'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:40:00 AM

 Lab ID:
 2101633-016
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	470	98		mg/Kg	10	1/20/2021 12:32:59 AM
Motor Oil Range Organics (MRO)	2000	490		mg/Kg	10	1/20/2021 12:32:59 AM
Surr: DNOP	0	30.4-154	S	%Rec	10	1/20/2021 12:32:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/20/2021 11:30:20 AM
Surr: BFB	98.8	75.3-105		%Rec	1	1/20/2021 11:30:20 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/20/2021 11:30:20 AM
Toluene	ND	0.049		mg/Kg	1	1/20/2021 11:30:20 AM
Ethylbenzene	ND	0.049		mg/Kg	1	1/20/2021 11:30:20 AM
Xylenes, Total	ND	0.098		mg/Kg	1	1/20/2021 11:30:20 AM
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	1/20/2021 11:30:20 AM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	5700	300		mg/Kg	100	1/21/2021 5:05:00 PM

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

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 16 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-02 1'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:45:00 AM

 Lab ID:
 2101633-017
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: BRM
Diesel Range Organics (DRO)	22	9.7	mg/Kg	1	1/20/2021 12:56:07 AM
Motor Oil Range Organics (MRO)	79	48	mg/Kg	1	1/20/2021 12:56:07 AM
Surr: DNOP	107	30.4-154	%Rec	1	1/20/2021 12:56:07 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 12:40:47 PM
Surr: BFB	99.8	75.3-105	%Rec	1	1/20/2021 12:40:47 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	1/20/2021 12:40:47 PM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 12:40:47 PM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 12:40:47 PM
Xylenes, Total	ND	0.099	mg/Kg	1	1/20/2021 12:40:47 PM
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	1/20/2021 12:40:47 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	480	60	mg/Kg	20	1/20/2021 7:32:03 PM

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

Qualifiers:

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

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

Page 17 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-02 2'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:50:00 AM

 Lab ID:
 2101633-018
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (	ORGANICS				Analyst: BRM
Diesel Range Organics (DRO)	15	9.6	mg/Kg	1	1/20/2021 1:19:16 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/20/2021 1:19:16 AM
Surr: DNOP	122	30.4-154	%Rec	1	1/20/2021 1:19:16 AM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 1:51:40 PM
Surr: BFB	98.6	75.3-105	%Rec	1	1/20/2021 1:51:40 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	1/20/2021 1:51:40 PM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 1:51:40 PM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 1:51:40 PM
Xylenes, Total	ND	0.097	mg/Kg	1	1/20/2021 1:51:40 PM
Surr: 4-Bromofluorobenzene	104	80-120	%Rec	1	1/20/2021 1:51:40 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	220	60	mg/Kg	20	1/20/2021 7:44:28 PM

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

Qualifiers:

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

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

Page 18 of 26

Date Reported: 1/25/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BH21-02 3'

 Project:
 Stebbins Fed SWD
 Collection Date: 1/14/2021 10:55:00 AM

 Lab ID:
 2101633-019
 Matrix: SOIL
 Received Date: 1/16/2021 9:15:00 AM

Analyses	Result	RL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>BRM</b>				
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	1/20/2021 1:42:27 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	1/20/2021 1:42:27 AM
Surr: DNOP	107	30.4-154	%Rec	1	1/20/2021 1:42:27 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/20/2021 2:15:10 PM
Surr: BFB	98.2	75.3-105	%Rec	1	1/20/2021 2:15:10 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	1/20/2021 2:15:10 PM
Toluene	ND	0.049	mg/Kg	1	1/20/2021 2:15:10 PM
Ethylbenzene	ND	0.049	mg/Kg	1	1/20/2021 2:15:10 PM
Xylenes, Total	ND	0.097	mg/Kg	1	1/20/2021 2:15:10 PM
Surr: 4-Bromofluorobenzene	103	80-120	%Rec	1	1/20/2021 2:15:10 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	1/20/2021 8:21:41 PM

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

Qualifiers:

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

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

Page 19 of 26

### **QC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2101633 25-Jan-21** 

**Client:** Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: MB-57609 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **57609** RunNo: **74716** 

Prep Date: 1/19/2021 Analysis Date: 1/19/2021 SeqNo: 2636793 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-57609 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 57609 RunNo: 74716

Prep Date: 1/19/2021 Analysis Date: 1/19/2021 SeqNo: 2636794 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.4 90 110

Sample ID: MB-57639 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 57639 RunNo: 74751

Prep Date: 1/20/2021 Analysis Date: 1/20/2021 SeqNo: 2638022 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-57639 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 57639 RunNo: 74751

Prep Date: 1/20/2021 Analysis Date: 1/20/2021 SeqNo: 2638023 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.7 90 110

#### Qualifiers:

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

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

Page 20 of 26

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2101633** 

25-Jan-21

Client: Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: MB-57593 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 57593 RunNo: 74697

Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SegNo: 2637248 Units: %Rec

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

Surr: DNOP 10 10.00 105 30.4 154

Sample ID: LCS-57593 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 57593 RunNo: 74697

Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637249 Units: %Rec

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

Surr: DNOP 5.2 5.000 104 30.4 154

Sample ID: MB-57585 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 57585 RunNo: 74697 Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637290 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Diesel Range Organics (DRO) ND 10

Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 12 10.00 116 30.4 154

Sample ID: LCS-57585 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Batch ID: 57585 Client ID: LCSS RunNo: 74697 Analysis Date: 1/20/2021 Units: mg/Kg Prep Date: 1/18/2021 SeqNo: 2637291 Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 54 10 50.00 0 109 68.9 141 Surr: DNOP 5.000 5.6 112 30.4 154

Sample ID: LCS-57592 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 57592 RunNo: 74729 Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637435 Units: mg/Kg SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Diesel Range Organics (DRO) 63 10 50.00 n 125 68.9 141

 Surr: DNOP
 6.3
 5.000
 125
 30.4
 154

 Sample ID: MB-57592
 SampType: MBLK
 TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 57592 RunNo: 74729

Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637438 Units: mg/Kg

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

Diesel Range Organics (DRO) ND 10

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 21 of 26

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2101633** 

25-Jan-21

Client: Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: MB-57592 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 57592 RunNo: 74729

Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637438 Units: mg/Kg

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

Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 14 10.00 144 30.4 154

#### Qualifiers:

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

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

Page 22 of 26

### Hall Environmental Analysis Laboratory, Inc.

2101633 25-Jan-21

WO#:

**Client:** Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: mb-57575 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: **57575** RunNo: **74750** 

Prep Date: 1/16/2021 Analysis Date: 1/20/2021 SeqNo: 2637942 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 1000 1000 100 75.3 105

Sample ID: Ics-57575 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 57575 RunNo: 74750

Prep Date: 1/16/2021 Analysis Date: 1/20/2021 SeqNo: 2637945 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 5.0 25.00 O 94.4 80 120 Surr: BFB 1100 S 1000 108 75.3 105

Sample ID: 2101633-017ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: **BH21-02 1'** Batch ID: **57575** RunNo: **74750** 

Prep Date: 1/16/2021 Analysis Date: 1/20/2021 SeqNo: 2637948 Units: mg/Kg

Result SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 21 4.9 24.68 0 85.8 61.3 114 Surr: BFB 987.2 S 1100 108 75.3 105

Sample ID: 2101633-017amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BH21-02 1' Batch ID: 57575 RunNo: 74750

Prep Date: 1/16/2021 Analysis Date: 1/20/2021 SegNo: 2637949 Units: mg/Kg

Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** PQL LowLimit Qual Gasoline Range Organics (GRO) 22 5.0 24.95 87.1 61.3 114 2.57 20 Surr: BFB 1100 998.0 110 75.3 105 0 0 S

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 23 of 26

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2101633 25-Jan-21** 

Client: Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: mb-57575 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 57575 RunNo: 74750

Prep Date: 1/16/2021 Analysis Date: 1/20/2021 SeqNo: 2637986 Units: mg/Kg

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

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 1.1 1.000 106 80 120

Sample ID: LCS-57575 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 57575 RunNo: 74750

Prep Date: 1/16/2021	Analysis [	Date: 1/	20/2021	S	SeqNo: 20	637987	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.6	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	80	120			

Sample ID: 2101633-016ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: BH21-02 0' Batch ID: 57575 RunNo: 74750

Prep Date: 1/16/2021	Analysis [	Date: 1/	20/2021	S	SeqNo: 2	637989	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	0.9970	0.01311	81.7	76.3	120			
Toluene	0.86	0.050	0.9970	0.01086	84.8	78.5	120			
Ethylbenzene	0.86	0.050	0.9970	0	86.4	78.1	124			
Xylenes, Total	2.6	0.10	2.991	0.01634	86.2	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9970		105	80	120			

Sample ID: 2101633-016amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: BH21-02 0' Batch ID: 57575 RunNo: 74750

Prep Date: 1/16/2021	Analysis D	oate: <b>1/</b> 2	20/2021	S	SeqNo: 20	637990	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9775	0.01311	82.8	76.3	120	0.622	20	
Toluene	0.85	0.049	0.9775	0.01086	86.1	78.5	120	0.357	20	
Ethylbenzene	0.86	0.049	0.9775	0	87.6	78.1	124	0.538	20	
Xylenes, Total	2.6	0.098	2.933	0.01634	86.7	79.3	125	1.44	20	
Surr: 4-Bromofluorobenzene	1.0		0.9775		106	80	120	0	0	

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 24 of 26

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2101633 25-Jan-21** 

Client: Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: Ics-57574	SampT	ype: <b>LC</b>	S4	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: BatchQC	Batch	n ID: <b>57</b>	574	F	RunNo: 7	4688				
Prep Date: 1/16/2021	Analysis D	oate: 1/	17/2021	9	SeqNo: 20	635943	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	98.0	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	102	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 1,2-Dichloroethane-d4	0.48		0.5000		95.9	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.5	70	130			
Surr: Dibromofluoromethane	0.51		0.5000		102	70	130			
Surr: Toluene-d8	0.48		0.5000		96.4	70	130			

Sample ID: mb-57574	Samp <sup>-</sup>	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Volat	tiles Short	List	
Client ID: PBS	Batc	h ID: <b>57</b>	574	F	RunNo: 7	4688				
Prep Date: 1/16/2021	Analysis [	Date: 1/	17/2021	\$	SeqNo: 2	635944	Units: mg/K	ζg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		103	70	130			
Surr: 4-Bromofluorobenzene	0.49		0.5000		98.0	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		105	70	130			
Surr: Toluene-d8	0.48		0.5000		96.8	70	130			

#### Qualifiers:

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

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

Page 25 of 26

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2101633** 

25-Jan-21

Client: Vertex Resource Group Ltd.

**Project:** Stebbins Fed SWD

Sample ID: Ics-57574 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: LCSS Batch ID: 57574 RunNo: 74688

Prep Date: 1/16/2021 Analysis Date: 1/17/2021 SeqNo: 2635963 Units: mg/Kg

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

 Gasoline Range Organics (GRO)
 22
 5.0
 25.00
 0
 86.6
 70
 130

 Surr: BFB
 520
 500.0
 104
 70
 130

Sample ID: mb-57574 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: PBS Batch ID: 57574 RunNo: 74688

Prep Date: 1/16/2021 Analysis Date: 1/17/2021 SeqNo: 2635964 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

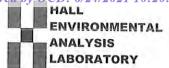
Surr: BFB 500 500.0 101 70 130

#### Qualifiers:

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

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

Page 26 of 26



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

# Sample Log-In Check List

Client Name: Vertex Resource Group Lt W	Vork Order Number: 210	1633		RcptNo: 1
Received By: Isaiah Ortiz 1/16	6/2021 9:15:00 AM	2	T	4
Completed By: Isaiah Ortiz 1/16	6/2021 9:28:46 AM	3	E_C	4
Reviewed By: The post				
Chain of Custody				
1. Is Chain of Custody complete?	Yes	<b>V</b>	10 🗆	Not Present
2. How was the sample delivered?	Cou	rier		
Log In				
3. Was an attempt made to cool the samples?	Yes	<b>&gt;</b>	lo 🗌	NA 🗆
4. Were all samples received at a temperature of >0°	° C to 6.0°C Yes	<b>✓</b>	lo 🗆	NA 🗆
5. Sample(s) in proper container(s)?	Yes	<b>✓</b> N	lo 🗆	
6. Sufficient sample volume for indicated test(s)?	Yes	✓ N	0 🗆	
7. Are samples (except VOA and ONG) properly prese		✓ N		
8. Was preservative added to bottles?	Yes		o <b>V</b>	NA 🗆
9. Received at least 1 vial with headspace <1/4" for A	Q VOA? Yes	□ N	o 🗆	NA 🔽
10. Were any sample containers received broken?	Yes		0 🗸	70
		2.1		# of preserved bottles checked
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes	N	0 🗆	for pH: (<2 or >12 unless noted
12. Are matrices correctly identified on Chain of Custod	dy? Yes	V N	οП	Adjusted?
3. Is it clear what analyses were requested?	Yes	V N		
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes	✓ N		Checked by:
Special Handling (if applicable)				
15. Was client notified of all discrepancies with this ord	der? Yes	□ N	o 🗆	NA 🗹
Person Notified:	Date:		_	
By Whom:	Via: ☐ eMa	ail Phone	Fax	☐ In Person
Regarding:				
Client Instructions:				
16. Additional remarks:				
17. Cooler Information				
Cooler No Temp °C Condition Seal Inta	ict Seal No Seal Da	ate Signe	Ву	
1 0.4 Good Not Prese			-	

Cha	in-of-C	Chain-of-Custody Record	Turn-Around T	Time: 5-4	he			85	_	Part of	6	- Albana	riveo
Client:	ertex	200	Standard	□ Rush				ANAI		YSTS	Z Z	STS I ABORATOR	d by €
			Project Name:	ä				NAVA.	haller	vironm	1 5		)CD =
Mailing Address:	ress:	0	Stebbil	105 Fea	1 Swo	4	4901 Hawkins NE	/kins N	,	pndne	due, N	Albuquerque, NM 87109	: 6/24/
			Project #:			100	Tel. 505-	505-345-3975	375	Fax 5	505-345-4107	4107	/202
Phone #:			21E-0	56000	700		=	ŧ	Ana	Analysis R	Request		1 10
email or Fax#:	ζ#:		Project Manager:	ger:					0		(ţu		0:20
QA/QC Package:	age:							SM	S		ıəsq		):36
□ Standard		☐ Level 4 (Full Validation)	Martile	Cordor	2			IIS0	PO		Attr		AM
Accreditation:		☐ Az Compliance	Sampler: JA	100			280		. <sub>c</sub> Ol		ıəse		
□ NELAC	□ Other			☑ Yes	□ No		8/8		_				
☐ EDD (Type)	pe)		# of Coolers:				əbi		_	(			
			Cooler Temp(including CF).	Ò	(0.) OF, h	TM	oitee			(AO)			
Date Time	e Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2101633	\≪∃TB 08ÆGT	□ 1808	EDB (N	АСВА Ср. г.	v) 09Z8	8270 (S Total C		
1-14 9!	Ol ib	5531-01 0-05		1,00	)W		_		_				
19:35	35	SS31-03			200								
9	diyo	5521-03			88					rd est			
9/1/5	15	5531-04			500								
9.50	2	5531-05			Sos								
9:55	55	5531-06			80								
(0)	10:00	5531-04			001								
10:05	05	5531-09			800							165	
10:10	10	5521-10			600								
101.15	(5)	3521-11			010								
10	0:30	5521-13		-	110				=				
11:00	20	10 10-1840			210								
Date: Time:	: Relinquished by:	ed by:	Received by:	Via:	Date Time (15/2) 1030	Remarks:	Si	0.5	2 1/1/1	B	rda		Page
Date: Time:	: Relinquished by:	ed by:	Received by:	Via:	Date Time								2 188
115/34 1900	00	Ch. 12. 12. 60		Con Le	1/16/71 091	\						mille	of

S	hain	-01-10-	Chain-or-Custody Record		20	100			H	HALL	N	IRO	ENVIRONMENTAL	eived
Client:	160	tex		□ Standard	Rush				A	AL	ANALYSIS	LAE	LABORATORY	by C
				Project Name:	ö				W	w.halle	nviron	a)		OCD.
Mailing Address:	Addres	S:		Stebbin	ns Fed	Swo	4	4901 Hawkins NE	wkins	1	Mbudu	erque, NI	Albuquerque, NM 87109	: 6/24
				Project #:				Tel. 506	505-345-3975		Fax	505-345-4107	-4107	1/202
Phone #:	÷.			2/5-0	£ LOQ				H	An		Request		110
email or Fax#:	· Fax#:			Project Manager:	iger:			10:			<b>⊅</b> ∩9	(tn		9:20
QA/QC Package:	Package			2					SMI		2 170	esd/		:36 A
□ Standard	dard		☐ Level 4 (Full Validation)	Vlathe	(spipe)	0		2.3	S0.		، ا-۱	/Дu		1 <i>M</i>
Accreditation:	tation:	□ Az Cc	☐ Az Compliance	1	RICO			2808			ZON			
□ NELAC	AC (Time)	□ Other		On Ice:	r Yes -	ON		/səl		SIE	120			
	(adki)			# OI COOIGIS.	-	27	8T	oioi		)et				
				Cooler   emp(including cF):	0		W /5	Pest		N 8 A		041-521		
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL NO.	хэт <i>в</i> хнчт	1808	EDB (	RCR	(1,0) 8260	8270 Total		
1-14	11:05		1311-01 1	HOZ	1.50	210								
	11:10		BH21-01 21			610								
	11:15		131421-01 31			\$10								
	10:40	~	BH21-02 01			910								
	Shiol		BH31-02 11			LIW								
	10:50		B1721-03 3'			810								
	10:55		BH31-03 31			610								
														1
Date:	Time:	Relinquished by:	led by:	Received by:	Via:	Date Time	Remarks:	ks:	1.	atali	le -			Page
Date:   5 7	Time: 1900	Relinquished by:	ed by:	Received by:	Via: 8	Date Time							Makabal	189 of
				)	1								The state of the s	14



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

April 05, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX:

RE: Stebbins Federal SWD OrderNo.: 2103C86

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/27/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/5/2021

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-01 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/24/2021 12:00:00 PM

 Lab ID:
 2103C86-001
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.8 mg/Kg 1 4/1/2021 11:18:58 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 4/1/2021 11:18:58 PM Surr: DNOP 84.4 70-130 %Rec 1 4/1/2021 11:18:58 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/1/2021 4:25:04 PM 4.8 mg/Kg 1 Surr: BFB 96.7 70-130 %Rec 1 4/1/2021 4:25:04 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/1/2021 4:25:04 PM 1 Toluene ND 0.048 mg/Kg 1 4/1/2021 4:25:04 PM Ethylbenzene ND 0.048 mg/Kg 1 4/1/2021 4:25:04 PM Xylenes, Total ND 0.097 mg/Kg 1 4/1/2021 4:25:04 PM 4/1/2021 4:25:04 PM Surr: 4-Bromofluorobenzene 97.9 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 560 60 4/2/2021 2:12:06 PM ma/Ka 20

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

Qualifiers:

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

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

Page 1 of 14

Date Reported: 4/5/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: BS21-04 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/24/2021 12:05:00 PM

 Lab ID:
 2103C86-002
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.6 mg/Kg 1 4/1/2021 11:28:33 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/1/2021 11:28:33 PM Surr: DNOP 93.5 70-130 %Rec 1 4/1/2021 11:28:33 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/1/2021 5:59:01 PM 4.8 mg/Kg 1 Surr: BFB 98.8 70-130 %Rec 1 4/1/2021 5:59:01 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/1/2021 5:59:01 PM 1 Toluene ND 0.048 mg/Kg 1 4/1/2021 5:59:01 PM Ethylbenzene ND 0.048 mg/Kg 1 4/1/2021 5:59:01 PM Xylenes, Total ND 0.096 mg/Kg 1 4/1/2021 5:59:01 PM 4/1/2021 5:59:01 PM Surr: 4-Bromofluorobenzene 100 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 350 60 4/2/2021 2:49:19 PM ma/Ka 20

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

Qualifiers:

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

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

Page 2 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-02 2.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/25/2021 1:00:00 PM

 Lab ID:
 2103C86-003
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 11:38:09 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 11:38:09 PM
Surr: DNOP	93.6	70-130	%Rec	1	4/1/2021 11:38:09 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/1/2021 6:22:33 PM
Surr: BFB	98.7	70-130	%Rec	1	4/1/2021 6:22:33 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/1/2021 6:22:33 PM
Toluene	ND	0.050	mg/Kg	1	4/1/2021 6:22:33 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/1/2021 6:22:33 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/1/2021 6:22:33 PM
Surr: 4-Bromofluorobenzene	99.4	70-130	%Rec	1	4/1/2021 6:22:33 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	380	61	mg/Kg	20	4/2/2021 3:26:33 PM

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

Qualifiers:

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

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

Page 3 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-03 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/25/2021 1:05:00 PM

 Lab ID:
 2103C86-004
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 11:47:47 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 11:47:47 PM
Surr: DNOP	95.4	70-130	%Rec	1	4/1/2021 11:47:47 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/1/2021 6:45:59 PM
Surr: BFB	99.7	70-130	%Rec	1	4/1/2021 6:45:59 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/1/2021 6:45:59 PM
Toluene	ND	0.047	mg/Kg	1	4/1/2021 6:45:59 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/1/2021 6:45:59 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/1/2021 6:45:59 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/1/2021 6:45:59 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	230	60	mg/Kg	20	4/2/2021 4:03:46 PM

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

Qualifiers:

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

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

Page 4 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-06 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/25/2021 1:10:00 PM

 Lab ID:
 2103C86-005
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/1/2021 11:57:26 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 11:57:26 PM
Surr: DNOP	89.5	70-130	%Rec	1	4/1/2021 11:57:26 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/1/2021 7:09:28 PM
Surr: BFB	101	70-130	%Rec	1	4/1/2021 7:09:28 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/1/2021 7:09:28 PM
Toluene	ND	0.050	mg/Kg	1	4/1/2021 7:09:28 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/1/2021 7:09:28 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/1/2021 7:09:28 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/1/2021 7:09:28 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	430	60	mg/Kg	20	4/2/2021 4:16:10 PM

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

Qualifiers:

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

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

Page 5 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-07 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/25/2021 1:20:00 PM

 Lab ID:
 2103C86-006
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/2/2021 12:07:06 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 12:07:06 AM
Surr: DNOP	79.4	70-130	%Rec	1	4/2/2021 12:07:06 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/1/2021 7:32:52 PM
Surr: BFB	99.4	70-130	%Rec	1	4/1/2021 7:32:52 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/1/2021 7:32:52 PM
Toluene	ND	0.048	mg/Kg	1	4/1/2021 7:32:52 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/1/2021 7:32:52 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/1/2021 7:32:52 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/1/2021 7:32:52 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	280	59	mg/Kg	20	4/2/2021 4:28:35 PM

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

Qualifiers:

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

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

Page 6 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-09 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/25/2021 1:40:00 PM

 Lab ID:
 2103C86-007
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/2/2021 12:16:47 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 12:16:47 AM
Surr: DNOP	94.1	70-130	%Rec	1	4/2/2021 12:16:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/1/2021 7:56:23 PM
Surr: BFB	98.5	70-130	%Rec	1	4/1/2021 7:56:23 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/1/2021 7:56:23 PM
Toluene	ND	0.049	mg/Kg	1	4/1/2021 7:56:23 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/1/2021 7:56:23 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/1/2021 7:56:23 PM
Surr: 4-Bromofluorobenzene	99.2	70-130	%Rec	1	4/1/2021 7:56:23 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	240	60	mg/Kg	20	4/2/2021 4:41:00 PM

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

Qualifiers:

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

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

Page 7 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-01 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/25/2021 1:50:00 PM

 Lab ID:
 2103C86-008
 Matrix: SOIL
 Received Date: 3/27/2021 10:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/2/2021 12:26:30 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 12:26:30 AM
Surr: DNOP	91.3	70-130	%Rec	1	4/2/2021 12:26:30 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	4/1/2021 8:20:04 PM
Surr: BFB	98.4	70-130	%Rec	1	4/1/2021 8:20:04 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/1/2021 8:20:04 PM
Toluene	ND	0.046	mg/Kg	1	4/1/2021 8:20:04 PM
Ethylbenzene	ND	0.046	mg/Kg	1	4/1/2021 8:20:04 PM
Xylenes, Total	ND	0.093	mg/Kg	1	4/1/2021 8:20:04 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/1/2021 8:20:04 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	500	60	mg/Kg	20	4/3/2021 9:43:51 AM

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

Qualifiers:

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

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

Page 8 of 14

Date Reported: 4/5/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-02 1.0'

Project: Stebbins Federal SWD

Collection Date: 3/25/2021

**Lab ID:** 2103C86-009 **Matrix:** SOIL **Received Date:** 3/27/2021 10:45:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 12:36:21 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 12:36:21 AM
Surr: DNOP	130	70-130	%Rec	1	4/2/2021 12:36:21 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/1/2021 8:43:49 PM
Surr: BFB	97.3	70-130	%Rec	1	4/1/2021 8:43:49 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/1/2021 8:43:49 PM
Toluene	ND	0.049	mg/Kg	1	4/1/2021 8:43:49 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/1/2021 8:43:49 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/1/2021 8:43:49 PM
Surr: 4-Bromofluorobenzene	98.0	70-130	%Rec	1	4/1/2021 8:43:49 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	830	60	mg/Kg	20	4/3/2021 9:56:15 AM

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

Qualifiers:

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

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

Page 9 of 14

### Hall Environmental Analysis Laboratory, Inc.

: 2103C86 05-Apr-21

WO#:

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59154 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59154 RunNo: 76398

Prep Date: 4/2/2021 Analysis Date: 4/2/2021 SeqNo: 2706509 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-59154 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59154 RunNo: 76398

Prep Date: 4/2/2021 Analysis Date: 4/2/2021 SeqNo: 2706510 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.6 90 110

Sample ID: MB-59176 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59176 RunNo: 76427

Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2706966 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-59176 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59176 RunNo: 76427

Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2706967 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.9 90 110

#### Qualifiers:

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

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

Page 10 of 14

Sample ID: MB-59087

## Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

WO#: **2103C86** 

05-Apr-21

Client:	Vertex Resource Group Ltd.
Project:	Stebbins Federal SWD

Client ID: PBS	Batch ID: 59	087	R	RunNo: <b>7</b> 0	6389				
Prep Date: 3/31/2021	Analysis Date: 4	/1/2021	S	SeqNo: 27	705139	Units: %Rec	;		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.7	10.00		77.2	70	130			

TestCode: EPA Method 8015M/D: Diesel Range Organics

Sample ID: <b>WB-59089</b>	Samprype: WBLK	resicode: EPA Wethod	8015M/D: Diesei Range Organics
Client ID: PBS	Batch ID: 59089	RunNo: <b>76389</b>	
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: <b>2705140</b>	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	9.4 10.00	94.2 70	130

Sample ID: <b>MB-59095</b>	SampType: <b>MBLK</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics	
Client ID: PBS	Batch ID: 59095	RunNo: <b>76389</b>		
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: <b>2705141</b>	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Q	ual
Surr: DNOP	3.1 10.00	31.3 70	130	S

Sample ID: MB-59098	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	ID: <b>59</b> 0	98	R	RunNo: <b>7</b> 0	6389				
Prep Date: 3/31/2021	Analysis D	ate: <b>4/</b>	1/2021	S	SeqNo: 2	705142	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.3		10.00		63.0	70	130			S

Sample ID: <b>MB-59107</b>	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 59107	RunNo: <b>76389</b>	
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: <b>2705143</b>	Units: %Rec
Analyte	Result PQL SPK valu	e SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.3 10.0	0 52.6 70	130 S

Sample ID: <b>MB-59115</b>	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch	1D: <b>59</b>	115	F	RunNo: 70	6389				
Prep Date: 3/31/2021	Analysis D	ate: 4/	1/2021	S	SeqNo: 2	705144	Units: %Red	С		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.1	70	130			

### Qualifiers:

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

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

Page 11 of 14

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2103C86** 

05-Apr-21

	Resource Group Ltd. s Federal SWD			
Sample ID: LCS-59087	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 59087	RunNo: <b>76389</b>		
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: <b>2705145</b>	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	3.9 5.000	78.3 70	130	
Sample ID: LCS-59089	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 59089	RunNo: <b>76389</b>		
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705146	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	4.7 5.000	94.8 70	130	
Sample ID: LCS-59095	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 59095	RunNo: <b>76389</b>		
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: <b>2705147</b>	Units: %Rec	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Surr: DNOP	1.1 5.000	22.0 70	130	S
Sample ID: LCS-59098	SampType: LCS	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 59098	RunNo: <b>76389</b>		
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: <b>2705148</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
Diesel Range Organics (DRO)	52 10 50.00	0 104 68.9	141	
Surr: DNOP	2.9 5.000	58.2 70	130	S
Sample ID: LCS-59107	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range	Organics
Client ID: LCSS	Batch ID: 59107	RunNo: <b>76389</b>		
		SagNo: 270E140	Units: %Rec	
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: <b>2705149</b>		
Prep Date: 3/31/2021 Analyte	•	SPK Ref Val %REC LowLimit	HighLimit %RPD	RPDLimit Qual
	•	·	HighLimit %RPD	RPDLimit Qual
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit 53.1 70	3	S

#### Qualifiers:

Analyte

Surr: DNOP

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

Prep Date: 3/31/2021

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

B Analyte detected in the associated Method Blank

SeqNo: 2705150

116

Units: %Rec

HighLimit

130

70

%RPD

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

SPK value SPK Ref Val %REC LowLimit

5.000

RL Reporting Limit

Page 12 of 14

**RPDLimit** 

Qual

Analysis Date: 4/1/2021

Result

5.8

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103C86** 

05-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59048 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59048 RunNo: 76388

Prep Date: 3/29/2021 Analysis Date: 4/1/2021 SeqNo: 2705057 Units: mq/Kq

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 980 1000 98.2 70 130

Sample ID: LCS-59048 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59048 RunNo: 76388

Prep Date: 3/29/2021 Analysis Date: 4/1/2021 SeqNo: 2705058 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 25.00 0 104 78.6 131

Surr: BFB 1100 1000 110 70 130

Sample ID: mb-59075 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705082 Units: %Rec

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

Surr: BFB 980 1000 98.0 70 130

Sample ID: Ics-59075 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705083 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: BFB 1100 1000 108 70 130

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 13 of 14

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2103C86** 

05-Apr-21

Client:	Vertex Resource Group Ltd.
Project:	Stebbins Federal SWD

Sample ID: mb-59048	Samp	Гуре: <b>МЕ</b>	BLK	TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batc	h ID: <b>59</b> 0	048	F	RunNo: 70	6388				
Prep Date: 3/29/2021	Analysis [	Date: <b>4/</b>	1/2021	\$	SeqNo: 2	705095	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.6	70	130			
Sample ID: LCS-59048	Samp	Гуре: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
				RunNo: <b>76388</b>						
Client ID: LCSS	Batc	h ID: <b>59</b> 0	048	F	RunNo: 70	6388				
Client ID: LCSS Prep Date: 3/29/2021	Batc Analysis [				RunNo: <b>7</b> 0 SeqNo: <b>2</b> 1		Units: mg/K	ίg		
			1/2021				Units: <b>mg/k</b> HighLimit	k <b>g</b> %RPD	RPDLimit	Qual
Prep Date: 3/29/2021	Analysis [	Date: <b>4/</b>	1/2021	5	SeqNo: 2	705096	•	•	RPDLimit	Qual
Prep Date: <b>3/29/2021</b> Analyte	Analysis [ Result	Date: <b>4/</b> PQL	<b>1/2021</b> SPK value	SPK Ref Val	SeqNo: 2°	705096 LowLimit	HighLimit	•	RPDLimit	Qual
Prep Date: 3/29/2021 Analyte Benzene	Analysis I Result 0.91	PQL 0.025	1/2021 SPK value 1.000	SPK Ref Val	SeqNo: 2° %REC 91.4	<b>705096</b> LowLimit 80	HighLimit 120	•	RPDLimit	Qual
Prep Date: 3/29/2021 Analyte Benzene Toluene	Analysis E Result 0.91 0.93	PQL 0.025 0.050	1/2021 SPK value 1.000 1.000	SPK Ref Val 0 0	%REC 91.4 92.7	705096 LowLimit 80 80	HighLimit 120 120	•	RPDLimit	Qual
Prep Date: 3/29/2021 Analyte Benzene Toluene Ethylbenzene	Analysis I Result 0.91 0.93 0.91	PQL 0.025 0.050 0.050	SPK value 1.000 1.000 1.000	SPK Ref Val  0 0 0	%REC 91.4 92.7 90.6	705096 LowLimit 80 80 80 80	HighLimit 120 120 120	•	RPDLimit	Qual

Sample ID: mb-59075	SampType	: MBLK	Test	tCode: <b>EP</b>	A Method	8021B: Volati	les		
Client ID: PBS	Batch ID	59075	R	tunNo: <b>76</b>	388				
Prep Date: 3/30/2021	Analysis Date	4/1/2021	S	SeqNo: <b>27</b>	05120	Units: %Rec			
Analyte	Result P	QL SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99	1.000		98.7	70	130			

Sample ID: LCS-59075	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: <b>59</b>	075	F	RunNo: 7	6388				
Prep Date: 3/30/2021	Analysis D	ate: 4/	/1/2021	S	SeqNo: 2	705121	Units: %Red	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1 000		102	70	130			

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

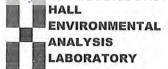
E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 14 of 14



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Website: clients.hallenvironmental.com Client Name: Vertex Resource Group Work Order Number: 2103C86 RcptNo: 1 Received By: Cheyenne Cason 3/27/2021 10:45:00 AM Completed By: Cheyenne Cason 3/27/2021 10:52:16 AM 03/27/2021 Reviewed By: Chain of Custody 1. Is Chain of Custody complete? Yes V No 🗌 Not Present 2. How was the sample delivered? Courier 3. Was an attempt made to cool the samples? No 🗌 NA 🗌 Yes 🗸 No 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C Yes V NA 🗌 No 🗌 5. Sample(s) in proper container(s)? Yes V No 🗌 6. Sufficient sample volume for indicated test(s)? Yes V No 🗌 7. Are samples (except VOA and ONG) properly preserved? V No V 8. Was preservative added to bottles? NA 🗌 Yes No 🗌 NA V 9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes No 🗸 10. Were any sample containers received broken? Yes # of preserved bottles checked Yes V for pH: 11. Does paperwork match bottle labels? No 🔲 (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? 12. Are matrices correctly identified on Chain of Custody? Yes 🗸 No 🗌 13. Is it clear what analyses were requested? Yes V No 🗌 Checked by: (12 3/27/21 Yes 🗸 14. Were all holding times able to be met? No 🗌 (If no, notify customer for authorization.) Special Handling (if applicable) Yes 15. Was client notified of all discrepancies with this order? No 🗌 NA 🗸 Person Notified: Date: By Whom: Via: eMail Phone Fax In Person Regarding: Client Instructions: Additional remarks:

Page 1 of 1

17. Cooler Information

Cooler No Tem

Temp °C

4.9

Condition

Good

Seal Intact Seal No

Seal Date

Signed By

Vertex   V	Chain-of-Custody Record	Turn-Around Time:	5 Day		Ī	HAII	N	PONME	INTE
Project Name   Proj	Client: Vartcx				•	MAL	SIS	LABORA	TORY
A solid Hawkins NE - Albuquerque, NM 87108   A solid Hawkins NE						ww.halle	nvironm	ental.com	)
Project #:   Project #:   Project #:   Project #:   Project Waldaton   Project Manager:	Mailing Address:	5	end SMI)	4901	Hawkin	1	Albuquer	que, NM 87109	
Project Manager:   Project Man		Project #:		Tel.	505-345		Fax 5	05-345-4107	
Project Manager:   Project Man	none #:	0000 010				An	alysis R	equest	
Peckage   Peck	nail or Fax#:	Project Manager:					<b>₹</b> ○	(ţu	
Time   Refinquished by:   Received by: Vie.   Refindushed by:   Received by: Vie.   Refindushed by:   Received by: Vie.   Refindushed by:   Received by: Vie.   Received by: Vie.   Refindushed by:   Received by: Vie.   Receiv			Cid	AM \ O			C '7O 1	iəsdA\ti	
Time   Reinquished by:   Received by:   No.   Cooler Time   Received by:   Cooler Time   Received by:   Cooler Time   Cooler Time   Received by:   Cooler Time   Cooler	□ Az Cor	3		DR	(1		051	uəs	
12.05   13.20   15.21 - 0.7   1.0			□ No	10	.40				
1200   Social Bischool   Soc	1	# of Coolers:		(GB	g po	stals			
Time   Matrix   Sample Name   Container   Preservative   HEAL No.     HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL No.   HEAL NO.   HE		Cooler Temp(including CF): 5-1	1 5h=2	12D	yetho	∍M 8	(AO\	100	
120°	Time Matrix	αH	210	08:H9T	EDB (V	АЯЭЯ	/) 09Z8	10 60	
1205	1200 Soil BSZI-01 1.0	)- -	100	1					
3 \( \text{is} \)	1205   1551-04 1.	1   1	200						
13 6	1340 3521-02 2,0		6003	_					
13   10   \$521-06   1, 0   \$005     \$005     \$13 \text{20}	1, 6521-03		400						
13   20   B521-07   1, 0°	10 3521-06 1,0		500						
13 50   \( \text{MS21-0} \)       \( \text{CC} \)       \( \text{CC} \)     \( \text	20 3521-07 1.0		900						
13   50	9 / 1 8521-07 1.0		200						
W521-02   1, 0   CCO      CCO	50 WSZ1-01 1.		800						
Time: Relinquished by:  Received by:  Time: Relinquished by:  Received by:  A 1900  A	1,		600						
Time: Relinquished by: Via: Date Time Remarks:    Time: Relinquished by: Via: Date Time Remarks: 3/27/4 (24)									
Time: Relinquished by: Via: Date Time Remarks:    Not   Manual   M									
Time: Relinquished by:  Received by: Via: 5 Date Time  3/27/4 1945	Time:	5	7	Remarks:					
	7 Time:	2	7	Math	-				



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

April 08, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX

RE: Stebbins Federal SWD OrderNo.: 2103D36

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 101 sample(s) on 3/30/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-05 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:00:00 AM

 Lab ID:
 2103D36-001
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 9:16:06 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 9:16:06 AM
Surr: DNOP	102	70-130	%Rec	1	4/1/2021 9:16:06 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/2/2021 12:44:00 AM
Surr: BFB	95.8	70-130	%Rec	1	4/2/2021 12:44:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/2/2021 10:29:46 PM
Toluene	ND	0.047	mg/Kg	1	4/2/2021 10:29:46 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/2/2021 10:29:46 PM
Xylenes, Total	ND	0.093	mg/Kg	1	4/2/2021 10:29:46 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/2/2021 10:29:46 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	150	60	mg/Kg	20	4/3/2021 2:54:03 PM

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

Qualifiers:

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

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

Page 1 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-08 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:05:00 AM

 Lab ID:
 2103D36-002
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 9:44:21 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 9:44:21 AM
Surr: DNOP	101	70-130	%Rec	1	4/1/2021 9:44:21 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/2/2021 1:44:00 AM
Surr: BFB	93.7	70-130	%Rec	1	4/2/2021 1:44:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 12:04:04 AM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 12:04:04 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 12:04:04 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 12:04:04 AM
Surr: 4-Bromofluorobenzene	99.4	70-130	%Rec	1	4/3/2021 12:04:04 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	180	60	mg/Kg	20	4/3/2021 3:06:28 PM

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

Qualifiers:

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

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

Page 2 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-10 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:10:00 AM

 Lab ID:
 2103D36-003
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 9:53:47 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 9:53:47 AM
Surr: DNOP	102	70-130	%Rec	1	4/1/2021 9:53:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/2/2021 2:44:00 AM
Surr: BFB	94.6	70-130	%Rec	1	4/2/2021 2:44:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 1:14:58 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 1:14:58 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 1:14:58 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 1:14:58 AM
Surr: 4-Bromofluorobenzene	98.2	70-130	%Rec	1	4/3/2021 1:14:58 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	220	59	mg/Kg	20	4/3/2021 3:18:52 PM

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

Qualifiers:

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

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

Page 3 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-11 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:15:00 AM

 Lab ID:
 2103D36-004
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 10:03:14 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 10:03:14 AM
Surr: DNOP	117	70-130	%Rec	1	4/1/2021 10:03:14 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/2/2021 3:03:00 AM
Surr: BFB	95.6	70-130	%Rec	1	4/2/2021 3:03:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 1:38:23 AM
Toluene	ND	0.047	mg/Kg	1	4/3/2021 1:38:23 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/3/2021 1:38:23 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/3/2021 1:38:23 AM
Surr: 4-Bromofluorobenzene	97.2	70-130	%Rec	1	4/3/2021 1:38:23 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	420	60	mg/Kg	20	4/3/2021 2:28:47 PM

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

Qualifiers:

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

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

Page 4 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-12 1.0'

**Project:** Stebbins Federal SWD Collection Date: 3/26/2021 8:20:00 AM

2103D36-005 Lab ID: Matrix: SOIL Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (	ORGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 10:12:40 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 10:12:40 AM
Surr: DNOP	110	70-130	%Rec	1	4/1/2021 10:12:40 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/2/2021 3:23:00 AM
Surr: BFB	96.1	70-130	%Rec	1	4/2/2021 3:23:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 2:01:47 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 2:01:47 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 2:01:47 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 2:01:47 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/3/2021 2:01:47 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	220	60	mg/Kg	20	4/3/2021 3:06:03 PM

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

Qualifiers:

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

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

Page 5 of 121

Date Reported: 4/8/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-13 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:25:00 AM

 Lab ID:
 2103D36-006
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 10:22:09 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 10:22:09 AM
Surr: DNOP	114	70-130	%Rec	1	4/1/2021 10:22:09 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 3:43:00 AM
Surr: BFB	94.5	70-130	%Rec	1	4/2/2021 3:43:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 2:25:15 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 2:25:15 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 2:25:15 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/3/2021 2:25:15 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/3/2021 2:25:15 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	340	60	mg/Kg	20	4/3/2021 3:43:16 PM

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

Qualifiers:

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

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

Page 6 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-14 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:30:00 AM

 Lab ID:
 2103D36-007
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 10:31:39 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 10:31:39 AM
Surr: DNOP	100	70-130	%Rec	1	4/1/2021 10:31:39 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 4:03:00 AM
Surr: BFB	93.9	70-130	%Rec	1	4/2/2021 4:03:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 2:48:55 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 2:48:55 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 2:48:55 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/3/2021 2:48:55 AM
Surr: 4-Bromofluorobenzene	99.6	70-130	%Rec	1	4/3/2021 2:48:55 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	96	60	mg/Kg	20	4/3/2021 3:55:41 PM

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

Qualifiers:

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

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

Page 7 of 121

Date Reported: 4/8/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-15 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:45:00 AM

 Lab ID:
 2103D36-008
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.0 mg/Kg 1 4/1/2021 10:41:09 AM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 4/1/2021 10:41:09 AM Surr: DNOP 107 70-130 %Rec 1 4/1/2021 10:41:09 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/2/2021 4:23:00 AM 4.7 mg/Kg 1 Surr: BFB 94.3 70-130 %Rec 1 4/2/2021 4:23:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/3/2021 3:12:32 AM 1 Toluene ND 0.047 mg/Kg 1 4/3/2021 3:12:32 AM Ethylbenzene ND 0.047 mg/Kg 1 4/3/2021 3:12:32 AM Xylenes, Total ND 0.095 mg/Kg 1 4/3/2021 3:12:32 AM Surr: 4-Bromofluorobenzene 100 70-130 %Rec 1 4/3/2021 3:12:32 AM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 370 60 4/3/2021 4:32:56 PM ma/Ka 20

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

Qualifiers:

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

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

Page 8 of 121

Date Reported: 4/8/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-16 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 8:50:00 AM

 Lab ID:
 2103D36-009
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.0 mg/Kg 1 4/1/2021 10:50:40 AM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 4/1/2021 10:50:40 AM Surr: DNOP 92.0 70-130 %Rec 1 4/1/2021 10:50:40 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/2/2021 4:43:00 AM 4.7 mg/Kg 1 Surr: BFB 96.2 70-130 %Rec 1 4/2/2021 4:43:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 4/3/2021 3:36:11 AM 0.024 mg/Kg 1 Toluene ND 0.047 mg/Kg 1 4/3/2021 3:36:11 AM Ethylbenzene ND 0.047 mg/Kg 1 4/3/2021 3:36:11 AM Xylenes, Total ND 0.095 mg/Kg 1 4/3/2021 3:36:11 AM 4/3/2021 3:36:11 AM Surr: 4-Bromofluorobenzene 97.5 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 4/3/2021 4:45:20 PM ma/Ka 20

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

Qualifiers:

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

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

Page 9 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-17 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:00:00 AM

 Lab ID:
 2103D36-010
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 11:00:11 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 11:00:11 AM
Surr: DNOP	94.8	70-130	%Rec	1	4/1/2021 11:00:11 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/2/2021 5:03:00 AM
Surr: BFB	90.3	70-130	%Rec	1	4/2/2021 5:03:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 3:59:45 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 3:59:45 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 3:59:45 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 3:59:45 AM
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	4/3/2021 3:59:45 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	310	60	mg/Kg	20	4/3/2021 4:57:44 PM

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

Qualifiers:

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

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

Page 10 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-18 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:05:00 AM

 Lab ID:
 2103D36-011
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/1/2021 11:09:45 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 11:09:45 AM
Surr: DNOP	101	70-130	%Rec	1	4/1/2021 11:09:45 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/3/2021 4:23:13 AM
Surr: BFB	100	70-130	%Rec	1	4/3/2021 4:23:13 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 4:23:13 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 4:23:13 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 4:23:13 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/3/2021 4:23:13 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/3/2021 4:23:13 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	150	60	mg/Kg	20	4/3/2021 5:10:09 PM

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

Qualifiers:

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

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

Page 11 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-19 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:10:00 AM

 Lab ID:
 2103D36-012
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 11:19:19 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 11:19:19 AM
Surr: DNOP	107	70-130	%Rec	1	4/1/2021 11:19:19 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 5:10:31 AM
Surr: BFB	96.9	70-130	%Rec	1	4/3/2021 5:10:31 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 5:10:31 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 5:10:31 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 5:10:31 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 5:10:31 AM
Surr: 4-Bromofluorobenzene	97.6	70-130	%Rec	1	4/3/2021 5:10:31 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	370	60	mg/Kg	20	4/3/2021 5:22:34 PM

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

Qualifiers:

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

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

Page 12 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-20 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:25:00 AM

 Lab ID:
 2103D36-013
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/1/2021 11:28:56 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 11:28:56 AM
Surr: DNOP	101	70-130	%Rec	1	4/1/2021 11:28:56 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/3/2021 5:34:08 AM
Surr: BFB	99.7	70-130	%Rec	1	4/3/2021 5:34:08 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 5:34:08 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 5:34:08 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 5:34:08 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/3/2021 5:34:08 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/3/2021 5:34:08 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	72	61	mg/Kg	20	4/3/2021 5:34:58 PM

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

Qualifiers:

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

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

Page 13 of 121

**EPA METHOD 300.0: ANIONS** 

Chloride

# Analytical Report Lab Order 2103D36

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-21 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:30:00 AM

 Lab ID:
 2103D36-014
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 4/1/2021 11:38:34 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/1/2021 11:38:34 AM Surr: DNOP 101 70-130 %Rec 1 4/1/2021 11:38:34 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/3/2021 5:57:43 AM 4.9 mg/Kg 1 Surr: BFB 98.1 70-130 %Rec 1 4/3/2021 5:57:43 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 4/3/2021 5:57:43 AM 1 Toluene ND 0.049 mg/Kg 1 4/3/2021 5:57:43 AM Ethylbenzene ND 0.049 mg/Kg 1 4/3/2021 5:57:43 AM Xylenes, Total ND 0.098 mg/Kg 1 4/3/2021 5:57:43 AM Surr: 4-Bromofluorobenzene 98.2 70-130 %Rec 1 4/3/2021 5:57:43 AM

640

61

ma/Ka

20

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

Qualifiers:

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

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

Page 14 of 121

Analyst: VP

4/3/2021 5:47:23 PM

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-22 1.0'

**Project:** Stebbins Federal SWD **Collection Date:** 3/26/2021 9:35:00 AM

**Lab ID:** 2103D36-015 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/1/2021 11:48:12 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 11:48:12 AM
Surr: DNOP	93.1	70-130	%Rec	1	4/1/2021 11:48:12 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/3/2021 6:21:12 AM
Surr: BFB	99.7	70-130	%Rec	1	4/3/2021 6:21:12 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 6:21:12 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 6:21:12 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 6:21:12 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/3/2021 6:21:12 AM
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	4/3/2021 6:21:12 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/3/2021 5:59:48 PM

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

Qualifiers:

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

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

Page 15 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-23 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:40:00 AM

 Lab ID:
 2103D36-016
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Q	ual (	J <b>nits</b>	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst: mb
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/1/2021 11:57:52 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/1/2021 11:57:52 AM
Surr: DNOP	130	70-130	S	%Rec	1	4/1/2021 11:57:52 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/3/2021 6:44:52 AM
Surr: BFB	101	70-130		%Rec	1	4/3/2021 6:44:52 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 6:44:52 AM
Toluene	ND	0.047		mg/Kg	1	4/3/2021 6:44:52 AM
Ethylbenzene	ND	0.047		mg/Kg	1	4/3/2021 6:44:52 AM
Xylenes, Total	ND	0.095		mg/Kg	1	4/3/2021 6:44:52 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 6:44:52 AM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	110	60		mg/Kg	20	4/3/2021 6:12:13 PM

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

Qualifiers:

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

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

Page 16 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-24 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:45:00 AM

 Lab ID:
 2103D36-017
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	4/1/2021 12:07:42 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	4/1/2021 12:07:42 PM
Surr: DNOP	98.2	70-130	%Rec	1	4/1/2021 12:07:42 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/3/2021 7:08:28 AM
Surr: BFB	98.1	70-130	%Rec	1	4/3/2021 7:08:28 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 7:08:28 AM
Toluene	ND	0.047	mg/Kg	1	4/3/2021 7:08:28 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/3/2021 7:08:28 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/3/2021 7:08:28 AM
Surr: 4-Bromofluorobenzene	98.6	70-130	%Rec	1	4/3/2021 7:08:28 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	430	60	mg/Kg	20	4/3/2021 6:24:38 PM

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

Qualifiers:

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

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

Page 17 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-25 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:50:00 AM

 Lab ID:
 2103D36-018
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OI	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 12:17:31 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 12:17:31 PM
Surr: DNOP	125	70-130	%Rec	1	4/1/2021 12:17:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 7:32:09 AM
Surr: BFB	99.9	70-130	%Rec	1	4/3/2021 7:32:09 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 7:32:09 AM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 7:32:09 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 7:32:09 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/3/2021 7:32:09 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/3/2021 7:32:09 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	65	61	mg/Kg	20	4/3/2021 7:01:51 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
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 18 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-26 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 9:55:00 AM

 Lab ID:
 2103D36-019
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 12:27:22 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 12:27:22 PM
Surr: DNOP	97.0	70-130	%Rec	1	4/1/2021 12:27:22 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/3/2021 12:01:40 PM
Surr: BFB	101	70-130	%Rec	1	4/3/2021 12:01:40 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 12:01:40 PM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 12:01:40 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 12:01:40 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/3/2021 12:01:40 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/3/2021 12:01:40 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	67	60	mg/Kg	20	4/3/2021 7:14:16 PM

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

Qualifiers:

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

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

Page 19 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-27 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:00:00 AM

 Lab ID:
 2103D36-020
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 12:37:09 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 12:37:09 PM
Surr: DNOP	89.1	70-130	%Rec	1	4/1/2021 12:37:09 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 12:25:30 PM
Surr: BFB	100	70-130	%Rec	1	4/3/2021 12:25:30 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 12:25:30 PM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 12:25:30 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 12:25:30 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 12:25:30 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/3/2021 12:25:30 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	390	60	mg/Kg	20	4/3/2021 7:26:40 PM

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

Qualifiers:

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

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

Page 20 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-28 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:05:00 AM

 Lab ID:
 2103D36-021
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/1/2021 5:34:58 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/1/2021 5:34:58 PM
Surr: DNOP	84.1	70-130	%Rec	1	4/1/2021 5:34:58 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/2/2021 12:40:00 AM
Surr: BFB	99.4	70-130	%Rec	1	4/2/2021 12:40:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 12:40:00 AM
Toluene	ND	0.049	mg/Kg	1	4/2/2021 12:40:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/2/2021 12:40:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/2/2021 12:40:00 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/2/2021 12:40:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	110	60	mg/Kg	20	4/3/2021 7:39:05 PM

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

Qualifiers:

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

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

Page 21 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-29 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:10:00 AM

 Lab ID:
 2103D36-022
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 6:04:05 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 6:04:05 PM
Surr: DNOP	80.6	70-130	%Rec	1	4/1/2021 6:04:05 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 1:50:41 AM
Surr: BFB	100	70-130	%Rec	1	4/2/2021 1:50:41 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 1:50:41 AM
Toluene	ND	0.048	mg/Kg	1	4/2/2021 1:50:41 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/2/2021 1:50:41 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/2/2021 1:50:41 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/2/2021 1:50:41 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	250	60	mg/Kg	20	4/3/2021 7:51:29 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
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 22 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-30 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:15:00 AM

 Lab ID:
 2103D36-023
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.4 mg/Kg 1 4/1/2021 6:13:51 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/1/2021 6:13:51 PM Surr: DNOP 81.8 70-130 %Rec 1 4/1/2021 6:13:51 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/2/2021 3:01:40 AM 4.7 mg/Kg 1 Surr: BFB 98.8 70-130 %Rec 1 4/2/2021 3:01:40 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/2/2021 3:01:40 AM 1 Toluene ND 0.047 mg/Kg 1 4/2/2021 3:01:40 AM Ethylbenzene ND 0.047 mg/Kg 1 4/2/2021 3:01:40 AM Xylenes, Total ND 0.094 mg/Kg 1 4/2/2021 3:01:40 AM 4/2/2021 3:01:40 AM Surr: 4-Bromofluorobenzene 98.4 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 160 60 4/3/2021 8:03:55 PM ma/Ka 20

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

Qualifiers:

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

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

Page 23 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-31 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:20:00 AM

 Lab ID:
 2103D36-024
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 6:23:39 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 6:23:39 PM
Surr: DNOP	78.2	70-130	%Rec	1	4/1/2021 6:23:39 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 3:25:20 AM
Surr: BFB	98.7	70-130	%Rec	1	4/2/2021 3:25:20 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 3:25:20 AM
Toluene	ND	0.048	mg/Kg	1	4/2/2021 3:25:20 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/2/2021 3:25:20 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/2/2021 3:25:20 AM
Surr: 4-Bromofluorobenzene	99.1	70-130	%Rec	1	4/2/2021 3:25:20 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	450	60	mg/Kg	20	4/3/2021 3:56:05 PM

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

Qualifiers:

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

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

Page 24 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-32 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:30:00 AM

 Lab ID:
 2103D36-025
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 6:33:30 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 6:33:30 PM
Surr: DNOP	78.1	70-130	%Rec	1	4/1/2021 6:33:30 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 3:48:54 AM
Surr: BFB	100	70-130	%Rec	1	4/2/2021 3:48:54 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 3:48:54 AM
Toluene	ND	0.048	mg/Kg	1	4/2/2021 3:48:54 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/2/2021 3:48:54 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/2/2021 3:48:54 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/2/2021 3:48:54 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	290	60	mg/Kg	20	4/3/2021 4:58:07 PM

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

Qualifiers:

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

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

Page 25 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-33 1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:35:00 AM

 Lab ID:
 2103D36-026
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/1/2021 6:43:21 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/1/2021 6:43:21 PM
Surr: DNOP	68.3	70-130	S	%Rec	1	4/1/2021 6:43:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/2/2021 3:27:27 PM
Surr: BFB	99.9	70-130		%Rec	1	4/2/2021 3:27:27 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/2/2021 3:27:27 PM
Toluene	ND	0.050		mg/Kg	1	4/2/2021 3:27:27 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/2/2021 3:27:27 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/2/2021 3:27:27 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/2/2021 3:27:27 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	82	60		mg/Kg	20	4/3/2021 5:35:22 PM

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

Qualifiers:

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

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

Page 26 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-34 1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:40:00 AM

 Lab ID:
 2103D36-027
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/1/2021 6:53:13 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/1/2021 6:53:13 PM
Surr: DNOP	57.5	70-130	S	%Rec	1	4/1/2021 6:53:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/2/2021 3:51:06 PM
Surr: BFB	99.3	70-130		%Rec	1	4/2/2021 3:51:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	4/2/2021 3:51:06 PM
Toluene	ND	0.047		mg/Kg	1	4/2/2021 3:51:06 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/2/2021 3:51:06 PM
Xylenes, Total	ND	0.094		mg/Kg	1	4/2/2021 3:51:06 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	4/2/2021 3:51:06 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	87	59		mg/Kg	20	4/3/2021 5:47:46 PM

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

Qualifiers:

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

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

Page 27 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-35 1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:45:00 AM

 Lab ID:
 2103D36-028
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/1/2021 7:03:07 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/1/2021 7:03:07 PM
Surr: DNOP	62.2	70-130	S	%Rec	1	4/1/2021 7:03:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/2/2021 4:14:35 PM
Surr: BFB	98.4	70-130		%Rec	1	4/2/2021 4:14:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/2/2021 4:14:35 PM
Toluene	ND	0.048		mg/Kg	1	4/2/2021 4:14:35 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/2/2021 4:14:35 PM
Xylenes, Total	ND	0.096		mg/Kg	1	4/2/2021 4:14:35 PM
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	4/2/2021 4:14:35 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	4/3/2021 6:00:11 PM

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

Qualifiers:

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

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

Page 28 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-36 1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:50:00 AM

 Lab ID:
 2103D36-029
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/1/2021 7:13:01 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/1/2021 7:13:01 PM
Surr: DNOP	60.0	70-130	S	%Rec	1	4/1/2021 7:13:01 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/2/2021 4:38:04 PM
Surr: BFB	99.4	70-130		%Rec	1	4/2/2021 4:38:04 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/2/2021 4:38:04 PM
Toluene	ND	0.049		mg/Kg	1	4/2/2021 4:38:04 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/2/2021 4:38:04 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/2/2021 4:38:04 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	4/2/2021 4:38:04 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	63	60		mg/Kg	20	4/3/2021 6:12:35 PM

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

Qualifiers:

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

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

Page 29 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-37 1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:55:00 AM

 Lab ID:
 2103D36-030
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 4/1/2021 7:22:56 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/1/2021 7:22:56 PM Surr: DNOP 70.7 70-130 %Rec 1 4/1/2021 7:22:56 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/2/2021 5:01:30 PM 5.0 mg/Kg 1 Surr: BFB 98.8 70-130 %Rec 1 4/2/2021 5:01:30 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 4/2/2021 5:01:30 PM 1 Toluene ND 0.050 mg/Kg 1 4/2/2021 5:01:30 PM Ethylbenzene ND 0.050 mg/Kg 1 4/2/2021 5:01:30 PM Xylenes, Total ND 0.099 mg/Kg 1 4/2/2021 5:01:30 PM 4/2/2021 5:01:30 PM Surr: 4-Bromofluorobenzene 99.0 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 67 60 4/3/2021 6:25:00 PM ma/Ka 20

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

Qualifiers:

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

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

Page 30 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-38 1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:00:00 PM

 Lab ID:
 2103D36-031
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/1/2021 7:33:02 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 7:33:02 PM
Surr: DNOP	77.2	70-130	%Rec	1	4/1/2021 7:33:02 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/2/2021 5:24:57 PM
Surr: BFB	98.6	70-130	%Rec	1	4/2/2021 5:24:57 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/2/2021 5:24:57 PM
Toluene	ND	0.050	mg/Kg	1	4/2/2021 5:24:57 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/2/2021 5:24:57 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/2/2021 5:24:57 PM
Surr: 4-Bromofluorobenzene	99.6	70-130	%Rec	1	4/2/2021 5:24:57 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	78	60	mg/Kg	20	4/3/2021 7:02:13 PM

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

Qualifiers:

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

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

Page 31 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-39 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:05:00 PM

 Lab ID:
 2103D36-032
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/1/2021 7:43:06 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/1/2021 7:43:06 PM
Surr: DNOP	65.1	70-130	S	%Rec	1	4/1/2021 7:43:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/2/2021 6:35:35 PM
Surr: BFB	99.2	70-130		%Rec	1	4/2/2021 6:35:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/2/2021 6:35:35 PM
Toluene	ND	0.048		mg/Kg	1	4/2/2021 6:35:35 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/2/2021 6:35:35 PM
Xylenes, Total	ND	0.096		mg/Kg	1	4/2/2021 6:35:35 PM
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	4/2/2021 6:35:35 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	440	60		mg/Kg	20	4/3/2021 7:14:38 PM

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

Qualifiers:

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

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

Page 32 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-40 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:10:00 PM

 Lab ID:
 2103D36-033
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/1/2021 7:53:10 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/1/2021 7:53:10 PM
Surr: DNOP	61.3	70-130	S	%Rec	1	4/1/2021 7:53:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/2/2021 6:58:59 PM
Surr: BFB	99.3	70-130		%Rec	1	4/2/2021 6:58:59 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/2/2021 6:58:59 PM
Toluene	ND	0.049		mg/Kg	1	4/2/2021 6:58:59 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/2/2021 6:58:59 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/2/2021 6:58:59 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/2/2021 6:58:59 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	210	60		mg/Kg	20	4/3/2021 7:27:03 PM

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

Qualifiers:

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

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

Page 33 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-41 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:15:00 PM

 Lab ID:
 2103D36-034
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 8:03:12 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 8:03:12 PM
Surr: DNOP	87.7	70-130	%Rec	1	4/1/2021 8:03:12 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 7:22:22 PM
Surr: BFB	98.6	70-130	%Rec	1	4/2/2021 7:22:22 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 7:22:22 PM
Toluene	ND	0.048	mg/Kg	1	4/2/2021 7:22:22 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/2/2021 7:22:22 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/2/2021 7:22:22 PM
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	4/2/2021 7:22:22 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	290	60	mg/Kg	20	4/3/2021 7:39:27 PM

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

Qualifiers:

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

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

Page 34 of 121

Surr: 4-Bromofluorobenzene

**EPA METHOD 300.0: ANIONS** 

Chloride

Analytical Report
Lab Order 2103D36

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-42 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:20:00 PM

 Lab ID:
 2103D36-035
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.1 mg/Kg 1 4/1/2021 8:13:13 PM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 4/1/2021 8:13:13 PM Surr: DNOP 81.4 70-130 %Rec 1 4/1/2021 8:13:13 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/2/2021 7:45:47 PM 5.0 mg/Kg 1 Surr: BFB 98.5 70-130 %Rec 1 4/2/2021 7:45:47 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 4/2/2021 7:45:47 PM 1 Toluene ND 0.050 mg/Kg 1 4/2/2021 7:45:47 PM Ethylbenzene ND 0.050 mg/Kg 1 4/2/2021 7:45:47 PM Xylenes, Total ND 0.10 mg/Kg 1 4/2/2021 7:45:47 PM

99.0

200

70-130

60

%Rec

ma/Ka

1

20

4/2/2021 7:45:47 PM

4/3/2021 7:51:52 PM

Analyst: VP

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

Qualifiers:

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

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

Page 35 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-43 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:25:00 PM

 Lab ID:
 2103D36-036
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 8:23:12 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 8:23:12 PM
Surr: DNOP	74.3	70-130	%Rec	1	4/1/2021 8:23:12 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/2/2021 8:09:17 PM
Surr: BFB	97.5	70-130	%Rec	1	4/2/2021 8:09:17 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/2/2021 8:09:17 PM
Toluene	ND	0.049	mg/Kg	1	4/2/2021 8:09:17 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/2/2021 8:09:17 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/2/2021 8:09:17 PM
Surr: 4-Bromofluorobenzene	97.2	70-130	%Rec	1	4/2/2021 8:09:17 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	94	60	mg/Kg	20	4/3/2021 8:04:17 PM

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

Qualifiers:

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

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

Page 36 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-44 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:30:00 AM

 Lab ID:
 2103D36-037
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>					
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/1/2021 8:33:11 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	4/1/2021 8:33:11 PM
Surr: DNOP	2.29	70-130	S	%Rec	1	4/1/2021 8:33:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/2/2021 8:32:39 PM
Surr: BFB	99.6	70-130		%Rec	1	4/2/2021 8:32:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/2/2021 8:32:39 PM
Toluene	ND	0.050		mg/Kg	1	4/2/2021 8:32:39 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/2/2021 8:32:39 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/2/2021 8:32:39 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	4/2/2021 8:32:39 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	150	60		mg/Kg	20	4/3/2021 8:16:41 PM

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

Qualifiers:

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

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

Page 37 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-45 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:35:00 AM

 Lab ID:
 2103D36-038
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 8:43:07 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 8:43:07 PM
Surr: DNOP	75.9	70-130	%Rec	1	4/1/2021 8:43:07 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/2/2021 8:56:04 PM
Surr: BFB	98.9	70-130	%Rec	1	4/2/2021 8:56:04 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/2/2021 8:56:04 PM
Toluene	ND	0.050	mg/Kg	1	4/2/2021 8:56:04 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/2/2021 8:56:04 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/2/2021 8:56:04 PM
Surr: 4-Bromofluorobenzene	98.6	70-130	%Rec	1	4/2/2021 8:56:04 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	4/3/2021 8:29:05 PM

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

Qualifiers:

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

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

Page 38 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-46 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:40:00 AM

 Lab ID:
 2103D36-039
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 8:53:03 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 8:53:03 PM
Surr: DNOP	79.6	70-130	%Rec	1	4/1/2021 8:53:03 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 9:19:26 PM
Surr: BFB	98.2	70-130	%Rec	1	4/2/2021 9:19:26 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 9:19:26 PM
Toluene	ND	0.048	mg/Kg	1	4/2/2021 9:19:26 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/2/2021 9:19:26 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/2/2021 9:19:26 PM
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	4/2/2021 9:19:26 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	100	61	mg/Kg	20	4/3/2021 8:41:30 PM

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

Qualifiers:

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

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

Page 39 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-47 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:45:00 AM

 Lab ID:
 2103D36-040
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 9:02:57 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 9:02:57 PM
Surr: DNOP	82.1	70-130	%Rec	1	4/1/2021 9:02:57 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/2/2021 9:42:53 PM
Surr: BFB	99.3	70-130	%Rec	1	4/2/2021 9:42:53 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/2/2021 9:42:53 PM
Toluene	ND	0.048	mg/Kg	1	4/2/2021 9:42:53 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/2/2021 9:42:53 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/2/2021 9:42:53 PM
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	4/2/2021 9:42:53 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	230	60	mg/Kg	20	4/3/2021 8:53:54 PM

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

Qualifiers:

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

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

Page 40 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-48 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:50:00 AM

 Lab ID:
 2103D36-041
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/2/2021 1:05:43 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/2/2021 1:05:43 AM
Surr: DNOP	23.1	70-130	S	%Rec	1	4/2/2021 1:05:43 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2021 12:49:03 PM
Surr: BFB	99.0	70-130		%Rec	1	4/3/2021 12:49:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/3/2021 12:49:03 PM
Toluene	ND	0.050		mg/Kg	1	4/3/2021 12:49:03 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2021 12:49:03 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2021 12:49:03 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/3/2021 12:49:03 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	76	59		mg/Kg	20	4/3/2021 9:31:08 PM

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

Qualifiers:

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

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

Page 41 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-49 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 10:55:00 AM

 Lab ID:
 2103D36-042
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/2/2021 2:51:00 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/2/2021 2:51:00 AM
Surr: DNOP	76.2	70-130	%Rec	1	4/2/2021 2:51:00 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 1:59:38 PM
Surr: BFB	101	70-130	%Rec	1	4/3/2021 1:59:38 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 1:59:38 PM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 1:59:38 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 1:59:38 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 1:59:38 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/3/2021 1:59:38 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	62	60	mg/Kg	20	4/3/2021 9:43:32 PM

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

Qualifiers:

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

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

Page 42 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-50 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:00:00 AM

 Lab ID:
 2103D36-043
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS				Analyst: <b>mb</b>		
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/2/2021 3:19:12 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/2/2021 3:19:12 AM
Surr: DNOP	43.7	70-130	S	%Rec	1	4/2/2021 3:19:12 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2021 3:10:18 PM
Surr: BFB	101	70-130		%Rec	1	4/3/2021 3:10:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 3:10:18 PM
Toluene	ND	0.048		mg/Kg	1	4/3/2021 3:10:18 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2021 3:10:18 PM
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2021 3:10:18 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/3/2021 3:10:18 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	4/3/2021 9:55:56 PM

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

Qualifiers:

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

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

Page 43 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-51 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:05:00 AM

 Lab ID:
 2103D36-044
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	4/2/2021 3:28:37 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/2/2021 3:28:37 AM
Surr: DNOP	68.9	70-130	S	%Rec	1	4/2/2021 3:28:37 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 3:33:53 PM
Surr: BFB	101	70-130		%Rec	1	4/3/2021 3:33:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/3/2021 3:33:53 PM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 3:33:53 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 3:33:53 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2021 3:33:53 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 3:33:53 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	72	60		mg/Kg	20	4/3/2021 8:41:10 PM

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

Qualifiers:

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

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

Page 44 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-52 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:10:00 AM

 Lab ID:
 2103D36-045
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>					
Diesel Range Organics (DRO)	15	9.5		mg/Kg	1	4/2/2021 3:38:02 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/2/2021 3:38:02 AM
Surr: DNOP	66.0	70-130	S	%Rec	1	4/2/2021 3:38:02 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 3:57:27 PM
Surr: BFB	102	70-130		%Rec	1	4/3/2021 3:57:27 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 3:57:27 PM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 3:57:27 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 3:57:27 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/3/2021 3:57:27 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 3:57:27 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	200	59		mg/Kg	20	4/3/2021 9:43:11 PM

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

Qualifiers:

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

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

Page 45 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-53 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:15:00 AM

 Lab ID:
 2103D36-046
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/2/2021 3:47:28 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/2/2021 3:47:28 AM
Surr: DNOP	54.7	70-130	S	%Rec	1	4/2/2021 3:47:28 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 4:21:00 PM
Surr: BFB	100	70-130		%Rec	1	4/3/2021 4:21:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 4:21:00 PM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 4:21:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 4:21:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/3/2021 4:21:00 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 4:21:00 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	65	61		mg/Kg	20	4/3/2021 10:20:26 PM

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

Qualifiers:

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

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

Page 46 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-54 1.0'

Project: Stebbins Federal SWD Collection Date: 3/26/2021 11:20:00 AM

**Lab ID:** 2103D36-047 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/2/2021 3:56:53 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/2/2021 3:56:53 AM
Surr: DNOP	53.9	70-130	S	%Rec	1	4/2/2021 3:56:53 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2021 4:44:30 PM
Surr: BFB	99.7	70-130		%Rec	1	4/3/2021 4:44:30 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 4:44:30 PM
Toluene	ND	0.048		mg/Kg	1	4/3/2021 4:44:30 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2021 4:44:30 PM
Xylenes, Total	ND	0.096		mg/Kg	1	4/3/2021 4:44:30 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 4:44:30 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	63	59		mg/Kg	20	4/3/2021 10:32:51 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
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 47 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-55 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 11:25:00 AM

 Lab ID:
 2103D36-048
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: mb
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/2/2021 4:06:20 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 4:06:20 AM
Surr: DNOP	71.0	70-130	%Rec	1	4/2/2021 4:06:20 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 5:08:03 PM
Surr: BFB	98.7	70-130	%Rec	1	4/3/2021 5:08:03 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 5:08:03 PM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 5:08:03 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 5:08:03 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 5:08:03 PM
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	4/3/2021 5:08:03 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	87	60	mg/Kg	20	4/3/2021 10:45:16 PM

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

Qualifiers:

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

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

Page 48 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-56 1.0'

Project: Stebbins Federal SWD Collection Date: 3/26/2021 12:30:00 PM

**Lab ID:** 2103D36-049 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/2/2021 4:15:47 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 4:15:47 AM
Surr: DNOP	73.3	70-130	%Rec	1	4/2/2021 4:15:47 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 6:18:26 PM
Surr: BFB	102	70-130	%Rec	1	4/3/2021 6:18:26 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/3/2021 6:18:26 PM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 6:18:26 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 6:18:26 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/3/2021 6:18:26 PM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	4/3/2021 6:18:26 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	76	59	mg/Kg	20	4/3/2021 10:57:41 PM

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

Qualifiers:

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

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

Page 49 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-57 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:35:00 PM

 Lab ID:
 2103D36-050
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/2/2021 4:25:14 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/2/2021 4:25:14 AM
Surr: DNOP	61.6	70-130	S	%Rec	1	4/2/2021 4:25:14 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2021 6:42:03 PM
Surr: BFB	99.8	70-130		%Rec	1	4/3/2021 6:42:03 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/3/2021 6:42:03 PM
Toluene	ND	0.050		mg/Kg	1	4/3/2021 6:42:03 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2021 6:42:03 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2021 6:42:03 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/3/2021 6:42:03 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	66	60		mg/Kg	20	4/3/2021 11:10:05 PM

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

Qualifiers:

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

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

Page 50 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-58 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:40:00 PM

 Lab ID:
 2103D36-051
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	63	9.7	mg/Kg	1	4/2/2021 4:34:41 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 4:34:41 AM
Surr: DNOP	73.0	70-130	%Rec	1	4/2/2021 4:34:41 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 7:05:49 PM
Surr: BFB	99.4	70-130	%Rec	1	4/3/2021 7:05:49 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/3/2021 7:05:49 PM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 7:05:49 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 7:05:49 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 7:05:49 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/3/2021 7:05:49 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	270	60	mg/Kg	20	4/3/2021 11:47:20 PM

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

Qualifiers:

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

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

Page 51 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-59 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:45:00 PM

 Lab ID:
 2103D36-052
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/2/2021 4:44:09 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/2/2021 4:44:09 AM
Surr: DNOP	52.3	70-130	S	%Rec	1	4/2/2021 4:44:09 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 7:29:13 PM
Surr: BFB	99.7	70-130		%Rec	1	4/3/2021 7:29:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/3/2021 7:29:13 PM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 7:29:13 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 7:29:13 PM
Xylenes, Total	ND	0.099		mg/Kg	1	4/3/2021 7:29:13 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 7:29:13 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	77	60		mg/Kg	20	4/3/2021 11:59:44 PM

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

Qualifiers:

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

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

Page 52 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-60 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:50:00 PM

 Lab ID:
 2103D36-053
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/2/2021 4:53:38 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/2/2021 4:53:38 AM
Surr: DNOP	56.9	70-130	S	%Rec	1	4/2/2021 4:53:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/3/2021 7:52:35 PM
Surr: BFB	98.8	70-130		%Rec	1	4/3/2021 7:52:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 7:52:35 PM
Toluene	ND	0.048		mg/Kg	1	4/3/2021 7:52:35 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/3/2021 7:52:35 PM
Xylenes, Total	ND	0.096		mg/Kg	1	4/3/2021 7:52:35 PM
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	4/3/2021 7:52:35 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	120	60		mg/Kg	20	4/4/2021 12:12:09 AM

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

Qualifiers:

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

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

Page 53 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-61 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 12:55:00 PM

 Lab ID:
 2103D36-054
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst: mb
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/2/2021 5:03:07 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/2/2021 5:03:07 AM
Surr: DNOP	33.8	70-130	S	%Rec	1	4/2/2021 5:03:07 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 8:15:56 PM
Surr: BFB	100	70-130		%Rec	1	4/3/2021 8:15:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/3/2021 8:15:56 PM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 8:15:56 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 8:15:56 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/3/2021 8:15:56 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	4/3/2021 8:15:56 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	110	60		mg/Kg	20	4/4/2021 12:24:34 AM

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

Qualifiers:

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

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

Page 54 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-62 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:00:00 PM

 Lab ID:
 2103D36-055
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.3 mg/Kg 1 4/2/2021 5:12:36 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/2/2021 5:12:36 AM Surr: DNOP 35.0 70-130 S %Rec 1 4/2/2021 5:12:36 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/3/2021 8:39:16 PM 4.9 mg/Kg 1 Surr: BFB 98.3 70-130 %Rec 1 4/3/2021 8:39:16 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 4/3/2021 8:39:16 PM 1 Toluene ND 0.049 mg/Kg 1 4/3/2021 8:39:16 PM Ethylbenzene ND 0.049 mg/Kg 1 4/3/2021 8:39:16 PM Xylenes, Total ND 0.099 mg/Kg 1 4/3/2021 8:39:16 PM Surr: 4-Bromofluorobenzene 99.0 70-130 %Rec 1 4/3/2021 8:39:16 PM **EPA METHOD 300.0: ANIONS** Analyst: VP Chloride 80 60 4/4/2021 12:36:59 AM ma/Ka 20

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

Qualifiers:

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

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

Page 55 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-63 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:05:00 PM

 Lab ID:
 2103D36-056
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.4 mg/Kg 1 4/2/2021 5:22:06 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/2/2021 5:22:06 AM Surr: DNOP 62.0 70-130 S %Rec 1 4/2/2021 5:22:06 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/3/2021 9:02:42 PM 4.8 mg/Kg 1 Surr: BFB 101 70-130 %Rec 1 4/3/2021 9:02:42 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/3/2021 9:02:42 PM 1 Toluene ND 0.048 mg/Kg 1 4/3/2021 9:02:42 PM Ethylbenzene ND 0.048 mg/Kg 1 4/3/2021 9:02:42 PM Xylenes, Total ND 0.097 mg/Kg 1 4/3/2021 9:02:42 PM 4/3/2021 9:02:42 PM Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 60 4/4/2021 12:49:23 AM 100 ma/Ka 20

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

Qualifiers:

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

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

Page 56 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-64 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:10:00 PM

 Lab ID:
 2103D36-057
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.9 mg/Kg 1 4/2/2021 5:31:36 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 4/2/2021 5:31:36 AM Surr: DNOP 36.0 70-130 S %Rec 1 4/2/2021 5:31:36 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/3/2021 9:26:06 PM 4.9 mg/Kg 1 Surr: BFB 102 70-130 %Rec 1 4/3/2021 9:26:06 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/3/2021 9:26:06 PM 1 Toluene ND 0.049 mg/Kg 1 4/3/2021 9:26:06 PM Ethylbenzene ND 0.049 mg/Kg 1 4/3/2021 9:26:06 PM Xylenes, Total ND 0.097 mg/Kg 1 4/3/2021 9:26:06 PM 4/3/2021 9:26:06 PM Surr: 4-Bromofluorobenzene 102 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 310 60 4/4/2021 1:01:48 AM ma/Ka 20

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

Qualifiers:

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

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

Page 57 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-65 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:15:00 PM

 Lab ID:
 2103D36-058
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	4/2/2021 5:41:07 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/2/2021 5:41:07 AM
Surr: DNOP	52.2	70-130	S	%Rec	1	4/2/2021 5:41:07 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 9:49:28 PM
Surr: BFB	102	70-130		%Rec	1	4/3/2021 9:49:28 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 9:49:28 PM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 9:49:28 PM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 9:49:28 PM
Xylenes, Total	ND	0.098		mg/Kg	1	4/3/2021 9:49:28 PM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	4/3/2021 9:49:28 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	190	60		mg/Kg	20	4/4/2021 1:14:12 AM

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

Qualifiers:

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

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

Page 58 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-66 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:20:00 PM

 Lab ID:
 2103D36-059
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.5 mg/Kg 1 4/2/2021 5:50:46 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/2/2021 5:50:46 AM Surr: DNOP 53.0 70-130 S %Rec 1 4/2/2021 5:50:46 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/4/2021 12:11:02 AM 4.8 mg/Kg 1 Surr: BFB 98.5 70-130 %Rec 1 4/4/2021 12:11:02 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/4/2021 12:11:02 AM 1 Toluene ND 0.048 mg/Kg 1 4/4/2021 12:11:02 AM Ethylbenzene ND 0.048 mg/Kg 1 4/4/2021 12:11:02 AM Xylenes, Total ND 0.097 mg/Kg 1 4/4/2021 12:11:02 AM 4/4/2021 12:11:02 AM Surr: 4-Bromofluorobenzene 99.5 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 270 60 4/4/2021 1:26:37 AM ma/Ka 20

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

Qualifiers:

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

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

Page 59 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-67 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:25:00 PM

 Lab ID:
 2103D36-060
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 10 mg/Kg 1 4/2/2021 6:00:25 AM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 4/2/2021 6:00:25 AM Surr: DNOP 45.5 70-130 S %Rec 1 4/2/2021 6:00:25 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/4/2021 12:34:42 AM 5.0 mg/Kg 1 Surr: BFB 98.6 70-130 %Rec 1 4/4/2021 12:34:42 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.025 mg/Kg 4/4/2021 12:34:42 AM 1 Toluene ND 0.050 mg/Kg 1 4/4/2021 12:34:42 AM Ethylbenzene ND 0.050 mg/Kg 1 4/4/2021 12:34:42 AM Xylenes, Total ND 0.099 mg/Kg 1 4/4/2021 12:34:42 AM 4/4/2021 12:34:42 AM Surr: 4-Bromofluorobenzene 99.0 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 510 60 4/4/2021 1:39:02 AM ma/Ka 20

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

Qualifiers:

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

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

Page 60 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-68 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:30:00 PM

 Lab ID:
 2103D36-061
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.2 mg/Kg 1 4/2/2021 6:10:03 AM Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 4/2/2021 6:10:03 AM Surr: DNOP 37.7 70-130 S %Rec 1 4/2/2021 6:10:03 AM **EPA METHOD 300.0: ANIONS** Analyst: VP Chloride 510 4/4/2021 2:16:15 AM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 0.025 mg/Kg 4/2/2021 7:15:24 PM 1 Toluene ND 0.049 mg/Kg 4/2/2021 7:15:24 PM 1 Ethylbenzene ND 0.049 mg/Kg 1 4/2/2021 7:15:24 PM Xylenes, Total ND 0.099 mg/Kg 1 4/2/2021 7:15:24 PM Surr: 1.2-Dichloroethane-d4 97.8 70-130 %Rec 1 4/2/2021 7:15:24 PM Surr: 4-Bromofluorobenzene 94.3 70-130 %Rec 1 4/2/2021 7:15:24 PM Surr: Dibromofluoromethane 70-130 %Rec 1 4/2/2021 7:15:24 PM 114 Surr: Toluene-d8 96.9 70-130 %Rec 1 4/2/2021 7:15:24 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 4/2/2021 7:15:24 PM 49 mg/Kg 1 Surr: BFB 103 70-130 %Rec 1 4/2/2021 7:15:24 PM

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

Qualifiers:

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

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

Page 61 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-69 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 1:40:00 PM

 Lab ID:
 2103D36-062
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 4/1/2021 1:21:06 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 4/1/2021 1:21:06 PM Surr: DNOP 97.0 70-130 %Rec 1 4/1/2021 1:21:06 PM **EPA METHOD 300.0: ANIONS** Analyst: VP Chloride 500 4/4/2021 2:28:40 AM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 0.024 mg/Kg 4/2/2021 8:41:05 PM 1 Toluene ND 0.049 mg/Kg 4/2/2021 8:41:05 PM 1 Ethylbenzene ND 0.049 mg/Kg 1 4/2/2021 8:41:05 PM Xylenes, Total ND 0.098 mg/Kg 1 4/2/2021 8:41:05 PM Surr: 1.2-Dichloroethane-d4 88.6 70-130 %Rec 1 4/2/2021 8:41:05 PM Surr: 4-Bromofluorobenzene 88.6 70-130 %Rec 1 4/2/2021 8:41:05 PM Surr: Dibromofluoromethane 107 70-130 %Rec 1 4/2/2021 8:41:05 PM Surr: Toluene-d8 101 70-130 %Rec 1 4/2/2021 8:41:05 PM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 4/2/2021 8:41:05 PM 49 mg/Kg 1

108

70-130

%Rec

1

4/2/2021 8:41:05 PM

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

Qualifiers:

Surr: BFB

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

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

Page 62 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-70 1.0'

**Project:** Stebbins Federal SWD **Collection Date:** 3/26/2021 1:50:00 PM

**Lab ID:** 2103D36-063 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (	ORGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 1:50:31 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 1:50:31 PM
Surr: DNOP	124	70-130	%Rec	1	4/1/2021 1:50:31 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	77	60	mg/Kg	20	4/4/2021 2:41:05 AM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/2/2021 10:06:44 PM
Toluene	ND	0.049	mg/Kg	1	4/2/2021 10:06:44 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/2/2021 10:06:44 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/2/2021 10:06:44 PM
Surr: 1,2-Dichloroethane-d4	95.3	70-130	%Rec	1	4/2/2021 10:06:44 PM
Surr: 4-Bromofluorobenzene	91.3	70-130	%Rec	1	4/2/2021 10:06:44 PM
Surr: Dibromofluoromethane	104	70-130	%Rec	1	4/2/2021 10:06:44 PM
Surr: Toluene-d8	98.8	70-130	%Rec	1	4/2/2021 10:06:44 PM
EPA METHOD 8015D MOD: GASOLINE RA	ANGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/2/2021 10:06:44 PM
Surr: BFB	102	70-130	%Rec	1	4/2/2021 10:06:44 PM

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

Qualifiers:

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

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

Page 63 of 121

2103D36-064

Lab ID:

Surr: BFB

# Analytical Report Lab Order 2103D36

Received Date: 3/30/2021 7:35:00 AM

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-71 1.0'

Matrix: SOIL

**Project:** Stebbins Federal SWD Collection Date: 3/26/2021 1:55:00 PM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 4/1/2021 2:00:14 PM ND 9.8 mg/Kg 1 Motor Oil Range Organics (MRO) 4/1/2021 2:00:14 PM ND 49 mg/Kg 1 Surr: DNOP 156 70-130 S %Rec 1 4/1/2021 2:00:14 PM **EPA METHOD 300.0: ANIONS** Analyst: VP Chloride 74 4/4/2021 3:18:18 AM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 0.024 mg/Kg 4/3/2021 12:58:10 AM 1 Toluene ND 0.049 mg/Kg 4/3/2021 12:58:10 AM 1 Ethylbenzene ND 0.049 mg/Kg 1 4/3/2021 12:58:10 AM Xylenes, Total ND 0.098 mg/Kg 1 4/3/2021 12:58:10 AM Surr: 1.2-Dichloroethane-d4 95.9 70-130 %Rec 1 4/3/2021 12:58:10 AM Surr: 4-Bromofluorobenzene 89.5 70-130 %Rec 1 4/3/2021 12:58:10 AM Surr: Dibromofluoromethane 70-130 %Rec 4/3/2021 12:58:10 AM 111 1 Surr: Toluene-d8 100 70-130 %Rec 1 4/3/2021 12:58:10 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 4/3/2021 12:58:10 AM 49 mg/Kg 1

103

70-130

%Rec

1

4/3/2021 12:58:10 AM

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

Qualifiers:

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

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

Page 64 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-72 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:00:00 PM

 Lab ID:
 2103D36-065
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 2:10:01 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 2:10:01 PM
Surr: DNOP	71.2	70-130	%Rec	1	4/1/2021 2:10:01 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	77	60	mg/Kg	20	4/4/2021 3:55:31 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	Т				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 1:26:50 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 1:26:50 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 1:26:50 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 1:26:50 AM
Surr: 1,2-Dichloroethane-d4	97.9	70-130	%Rec	1	4/3/2021 1:26:50 AM
Surr: 4-Bromofluorobenzene	92.3	70-130	%Rec	1	4/3/2021 1:26:50 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/3/2021 1:26:50 AM
Surr: Toluene-d8	97.1	70-130	%Rec	1	4/3/2021 1:26:50 AM
EPA METHOD 8015D MOD: GASOLINE RANGI	<b>≣</b>				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 1:26:50 AM
Surr: BFB	104	70-130	%Rec	1	4/3/2021 1:26:50 AM

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

Qualifiers:

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

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

Page 65 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-73 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:05:00 PM

 Lab ID:
 2103D36-066
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS					Analyst: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/1/2021 2:19:46 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/1/2021 2:19:46 PM
Surr: DNOP	65.4	70-130	S	%Rec	1	4/1/2021 2:19:46 PM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	71	59		mg/Kg	20	4/4/2021 4:57:35 AM
EPA METHOD 8260B: VOLATILES SHORT LIST	-					Analyst: <b>JMR</b>
Benzene	ND	0.024		mg/Kg	1	4/3/2021 1:55:31 AM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 1:55:31 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/3/2021 1:55:31 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/3/2021 1:55:31 AM
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%Rec	1	4/3/2021 1:55:31 AM
Surr: 4-Bromofluorobenzene	89.5	70-130		%Rec	1	4/3/2021 1:55:31 AM
Surr: Dibromofluoromethane	108	70-130		%Rec	1	4/3/2021 1:55:31 AM
Surr: Toluene-d8	96.0	70-130		%Rec	1	4/3/2021 1:55:31 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 1:55:31 AM
Surr: BFB	105	70-130		%Rec	1	4/3/2021 1:55:31 AM

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

Qualifiers:

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

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

Page 66 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-74 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:10:00 PM

 Lab ID:
 2103D36-067
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 2:50:44 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 2:50:44 PM
Surr: DNOP	73.2	70-130	%Rec	1	4/1/2021 2:50:44 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	120	59	mg/Kg	20	4/4/2021 5:10:00 AM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/3/2021 2:24:13 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 2:24:13 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 2:24:13 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/3/2021 2:24:13 AM
Surr: 1,2-Dichloroethane-d4	94.8	70-130	%Rec	1	4/3/2021 2:24:13 AM
Surr: 4-Bromofluorobenzene	87.5	70-130	%Rec	1	4/3/2021 2:24:13 AM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	4/3/2021 2:24:13 AM
Surr: Toluene-d8	101	70-130	%Rec	1	4/3/2021 2:24:13 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/3/2021 2:24:13 AM
Surr: BFB	105	70-130	%Rec	1	4/3/2021 2:24:13 AM

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

Qualifiers:

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

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

Page 67 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-75 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:20:00 PM

 Lab ID:
 2103D36-068
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/1/2021 3:00:27 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 3:00:27 PM
Surr: DNOP	102	70-130	%Rec	1	4/1/2021 3:00:27 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	330	60	mg/Kg	20	4/4/2021 5:22:25 AM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 2:52:54 AM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 2:52:54 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 2:52:54 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 2:52:54 AM
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	4/3/2021 2:52:54 AM
Surr: 4-Bromofluorobenzene	89.6	70-130	%Rec	1	4/3/2021 2:52:54 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	4/3/2021 2:52:54 AM
Surr: Toluene-d8	101	70-130	%Rec	1	4/3/2021 2:52:54 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 2:52:54 AM
Surr: BFB	104	70-130	%Rec	1	4/3/2021 2:52:54 AM

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

Qualifiers:

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

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

Page 68 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-03 0-1.0'

Project:Stebbins Federal SWDCollection Date: 3/26/2021 2:30:00 PMLab ID:2103D36-069Matrix: SOILReceived Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 3:10:12 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 3:10:12 PM
Surr: DNOP	112	70-130	%Rec	1	4/1/2021 3:10:12 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	350	61	mg/Kg	20	4/4/2021 5:34:50 AM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	т				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 3:21:36 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 3:21:36 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 3:21:36 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/3/2021 3:21:36 AM
Surr: 1,2-Dichloroethane-d4	97.3	70-130	%Rec	1	4/3/2021 3:21:36 AM
Surr: 4-Bromofluorobenzene	88.5	70-130	%Rec	1	4/3/2021 3:21:36 AM
Surr: Dibromofluoromethane	110	70-130	%Rec	1	4/3/2021 3:21:36 AM
Surr: Toluene-d8	100	70-130	%Rec	1	4/3/2021 3:21:36 AM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 3:21:36 AM
Surr: BFB	102	70-130	%Rec	1	4/3/2021 3:21:36 AM

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

Qualifiers:

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

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

Page 69 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-04 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:35:00 PM

 Lab ID:
 2103D36-070
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 3:19:54 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 3:19:54 PM
Surr: DNOP	90.9	70-130	%Rec	1	4/1/2021 3:19:54 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	450	61	mg/Kg	20	4/4/2021 5:47:14 AM
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	4/3/2021 3:50:13 AM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 3:50:13 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 3:50:13 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/3/2021 3:50:13 AM
Surr: 1,2-Dichloroethane-d4	98.0	70-130	%Rec	1	4/3/2021 3:50:13 AM
Surr: 4-Bromofluorobenzene	89.7	70-130	%Rec	1	4/3/2021 3:50:13 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	4/3/2021 3:50:13 AM
Surr: Toluene-d8	98.6	70-130	%Rec	1	4/3/2021 3:50:13 AM
EPA METHOD 8015D MOD: GASOLINE RAI	NGE				Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 3:50:13 AM
Surr: BFB	102	70-130	%Rec	1	4/3/2021 3:50:13 AM

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

Qualifiers:

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

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

Page 70 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-05 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:40:00 PM

 Lab ID:
 2103D36-071
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 3:29:38 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 3:29:38 PM
Surr: DNOP	82.2	70-130	%Rec	1	4/1/2021 3:29:38 PM
<b>EPA METHOD 300.0: ANIONS</b>					Analyst: VP
Chloride	91	60	mg/Kg	20	4/4/2021 5:59:38 AM
<b>EPA METHOD 8260B: VOLATILES SHOR</b>	T LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 4:18:51 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 4:18:51 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 4:18:51 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 4:18:51 AM
Surr: 1,2-Dichloroethane-d4	98.9	70-130	%Rec	1	4/3/2021 4:18:51 AM
Surr: 4-Bromofluorobenzene	87.1	70-130	%Rec	1	4/3/2021 4:18:51 AM
Surr: Dibromofluoromethane	108	70-130	%Rec	1	4/3/2021 4:18:51 AM
Surr: Toluene-d8	96.2	70-130	%Rec	1	4/3/2021 4:18:51 AM
EPA METHOD 8015D MOD: GASOLINE R	ANGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 4:18:51 AM
Surr: BFB	101	70-130	%Rec	1	4/3/2021 4:18:51 AM

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

Qualifiers:

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

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

Page 71 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-06 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:45:00 PM

 Lab ID:
 2103D36-072
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 3:39:20 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 3:39:20 PM
Surr: DNOP	93.1	70-130	%Rec	1	4/1/2021 3:39:20 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	81	60	mg/Kg	20	4/4/2021 6:12:02 AM
EPA METHOD 8260B: VOLATILES SHORT	T LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 4:47:27 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 4:47:27 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 4:47:27 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/3/2021 4:47:27 AM
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	4/3/2021 4:47:27 AM
Surr: 4-Bromofluorobenzene	87.3	70-130	%Rec	1	4/3/2021 4:47:27 AM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	4/3/2021 4:47:27 AM
Surr: Toluene-d8	95.4	70-130	%Rec	1	4/3/2021 4:47:27 AM
EPA METHOD 8015D MOD: GASOLINE R.	ANGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 4:47:27 AM
Surr: BFB	105	70-130	%Rec	1	4/3/2021 4:47:27 AM

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

Qualifiers:

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

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

Page 72 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-07 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:50:00 PM

 Lab ID:
 2103D36-073
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/1/2021 3:49:01 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/1/2021 3:49:01 PM
Surr: DNOP	74.6	70-130	%Rec	1	4/1/2021 3:49:01 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	490	61	mg/Kg	20	4/4/2021 6:24:26 AM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 5:16:07 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 5:16:07 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 5:16:07 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 5:16:07 AM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	4/3/2021 5:16:07 AM
Surr: 4-Bromofluorobenzene	86.5	70-130	%Rec	1	4/3/2021 5:16:07 AM
Surr: Dibromofluoromethane	113	70-130	%Rec	1	4/3/2021 5:16:07 AM
Surr: Toluene-d8	97.4	70-130	%Rec	1	4/3/2021 5:16:07 AM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 5:16:07 AM
Surr: BFB	104	70-130	%Rec	1	4/3/2021 5:16:07 AM

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

Qualifiers:

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

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

Page 73 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-08 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 2:55:00 PM

 Lab ID:
 2103D36-074
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 3:58:40 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 3:58:40 PM
Surr: DNOP	85.6	70-130	%Rec	1	4/1/2021 3:58:40 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	290	60	mg/Kg	20	4/4/2021 5:10:15 AM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/3/2021 5:44:48 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 5:44:48 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 5:44:48 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 5:44:48 AM
Surr: 1,2-Dichloroethane-d4	98.7	70-130	%Rec	1	4/3/2021 5:44:48 AM
Surr: 4-Bromofluorobenzene	91.0	70-130	%Rec	1	4/3/2021 5:44:48 AM
Surr: Dibromofluoromethane	113	70-130	%Rec	1	4/3/2021 5:44:48 AM
Surr: Toluene-d8	98.3	70-130	%Rec	1	4/3/2021 5:44:48 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 5:44:48 AM
Surr: BFB	104	70-130	%Rec	1	4/3/2021 5:44:48 AM

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

Qualifiers:

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

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

Page 74 of 121

2103D36-075

Lab ID:

# Analytical Report Lab Order 2103D36

Received Date: 3/30/2021 7:35:00 AM

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-09 0-1.0

Matrix: SOIL

**Project:** Stebbins Federal SWD Collection Date: 3/26/2021 3:00:00 PM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 4/1/2021 4:08:20 PM ND 9.7 mg/Kg 1 Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/1/2021 4:08:20 PM Surr: DNOP 103 70-130 %Rec 1 4/1/2021 4:08:20 PM **EPA METHOD 300.0: ANIONS** Analyst: VP Chloride 730 4/4/2021 5:22:39 AM 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 0.025 mg/Kg 4/3/2021 6:13:28 AM 1 Toluene ND 0.049 mg/Kg 4/3/2021 6:13:28 AM 1 Ethylbenzene ND 0.049 mg/Kg 1 4/3/2021 6:13:28 AM Xylenes, Total ND 0.099 mg/Kg 1 4/3/2021 6:13:28 AM Surr: 1.2-Dichloroethane-d4 97.8 70-130 %Rec 1 4/3/2021 6:13:28 AM Surr: 4-Bromofluorobenzene 88.8 70-130 %Rec 1 4/3/2021 6:13:28 AM Surr: Dibromofluoromethane 70-130 %Rec 1 4/3/2021 6:13:28 AM 112 Surr: Toluene-d8 100 70-130 %Rec 1 4/3/2021 6:13:28 AM **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: JMR Gasoline Range Organics (GRO) ND 4/3/2021 6:13:28 AM 49 mg/Kg 1 Surr: BFB 106 70-130 %Rec 1 4/3/2021 6:13:28 AM

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

Qualifiers:

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

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

Page 75 of 121

2103D36-076

Surr: Toluene-d8

Surr: BFB

Gasoline Range Organics (GRO)

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

Lab ID:

# Analytical Report Lab Order 2103D36

Received Date: 3/30/2021 7:35:00 AM

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-10 0-1.0

Matrix: SOIL

**Project:** Stebbins Federal SWD **Collection Date:** 3/26/2021 3:05:00 PM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.8 mg/Kg 1 4/1/2021 4:17:58 PM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 4/1/2021 4:17:58 PM Surr: DNOP 121 70-130 %Rec 1 4/1/2021 4:17:58 PM **EPA METHOD 300.0: ANIONS** Analyst: VP Chloride 4/4/2021 5:35:04 AM 130 60 mg/Kg 20 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: JMR ND 0.024 mg/Kg 4/3/2021 6:41:55 AM 1 Toluene ND 0.049 mg/Kg 4/3/2021 6:41:55 AM 1 Ethylbenzene ND 0.049 mg/Kg 1 4/3/2021 6:41:55 AM Xylenes, Total ND 0.098 mg/Kg 1 4/3/2021 6:41:55 AM Surr: 1.2-Dichloroethane-d4 99.8 70-130 %Rec 1 4/3/2021 6:41:55 AM Surr: 4-Bromofluorobenzene 86.1 70-130 %Rec 1 4/3/2021 6:41:55 AM Surr: Dibromofluoromethane 109 70-130 %Rec 1 4/3/2021 6:41:55 AM

97.1

ND

99.4

70-130

70-130

49

%Rec

mg/Kg

%Rec

1

1

1

4/3/2021 6:41:55 AM

4/3/2021 6:41:55 AM

4/3/2021 6:41:55 AM

Analyst: JMR

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

Qualifiers:

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

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

Page 76 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-11 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 3:10:00 PM

 Lab ID:
 2103D36-077
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/1/2021 4:27:34 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/1/2021 4:27:34 PM
Surr: DNOP	132	70-130	S	%Rec	1	4/1/2021 4:27:34 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/4/2021 5:47:29 AM
<b>EPA METHOD 8260B: VOLATILES SHORT L</b>	LIST					Analyst: <b>JMR</b>
Benzene	ND	0.025		mg/Kg	1	4/3/2021 7:10:34 AM
Toluene	ND	0.050		mg/Kg	1	4/3/2021 7:10:34 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/3/2021 7:10:34 AM
Xylenes, Total	ND	0.10		mg/Kg	1	4/3/2021 7:10:34 AM
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/3/2021 7:10:34 AM
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	4/3/2021 7:10:34 AM
Surr: Dibromofluoromethane	104	70-130		%Rec	1	4/3/2021 7:10:34 AM
Surr: Toluene-d8	98.3	70-130		%Rec	1	4/3/2021 7:10:34 AM
EPA METHOD 8015D MOD: GASOLINE RAN	IGE					Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/3/2021 7:10:34 AM
Surr: BFB	108	70-130		%Rec	1	4/3/2021 7:10:34 AM

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

Qualifiers:

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

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

Page 77 of 121

Date Reported: 4/8/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-12 0-1.0'

**Project:** Stebbins Federal SWD **Collection Date:** 3/26/2021 3:15:00 PM

**Lab ID:** 2103D36-078 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGA	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/1/2021 4:37:17 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/1/2021 4:37:17 PM
Surr: DNOP	127	70-130	%Rec	1	4/1/2021 4:37:17 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	59	mg/Kg	20	4/4/2021 5:59:53 AM
EPA METHOD 8260B: VOLATILES SHORT LIS	т				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	4/3/2021 7:39:12 AM
Toluene	ND	0.050	mg/Kg	1	4/3/2021 7:39:12 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/3/2021 7:39:12 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/3/2021 7:39:12 AM
Surr: 1,2-Dichloroethane-d4	97.7	70-130	%Rec	1	4/3/2021 7:39:12 AM
Surr: 4-Bromofluorobenzene	90.1	70-130	%Rec	1	4/3/2021 7:39:12 AM
Surr: Dibromofluoromethane	108	70-130	%Rec	1	4/3/2021 7:39:12 AM
Surr: Toluene-d8	98.8	70-130	%Rec	1	4/3/2021 7:39:12 AM
EPA METHOD 8015D MOD: GASOLINE RANGE	<b></b>				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/3/2021 7:39:12 AM
Surr: BFB	105	70-130	%Rec	1	4/3/2021 7:39:12 AM

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

Qualifiers:

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

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

Page 78 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-13 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 3:20:00 PM

 Lab ID:
 2103D36-079
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 4:46:55 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 4:46:55 PM
Surr: DNOP	104	70-130	%Rec	1	4/1/2021 4:46:55 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/4/2021 6:12:18 AM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/3/2021 8:07:52 AM
Toluene	ND	0.049	mg/Kg	1	4/3/2021 8:07:52 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/3/2021 8:07:52 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/3/2021 8:07:52 AM
Surr: 1,2-Dichloroethane-d4	99.1	70-130	%Rec	1	4/3/2021 8:07:52 AM
Surr: 4-Bromofluorobenzene	94.8	70-130	%Rec	1	4/3/2021 8:07:52 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	4/3/2021 8:07:52 AM
Surr: Toluene-d8	96.7	70-130	%Rec	1	4/3/2021 8:07:52 AM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/3/2021 8:07:52 AM
Surr: BFB	104	70-130	%Rec	1	4/3/2021 8:07:52 AM

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

Qualifiers:

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

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

Page 79 of 121

**Project:** 

# Analytical Report Lab Order 2103D36

**Collection Date:** 3/26/2021 3:25:00 PM

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

Stebbins Federal SWD

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-14 0-1.0'

**Lab ID:** 2103D36-080 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	4/1/2021 4:56:37 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 4:56:37 PM
Surr: DNOP	78.8	70-130	%Rec	1	4/1/2021 4:56:37 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	4/4/2021 6:24:43 AM
EPA METHOD 8260B: VOLATILES SHORT LIST				Analyst: <b>JMR</b>	
Benzene	ND	0.024	mg/Kg	1	4/3/2021 8:36:34 AM
Toluene	ND	0.048	mg/Kg	1	4/3/2021 8:36:34 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/3/2021 8:36:34 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/3/2021 8:36:34 AM
Surr: 1,2-Dichloroethane-d4	98.9	70-130	%Rec	1	4/3/2021 8:36:34 AM
Surr: 4-Bromofluorobenzene	91.9	70-130	%Rec	1	4/3/2021 8:36:34 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/3/2021 8:36:34 AM
Surr: Toluene-d8	95.3	70-130	%Rec	1	4/3/2021 8:36:34 AM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/3/2021 8:36:34 AM
Surr: BFB	106	70-130	%Rec	1	4/3/2021 8:36:34 AM

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

Qualifiers:

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

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

Page 80 of 121

2103D36-081

Lab ID:

Benzene

Toluene

Chloride

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

**EPA METHOD 300.0: ANIONS** 

# Analytical Report Lab Order 2103D36

Received Date: 3/30/2021 7:35:00 AM

Date Reported: 4/8/2021

4/4/2021 12:58:17 AM

4/4/2021 12:58:17 AM

4/4/2021 12:58:17 AM

4/4/2021 12:58:17 AM 4/4/2021 12:58:17 AM

4/4/2021 6:37:08 AM

Analyst: VP

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-15 0-1.0'

Matrix: SOIL

**Project:** Stebbins Federal SWD **Collection Date:** 3/26/2021 3:30:00 PM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.3 mg/Kg 1 4/2/2021 2:13:12 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/2/2021 2:13:12 AM Surr: DNOP 64.5 70-130 S %Rec 1 4/2/2021 2:13:12 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/4/2021 12:58:17 AM 5.0 mg/Kg 1 Surr: BFB 100 70-130 %Rec 1 4/4/2021 12:58:17 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB

ND

ND

ND

ND

100

ND

0.025

0.050

0.050

0.10

60

70-130

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

1

1

1

1

1

20

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

Qualifiers:

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

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

Page 81 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-16 0-1.0'

Project:Stebbins Federal SWDCollection Date: 3/26/2021 3:35:00 PMLab ID:2103D36-082Matrix: SOILReceived Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>					
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/2/2021 2:22:43 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/2/2021 2:22:43 AM
Surr: DNOP	50.8	70-130	S	%Rec	1	4/2/2021 2:22:43 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/4/2021 3:08:48 AM
Surr: BFB	98.9	70-130		%Rec	1	4/4/2021 3:08:48 AM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/4/2021 3:08:48 AM
Toluene	ND	0.049		mg/Kg	1	4/4/2021 3:08:48 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/4/2021 3:08:48 AM
Xylenes, Total	ND	0.099		mg/Kg	1	4/4/2021 3:08:48 AM
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	4/4/2021 3:08:48 AM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	ND	60		mg/Kg	20	4/4/2021 7:14:22 AM

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

Qualifiers:

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

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

Page 82 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-17 0-1.0'

Project:Stebbins Federal SWDCollection Date: 3/26/2021 3:40:00 PMLab ID:2103D36-083Matrix: SOILReceived Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 10:14:42 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 10:14:42 AM
Surr: DNOP	84.8	70-130	%Rec	1	4/1/2021 10:14:42 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 4:19:20 AM
Surr: BFB	100	70-130	%Rec	1	4/4/2021 4:19:20 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 4:19:20 AM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 4:19:20 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 4:19:20 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/4/2021 4:19:20 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/4/2021 4:19:20 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/4/2021 7:26:46 AM

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

Qualifiers:

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

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

Page 83 of 121

**Project:** 

# Analytical Report Lab Order 2103D36

**Collection Date:** 3/26/2021 3:45:00 PM

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

Stebbins Federal SWD

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-18 0-1.0'

**Lab ID:** 2103D36-084 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 10:38:15 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 10:38:15 AM
Surr: DNOP	87.1	70-130	%Rec	1	4/1/2021 10:38:15 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/4/2021 4:42:50 AM
Surr: BFB	99.5	70-130	%Rec	1	4/4/2021 4:42:50 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/4/2021 4:42:50 AM
Toluene	ND	0.047	mg/Kg	1	4/4/2021 4:42:50 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/4/2021 4:42:50 AM
Xylenes, Total	ND	0.093	mg/Kg	1	4/4/2021 4:42:50 AM
Surr: 4-Bromofluorobenzene	99.8	70-130	%Rec	1	4/4/2021 4:42:50 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	81	60	mg/Kg	20	4/5/2021 10:02:19 AM

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

Qualifiers:

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

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

Page 84 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd.

**Project:** Stebbins Federal SWD

**Lab ID:** 2103D36-085

**Client Sample ID:** WS21-19 0-1.0'

Collection Date: 3/26/2021 3:50:00 PM Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qua	l Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/1/2021 11:01:48 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 11:01:48 AM
Surr: DNOP	89.4	70-130	%Rec	1	4/1/2021 11:01:48 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/4/2021 5:06:19 AM
Surr: BFB	102	70-130	%Rec	1	4/4/2021 5:06:19 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/4/2021 5:06:19 AM
Toluene	ND	0.048	mg/Kg	1	4/4/2021 5:06:19 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/4/2021 5:06:19 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/4/2021 5:06:19 AM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	4/4/2021 5:06:19 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	87	60	mg/Kg	20	4/7/2021 7:58:25 AM

Matrix: SOIL

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

Qualifiers:

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

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

Page 85 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-20 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:55:00 PM

**Lab ID:** 2103D36-086 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/1/2021 11:25:25 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 11:25:25 AM
Surr: DNOP	88.4	70-130	%Rec	1	4/1/2021 11:25:25 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	4/4/2021 5:29:56 AM
Surr: BFB	99.0	70-130	%Rec	1	4/4/2021 5:29:56 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/4/2021 5:29:56 AM
Toluene	ND	0.046	mg/Kg	1	4/4/2021 5:29:56 AM
Ethylbenzene	ND	0.046	mg/Kg	1	4/4/2021 5:29:56 AM
Xylenes, Total	ND	0.092	mg/Kg	1	4/4/2021 5:29:56 AM
Surr: 4-Bromofluorobenzene	99.0	70-130	%Rec	1	4/4/2021 5:29:56 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	59	mg/Kg	20	4/5/2021 11:41:36 AM

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

Qualifiers:

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

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

Page 86 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-21 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 4:00:00 PM

 Lab ID:
 2103D36-087
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/1/2021 11:49:04 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 11:49:04 AM
Surr: DNOP	82.5	70-130	%Rec	1	4/1/2021 11:49:04 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 5:53:25 AM
Surr: BFB	98.8	70-130	%Rec	1	4/4/2021 5:53:25 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 5:53:25 AM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 5:53:25 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 5:53:25 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/4/2021 5:53:25 AM
Surr: 4-Bromofluorobenzene	98.5	70-130	%Rec	1	4/4/2021 5:53:25 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/5/2021 11:54:00 AM

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

Qualifiers:

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

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

Page 87 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-22 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 4:05:00 PM

 Lab ID:
 2103D36-088
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 12:12:45 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 12:12:45 PM
Surr: DNOP	86.2	70-130	%Rec	1	4/1/2021 12:12:45 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/4/2021 6:16:58 AM
Surr: BFB	99.4	70-130	%Rec	1	4/4/2021 6:16:58 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 6:16:58 AM
Toluene	ND	0.050	mg/Kg	1	4/4/2021 6:16:58 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/4/2021 6:16:58 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/4/2021 6:16:58 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/4/2021 6:16:58 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	61	mg/Kg	20	4/5/2021 12:06:25 PM

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

Qualifiers:

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

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

Page 88 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-23 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 4:10:00 PM

 Lab ID:
 2103D36-089
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	4/1/2021 12:36:31 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 12:36:31 PM
Surr: DNOP	85.1	70-130	%Rec	1	4/1/2021 12:36:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 7:27:46 AM
Surr: BFB	99.9	70-130	%Rec	1	4/4/2021 7:27:46 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/4/2021 7:27:46 AM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 7:27:46 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 7:27:46 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/4/2021 7:27:46 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/4/2021 7:27:46 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	440	60	mg/Kg	20	4/5/2021 12:18:50 PM

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

Qualifiers:

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

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

Page 89 of 121

Date Reported: 4/8/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-24 0-1.0

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 4:15:00 PM

 Lab ID:
 2103D36-090
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 8.7 mg/Kg 1 4/1/2021 1:00:15 PM Motor Oil Range Organics (MRO) ND 44 mg/Kg 1 4/1/2021 1:00:15 PM Surr: DNOP 93.2 70-130 %Rec 1 4/1/2021 1:00:15 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/4/2021 7:51:19 AM 4.9 mg/Kg 1 Surr: BFB 99.2 70-130 %Rec 1 4/4/2021 7:51:19 AM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/4/2021 7:51:19 AM 1 Toluene ND 0.049 mg/Kg 1 4/4/2021 7:51:19 AM Ethylbenzene ND 0.049 mg/Kg 1 4/4/2021 7:51:19 AM Xylenes, Total ND 0.098 mg/Kg 1 4/4/2021 7:51:19 AM Surr: 4-Bromofluorobenzene 98.3 70-130 %Rec 1 4/4/2021 7:51:19 AM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 310 60 4/5/2021 12:31:15 PM ma/Ka 20

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

Qualifiers:

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

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

Page 90 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-25 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 4:20:00 PM

 Lab ID:
 2103D36-091
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	4/1/2021 1:24:08 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 1:24:08 PM
Surr: DNOP	93.0	70-130	%Rec	1	4/1/2021 1:24:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/4/2021 8:14:59 AM
Surr: BFB	101	70-130	%Rec	1	4/4/2021 8:14:59 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/4/2021 8:14:59 AM
Toluene	ND	0.048	mg/Kg	1	4/4/2021 8:14:59 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/4/2021 8:14:59 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/4/2021 8:14:59 AM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/4/2021 8:14:59 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	300	60	mg/Kg	20	4/5/2021 12:43:39 PM

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

Qualifiers:

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

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

Page 91 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-26 0-1.0'

Project:Stebbins Federal SWDCollection Date: 3/26/2021 4:25:00 PMLab ID:2103D36-092Matrix: SOILReceived Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/1/2021 1:48:02 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/1/2021 1:48:02 PM
Surr: DNOP	92.0	70-130	%Rec	1	4/1/2021 1:48:02 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/4/2021 8:38:38 AM
Surr: BFB	99.9	70-130	%Rec	1	4/4/2021 8:38:38 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/4/2021 8:38:38 AM
Toluene	ND	0.047	mg/Kg	1	4/4/2021 8:38:38 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/4/2021 8:38:38 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/4/2021 8:38:38 AM
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	4/4/2021 8:38:38 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	380	60	mg/Kg	20	4/5/2021 12:56:04 PM

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

Qualifiers:

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

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

Page 92 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-27 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 4:30:00 PM

**Lab ID:** 2103D36-093 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/1/2021 2:11:56 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/1/2021 2:11:56 PM
Surr: DNOP	81.1	70-130	%Rec	1	4/1/2021 2:11:56 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/4/2021 9:02:05 AM
Surr: BFB	102	70-130	%Rec	1	4/4/2021 9:02:05 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/4/2021 9:02:05 AM
Toluene	ND	0.047	mg/Kg	1	4/4/2021 9:02:05 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/4/2021 9:02:05 AM
Xylenes, Total	ND	0.093	mg/Kg	1	4/4/2021 9:02:05 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/4/2021 9:02:05 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	61	mg/Kg	20	4/5/2021 1:08:29 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
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 93 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-28 0-1.0'

Project:Stebbins Federal SWDCollection Date: 3/26/2021 4:35:00 PMLab ID:2103D36-094Matrix: SOILReceived Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>					
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/1/2021 2:35:49 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/1/2021 2:35:49 PM
Surr: DNOP	69.7	70-130	S	%Rec	1	4/1/2021 2:35:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/4/2021 9:25:47 AM
Surr: BFB	99.2	70-130		%Rec	1	4/4/2021 9:25:47 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/4/2021 9:25:47 AM
Toluene	ND	0.048		mg/Kg	1	4/4/2021 9:25:47 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/4/2021 9:25:47 AM
Xylenes, Total	ND	0.096		mg/Kg	1	4/4/2021 9:25:47 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	4/4/2021 9:25:47 AM
EPA METHOD 300.0: ANIONS						Analyst: <b>VP</b>
Chloride	260	59		mg/Kg	20	4/5/2021 1:45:42 PM

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

Qualifiers:

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

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

Page 94 of 121

Date Reported: 4/8/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-29 0-1.0'

**Project:** Stebbins Federal SWD Collection Date: 3/26/2021 4:40:00 PM

**Lab ID:** 2103D36-095 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	4/1/2021 2:59:42 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	4/1/2021 2:59:42 PM
Surr: DNOP	84.2	70-130	%Rec	1	4/1/2021 2:59:42 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	4/4/2021 9:49:31 AM
Surr: BFB	99.9	70-130	%Rec	1	4/4/2021 9:49:31 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/4/2021 9:49:31 AM
Toluene	ND	0.046	mg/Kg	1	4/4/2021 9:49:31 AM
Ethylbenzene	ND	0.046	mg/Kg	1	4/4/2021 9:49:31 AM
Xylenes, Total	ND	0.092	mg/Kg	1	4/4/2021 9:49:31 AM
Surr: 4-Bromofluorobenzene	99.9	70-130	%Rec	1	4/4/2021 9:49:31 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	130	60	mg/Kg	20	4/5/2021 1:58:07 PM

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

Qualifiers:

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

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

Page 95 of 121

**Collection Date:** 3/26/2021 4:45:00 PM

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: WS21-30 0-1.0'

**Project:** Stebbins Federal SWD 2103D36-096 Lab ID: Matrix: SOIL Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/1/2021 3:23:33 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/1/2021 3:23:33 PM
Surr: DNOP	87.3	70-130	%Rec	1	4/1/2021 3:23:33 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 10:13:15 AM
Surr: BFB	100	70-130	%Rec	1	4/4/2021 10:13:15 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/4/2021 10:13:15 AM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 10:13:15 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 10:13:15 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/4/2021 10:13:15 AM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/4/2021 10:13:15 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	120	60	mg/Kg	20	4/5/2021 2:10:32 PM

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

Qualifiers:

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

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

Page 96 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-31 0-1.0'

**Project:** Stebbins Federal SWD Collection Date: 3/26/2021 4:50:00 PM

**Lab ID:** 2103D36-097 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/1/2021 3:47:22 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/1/2021 3:47:22 PM
Surr: DNOP	71.7	70-130	%Rec	1	4/1/2021 3:47:22 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 10:37:00 AM
Surr: BFB	101	70-130	%Rec	1	4/4/2021 10:37:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 10:37:00 AM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 10:37:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 10:37:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/4/2021 10:37:00 AM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/4/2021 10:37:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/5/2021 2:22:56 PM

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

Qualifiers:

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

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

Page 97 of 121

**Collection Date:** 3/26/2021 4:55:00 PM

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: WS21-32 0-1.0'

**Project:** Stebbins Federal SWD 2103D36-098 Lab ID: Matrix: SOIL Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/1/2021 4:11:16 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/1/2021 4:11:16 PM
Surr: DNOP	84.1	70-130	%Rec	1	4/1/2021 4:11:16 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 11:00:48 AM
Surr: BFB	99.4	70-130	%Rec	1	4/4/2021 11:00:48 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 11:00:48 AM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 11:00:48 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 11:00:48 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/4/2021 11:00:48 AM
Surr: 4-Bromofluorobenzene	99.5	70-130	%Rec	1	4/4/2021 11:00:48 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/5/2021 2:35:21 PM

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

Qualifiers:

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

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

Page 98 of 121

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-33 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 5:00:00 PM

 Lab ID:
 2103D36-099
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/1/2021 5:06:13 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/1/2021 5:06:13 PM
Surr: DNOP	102	70-130	%Rec	1	4/1/2021 5:06:13 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 1:23:00 PM
Surr: BFB	100	70-130	%Rec	1	4/4/2021 1:23:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 1:23:00 PM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 1:23:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 1:23:00 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/4/2021 1:23:00 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/4/2021 1:23:00 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	4/5/2021 2:47:46 PM

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

Qualifiers:

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

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

Page 99 of 121

**Project:** 

# Analytical Report Lab Order 2103D36

**Collection Date:** 3/26/2021 5:05:00 PM

Date Reported: 4/8/2021

# Hall Environmental Analysis Laboratory, Inc.

Stebbins Federal SWD

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-34 0-1.0'

**Lab ID:** 2103D36-100 **Matrix:** SOIL **Received Date:** 3/30/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/3/2021 11:32:39 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/3/2021 11:32:39 PM
Surr: DNOP	93.2	70-130	%Rec	1	4/3/2021 11:32:39 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/4/2021 1:46:33 PM
Surr: BFB	103	70-130	%Rec	1	4/4/2021 1:46:33 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/4/2021 1:46:33 PM
Toluene	ND	0.049	mg/Kg	1	4/4/2021 1:46:33 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/4/2021 1:46:33 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/4/2021 1:46:33 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/4/2021 1:46:33 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	240	60	mg/Kg	20	4/5/2021 10:37:02 PM

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

Qualifiers:

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

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

Page 100 of 121

Date Reported: 4/8/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-35 0-1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/26/2021 5:10:00 PM

 Lab ID:
 2103D36-101
 Matrix: SOIL
 Received Date: 3/30/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 8.8 mg/Kg 1 4/2/2021 3:48:39 PM Motor Oil Range Organics (MRO) ND 44 mg/Kg 1 4/2/2021 3:48:39 PM Surr: DNOP 149 70-130 S %Rec 1 4/2/2021 3:48:39 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/4/2021 2:10:01 PM 4.9 mg/Kg 1 Surr: BFB 98.9 70-130 %Rec 1 4/4/2021 2:10:01 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.024 mg/Kg 4/4/2021 2:10:01 PM 1 Toluene ND 0.049 mg/Kg 1 4/4/2021 2:10:01 PM Ethylbenzene ND 0.049 mg/Kg 1 4/4/2021 2:10:01 PM Xylenes, Total ND 0.097 mg/Kg 1 4/4/2021 2:10:01 PM 4/4/2021 2:10:01 PM Surr: 4-Bromofluorobenzene 97.9 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 90 60 4/5/2021 10:49:26 PM ma/Ka 20

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

Qualifiers:

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

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

Page 101 of 121

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

Vertex Resource Group Ltd.

WO#: **2103D36** *08-Apr-21* 

**Project:** Stebbins Federal SWD Sample ID: MB-59181 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59181 RunNo: 76426 Prep Date: Analysis Date: 4/3/2021 SeqNo: 2706882 4/3/2021 Units: mq/Kq SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual Chloride ND 1.5 Sample ID: LCS-59181 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 59181 RunNo: 76426 Prep Date: 4/3/2021 Analysis Date: 4/3/2021 SeqNo: 2706883 Units: mg/Kg SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual Chloride 1.5 15.00 92.5 110 Sample ID: MB-59183 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59183 RunNo: 76426 Prep Date: 4/3/2021 Analysis Date: 4/3/2021 SeqNo: 2706912 Units: mq/Kq Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual Chloride ND 1.5 Sample ID: LCS-59183 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 59183 RunNo: 76426 Analysis Date: 4/3/2021 Prep Date: 4/3/2021 SeqNo: 2706913 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Sample ID: MB-59184	SampType: MBLK	TestCode: EPA Method 300.0: Anions

15.00

Client ID: **PBS** Batch ID: **59184** RunNo: **76426** 

1.5

14

Prep Date: 4/3/2021 Analysis Date: 4/4/2021 SeqNo: 2706944 Units: mg/Kg

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

n

92.4

90

110

Chloride ND 1.5

Sample ID: LCS-59184 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59184 RunNo: 76426

Prep Date: 4/3/2021 Analysis Date: 4/4/2021 SegNo: 2706945 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 94.7 90 110

Chloride 14 1.5 15.00 0 94.7 90 110

#### Qualifiers:

Chloride

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

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

Page 102 of 121

**Client:** 

## Hall Environmental Analysis Laboratory, Inc.

Vertex Resource Group Ltd.

WO#: 2103D36 08-Apr-21

Qual

**Project:** Stebbins Federal SWD Sample ID: MB-59176 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59176 RunNo: 76427 Prep Date: Analysis Date: 4/3/2021 SeqNo: 2706966 4/2/2021 Units: mq/Kq SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Chloride ND 1.5 Sample ID: LCS-59176 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59176 RunNo: 76427 Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2706967 Units: mg/Kg SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual Chloride 1.5 15.00 94.9 110

Sample ID: MB-59182 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59182 RunNo: 76427 Prep Date: 4/3/2021 Analysis Date: 4/3/2021 SeqNo: 2706996 Units: mq/Kq Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual Chloride ND 1.5

Sample ID: LCS-59182 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 59182 RunNo: 76427 Analysis Date: 4/3/2021 Prep Date: 4/3/2021 SeqNo: 2706997 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride 14 1.5 15.00 93.4 90

Sample ID: MB-59184 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59184 RunNo: 76427 Prep Date: 4/3/2021 Analysis Date: 4/4/2021 SeqNo: 2707060 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride ND 1.5

Sample ID: LCS-59184 TestCode: EPA Method 300.0: Anions SampType: LCS Client ID: LCSS Batch ID: 59184 RunNo: 76427 Prep Date: 4/3/2021 Analysis Date: 4/4/2021 SeqNo: 2707061 Units: mg/Kg %RPD **RPDLimit** Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit Qual 14 1.5

15.00

#### Qualifiers:

Chloride

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

Analyte detected in the associated Method Blank

110

- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 103 of 121

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client:	Vertex Resource Group Ltd.
Project:	Stebbins Federal SWD

Project: Stebbins	s Federal SWD								
Sample ID: <b>MB-59087</b>	SampType: I	MBLK	Tes	tCode: <b>EF</b>	Code: EPA Method 8015M/D: Diesel Range Organics				
Client ID: PBS	Batch ID:	59087	F	RunNo: <b>76389</b>					
Prep Date: 3/31/2021	Analysis Date:	4/1/2021	8	SeqNo: <b>27</b>	705139	Units: mg/K	g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		0							
Motor Oil Range Organics (MRO) Surr: DNOP	ND 5	0 10.00		77.2	70	130			
Juli. DNOF	1.1	10.00		11.2	70	130			
Sample ID: MB-59089	SampType: I	MBLK	Tes	tCode: <b>EF</b>	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID:	F	RunNo: <b>76</b>	3389					
Prep Date: 3/31/2021	Analysis Date:	4/1/2021	S	SeqNo: <b>27</b>	705140	Units: mg/K	.g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		0							
Motor Oil Range Organics (MRO)		0		04.0	70	400			
Surr: DNOP	9.4	10.00		94.2	70	130			
Sample ID: <b>MB-59095</b>	SampType: I	MBLK	Tes	tCode: <b>EF</b>	A Method	8015M/D: Die	esel Rango	e Organics	
Client ID: PBS	Batch ID: §	59095	F	RunNo: <b>76</b>	3389				
Prep Date: 3/31/2021	Analysis Date:	4/2/2021	SeqNo: 2705141 Units: mg/Kg						
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		0							
Motor Oil Range Organics (MRO)		0		24.2	70	420			0
Surr: DNOP	3.1	10.00		31.3	70	130			S
Sample ID: MB-59098	SampType: I	MBLK	Tes	tCode: <b>EF</b>	A Method	8015M/D: Die	esel Range	e Organics	
Client ID: PBS	Batch ID:	59098	F	RunNo: <b>76</b>	3389				
Prep Date: 3/31/2021	Analysis Date:	4/1/2021	S	SeqNo: <b>27</b>	705142	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 1	0							
Motor Oil Range Organics (MRO)		0							
Surr: DNOP	6.3	10.00		63.0	70	130			S
Sample ID: MB-59107	SampType: I	MBLK	Tes	tCode: <b>EF</b>	A Method	8015M/D: Die	sel Range	e Organics	
Client ID: PBS	Batch ID: §	59107	F	RunNo: <b>76</b>	6389				
Prep Date: 3/31/2021	Analysis Date:	4/2/2021	S	SeqNo: <b>27</b>	705143	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
		0							
Diesel Range Organics (DRO)	IND I	· ·							
Diesel Range Organics (DRO)  Motor Oil Range Organics (MRO)  Surr: DNOP		0 10.00		52.6	70	130			S

#### Qualifiers:

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

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

Page 104 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

1													
Sample ID: <b>MB-59115</b>	SampTyp	pe: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics				
Client ID: PBS	Batch I	D: <b>59</b>	115	RunNo: <b>76389</b>									
Prep Date: 3/31/2021	Analysis Dat	te: <b>4/</b>	1/2021	S	SeqNo: 2	705144	Units: mg/h	<b>(</b> g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	ND	10											
Motor Oil Range Organics (MRO)	ND	50											
Surr: DNOP	9.3		10.00		93.1	70	130						
Sample ID: LCS-59087	SampTyp	pe: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics				
Client ID: LCSS	Batch I	D: <b>59</b> 0	087	F	tunNo: <b>7</b>	6389							
Prep Date: 3/31/2021	Analysis Dat	te: <b>4/</b>	1/2021	S	SeqNo: 2	705145	Units: mg/k	<b>(</b> g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Diesel Range Organics (DRO)	50	10	50.00	0	100	68.9	141						
Surr: DNOP	3.9		5.000		78.3	70	130						
Sample ID: LCS-59089	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organic								e Organics				
	• • •							): <b>76389</b>					
Client ID: LCSS				F	tunNo: 7	6389			_				
•		D: <b>59</b> 0	089		tunNo: <b>7</b> 6		Units: mg/l	<b>(</b> g	-				
Client ID: LCSS	Batch I Analysis Dat	D: <b>59</b> 0	089 1/2021		SeqNo: 2		Units: mg/h	<b>(g</b> %RPD	RPDLimit	Qual			
Client ID: LCSS  Prep Date: 3/31/2021	Batch I Analysis Dat	D: <b>59</b> 0	089 1/2021	S	SeqNo: 2	705146	Ū	•	RPDLimit	Qual			
Client ID: LCSS Prep Date: 3/31/2021 Analyte	Batch I Analysis Dat Result	D: <b>59</b> ( te: <b>4/</b> PQL	089 1/2021 SPK value	SPK Ref Val	SeqNo: 2	<b>705146</b> LowLimit	HighLimit	•	RPDLimit	Qual			
Client ID: LCSS Prep Date: 3/31/2021 Analyte Diesel Range Organics (DRO)	Batch I Analysis Dat Result 45	D: <b>590</b> te: <b>4/</b> PQL 10	089 1/2021 SPK value 50.00 5.000	SPK Ref Val 0	%REC 90.8 94.8	<b>705146</b> LowLimit  68.9  70	HighLimit 141	%RPD		Qual			
Client ID: LCSS Prep Date: 3/31/2021 Analyte Diesel Range Organics (DRO) Surr: DNOP	Batch I Analysis Dat Result 45 4.7	D: <b>59</b> 0 tte: <b>4</b> / PQL 10	089 1/2021 SPK value 50.00 5.000	SPK Ref Val 0	%REC 90.8 94.8	705146 LowLimit 68.9 70 PA Method	HighLimit 141 130	%RPD		Qual			
Client ID: LCSS Prep Date: 3/31/2021 Analyte Diesel Range Organics (DRO) Surr: DNOP  Sample ID: LCS-59095	Batch I Analysis Dat Result 45 4.7 SampTyp	D: <b>59</b> 0 te: <b>4</b> / PQL 10 De: <b>LC</b>	089 1/2021 SPK value 50.00 5.000	SPK Ref Val 0	%REC 90.8 94.8	705146 LowLimit 68.9 70 PA Method 6389	HighLimit 141 130	%RPD		Qual			
Client ID: LCSS Prep Date: 3/31/2021 Analyte Diesel Range Organics (DRO) Surr: DNOP  Sample ID: LCS-59095 Client ID: LCSS	Batch I Analysis Dat Result 45 4.7  SampTyp Batch I Analysis Dat	D: <b>59</b> 0 te: <b>4</b> / PQL 10 De: <b>LC</b>	089 1/2021 SPK value 50.00 5.000 S 095 2/2021	SPK Ref Val 0	%REC 90.8 94.8 tCode: El	705146 LowLimit 68.9 70 PA Method 6389	HighLimit 141 130  8015M/D: Di	%RPD		Qual			
Client ID: LCSS Prep Date: 3/31/2021 Analyte Diesel Range Organics (DRO) Surr: DNOP  Sample ID: LCS-59095 Client ID: LCSS Prep Date: 3/31/2021	Batch I Analysis Dat Result 45 4.7  SampTyp Batch I Analysis Dat	D: 590 te: 4/ PQL 10 pe: LC D: 590 te: 4/	089 1/2021 SPK value 50.00 5.000 S 095 2/2021	SPK Ref Val 0 Tes	%REC 90.8 94.8 tCode: El tunNo: 76 seqNo: 2	705146  LowLimit 68.9 70  PA Method 6389 705147	HighLimit 141 130  8015M/D: Di  Units: mg/h	%RPD  esel Range	e Organics				
Client ID: LCSS Prep Date: 3/31/2021 Analyte Diesel Range Organics (DRO) Surr: DNOP  Sample ID: LCS-59095 Client ID: LCSS Prep Date: 3/31/2021 Analyte	Batch I Analysis Dat Result 45 4.7  SampTyp Batch I Analysis Dat Result	PQL 10  D: 590  D: 590  D: 590  D: 590  PQL	089 1/2021 SPK value 50.00 5.000 S 095 2/2021 SPK value	SPK Ref Val  0  Tes  R SPK Ref Val	%REC 90.8 94.8 tCode: El tunNo: 76 geqNo: 2 %REC	705146  LowLimit 68.9 70  PA Method 6389 705147  LowLimit	HighLimit 141 130  8015M/D: Di  Units: mg/k	%RPD  esel Range	e Organics				

#### Qualifiers:

Analyte

Surr: DNOP

Client ID: LCSS

Prep Date: 3/31/2021

Diesel Range Organics (DRO)

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

B Analyte detected in the associated Method Blank

RunNo: 76389

104

58.2

SeqNo: 2705148

LowLimit

68.9

70

Units: mg/Kg

141

130

%RPD

HighLimit

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

SPK value SPK Ref Val %REC

50.00

5.000

Page 105 of 121

**RPDLimit** 

Qual

S

Batch ID: 59098

PQL

10

Analysis Date: 4/1/2021

Result

52

2.9

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: LCS-59107	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch	n ID: <b>59</b> ′	107	RunNo: <b>76389</b>							
Prep Date: 3/31/2021	Analysis D	ate: <b>4/</b>	2/2021	S	SeqNo: 2	705149	<b>05149</b> Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	59	10	50.00	0	118	68.9	141				
Surr: DNOP	2.7		5.000		53.1	70	130			S	
Sample ID: 1 CS-50115	SampT	vne: I C	9	Tes	Code: El	PA Mothod	9015M/D: Di	osol Pang	o Organics		

Gampi D. ECG-33113 Gampi ypc. ECG				restoode. Li A Method 60 13M/b. Dieser Kange Organics								
Client ID: LCSS Batch ID: 59115				F	RunNo: <b>7</b> 0	6389						
Prep Date: 3/31/2021 Analysis Date: 4/1/2021				S	SeqNo: <b>2705150</b>			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	59	10	50.00	0	117	68.9	141					
Surr: DNOP	5.8		5.000		116	70	130					

Sample ID: 2103D36-001AMS	SampT	ype: <b>MS</b>	3	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: <b>BS21-05 1.0'</b>	Batch	ID: <b>59</b>	089	R	tunNo: <b>7</b> 0	6389				
Prep Date: 3/31/2021	Analysis Date: 4/1/2021 SeqNo: 2705153 Units: mg/Kg									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	8.7	43.71	0	111	15	184			
Surr: DNOP	5.3		4.371		120	70	130			

Sample ID: 2103D36-021AMS	SampTy	/pe: <b>MS</b>	3	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics		
Client ID: BS21-28 1.0'	Batch	ID: <b>59</b>	087	F	RunNo: 7	6389					
Prep Date: 3/31/2021	Analysis Da	Analysis Date: 4/1/2021			SeqNo: <b>2705154</b>			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	42	9.9	49.65	0	85.4	15	184				
Surr: DNOP	3.5		4.965		69.7	70	130			S	

Sample ID: 2103D36-042AM5	Samp1	ype: <b>M</b> \$	3	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: BS21-49 1.0'	Batcl	n ID: <b>59</b>	107	F	RunNo: 7	6389				
Prep Date: 3/31/2021	Analysis D	Date: 4/	2/2021	8	SeqNo: 2	705155	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	9.7	48.31	4.921	121	15	184			
Surr: DNOP	2.8		4.831		58.6	70	130			S

Sample ID: 2103D36-062AM	S SampType: MS	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: BS21-69 1.0'	Batch ID: 59115	RunNo: 76389	
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: <b>2705156</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual

#### Qualifiers:

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

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

Page 106 of 121

# Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: 2103D36-062AMS	SampT	ype: <b>MS</b>	3	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: BS21-69 1.0'	Batch	ID: <b>59</b>	115	F	lunNo: 7	6389				
Prep Date: 3/31/2021	Analysis D	ate: 4/	1/2021	S	SeqNo: 2	705156	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.9	49.65	0	111	15	184			
Surr: DNOP	5.6		4.965		113	70	130			
Sample ID: 2103D36-001AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics										

Campic ID. 2103D30-001AW	Oampi,	ypc. IVI	טנ	103	icouc. Li	A MELITOU	OU I SIVI/D. DIE	ssei ivalige	e Organics	
Client ID: BS21-05 1.0'	Batch	ID: <b>59</b>	089	F	RunNo: <b>7</b> 0	6389				
Prep Date: 3/31/2021	Analysis D	ate: <b>4/</b>	1/2021	8	SeqNo: 2	705159	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	9.6	48.17	0	116	15	184	13.3	23.9	
Surr: DNOP	5.9		4.817		123	70	130	0	0	

Sample ID: 2103D36-021AMSI	<b>D</b> SampT	ype: <b>M</b> \$	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: BS21-28 1.0'	Batch	ID: <b>59</b>	087	F	RunNo: 7	6389				
Prep Date: 3/31/2021	Analysis D	ate: 4/	1/2021	8	SeqNo: 2	705160	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.7	48.69	0	98.3	15	184	12.1	23.9	
Surr: DNOP	3.7		4.869		76.7	70	130	0	0	

Sample ID: 2103D36-042AM	SD SampT	уре: М\$	SD	Tes	tCode: El	PA Method	8015M/D: Die	esel Range	e Organics	
Client ID: BS21-49 1.0'	Batch	ID: <b>59</b>	107	F	RunNo: 7	6389				
Prep Date: 3/31/2021	Analysis D	ate: 4/	2/2021	8	SeqNo: 2	705161	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	9.6	47.85	4.921	106	15	184	13.6	23.9	
Surr: DNOP	2.6		4.785		53.9	70	130	0	0	S

Sample ID:	2103D36-062AMSD	SampTy	/pe: <b>MS</b>	SD	Test	Code: El	PA Method	8015M/D: Die	esel Range	organics	
Client ID:	BS21-69 1.0'	Batch	ID: <b>59</b>	115	R	tunNo: 70	6389				
Prep Date:	3/31/2021	Analysis Da	ate: <b>4/</b>	1/2021	S	eqNo: 2	705162	Units: mg/K	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	43	9.5	47.48	0	91.5	15	184	23.9	23.9	R

Sample ID: MB-59156	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 59156	RunNo: <b>76435</b>	
Prep Date: 4/2/2021	Analysis Date: 4/3/2021	SeqNo: <b>2707387</b>	Units: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual

#### Qualifiers:

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

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

Page 107 of 121

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** *08-Apr-21* 

Client: Vertex Resource Group Ltd.
Project: Stebbins Federal SWD

Sample ID: MB-59156	SampT	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	n ID: <b>59</b> 1	156	F	RunNo: <b>7</b>	6435					
Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b> 3	3/2021	8	SeqNo: 2	707387	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	9.5		10.00		94.8	70	130				
Sample ID: <b>MB-59161</b>	SampT	ype: <b>ME</b>	BLK	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics		
Client ID: PBS	Batch	n ID: <b>59</b> 1	161	F	RunNo: <b>7</b>	6435					
Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b> 3	3/2021	9	SeqNo: 2	707388	Units: %Red	С			

Prep Date: 4/2/2021	Analysis Date: 4/3/2	2021 S	SeqNo: <b>2707388</b>	Units: %Rec			
Analyte	Result PQL S	PK value SPK Ref Val	%REC LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.3	10.00	83.1 70	130			
Sample ID: LCS-59156	SampType: LCS	Tes	tCode: <b>EPA Method</b>	8015M/D: Dies	sel Range	e Organics	

'	•							·	Ū	
Client ID: LCSS	Batch	ID: <b>59</b>	156	F	RunNo: 7	6435				
Prep Date: 4/2/2021	Analysis D	ate: 4/	3/2021	8	SeqNo: 2	707389	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.9	68.9	141			
Surr: DNOP	4.3		5.000		85.4	70	130			

Sample ID: LCS-59161	SampType: LCS	5	TestC	ode: <b>EP</b>	A Method 8	8015M/D: Dies	el Range	Organics	
Client ID: LCSS	Batch ID: 591	61	Ru	nNo: <b>76</b> 4	435				
Prep Date: 4/2/2021	Analysis Date: 4/3	/2021	Se	qNo: <b>27</b> 0	07390	Units: %Rec			
Analyte	Result PQL	SPK value S	PK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0	5.000		79.5	70	130	•		

Sample ID: MB-59133	SampType: <b>MBLK</b>			TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	ient ID: PBS Batch ID: 59133					RunNo: <b>76411</b>						
Prep Date: 4/1/2021	Analysis D	ate: <b>4/</b>	2/2021	SeqNo: <b>2707609</b>			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Diesel Range Organics (DRO)	ND	10										
Motor Oil Range Organics (MRO)	ND	50										
Surr: DNOP	9.6		10.00		95.8	70	130					

Sample ID: LCS-59133	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics	
Client ID: LCSS	Batch ID: 59133	RunNo: <b>76411</b>		
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: <b>2707610</b>	Units: mg/Kg	
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual	

#### Qualifiers:

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

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

Page 108 of 121

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D36

08-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: LCS-59133 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 59133 RunNo: 76411 Prep Date: 4/1/2021 Analysis Date: 4/2/2021 SeqNo: 2707610 Units: mg/Kg PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Diesel Range Organics (DRO) 10 0 53 50.00 106 68.9 141

Surr: DNOP 4.7 5.000 94.6 130

Sample ID: 2103D36-101AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: WS21-35 0-1.0' Batch ID: 59133 RunNo: 76411

Prep Date: 4/1/2021 Analysis Date: 4/2/2021 SeqNo: 2707611 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 49 45.54 0 108 15 184 Surr: DNOP 70 5.3 4.554 117 130

Sample ID: 2103D36-101AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: WS21-35 0-1.0' Batch ID: 59133 RunNo: 76411

Prep Date: 4/1/2021 Analysis Date: 4/2/2021 SeqNo: 2707612 Units: mg/Kg

PQL %RPD **RPDLimit** Result SPK value SPK Ref Val %REC HighLimit Qual Analyte LowLimit Diesel Range Organics (DRO) 41 9.5 47.71 0 86.0 15 184 17.6 23.9 Surr: DNOP 4.771 91.6 70 130 0 4.4 0

#### Qualifiers:

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

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

Page 109 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.
Project: Stebbins Federal SWD

Sample ID: mb-59075 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705082 Units: mq/Kq

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 980 1000 98.0 70 130

Sample ID: Ics-59075 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705083 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 O 98.6 78.6 131 Surr: BFB 1100 1000 108 70 130

Sample ID: 2103d36-021ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-28 1.0' Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2705085 Units: mg/Kg

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual Gasoline Range Organics (GRO) 24 4.9 24.49 O 96.1 61.3 114 Surr: BFB 1100 979.4 108 70 130

Sample ID: 2103d36-021amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-28 1.0' Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2705086 Units: mg/Kg

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Gasoline Range Organics (GRO) 25 4.9 0 103 61.3 6.50 20 24 41 114 Surr: BFB 1100 976.6 110 70 130 0

Sample ID: Ics-59072 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59072 RunNo: 76396

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705510 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 27 5.0 0 78.6 25.00 108 131 Surr: BFB 1100 1000 106 70 130

Sample ID: mb-59072 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59072 RunNo: 76396

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705511 Units: mg/Kg

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

#### Qualifiers:

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

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

Page 110 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D36

08-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59072 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59072 RunNo: 76396

Analysis Date: 4/1/2021 SeqNo: 2705511 Prep Date: 3/30/2021 Units: mq/Kq

SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 930 1000 93.0 70 130

Sample ID: 2103D36-001ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-05 1.0' Batch ID: 59072 RunNo: 76396

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2705539 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 4.9 24.41 O 100 61.3 114 Surr: BFB

108

70

130

Sample ID: 2103D36-001amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

976.6

Client ID: BS21-05 1.0' Batch ID: 59072 RunNo: 76396

1100

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2705540 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 24 4.8 24.06 O 98.0 61.3 114 3.39 20 Surr: BFB 0 990 962.5 102 70 130 0

Sample ID: mb-59076 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59076 RunNo: 76428

Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707085 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) ND 5.0 130

Surr: BFB 990 1000 99.3 70

Sample ID: Ics-59076 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59076 RunNo: 76428

Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707086 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 5.0 0 78.6 25.00 93.2 131 Surr: BFB 1100 1000 111 70 130

TestCode: EPA Method 8015D: Gasoline Range Sample ID: 2103d36-041ams SampType: MS

Client ID: BS21-48 1.0' Batch ID: 59076 RunNo: 76428

Prep Date: Units: mg/Kg 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707088

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

#### Qualifiers:

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

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

Page 111 of 121

### Hall Environmental Analysis Laboratory, Inc.

1100

#: 2103D36 08-Apr-21

WO#:

0

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: 2103d36-041ams	SampT	ype: <b>MS</b>	3	Tes	stCode: EPA Method 8015D: Gasoline Range						
Client ID: BS21-48 1.0'	Batch	n ID: <b>59</b> 0	076	F	RunNo: 7	6428					
Prep Date: 3/30/2021	Analysis D	oate: <b>4/</b>	3/2021	SeqNo: 2707088 Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	25	4.9	24.53	0	101	61.3	114				
Surr: BFB	1100		981.4		111	70	130				

Sample ID: 2103d36-041amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range Client ID: BS21-48 1.0 Batch ID: 59076 RunNo: 76428 Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707089 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 4.9 24.44 O 102 61.3 114 0.592 20

112

70

130

977.5

Sample ID: mb-59086 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: PBS Batch ID: 59086 RunNo: 76428 Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707109 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 1000 1000 101 70 130

Sample ID: Ics-59086 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 59086 RunNo: 76428 Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707110 Units: mg/Kg %REC %RPD Result PQL SPK value SPK Ref Val LowLimit HighLimit **RPDLimit** Qual Gasoline Range Organics (GRO) 25 99.8 5.0 25.00 78.6 131 Surr: BFB 1100 1000 110 70 130

Sample ID: 2103d36-081ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range Client ID: WS21-15 0-1.0' Batch ID: 59086 RunNo: 76428 Units: mg/Kg Prep Date: 3/30/2021 Analysis Date: 4/4/2021 SeqNo: 2707112 Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 0 4.6 23.19 97.8 61.3 114 Surr: BFB 1000 927.6 110 70 130

Sample ID: 2103d36-081amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: WS21-15 0-1.0' Batch ID: 59086 RunNo: 76428

Prep Date: 3/30/2021 Analysis Date: 4/4/2021 SeqNo: 2707113 Units: mg/Kg

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

#### Qualifiers:

Surr: BFB

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

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

Page 112 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: 2103d36-081amsd	SampT	ype: MS	SD .	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: WS21-15 0-1.0'	Batch	1D: <b>59</b> 0	086	F	RunNo: 7	6428				
Prep Date: 3/30/2021	Analysis D	ate: 4/	4/2021	9	SeqNo: 2	707113	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.49	0	97.2	61.3	114	4.90	20	
Surr: BFB	1100		979.4		109	70	130	0	0	
Sample ID: <b>mb-59093</b>	SampT	SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range								

Client ID: PBS Batch ID: 59093 RunNo: 76428 Prep Date: 3/31/2021 Analysis Date: 4/4/2021 SeqNo: 2707133 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit **RPDLimit** Analyte Result PQL HighLimit %RPD Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 1000 1000 99.6 70 130

Sample ID: Ics-59093 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 59093 RunNo: 76428 Prep Date: 3/31/2021 Analysis Date: 4/4/2021 SeqNo: 2707134 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte LowLimit Qual Gasoline Range Organics (GRO) 24 5.0 25.00 0 97.6 78.6 131 Surr: BFB 1100 1000 110 70 130

TestCode: EPA Method 8015D: Gasoline Range Sample ID: 2103d36-101ams SampType: MS Client ID: WS21-35 0-1.0' Batch ID: 59093 RunNo: 76428 Prep Date: 3/31/2021 Analysis Date: 4/4/2021 SeqNo: 2707136 Units: mg/Kg Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** PQL LowLimit Qual Gasoline Range Organics (GRO) 22 4.9 90.3 61.3 24.65 114 Surr: BFB 1100 986.2 108 70 130

Sample ID: 2103d36-101amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range Client ID: WS21-35 0-1.0' Batch ID: 59093 RunNo: 76428 Prep Date: 3/31/2021 Analysis Date: 4/4/2021 SeqNo: 2707137 Units: mg/Kg Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 0 61.3 4.9 24.41 93.3 114 2.24 20 Surr: BFB 1100 976.6 109 70 130 0 0

#### Qualifiers:

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

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

Page 113 of 121

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D36

08-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59075 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021 Analysis Date: 4/1/2021 SeqNo: 2705120 Units: mg/Kg

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

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

Surr: 4-Bromofluorobenzene 0.99 1.000 98.7 70 130

Sample ID: LCS-59075 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021	Analysis Date: 4/1/2021			SeqNo: <b>2705121</b> Units: <b>mg/</b>				/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.95	0.025	1.000	0	95.2	80	120				
Toluene	0.97	0.050	1.000	0	96.8	80	120				
Ethylbenzene	0.96	0.050	1.000	0	96.0	80	120				
Xylenes, Total	2.9	0.10	3.000	0	96.2	80	120				
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130				

Sample ID: 2103d36-022ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: BS21-29 1.0' Batch ID: 59075 RunNo: 76388

Prep Date: 3/30/2021	Analysis [	Analysis Date: 4/2/2021			SeqNo: 2705124 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.024	0.9506	0	94.2	76.3	120			
Toluene	0.91	0.048	0.9506	0	95.6	78.5	120			
Ethylbenzene	0.89	0.048	0.9506	0	94.0	78.1	124			
Xylenes, Total	2.7	0.095	2.852	0	93.6	79.3	125			
Surr: 4-Bromofluorobenzene	0.95		0.9506		100	70	130			

Sample ID: 2103d36-022amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles

Batch ID: 59075 Client ID: BS21-29 1.0' RunNo: 76388

Prep Date: 3/30/2021	Analysis D	Analysis Date: 4/2/2021			SeqNo: 2705125 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9416	0	94.8	76.3	120	0.332	20	
Toluene	0.91	0.047	0.9416	0	96.2	78.5	120	0.393	20	
Ethylbenzene	0.90	0.047	0.9416	0	95.9	78.1	124	1.10	20	
Xylenes, Total	2.7	0.094	2.825	0	95.3	79.3	125	0.928	20	
Surr: 4-Bromofluorobenzene	0.95		0.9416		100	70	130	0	0	

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 114 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59072 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 59072 RunNo: 76412

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2706779 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Benzene ND 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 99.6 70 130

Sample ID: Ics-59072 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 59072 RunNo: 76412

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2706780 Units: mg/Kg

Prep Date: 3/30/2021	Analysis L	Date: <b>4/</b>	2/2021	Seqino: 2706780 Units: mg/r				.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.9	80	120			
Toluene	0.96	0.050	1.000	0	95.7	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: 2103d36-002ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: **BS21-08 1.0'** Batch ID: **59072** RunNo: **76412** 

Prep Date: 3/30/2021	Analysis Date: 4/3/2021			S	SeqNo: 2706783 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	0.9862	0	90.0	76.3	120			
Toluene	0.93	0.049	0.9862	0	94.7	78.5	120			
Ethylbenzene	0.93	0.049	0.9862	0	94.6	78.1	124			
Xylenes, Total	2.8	0.099	2.959	0	94.1	79.3	125			
Surr: 4-Bromofluorobenzene	0.99		0.9862		101	70	130			

Sample ID: 2103d36-002amsd SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: BS21-08 1.0' Batch ID: 59072 RunNo: 76412

Prep Date: 3/30/2021	Analysis D	Analysis Date: 4/3/2021			SeqNo: 2706784 Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.88	0.025	1.000	0	88.0	80	120	0.846	20	
Toluene	0.93	0.050	1.000	0	92.6	80	120	0.756	20	
Ethylbenzene	0.93	0.050	1.000	0	92.9	80	120	0.423	20	
Xylenes, Total	2.8	0.10	3.000	0	92.8	80	120	0.0313	20	
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130	0	0	

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 115 of 121

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D36

08-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59076 SampType: MBLK TestCode: EPA Method 8021B: Volatiles Client ID: PBS Batch ID: 59076 RunNo: 76428

Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707167 Units: mq/Kq

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

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

LCSS

Surr: 4-Bromofluorobenzene 1.0 1.000 101 70 130

Sample ID: LCS-59076 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Batch ID: 59076 Client ID:

Analysis Date: 4/3/2021 SeqNo: 2707168 Prep Date: 3/30/2021 Units: mg/Kg PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 1.000 0.91 0.025 0 90.6 80 120 Benzene Toluene 0.92 0.050 1.000 0 92.2 80 120 0 80 Ethylbenzene 0.91 0.050 1.000 91.1 120 0 90.6 Xylenes, Total 2.7 0.10 3.000 80 120 Surr: 4-Bromofluorobenzene 1.0 1.000 101 70 130

RunNo: 76428

SampType: MS TestCode: EPA Method 8021B: Volatiles Sample ID: 2103d36-042ams

Client ID: BS21-49 1.0' Batch ID: 59076 RunNo: 76428

Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707171 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 93.1 0.92 0.025 0.9872 76.3 120 Benzene O Toluene 0.93 0.049 0.9872 0 94.4 78.5 120 0.9872 0 78.1 Ethylbenzene 0.93 0.049 94 2 124 Xylenes, Total 2.8 0.099 2.962 0 94.4 79.3 125 Surr: 4-Bromofluorobenzene 0.9872 105 1.0 70 130

TestCode: EPA Method 8021B: Volatiles Sample ID: 2103d36-042amsd SampType: MSD

BS21-49 1.0' Batch ID: 59076 Client ID: RunNo: 76428

Prep Date: 3/30/2021	Analysis Date: 4/3/2021			S	SeqNo: 2	707172	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.024	0.9699	0	91.7	80	120	3.22	20	
Toluene	0.90	0.048	0.9699	0	92.9	80	120	3.31	20	
Ethylbenzene	0.90	0.048	0.9699	0	92.5	80	120	3.55	20	
Xylenes, Total	2.7	0.097	2.910	0	92.5	80	120	3.76	20	
Surr: 4-Bromofluorobenzene	1.0		0.9699		104	70	130	0	0	

#### Qualifiers:

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

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

Page 116 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D36

08-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59086 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 59086 RunNo: 76428

Prep Date: 3/30/2021 Analysis Date: 4/3/2021 SeqNo: 2707198 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit **RPDLimit** Analyte Result %RPD Qual Benzene ND 0.025

Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 1.0 1.000 102 70 130

Sample ID: LCS-59086 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 59086 RunNo: 76428

Prep Date: 3/30/2021	Analysis Date: 4/3/2021			\$	SeqNo: 2	707201	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	80	120			
Toluene	0.94	0.050	1.000	0	94.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: 2103d36-082ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: WS21-16 0-1.0' Batch ID: 59086 RunNo: 76428

Prep Date: 3/30/2021	Analysis Date: 4/4/2021			SeqNo: <b>2707205</b>			Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9515	0	91.0	76.3	120			
Toluene	0.89	0.048	0.9515	0	93.3	78.5	120			
Ethylbenzene	0.88	0.048	0.9515	0	93.0	78.1	124			
Xylenes, Total	2.6	0.095	2.854	0	92.1	79.3	125			
Surr: 4-Bromofluorobenzene	0.99		0.9515		104	70	130			

TestCode: EPA Method 8021B: Volatiles Sample ID: 2103d36-082amsd SampType: MSD

Client ID: WS21-16 0-1.0' Batch ID: 59086 RunNo: 76428

Prep Date: 3/30/2021	Analysis Date: 4/4/2021			SeqNo: <b>2707206</b>			Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9794	0	93.0	80	120	5.00	20	
Toluene	0.92	0.049	0.9794	0	94.1	80	120	3.66	20	
Ethylbenzene	0.92	0.049	0.9794	0	94.0	80	120	4.04	20	
Xylenes, Total	2.8	0.098	2.938	0	94.2	80	120	5.20	20	
Surr: 4-Bromofluorobenzene	1.0		0.9794		103	70	130	0	0	

#### Qualifiers:

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

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

Page 117 of 121

#### Hall Environmental Analysis Laboratory, Inc.

1.0

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59093 SampType: MBLK TestCode: EPA Method 8021B: Volatiles
Client ID: PBS Batch ID: 59093 RunNo: 76428

Prep Date: 3/31/2021 Analysis Date: 4/4/2021 SeqNo: 2707225 Units: mg/Kg

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

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 0.99 1.000 99.4 70 130

1.000

Sample ID: LCS-59093	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batcl	n ID: <b>59</b> 0	093	F	RunNo: 7	6428				
Prep Date: 3/31/2021	Analysis D	Date: 4/	4/2021	5	SeqNo: 2	707226	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.4	80	120			
Toluene	0.94	0.050	1.000	0	93.8	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.6	80	120			

103

70

130

#### Qualifiers:

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

Surr: 4-Bromofluorobenzene

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

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

Page 118 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** *08-Apr-21* 

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: Ics-59077	SampT	ype: <b>LC</b>	S4	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: BatchQC	Batcl	n ID: <b>59</b> 0	)77	F	RunNo: <b>7</b>	6442				
Prep Date: 3/30/2021	Analysis D	oate: <b>4/</b> 2	2/2021	8	SeqNo: 2	707673	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	105	80	120			
Toluene	0.99	0.050	1.000	0	99.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.50		0.5000		100	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		92.2	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		107	70	130			
Surr: Toluene-d8	0.49		0.5000		98.8	70	130			

Sample ID: <b>mb-59077</b>	Samp1	уре: МЕ	BLK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batcl	h ID: <b>59</b> 0	077	F	RunNo: 7	6442				
Prep Date: 3/30/2021	Analysis D	Date: 4/	2/2021	9	SeqNo: 2	707674	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.53		0.5000		106	70	130			
Surr: 4-Bromofluorobenzene	0.45		0.5000		89.9	70	130			
Surr: Dibromofluoromethane	0.57		0.5000		114	70	130			
Surr: Toluene-d8	0.49		0.5000		98.4	70	130			

Sample ID: 2103d36-062ams	SampT	ype: <b>MS</b>	64	Tes	tCode: EF	PA Method	8260B: Volat	iles Short	List	•
Client ID: BS21-69 1.0'	Batch	n ID: <b>59</b> 0	077	F	tunNo: 70	6442				
Prep Date: 3/30/2021	Analysis D	ate: <b>4/</b> 2	2/2021	S	SeqNo: 27	707677	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9681	0	113	71.1	115			
Toluene	1.0	0.048	0.9681	0	103	79.6	132			
Ethylbenzene	1.0	0.048	0.9681	0	106	83.8	134			
Xylenes, Total	3.0	0.097	2.904	0	105	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.49		0.4840		100	70	130			
Surr: 4-Bromofluorobenzene	0.43		0.4840		87.9	70	130			
Surr: Dibromofluoromethane	0.53		0.4840		109	70	130			
Surr: Toluene-d8	0.47		0.4840		97.7	70	130			

#### Qualifiers:

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

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

Page 119 of 121

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D36** 

08-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: 2103d36-062amsd Client ID: BS21-69 1.0'	Batcl	ype: <b>MS</b>	077	F	RunNo: <b>7</b> 0	6442	8260B: Volat		List	
Prep Date: 3/30/2021	Analysis D	Date: <b>4/</b>	2/2021	٤	SeqNo: 2	707678	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9662	0	118	71.1	115	4.71	20	S
Toluene	1.1	0.048	0.9662	0	109	79.6	132	5.55	20	
Ethylbenzene	1.1	0.048	0.9662	0	110	83.8	134	3.52	20	
Xylenes, Total	3.3	0.097	2.899	0	113	82.4	132	7.25	20	
Surr: 1,2-Dichloroethane-d4	0.48		0.4831		98.6	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.45		0.4831		92.1	70	130	0	0	
Surr: Dibromofluoromethane	0.55		0.4831		113	70	130	0	0	
Surr: Toluene-d8	0.49		0.4831		102	70	130	0	0	

#### Qualifiers:

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

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

Page 120 of 121

#### Hall Environmental Analysis Laboratory, Inc.

530

WO#: **2103D36** *08-Apr-21* 

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Surr: BFB

 Sample ID:
 Ics-59077
 SampType:
 LCS
 TestCode:
 EPA Method 8015D Mod:
 Gasoline Range

 Client ID:
 LCSS
 Batch ID:
 59077
 RunNo:
 76442

 Prep Date:
 3/30/2021
 Analysis Date:
 4/2/2021
 SeqNo:
 2707721
 Units:
 mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual 25.00 Gasoline Range Organics (GRO) 24 5.0 Λ 95.2 70 130

106

70

130

Sample ID: mb-59077 SampType: MBLK TestCode: EPA Method 8015D Mod: Gasoline Range

500.0

Client ID: PBS Batch ID: 59077 RunNo: 76442

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2707722 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO) ND 5.0

 Surr: BFB
 520
 500.0
 104
 70
 130

 Sample ID: 2103d36-061ams
 SampType: MS
 TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: BS21-68 1.0' Batch ID: 59077 RunNo: 76442

Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2707724 Units: mg/Kg

Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte PQL LowLimit Qual Gasoline Range Organics (GRO) 23 5.0 24.85 0 94.2 49.2 122 Surr: BFB 70 510 497.0 104 130

Sample ID: 2103d36-061amsd SampType: MSD TestCode: EPA Method 8015D Mod: Gasoline Range

Client ID: BS21-68 1.0' Batch ID: 59077 RunNo: 76442

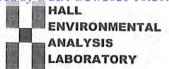
Prep Date: 3/30/2021 Analysis Date: 4/2/2021 SeqNo: 2707725 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual 122 Gasoline Range Organics (GRO) 26 104 49.2 4.9 24.70 9.34 20 Surr: BFB 540 494.1 109 70 130 0 0

#### Qualifiers:

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

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

Page 121 of 121



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

# Sample Log-In Check List

Client Name:	Vertex Res	source Group	Work	Order Num	ber: 210	3D36			RcptNo:	1
Received By:	Juan Roja	as	3/30/20	21 7:35:00	AM		Huan	3.9		
Completed By:	Desiree D	ominguez	3/30/20	21 8:13:25	AM		Juan			
Reviewed By:		30/21					112	3		
Chain of Cust	tody									
1. Is Chain of Cu	stody comp	lete?			Yes	V	No		Not Present	
2. How was the	sample deliv	rered?			Cou	rier				
Log In										
3. Was an attem	pt made to	cool the sampl	es?		Yes	<b>V</b>	No		NA 🗆	
4. Were all samp	les received	at a temperat	ure of >0° C	to 6.0°C	Yes	<b>V</b>	No		NA 🗆	
5. Sample(s) in p	roper conta	iner(s)?			Yes	~	No			
6. Sufficient samp	ole volume f	or indicated te	st(s)?		Yes	V	No			
7. Are samples (e	except VOA	and ONG) pro	perly preserve	ed?	Yes	<b>V</b>	No			
8. Was preservat	ive added to	bottles?			Yes		No	<b>V</b>	NA 🗆	
9. Received at lea	ast 1 vial wit	h headspace <	1/4" for AQ V	/OA?	Yes		No		NA 🗹	->
10. Were any sam	ple containe	ers received br	oken?		Yes		No	<b>V</b>	# of preserved	3/30/21
11. Does paperwork (Note discrepa					Yes	<b>V</b>	No		bottles checked for pH: (<2 or	>12 unless noted)
12. Are matrices co					Yes	<b>V</b>	No		Adjusted?	
13. Is it clear what					Yes	<b>V</b>	No			
14. Were all holdin (If no, notify cu					Yes	<b>V</b>	No		Checked by:	1
Special Handli	ng (if app	olicable)								
15. Was client not			ith this order?	>	Yes		No		NA 🗹	
Person N	Notified:			Date		_		_		
By Whor	n:			Via:	☐ eM	ail 🔲	Phone [	Fax	☐ In Person	
Regardir	ng:							1 2 22		
Client In	structions:									
16. Additional ren	narks:									
17. Cooler Inform	nation									
Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal D	ate	Signed	Rv		
1	1.2	Good	Joan Intact	CCALINO	Jeai D	ale	Signed	υу		
2	0.5	Good								
3	0.9	Good				-				

	Chain-or-C	Chain-of-Custody Record	ord	Turn-Around Time:		5 Day			H	HALL	Z	TRON	ENVIRONMENTAL
Client: \	Vertex			M Standard		,		I	A	AL	SIS	LABO	ANALYSIS LABORATOR
				Project Name:	(i				×	w.halle	nviron	www.hallenvironmental.com	
Mailing	Mailing Address:			Stubb	sins tede	Stebbins Adenal SWD	4	4901 Hawkins NE	wkins	NE .	Albuqu	Albuquerque, NM 87109	37109
				Project #:	C 02-2			Tel. 505-345-3975	5-345-	3975	Fax	Fax 505-345-4107	07
Phone #:	#:			0 110	18000					Ā	Analysis	Rednest	
email (	email or Fax#:		H	Project Manager:	ager:		1.4	10			†O <sup>‡</sup>	(ţu	
QA/QC Packa	QA/QC Package:	☐ Level 4 (Full Validation)	lidation)	Monica	ca Peppin	<u>ر</u> د	208) s'	O / MR	SMISC		PO₄, S	əsdA\tr	
Accrec	٠,	☐ Az Compliance		Sampler: N	MITP						10 <sup>5</sup> '	ıəse	
□ NELAC		ier			E-Yes	oN □	1.11			S	V "		
□ EDI	□ EDD (Type)			# of Coolers:			38.			etale			
				Cooler Temp(including cF):	O(including CF):	Kenay (°C)	LM	-		M 8			
Date	Time Matrix	Sample Name		Container Type and #	Preservative Type	HEAL NO. 2103 D36	X318	9 1808	N) BO3	АЯЭЯ	() F, I 8260 (/	8) 0728 O IstoT	
3-92-8	3-26-21 0800 501	_	1.0	20 h	100	100-	>				1		
	1 5080	13521-08	1,0		_	C00-					1		
	0860	8521-10	(,0,			200-							1
	5/80	11 - 1258	1.0'			h00-							
	0280	13521 -12	1.0			S00 -							
	0825	13521-13	1.0.1			-000							
	0830	B521-14	1.0'			+00-							
	5480	15521-15	1.0'			- 008							
	0.580	13521-16	1.0.			600-							
	0060	12521-17	1.0'			0/0-				Ø			
	3060	B1-1258	1.0 '			-014							
>	0160	13581-19	1.0.			0	_		4				
Date:	Time: Relinqu	Relinquished by:	7	Received by	Via:	Date Time	Remai	ks:	069	101-	1.2		
3/24/21	300	<u> </u>	1	P		7	WSZI- not BSZI-	المالية	4 3	-125		0.0-0-0	5.
Date:	-	Relinquished by:		Received by:	Via:	Jate	कें ट्	S -	Monica	2	= 10	3/30/21	
17/1	1911			1	J. Charles	2/2/by 1/2/		2000	1		0000		

O	hain-	of-C	Chain-of-Custody Record	cord	Turn-Around Time:	1	5 Oay			100	2		Ü		Č			È		eivei
Client:	Vertex	ex			区 Standard			<u> </u>		1			Z Z	S		ANALYSIS LABORATORY	RA		Z K	i by C
					Project Name						<b>&gt;</b>	w.ha	www.hallenvironmental.com	ronm	ental	com				JUD:
Mailing	Mailing Address:				Stubbins	ins ted	tederal SWD		490	1 Ha	4901 Hawkins NE	Ä	Albi	enbr	rque,	Albuquerque, NM 87109	109			0/24
						7			Tel	. 505	Tel. 505-345-3975	3975	Ш	ax 5	05-3	Fax 505-345-4107				1/202
Phone #:	#:				0 12,0	1 2000						1	Analysis Request	sis R	edne	st				1 10
email o	email or Fax#:				Project Manager:	iger:		(1	(0)		-		<sup>†</sup> O5		(1	(111		L		:20
QA/QC Packa	QA/QC Package: ☐ Standard		☐ Level 4 (Full Validation)	/alidation)	Movie	a Peppin	U.O.	208) s'	AM / O	ЬCB₁౭	SMISC		PO4, 5		- 1 7/1	asaV/II				:30 AM
Accreditation:	tation:	□ Az C	☐ Az Compliance		Sampler: (V	MP		LMB	אם א				10 <sup>5</sup> '			Iasa				
□ NELAC	AC	□ Other	16			→ Yes	□ No	L /	05				٤, ١			(1-1)				
□ EDC	EDD (Type)_				# of Coolers:	3		BE	49)				ON			1111				
					Cooler Temp(including CF):	(including CF): 5 c	c Kenny Ky (°C)	IM	ası	-			31, 1			OIIIO				
Date	Time	Matrix	Sample Name	4)	Container Type and #	Preservative Type	HEAL NO. 2103D36	(X3T8	08:H9T	P 1808	N) BOB PAHs b	AADA	G) E, E	v) 09Z8	3) 0728	O latoT				
12-92-8	3260 12925	50:1	18521-20	1.0	405	100	S10-	7	1				1							
-	0630	-	12-1258	1.0		_	h10-	-	-				-			Z.				
	0935		BS21-22	1.0			510-													
	0460		B521-23	1,0			- 016													
	3460		13521-24	1.0			£10-													
7	2560		13521-25	(, 0 '			-018													
	0955		13521-26	1,0			-019													
	1000		12-1258	1.0.			020-		_											
	1005		BS21-28	1.0			- 021													
-	0101		1321-29	101			- 022							П						
,	1015		BS21-30	1.0'			220-													
>	1020		8521-31	1.0%			h20-	_	_				_					=		
Date:	Time:	Relinquished by	<		Received by:	Via:	Date Time	Ren	Remarks:	3.5			1,2	0	11	2				P
34/2	1300	1	\ \ \ \	1	X		7						S.	3-1	070	با				age
Date:	Time:	Relinquished by:	hed by:		Received by	Via:	Date Time	(					Ö	0-1	110	-				331
7	1910	7			1	1 rounier	3/30/21 7.3 1/1 lated or	2	ato	Bo	L	ij								oj s
	If necessary, samples		submitted to Hall Environmental may be subcontracted to other accredited laboratories.	intal may be sub	contracted to other	sccredited laboratorie	es. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	possik	ility. A	ny sub-	contrac	ed data	will be	clearly	notatec	on the an	alytical	eport.		23

	hain-	of-C	Chain-of-Custody Record	cord	Turn-Around T	ime:	5 Day			<b>HA</b>	1	N	RON	HALL ENVIRONMENTAL	eived
Client:	Vertex	rex			☑ Standard	□ Ru	,			AN	ALY	ANALYSIS	LABO	ABORATOR	by C
					Project Name:		-			W	v.haller	ivironme	ent		OCD:
Mailing	Mailing Address:				STOOL	ns tede	s tederal Jul	4	4901 Hawkins NE	wkins	1	Ibuquer	Albuquerque, NM 87109	87109	6/24
					Project #:	0			Tel. 505-345-3975	-345-3	975	Fax 50	505-345-4107	107	//202
Phone #:	#:				2 7	1 2000					Ana	Analysis Re	Rednest		1 10
email or Fax#:	r Fax#:				Project Manager.	ager:				• 1	709		(tu		0:20
QA/QC Packa	QA/QC Package:		☐ Level 4 (Full Validation)	/alidation)	Monica	a Pappin	0,0	S08) s AM \ C		SWIS	S 704		əsdA\t		:36 AN
Accreditation:		□ Az Cc	☐ Az Compliance		Sampler: MTP	04			280		0	17	uəse		1
□ NELAC		□ Other			On Ice:	₽.Ves	□ No		)8/s				-		
□ EDC	/pe/				# of Coolers:				əpic		_	(			
					Cooler Temp(including CF):	(including CF):	to Remarks (°C)	200	oitea			AOV			
Date	Time	Matrix	Sample Name	0	Container Type and #	Preservative Type	HEAL NO. 2103536	X3T8 08:H9T	□ 1808	A) 803 1 2HA9	РСРА ОВГ,	() 0928	8) 0728 C lstoT		
3-26-21	3-26-21 1130	501	B221 - 32	1,0	20 17	1,00	520-	7			7				
-	1135		B521-33	1,5		-	- 026	_			)				
	04/1		13521-34	1,5'			£20-								
	5411		B521-35	1,5,			-028								
	0511		0521-36	1,5'			- 024								
	1155		13521-37	1.5.			- 038								
	1200		B521-38	1.5'			-031								
	1205		8521-39	1.0 "			780								
	1210		13521-40	,0')			-033								
	1215		14-1258	. 0')			-034								
-	1220		1258- 45	1.0			-035								
>	1225	-	B521-43	1.0'	1	1	-036	_							
Date:	Time:	Relinquished by	ed by:	1	Received by:	Via:	Date Time	Remarks:	(S:		1.2	120-	2		P
3/29/7	(38	)		1							2.5	0-0-6	10.0		age :
Date:	Time:	Relinquished by:	led by:		Received by:	Na.	12 12 12 12 12 12 12 12 12 12 12 12 12 1	A	400	) (1		5			332 of
	If necessary, s	samples sut	omitted to Hall Environme	ntal may be subo	contracted to others	sccredited laboratori	erves as not	s possibility.	Any sub-	contracte	d data will	be clearly n	notated on the	e analytical report.	<b>5</b> 25

	Client: \\\.	707			O. C.					I,	HALL		IVI	ENVIRONMENT	NTAL	vea by
	>	ロートメ				e:					E N	ANALYSIS		LABORAT	ATORY	OC
Mailing	Mailing Address:	S:			Steph	sins Fed	Stebbins Federal SWD		www.h 4901 Hawkins NE	v Hawkir	ww.h	allenvir - Albu	onme	www.hallenvironmental.com ns NE - Albuquerque, NM 87109		D: 6/24
					Project #:	10000			Tel. 5	Tel. 505-345-3975	5-397		Fax 50	505-345-4107		1/202
Phone #:	#:					10000						Analysis		Request		1 10
email c	email or Fax#:				Project Manager:	ager:					-	<sup>†</sup> O <sup>9</sup>	-	(tu		):20
QA/QC Packa	QA/QC Package: ☐ Standard	46	☐ Level 4 (Full Validation)	alidation)	Monica	()	Jeppin	208) s'	PCB's		SWISO	PO₄, S		əsdA\tr		:36 AM
Accred	Accreditation:	□ Az C	☐ Az Compliance		Sampler: N	OTO			-171		3270	10 <sup>5</sup> '	-	ıəse		
□ NELAC	AC	□ Other			On Ice:	P-Yes	□ No		1-1				(AC			
	☐ EDD (Type)				# of Coolers:					10.00						
					Cooler Temp(including CF);	O(including CF): > P	Hemanks (°C)					_				
Date	Time	Matrix	Sample Name		Container Type and #	Preservative Type	HEAL No. 2103556	ХЭТВ	08:H41 9 1808	EDB (V	PAHs t	(J) E' 1	7) 09S8 8) 07S8			
3-26-2	3-26-21 1030	50:1	13521-44	1.01	20 17	3	- 037	7	1			7				
-	1035	_	B521-45	1.0'			-038	_				=				
	0401		13521-46	1.0'			-039									
	1045		13521-47	1.0.			040-									
	0501		B521-48	1.0'			140-			Ħ						
	1055		13521-49	1.0'			240 -	-			+					
	1100		8521-50	1.0.1			-043									
	1105		13521-51	1.0			hh0 -				-					
	0111		3521-52	1.0,			240-				-					
	1115		8521-53	, 0'1			940-									
`	0211		B521-54	1.0			£40-									
>	1125		8521-55	1.0	-		8h0-					1				6
Date:	Time:	Relinquished by:	Jed by:	1	Received by:	Via:	ate	Remarks:	ırks:			1.2	0	21.5		Pa
3 29 2	1300	) John String	) ind poor		Docoive In	Visi	3/24/2/ 1300 Date Time					0	0-1	5.0		ige 3
Sale.	2 6		led by.		The company of the co	A (1) 2500	2	3	Atabo	9		0	0-6-0	0:0.7		33 of

Mailing Address:  Mailing Address:  Phone #: email or Fax#:  QA/QC Package:  Accreditation:	かせる		,				1					THE NUMBER OF THE	
			☑/Standard	□ Rush			P	AM	ANALYSIS L	SIS	SLAB	ABORATOR	>
			Project Name:					W	w.halle	environ	www.hallenvironmental.com		
	dress:		Stelobins	ns tedlera	oral over	4	1901 H	4901 Hawkins NE -		Albuqu	Albuquerque, NM 87109	187109	6/24
Phone #: email or F QA/QC Pa  Stands Accredital			١				Tel. 50	505-345-3975		Fax	505-345-4107	1107	7202
email or F QA/QC Pa₁ □ Standa Accredital			210	000 87	7	į			An		Request	Total Marie Marie	2 1
QA/QC Paragrams  Standa  Accredital	ax#:		Project Manager	ger:			10			₽O	(ţu		-20
Accreditat	ckage:		Monica	P. DOO'S		.208)		SWI		S '*C	/pse		.00 /
Accreditat	ırd	☐ Level 4 (Full Validation)		- 1				S0		)d '	/Дu		1771
DA INFI		☐ Az Compliance	Sampler: (M	MIP						105			
ואברער	: □ Other	ner	On Ice:	-B-Yes	□ No				S	u '8	100		
☐ EDD (Type)	ype)		# of Coolers: 3	3		_			lete				
			Cooler Temp(including CF):	(including CF):	Duran (E ( (°C)				M 8				
Date Ti	Time Matrix	Sample Name	Container Type and #	Preservative Type	HEAL NO. 210310310	X3T8	08:H9T 9 1808	N) BO3 RAHs I	AADA	() E' ()	3) 0728 O lstoT		
3-26-4 1	1330 50:1	13521-68 1.0		12	190-	7			g				
1 1	1340 1	13521-69 1,0"	1		290-					1			
7	350	1,0° 1,0°			290-								
1	1355	BSZ1-71 1,0°			490 -								
1 1	1400	13521-72 1.0'			590-								
	1405	18521-73 1.0°			990-								
1/1	1910	1354-74 1.0°			+90-								
1	0241	8521-75 1,0"			890-								
	1000	/XXXX			640-	/							
××					-040								
× -		XX			140-								
7			7	_	09月0120年5								
Date: Tir	Time: Relinquished b	ished by:	Received by	Via:		Remarks:		26 3/2	30/2/	1	1.2.0	0.10	F
3/24/21			M		3/29/21 1300					7	0.5.	160	uge .
Date: Tir	Time: Relinqui	Relinquished by:	Received by:	Via:	2/2,1 15,	E	of oto	Š			0.7.0	6.000	335 of

Nailing Address:	£X		i: Vertex ig Address:	© Standard Project Name:		ederal SWD	4	ANA www.h	HALL ANAL www.hal	ALY ALY w.hallen	SIS vironm	HALL ENVIRONMENTAL ANALYSIS LABORATOR www.hallenvironmental.com kins NE - Albuquerque, NM 87109	NTAL
				Project #:	00087			Tel. 505-345-3975	-345-3	975 Ana	Fax 50 ysis R	Fax 505-345-4107 Analysis Request	
email or Fax#:				Project Manager:						<sup>7</sup> OS		(tne	
QA/QC Package:	□ Lev	el 4 (Full	☐ Level 4 (Full Validation)	Monic	4	uppin			SWIS0	,,∮Oq		edA∖tr	
	☐ Az Compliance	Se Se		٠,	MJP					1O <sub>2</sub> ,			
□ NELAC	□ Other			On Ice:	⊸ Yes	□ No	7.00			_		Year	
(Type)				# of Coolers:	3			1			(		
				Cooler Temp(including CF).	O(including CF): Se	- Denar 16(°C)					ΑΟV	133	
Time	Matrix Samp	Sample Name	Ф	Container Type and #	Preservative Type	HEAL No. (	XETE 08:H9T	日 1808	N) 803 I sHA9	RCRA (C)F,	() 0928	s) 0728 O lstoT	
_	So: 1 W52/	WS21-03	0-1.0	707	100		1			7	Į,		
1435	1 WS2	WS21-04	0-1.0	_	_	0+0 h+0 -	-						
OHLI	125M	WSZ1-05	0-1-0			1to \$20-							
1445	W52,	90-125M	0-1-0			240 9 to -							
1450	125M	LO-125M	0-1-0			Eto t to -							
1455	125M	WSZ1-08	0-1.0			4to 8to-							
1800	125M	10-	0-1-0		× ×	-049 075							
1505	WS21-1	01-	,01-0			-080 ott							
1510	-125M	11 -	0-1.0			- CBI 077							
1515	17574	-15	0-1-0			-012 078					1		
1520	-125M	1-13	0-1-0			-08300							
1525	-125H	41-1	0-1.0			13/3012/ OBY 080	=						
_	Relinquished by:	(	1	Received by:	/wie.	Date Time	Remarks	ks:			2-0	27:	
R		V	1			3/24/21 1700				0	2-0-0	1500	
ime:	Relinquished by:			Received by:	and	,_	4	4		0	3-6	1.0.1	

Client: \( \frac{1}{1} \int \frac{1} \int \frac{1}{1} \in	#:  #:  Address:  Address:  r Fax#:  Package:  Idard  Itation:	□ Az Co □ Other So : 1		me 0 - 1.0'	Project Nar Standa Project Nar Standa Project Nar Ol E- On Ice:  # of Cooler Ten Container Type and # # 67		100 C C C C C C C C C C C C C C C C C C	(BTEX) MTBE / TMB's (8021)	### PPH:8015D(GRO / DRO / MRO)  TPH:8015D(GRO / DRO / MRO)  #### Pesticides/8082 PCB's  EDB (Method 504.1)  PAHs by 8310 or 8270SIMS  RCBA 8 Metals	#WW.ha Pedicides/8062 2005 397 397 397 397 397 397 397 397 397 397	M. hall a Metals A Me	### ### ### ### ### ### ### ### ### ##	NALYSIS LABC  NAMW.hallenvironmental.com  RCRA 8 Metals  RCRA 8 Metals  RCRA 8 Metals  Analysis Request  Analysis Request  Total Coliform (Present/Absent)  Total Coliform (Present/Absent)	Www.hallenvironmental.com  Www.hallenvironmental.com  Www.hallenvironmental.com  Www.hallenvironmental.com  Www.hallenvironmental.com  Www.hallenvironmental.com  Wr. R. Bri, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> BY5-3975  Fax 505-345-4107  Analysis Request  Total Coliform (Present/Absent)  Total Coliform (Present/Absent)	ived by OCD: 6/24/2021 10:20:36 AM
	5291 5291		BSS1-24 BSS1-25 BSS1-26	0-1.0			000								
Date: Til 	Time:	Relinquished by:	ed by:		Received by:	Via:	Syl 1)cc	Remarks:	rks:	`		0.5	10-1	20.5	Page 337 of

Mailing Address:	Standard Project Name:  Stebbins Project #:	Rus Fee	Federal SWD 87	490 Te	######################################	HALL ANAL  Www.hall kins NE - 345-3975	LYSIS LAE LYSIS LAE allenvironmental.cc - Albuquerque, NI Fax 505-345-	HALL ENVIRONMENTAL ANALYSIS LABORATOR www.hallenvironmental.com kins NE - Albuquerque, NM 87109 345-3975 Fax 505-345-4107 Analysis Request	NTAL
email or Fax#:	Project Manager:	ager:					₽C	(11	
QA/QC Package:   □ Standard  □ Level 4 (Full Validation)			Peppin	1508) s' 9 NRC	bCB,2		PO₄, S(	nəsdA\tr	
Accreditation:	Sampler: MXP	NJP					NO <sup>5</sup> '		
□ NELAC □ Other	On Ice:	Z Yes	No □			sls	, <sub>E</sub> O		
	Cooler Temp(including CF);	O(including CF): See	Heman ( °C)			) Met		0.00	
Time Matrix Sample Name	Container Type and #	Preservative Type	HEAL NO. 2103 D36	(X3T8	8081 Pe	PAHs b	85e0 (√	S) 0728 O lstoT	
56:1	1	2)	END 7 POS.	>			160		
0-1-0 821-28 0-1.0			H60 2 60-						
1640 13521-29 0-1.0	1		560 660-						
1645   BSSI-30 0-1,0°			160 096						
1650   BS21-31 0-1.0-			t60 191-						
B521-32	١		100 A01						
01-0 ESS1-33 6-1.0			-103 099						
18521-34 BS21-34			001 HOI-						
1710 3521-35 0-1.0	)		- 105 101						
			12/08/8 000						
Relinquished by:	Received by	Via:	Date Time	Remarks:			2000	١. ٢٠	
1300	1		3/29/21 (300			0.5	5-0-5	3	
Date: Time: Relinquished by:	Received by:	Via:	Date Time	1		9	09-0-60	6.	



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

April 07, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

**FAX** 

RE: Stebbins Federal SWD OrderNo.: 2103D82

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 47 sample(s) on 3/31/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-74 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:00:00 AM

 Lab ID:
 2103D82-001
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 10 mg/Kg 1 4/2/2021 6:33:59 PM Motor Oil Range Organics (MRO) ND 50 mg/Kg 1 4/2/2021 6:33:59 PM Surr: DNOP 96.7 70-130 %Rec 1 4/2/2021 6:33:59 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/5/2021 8:01:00 PM 5.0 mg/Kg 1 Surr: BFB 88.2 70-130 %Rec 1 4/5/2021 8:01:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.025 mg/Kg 4/5/2021 8:01:00 PM 1 Toluene ND 0.050 mg/Kg 1 4/5/2021 8:01:00 PM Ethylbenzene ND 0.050 mg/Kg 1 4/5/2021 8:01:00 PM Xylenes, Total ND 0.10 mg/Kg 1 4/5/2021 8:01:00 PM 4/5/2021 8:01:00 PM Surr: 4-Bromofluorobenzene 85.5 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 85 60 4/6/2021 3:12:34 AM ma/Ka 20

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

Qualifiers:

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

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

Page 1 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-75 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:05:00 AM

 Lab ID:
 2103D82-002
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.0 mg/Kg 1 4/2/2021 6:47:16 PM Motor Oil Range Organics (MRO) ND 45 mg/Kg 1 4/2/2021 6:47:16 PM Surr: DNOP 90.1 70-130 %Rec 1 4/2/2021 6:47:16 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/5/2021 8:21:00 PM 4.8 mg/Kg 1 Surr: BFB 86.1 70-130 %Rec 1 4/5/2021 8:21:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 mg/Kg 4/5/2021 8:21:00 PM 1 Toluene ND 0.048 mg/Kg 1 4/5/2021 8:21:00 PM Ethylbenzene ND 0.048 mg/Kg 1 4/5/2021 8:21:00 PM Xylenes, Total ND 0.097 mg/Kg 1 4/5/2021 8:21:00 PM Surr: 4-Bromofluorobenzene 82.1 70-130 %Rec 1 4/5/2021 8:21:00 PM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 120 60 4/6/2021 3:24:59 AM ma/Ka 20

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

Qualifiers:

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

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

Page 2 of 60

Date Reported: 4/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-76 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:10:00 AM

 Lab ID:
 2103D82-003
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/2/2021 7:00:34 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 7:00:34 PM
Surr: DNOP	94.0	70-130	%Rec	1	4/2/2021 7:00:34 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/5/2021 8:40:00 PM
Surr: BFB	90.1	70-130	%Rec	1	4/5/2021 8:40:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/5/2021 8:40:00 PM
Toluene	ND	0.049	mg/Kg	1	4/5/2021 8:40:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/5/2021 8:40:00 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/5/2021 8:40:00 PM
Surr: 4-Bromofluorobenzene	85.0	70-130	%Rec	1	4/5/2021 8:40:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	110	60	mg/Kg	20	4/6/2021 3:37:24 AM

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

Qualifiers:

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

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

Page 3 of 60

Date Reported: 4/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-77 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:15:00 AM

 Lab ID:
 2103D82-004
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/2/2021 7:13:52 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 7:13:52 PM
Surr: DNOP	90.5	70-130	%Rec	1	4/2/2021 7:13:52 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/5/2021 9:00:00 PM
Surr: BFB	89.4	70-130	%Rec	1	4/5/2021 9:00:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.023	mg/Kg	1	4/5/2021 9:00:00 PM
Toluene	ND	0.047	mg/Kg	1	4/5/2021 9:00:00 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/5/2021 9:00:00 PM
Xylenes, Total	ND	0.093	mg/Kg	1	4/5/2021 9:00:00 PM
Surr: 4-Bromofluorobenzene	86.5	70-130	%Rec	1	4/5/2021 9:00:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	130	60	mg/Kg	20	4/6/2021 3:49:49 AM

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

Qualifiers:

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

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

Page 4 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-78 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:20:00 AM

 Lab ID:
 2103D82-005
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.4 mg/Kg 1 4/2/2021 7:27:19 PM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/2/2021 7:27:19 PM Surr: DNOP 84.0 70-130 %Rec 1 4/2/2021 7:27:19 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/5/2021 9:20:00 PM 4.8 mg/Kg 1 Surr: BFB 93.0 70-130 %Rec 1 4/5/2021 9:20:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 mg/Kg 4/5/2021 9:20:00 PM 1 Toluene ND 0.048 mg/Kg 1 4/5/2021 9:20:00 PM Ethylbenzene ND 0.048 mg/Kg 1 4/5/2021 9:20:00 PM Xylenes, Total ND 0.096 mg/Kg 1 4/5/2021 9:20:00 PM 4/5/2021 9:20:00 PM Surr: 4-Bromofluorobenzene 86.3 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 60 4/6/2021 4:02:15 AM 130 ma/Ka 20

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

Qualifiers:

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

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

Page 5 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-79 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:25:00 AM

 Lab ID:
 2103D82-006
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.6 mg/Kg 1 4/2/2021 7:40:33 PM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/2/2021 7:40:33 PM Surr: DNOP 73.8 70-130 %Rec 1 4/2/2021 7:40:33 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/5/2021 9:40:00 PM 4.8 mg/Kg 1 Surr: BFB 87.1 70-130 %Rec 1 4/5/2021 9:40:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 mg/Kg 4/5/2021 9:40:00 PM 1 Toluene ND 0.048 mg/Kg 1 4/5/2021 9:40:00 PM Ethylbenzene ND 0.048 mg/Kg 1 4/5/2021 9:40:00 PM Xylenes, Total ND 0.095 mg/Kg 1 4/5/2021 9:40:00 PM 4/5/2021 9:40:00 PM Surr: 4-Bromofluorobenzene 83.3 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 120 60 4/6/2021 4:39:29 AM ma/Ka 20

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

Qualifiers:

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

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

Page 6 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-80 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:30:00 AM

 Lab ID:
 2103D82-007
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 4/2/2021 10:36:38 AM Motor Oil Range Organics (MRO) ND 48 mg/Kg 1 4/2/2021 10:36:38 AM Surr: DNOP 88.1 70-130 %Rec 1 4/2/2021 10:36:38 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/5/2021 11:39:00 PM 4.9 mg/Kg 1 Surr: BFB 95.2 70-130 %Rec 1 4/5/2021 11:39:00 PM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 mg/Kg 4/5/2021 11:39:00 PM 1 Toluene ND 0.049 mg/Kg 1 4/5/2021 11:39:00 PM Ethylbenzene ND 0.049 mg/Kg 1 4/5/2021 11:39:00 PM Xylenes, Total ND 0.098 mg/Kg 1 4/5/2021 11:39:00 PM 4/5/2021 11:39:00 PM Surr: 4-Bromofluorobenzene 88.5 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 60 4/6/2021 4:51:54 AM 110 ma/Ka 20

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

Qualifiers:

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

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

Page 7 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-81 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:35:00 AM

 Lab ID:
 2103D82-008
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/2/2021 11:12:36 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 11:12:36 AM
Surr: DNOP	86.1	70-130	%Rec	1	4/2/2021 11:12:36 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 12:39:00 AM
Surr: BFB	89.0	70-130	%Rec	1	4/6/2021 12:39:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 12:39:00 AM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 12:39:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 12:39:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 12:39:00 AM
Surr: 4-Bromofluorobenzene	86.4	70-130	%Rec	1	4/6/2021 12:39:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	140	60	mg/Kg	20	4/6/2021 5:04:19 AM

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

Qualifiers:

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

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

Page 8 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-82 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:40:00 AM

 Lab ID:
 2103D82-009
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 4/2/2021 11:24:40 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 4/2/2021 11:24:40 AM Surr: DNOP 85.9 70-130 %Rec 1 4/2/2021 11:24:40 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/6/2021 1:39:00 AM 5.0 mg/Kg 1 Surr: BFB 91.3 70-130 %Rec 1 4/6/2021 1:39:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.025 mg/Kg 4/6/2021 1:39:00 AM 1 Toluene ND 0.050 mg/Kg 1 4/6/2021 1:39:00 AM Ethylbenzene ND 0.050 mg/Kg 1 4/6/2021 1:39:00 AM Xylenes, Total ND 0.10 mg/Kg 1 4/6/2021 1:39:00 AM Surr: 4-Bromofluorobenzene 84.8 70-130 %Rec 1 4/6/2021 1:39:00 AM Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 60 4/6/2021 5:16:44 AM 120 ma/Ka 20

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

Qualifiers:

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

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

Page 9 of 60

Toluene

Chloride

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

**EPA METHOD 300.0: ANIONS** 

**Analytical Report** Lab Order 2103D82

1

1

1

1

1

20

mg/Kg

mg/Kg

mg/Kg

%Rec

ma/Ka

Date Reported: 4/7/2021

4/6/2021 1:59:00 AM

4/6/2021 1:59:00 AM

4/6/2021 1:59:00 AM

4/6/2021 1:59:00 AM

4/5/2021 11:26:40 PM

Analyst: VP

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Vertex Resource Group Ltd. Client Sample ID: BS21-83 1.0'

**Project:** Stebbins Federal SWD Collection Date: 3/29/2021 8:45:00 AM Lab ID: 2103D82-010 Matrix: SOIL Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.7 mg/Kg 1 4/2/2021 11:36:50 AM Motor Oil Range Organics (MRO) ND 49 mg/Kg 1 4/2/2021 11:36:50 AM Surr: DNOP 87.0 70-130 %Rec 1 4/2/2021 11:36:50 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/6/2021 1:59:00 AM 4.8 mg/Kg 1 Surr: BFB 91.1 70-130 %Rec 1 4/6/2021 1:59:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 mg/Kg 4/6/2021 1:59:00 AM

ND

ND

ND

86.5

110

0.048

0.048

0.096

70-130

60

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

Qualifiers:

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

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

Page 10 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-84 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:50:00 AM

 Lab ID:
 2103D82-011
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Result **RL Qual Units** DF **Date Analyzed Analyses EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) ND 9.5 mg/Kg 1 4/2/2021 11:49:04 AM Motor Oil Range Organics (MRO) ND 47 mg/Kg 1 4/2/2021 11:49:04 AM Surr: DNOP 79.8 70-130 %Rec 1 4/2/2021 11:49:04 AM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Range Organics (GRO) ND 4/6/2021 2:19:00 AM 4.9 mg/Kg 1 Surr: BFB 93.1 70-130 %Rec 1 4/6/2021 2:19:00 AM **EPA METHOD 8021B: VOLATILES** Analyst: CCM Benzene ND 0.024 mg/Kg 4/6/2021 2:19:00 AM 1 Toluene ND 0.049 mg/Kg 1 4/6/2021 2:19:00 AM Ethylbenzene ND 0.049 mg/Kg 1 4/6/2021 2:19:00 AM Xylenes, Total ND 0.097 mg/Kg 1 4/6/2021 2:19:00 AM 4/6/2021 2:19:00 AM Surr: 4-Bromofluorobenzene 87.8 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride 60 4/6/2021 12:28:43 AM 100 ma/Ka 20

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

Qualifiers:

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

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

Page 11 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-85 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 8:55:00 AM

 Lab ID:
 2103D82-012
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

**Analyses** Result **RL Qual Units** DF **Date Analyzed EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 4/2/2021 12:01:25 PM ND 9.2 mg/Kg 1 Motor Oil Range Organics (MRO) ND 46 mg/Kg 1 4/2/2021 12:01:25 PM Surr: DNOP 89.4 70-130 %Rec 1 4/2/2021 12:01:25 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: CCM Gasoline Pange Organics (GPO) 4/6/2021 2:38:00 AM

Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 2:38:00 AM
Surr: BFB	91.7	70-130	%Rec	1	4/6/2021 2:38:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 2:38:00 AM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 2:38:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 2:38:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 2:38:00 AM
Surr: 4-Bromofluorobenzene	87.0	70-130	%Rec	1	4/6/2021 2:38:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	92	60	mg/Kg	20	4/6/2021 1:05:58 AM

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

Qualifiers:

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

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

Page 12 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-86 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:00:00 AM

 Lab ID:
 2103D82-013
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 12:13:53 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 12:13:53 PM
Surr: DNOP	87.7	70-130	%Rec	1	4/2/2021 12:13:53 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/6/2021 2:58:00 AM
Surr: BFB	90.0	70-130	%Rec	1	4/6/2021 2:58:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 2:58:00 AM
Toluene	ND	0.047	mg/Kg	1	4/6/2021 2:58:00 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/6/2021 2:58:00 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 2:58:00 AM
Surr: 4-Bromofluorobenzene	84.5	70-130	%Rec	1	4/6/2021 2:58:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	85	61	mg/Kg	20	4/6/2021 1:18:23 AM

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

Qualifiers:

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

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

Page 13 of 60

Date Reported: 4/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-87 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:05:00 AM

 Lab ID:
 2103D82-014
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	4/2/2021 12:26:27 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/2/2021 12:26:27 PM
Surr: DNOP	97.3	70-130	%Rec	1	4/2/2021 12:26:27 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 3:18:00 AM
Surr: BFB	90.3	70-130	%Rec	1	4/6/2021 3:18:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 3:18:00 AM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 3:18:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 3:18:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 3:18:00 AM
Surr: 4-Bromofluorobenzene	86.7	70-130	%Rec	1	4/6/2021 3:18:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	93	60	mg/Kg	20	4/6/2021 1:30:47 AM

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

Qualifiers:

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

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

Page 14 of 60

Date Reported: 4/7/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-88 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:10:00 AM

 Lab ID:
 2103D82-015
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/2/2021 12:39:08 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/2/2021 12:39:08 PM
Surr: DNOP	79.8	70-130	%Rec	1	4/2/2021 12:39:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 3:38:00 AM
Surr: BFB	91.2	70-130	%Rec	1	4/6/2021 3:38:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 3:38:00 AM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 3:38:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 3:38:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 3:38:00 AM
Surr: 4-Bromofluorobenzene	88.2	70-130	%Rec	1	4/6/2021 3:38:00 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	87	61	mg/Kg	20	4/6/2021 1:43:12 AM

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

Qualifiers:

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

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

Page 15 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-89 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:15:00 AM

 Lab ID:
 2103D82-016
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	4/2/2021 12:51:59 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/2/2021 12:51:59 PM
Surr: DNOP	90.2	70-130	%Rec	1	4/2/2021 12:51:59 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 3:58:00 AM
Surr: BFB	91.5	70-130	%Rec	1	4/6/2021 3:58:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 3:58:00 AM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 3:58:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 3:58:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 3:58:00 AM
Surr: 4-Bromofluorobenzene	86.3	70-130	%Rec	1	4/6/2021 3:58:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	81	59	mg/Kg	20	4/6/2021 1:55:37 AM

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

Qualifiers:

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

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

Page 16 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-90 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:20:00 AM

 Lab ID:
 2103D82-017
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 1:04:49 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 1:04:49 PM
Surr: DNOP	87.4	70-130	%Rec	1	4/2/2021 1:04:49 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 10:46:00 AM
Surr: BFB	95.7	70-130	%Rec	1	4/6/2021 10:46:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 10:46:00 AM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 10:46:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 10:46:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/6/2021 10:46:00 AM
Surr: 4-Bromofluorobenzene	87.5	70-130	%Rec	1	4/6/2021 10:46:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	76	60	mg/Kg	20	4/6/2021 2:32:52 AM

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

Qualifiers:

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

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

Page 17 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-91 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:25:00 AM

 Lab ID:
 2103D82-018
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/2/2021 1:17:29 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 1:17:29 PM
Surr: DNOP	82.3	70-130	%Rec	1	4/2/2021 1:17:29 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 11:06:00 AM
Surr: BFB	90.4	70-130	%Rec	1	4/6/2021 11:06:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 11:06:00 AM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 11:06:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 11:06:00 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 11:06:00 AM
Surr: 4-Bromofluorobenzene	86.8	70-130	%Rec	1	4/6/2021 11:06:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	98	61	mg/Kg	20	4/6/2021 2:45:16 AM

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

Qualifiers:

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

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

Page 18 of 60

Date Reported: 4/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-92 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:30:00 AM

 Lab ID:
 2103D82-019
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/2/2021 1:30:06 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 1:30:06 PM
Surr: DNOP	84.2	70-130	%Rec	1	4/2/2021 1:30:06 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 11:26:00 AM
Surr: BFB	92.1	70-130	%Rec	1	4/6/2021 11:26:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 11:26:00 AM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 11:26:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 11:26:00 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/6/2021 11:26:00 AM
Surr: 4-Bromofluorobenzene	88.8	70-130	%Rec	1	4/6/2021 11:26:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	88	59	mg/Kg	20	4/6/2021 2:57:41 AM

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

Qualifiers:

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

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

Page 19 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-93 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:35:00 AM

 Lab ID:
 2103D82-020
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/2/2021 1:42:47 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/2/2021 1:42:47 PM
Surr: DNOP	81.7	70-130	%Rec	1	4/2/2021 1:42:47 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 11:46:00 AM
Surr: BFB	90.2	70-130	%Rec	1	4/6/2021 11:46:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 11:46:00 AM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 11:46:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 11:46:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 11:46:00 AM
Surr: 4-Bromofluorobenzene	85.3	70-130	%Rec	1	4/6/2021 11:46:00 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	90	61	mg/Kg	20	4/6/2021 3:10:05 AM

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

Qualifiers:

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

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

Page 20 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-94 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:40:00 AM

 Lab ID:
 2103D82-021
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	4/2/2021 1:55:31 PM
Motor Oil Range Organics (MRO)	ND	51	mg/Kg	1	4/2/2021 1:55:31 PM
Surr: DNOP	82.0	70-130	%Rec	1	4/2/2021 1:55:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 12:06:00 PM
Surr: BFB	90.9	70-130	%Rec	1	4/6/2021 12:06:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 12:06:00 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 12:06:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 12:06:00 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 12:06:00 PM
Surr: 4-Bromofluorobenzene	84.5	70-130	%Rec	1	4/6/2021 12:06:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	75	60	mg/Kg	20	4/6/2021 3:22:29 AM

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

Qualifiers:

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

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

Page 21 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-95 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:45:00 AM

 Lab ID:
 2103D82-022
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/2/2021 2:08:16 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/2/2021 2:08:16 PM
Surr: DNOP	2.54	70-130	S	%Rec	1	4/2/2021 2:08:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/6/2021 12:26:00 PM
Surr: BFB	87.9	70-130		%Rec	1	4/6/2021 12:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	4/6/2021 12:26:00 PM
Toluene	ND	0.048		mg/Kg	1	4/6/2021 12:26:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	4/6/2021 12:26:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	4/6/2021 12:26:00 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	4/6/2021 12:26:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	79	60		mg/Kg	20	4/6/2021 3:34:53 AM

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

Qualifiers:

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

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

Page 22 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-96 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:50:00 AM

 Lab ID:
 2103D82-023
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/2/2021 2:20:52 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 2:20:52 PM
Surr: DNOP	85.8	70-130	%Rec	1	4/2/2021 2:20:52 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 12:46:00 PM
Surr: BFB	87.7	70-130	%Rec	1	4/6/2021 12:46:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 12:46:00 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 12:46:00 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 12:46:00 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 12:46:00 PM
Surr: 4-Bromofluorobenzene	83.5	70-130	%Rec	1	4/6/2021 12:46:00 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	140	59	mg/Kg	20	4/6/2021 3:47:17 AM

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

Qualifiers:

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

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

Page 23 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-97 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 10:55:00 AM

 Lab ID:
 2103D82-024
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/2/2021 2:33:17 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 2:33:17 PM
Surr: DNOP	75.6	70-130	%Rec	1	4/2/2021 2:33:17 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 1:05:00 PM
Surr: BFB	93.7	70-130	%Rec	1	4/6/2021 1:05:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 1:05:00 PM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 1:05:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 1:05:00 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/6/2021 1:05:00 PM
Surr: 4-Bromofluorobenzene	87.0	70-130	%Rec	1	4/6/2021 1:05:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	170	60	mg/Kg	20	4/6/2021 3:59:41 AM

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

Qualifiers:

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

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

Page 24 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-98 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:00:00 AM

 Lab ID:
 2103D82-025
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 2:45:57 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 2:45:57 PM
Surr: DNOP	96.6	70-130	%Rec	1	4/2/2021 2:45:57 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 1:25:00 PM
Surr: BFB	90.6	70-130	%Rec	1	4/6/2021 1:25:00 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 1:25:00 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 1:25:00 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 1:25:00 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 1:25:00 PM
Surr: 4-Bromofluorobenzene	85.5	70-130	%Rec	1	4/6/2021 1:25:00 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	81	60	mg/Kg	20	4/6/2021 4:12:06 AM

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

Qualifiers:

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

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

Page 25 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-99 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:05:00 AM

 Lab ID:
 2103D82-026
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 2:58:34 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 2:58:34 PM
Surr: DNOP	86.8	70-130	%Rec	1	4/2/2021 2:58:34 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/6/2021 1:45:00 PM
Surr: BFB	91.3	70-130	%Rec	1	4/6/2021 1:45:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/6/2021 1:45:00 PM
Toluene	ND	0.047	mg/Kg	1	4/6/2021 1:45:00 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/6/2021 1:45:00 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 1:45:00 PM
Surr: 4-Bromofluorobenzene	87.4	70-130	%Rec	1	4/6/2021 1:45:00 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	83	60	mg/Kg	20	4/6/2021 10:35:58 PM

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

Qualifiers:

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

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

Page 26 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-100 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:10:00 AM

 Lab ID:
 2103D82-027
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	4/2/2021 9:58:13 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/2/2021 9:58:13 PM
Surr: DNOP	106	70-130	%Rec	1	4/2/2021 9:58:13 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 1:08:48 PM
Surr: BFB	103	70-130	%Rec	1	4/6/2021 1:08:48 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 1:08:48 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 1:08:48 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 1:08:48 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/6/2021 1:08:48 PM
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	4/6/2021 1:08:48 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	88	60	mg/Kg	20	4/6/2021 11:13:11 PM

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

Qualifiers:

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

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

Page 27 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-101 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:15:00 AM

 Lab ID:
 2103D82-028
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 10:28:24 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 10:28:24 PM
Surr: DNOP	93.3	70-130	%Rec	1	4/2/2021 10:28:24 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 3:06:31 PM
Surr: BFB	102	70-130	%Rec	1	4/6/2021 3:06:31 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 3:06:31 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 3:06:31 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 3:06:31 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 3:06:31 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/6/2021 3:06:31 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	80	59	mg/Kg	20	4/6/2021 11:50:24 PM

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

Qualifiers:

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

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

Page 28 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-102 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:20:00 AM

 Lab ID:
 2103D82-029
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 10:38:25 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 10:38:25 PM
Surr: DNOP	106	70-130	%Rec	1	4/2/2021 10:38:25 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 4:17:10 PM
Surr: BFB	103	70-130	%Rec	1	4/6/2021 4:17:10 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 4:17:10 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 4:17:10 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 4:17:10 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 4:17:10 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/6/2021 4:17:10 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	82	60	mg/Kg	20	4/7/2021 12:02:48 AM

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

Qualifiers:

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

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

Page 29 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-103 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:25:00 AM

 Lab ID:
 2103D82-030
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/2/2021 10:48:25 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/2/2021 10:48:25 PM
Surr: DNOP	95.1	70-130	%Rec	1	4/2/2021 10:48:25 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 4:40:43 PM
Surr: BFB	101	70-130	%Rec	1	4/6/2021 4:40:43 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 4:40:43 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 4:40:43 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 4:40:43 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/6/2021 4:40:43 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/6/2021 4:40:43 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	74	60	mg/Kg	20	4/7/2021 12:15:13 AM

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

Qualifiers:

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

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

Page 30 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-104 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:30:00 AM

 Lab ID:
 2103D82-031
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/2/2021 10:58:23 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/2/2021 10:58:23 PM
Surr: DNOP	107	70-130	%Rec	1	4/2/2021 10:58:23 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 5:04:17 PM
Surr: BFB	99.7	70-130	%Rec	1	4/6/2021 5:04:17 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/6/2021 5:04:17 PM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 5:04:17 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 5:04:17 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 5:04:17 PM
Surr: 4-Bromofluorobenzene	98.8	70-130	%Rec	1	4/6/2021 5:04:17 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	75	60	mg/Kg	20	4/7/2021 12:27:38 AM

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

Qualifiers:

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

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

Page 31 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-105 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:35:00 AM

 Lab ID:
 2103D82-032
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/2/2021 11:08:19 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/2/2021 11:08:19 PM
Surr: DNOP	77.8	70-130	%Rec	1	4/2/2021 11:08:19 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 5:27:45 PM
Surr: BFB	100	70-130	%Rec	1	4/6/2021 5:27:45 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/6/2021 5:27:45 PM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 5:27:45 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 5:27:45 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/6/2021 5:27:45 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/6/2021 5:27:45 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	76	60	mg/Kg	20	4/7/2021 1:04:51 AM

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

Qualifiers:

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

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

Page 32 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-106 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:40:00 AM

 Lab ID:
 2103D82-033
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/2/2021 11:18:15 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 11:18:15 PM
Surr: DNOP	114	70-130	%Rec	1	4/2/2021 11:18:15 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/6/2021 5:51:12 PM
Surr: BFB	100	70-130	%Rec	1	4/6/2021 5:51:12 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 5:51:12 PM
Toluene	ND	0.047	mg/Kg	1	4/6/2021 5:51:12 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/6/2021 5:51:12 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 5:51:12 PM
Surr: 4-Bromofluorobenzene	99.0	70-130	%Rec	1	4/6/2021 5:51:12 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	82	60	mg/Kg	20	4/7/2021 1:17:16 AM

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

Qualifiers:

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

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

Page 33 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-107 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:45:00 AM

 Lab ID:
 2103D82-034
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/2/2021 11:28:10 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/2/2021 11:28:10 PM
Surr: DNOP	90.8	70-130	%Rec	1	4/2/2021 11:28:10 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 6:15:03 PM
Surr: BFB	97.3	70-130	%Rec	1	4/6/2021 6:15:03 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 6:15:03 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 6:15:03 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 6:15:03 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 6:15:03 PM
Surr: 4-Bromofluorobenzene	96.3	70-130	%Rec	1	4/6/2021 6:15:03 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	87	60	mg/Kg	20	4/7/2021 1:29:41 AM

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

Qualifiers:

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

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

Page 34 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-108 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:50:00 AM

 Lab ID:
 2103D82-035
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR		Analyst: <b>mb</b>			
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/2/2021 11:38:03 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/2/2021 11:38:03 PM
Surr: DNOP	98.6	70-130	%Rec	1	4/2/2021 11:38:03 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 6:38:31 PM
Surr: BFB	101	70-130	%Rec	1	4/6/2021 6:38:31 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/6/2021 6:38:31 PM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 6:38:31 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 6:38:31 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 6:38:31 PM
Surr: 4-Bromofluorobenzene	99.1	70-130	%Rec	1	4/6/2021 6:38:31 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	61	59	mg/Kg	20	4/7/2021 1:42:05 AM

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

Qualifiers:

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

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

Page 35 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-109 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 11:55:00 AM

 Lab ID:
 2103D82-036
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/2/2021 11:47:55 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/2/2021 11:47:55 PM
Surr: DNOP	97.6	70-130	%Rec	1	4/2/2021 11:47:55 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 7:02:01 PM
Surr: BFB	102	70-130	%Rec	1	4/6/2021 7:02:01 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 7:02:01 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 7:02:01 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 7:02:01 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/6/2021 7:02:01 PM
Surr: 4-Bromofluorobenzene	102	70-130	%Rec	1	4/6/2021 7:02:01 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 1:54:29 AM

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

Qualifiers:

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

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

Page 36 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-110 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:00:00 PM

 Lab ID:
 2103D82-037
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/2/2021 11:57:43 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/2/2021 11:57:43 PM
Surr: DNOP	83.8	70-130	%Rec	1	4/2/2021 11:57:43 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 7:25:29 PM
Surr: BFB	102	70-130	%Rec	1	4/6/2021 7:25:29 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 7:25:29 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 7:25:29 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 7:25:29 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 7:25:29 PM
Surr: 4-Bromofluorobenzene	101	70-130	%Rec	1	4/6/2021 7:25:29 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 2:06:54 AM

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

Qualifiers:

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

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

Page 37 of 60

Date Reported: 4/7/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-111 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:05:00 PM

 Lab ID:
 2103D82-038
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG		Analyst: mb			
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/3/2021 12:07:27 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/3/2021 12:07:27 AM
Surr: DNOP	125	70-130	%Rec	1	4/3/2021 12:07:27 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 8:35:48 PM
Surr: BFB	101	70-130	%Rec	1	4/6/2021 8:35:48 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 8:35:48 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 8:35:48 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 8:35:48 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 8:35:48 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/6/2021 8:35:48 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 2:19:18 AM

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

Qualifiers:

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

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

Page 38 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-112 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:10:00 PM

 Lab ID:
 2103D82-039
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	4/3/2021 12:17:11 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/3/2021 12:17:11 AM
Surr: DNOP	74.0	70-130	%Rec	1	4/3/2021 12:17:11 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 8:59:22 PM
Surr: BFB	99.0	70-130	%Rec	1	4/6/2021 8:59:22 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 8:59:22 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 8:59:22 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 8:59:22 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/6/2021 8:59:22 PM
Surr: 4-Bromofluorobenzene	99.0	70-130	%Rec	1	4/6/2021 8:59:22 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 2:31:43 AM

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

Qualifiers:

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

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

Page 39 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-113 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:15:00 PM

 Lab ID:
 2103D82-040
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/3/2021 12:26:54 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/3/2021 12:26:54 AM
Surr: DNOP	102	70-130	%Rec	1	4/3/2021 12:26:54 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 9:23:01 PM
Surr: BFB	100	70-130	%Rec	1	4/6/2021 9:23:01 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/6/2021 9:23:01 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 9:23:01 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 9:23:01 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 9:23:01 PM
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	4/6/2021 9:23:01 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	61	mg/Kg	20	4/7/2021 2:44:07 AM

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

Qualifiers:

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

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

Page 40 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-114 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:20:00 PM

 Lab ID:
 2103D82-041
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/3/2021 12:36:38 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/3/2021 12:36:38 AM
Surr: DNOP	128	70-130	%Rec	1	4/3/2021 12:36:38 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 9:46:34 PM
Surr: BFB	97.3	70-130	%Rec	1	4/6/2021 9:46:34 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 9:46:34 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 9:46:34 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 9:46:34 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/6/2021 9:46:34 PM
Surr: 4-Bromofluorobenzene	96.3	70-130	%Rec	1	4/6/2021 9:46:34 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 2:56:31 AM

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

Qualifiers:

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

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

Page 41 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-115 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:25:00 PM

 Lab ID:
 2103D82-042
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/3/2021 12:46:23 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/3/2021 12:46:23 AM
Surr: DNOP	108	70-130	%Rec	1	4/3/2021 12:46:23 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/6/2021 10:10:01 PM
Surr: BFB	98.6	70-130	%Rec	1	4/6/2021 10:10:01 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 10:10:01 PM
Toluene	ND	0.047	mg/Kg	1	4/6/2021 10:10:01 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/6/2021 10:10:01 PM
Xylenes, Total	ND	0.094	mg/Kg	1	4/6/2021 10:10:01 PM
Surr: 4-Bromofluorobenzene	97.8	70-130	%Rec	1	4/6/2021 10:10:01 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 3:33:44 AM

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

Qualifiers:

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

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

Page 42 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-116 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:30:00 PM

 Lab ID:
 2103D82-043
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/3/2021 12:56:08 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/3/2021 12:56:08 AM
Surr: DNOP	98.2	70-130	%Rec	1	4/3/2021 12:56:08 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/6/2021 10:33:29 PM
Surr: BFB	101	70-130	%Rec	1	4/6/2021 10:33:29 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 10:33:29 PM
Toluene	ND	0.047	mg/Kg	1	4/6/2021 10:33:29 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/6/2021 10:33:29 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 10:33:29 PM
Surr: 4-Bromofluorobenzene	99.7	70-130	%Rec	1	4/6/2021 10:33:29 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	59	mg/Kg	20	4/7/2021 3:46:09 AM

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

Qualifiers:

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

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

Page 43 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-117 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:35:00 PM

 Lab ID:
 2103D82-044
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/3/2021 1:05:55 AM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/3/2021 1:05:55 AM
Surr: DNOP	117	70-130	%Rec	1	4/3/2021 1:05:55 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 10:56:54 PM
Surr: BFB	99.2	70-130	%Rec	1	4/6/2021 10:56:54 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 10:56:54 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 10:56:54 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 10:56:54 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 10:56:54 PM
Surr: 4-Bromofluorobenzene	98.6	70-130	%Rec	1	4/6/2021 10:56:54 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 3:58:34 AM

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

Qualifiers:

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

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

Page 44 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-118 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:40:00 PM

 Lab ID:
 2103D82-045
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/3/2021 1:15:43 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/3/2021 1:15:43 AM
Surr: DNOP	90.1	70-130	%Rec	1	4/3/2021 1:15:43 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/6/2021 11:20:18 PM
Surr: BFB	98.4	70-130	%Rec	1	4/6/2021 11:20:18 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/6/2021 11:20:18 PM
Toluene	ND	0.047	mg/Kg	1	4/6/2021 11:20:18 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/6/2021 11:20:18 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/6/2021 11:20:18 PM
Surr: 4-Bromofluorobenzene	97.8	70-130	%Rec	1	4/6/2021 11:20:18 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	61	mg/Kg	20	4/7/2021 4:10:59 AM

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

Qualifiers:

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

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

Page 45 of 60

Date Reported: 4/7/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-119 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:45:00 PM

 Lab ID:
 2103D82-046
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/3/2021 1:25:31 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/3/2021 1:25:31 AM
Surr: DNOP	97.9	70-130	%Rec	1	4/3/2021 1:25:31 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 11:43:49 PM
Surr: BFB	99.7	70-130	%Rec	1	4/6/2021 11:43:49 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/6/2021 11:43:49 PM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 11:43:49 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 11:43:49 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/6/2021 11:43:49 PM
Surr: 4-Bromofluorobenzene	98.6	70-130	%Rec	1	4/6/2021 11:43:49 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 4:48:13 AM

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

Qualifiers:

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

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

Page 46 of 60

Date Reported: 4/7/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-120 1.0'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/29/2021 12:50:00 PM

 Lab ID:
 2103D82-047
 Matrix: SOIL
 Received Date: 3/31/2021 8:00:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/3/2021 11:56:52 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/3/2021 11:56:52 PM
Surr: DNOP	107	70-130	%Rec	1	4/3/2021 11:56:52 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/5/2021 9:42:46 PM
Surr: BFB	101	70-130	%Rec	1	4/5/2021 9:42:46 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/5/2021 9:42:46 PM
Toluene	ND	0.048	mg/Kg	1	4/5/2021 9:42:46 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/5/2021 9:42:46 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/5/2021 9:42:46 PM
Surr: 4-Bromofluorobenzene	100	70-130	%Rec	1	4/5/2021 9:42:46 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 5:00:37 AM

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

Qualifiers:

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

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

Page 47 of 60

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D82** *07-Apr-21* 

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD Sample ID: MB-59214 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59214 RunNo: 76463 Prep Date: Analysis Date: 4/5/2021 SeqNo: 2708614 4/5/2021 Units: mq/Kq SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual Chloride ND 1.5 Sample ID: LCS-59214 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 59214 RunNo: 76463 Prep Date: 4/5/2021 Analysis Date: 4/5/2021 SeqNo: 2708615 Units: mg/Kg SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual Chloride 1.5 15.00 95.8 110 Sample ID: MB-59196 SampType: MBLK TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59196 RunNo: 76468 Prep Date: 4/4/2021 Analysis Date: 4/5/2021 SeqNo: 2708946 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Qual Chloride ND 1.5 Sample ID: LCS-59196 SampType: LCS TestCode: EPA Method 300.0: Anions Client ID: LCSS Batch ID: 59196 RunNo: 76468 Analysis Date: 4/5/2021 Prep Date: 4/4/2021 SeqNo: 2708947 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride 14 1.5 15.00 94.4 90 Sample ID: MB-59241 SampType: mblk TestCode: EPA Method 300.0: Anions Client ID: PBS Batch ID: 59241 RunNo: 76503 Prep Date: 4/6/2021 Analysis Date: 4/6/2021 SeqNo: 2710354 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride ND 1.5 Sample ID: LCS-59241 TestCode: EPA Method 300.0: Anions SampType: Ics Client ID: LCSS Batch ID: 59241 RunNo: 76503

#### Qualifiers:

Analyte

Chloride

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

Prep Date: 4/6/2021

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

SeqNo: 2710355

92.1

LowLimit

Units: mg/Kg

110

HighLimit

%RPD

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

SPK value SPK Ref Val %REC

15.00

Page 48 of 60

**RPDLimit** 

Qual

Analysis Date: 4/6/2021

**PQL** 

1.5

Result

14

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D82** 

07-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59245 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59245 RunNo: 76503

Prep Date: 4/6/2021 Analysis Date: 4/7/2021 SeqNo: 2710386 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-59245 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59245 RunNo: 76503

Prep Date: 4/6/2021 Analysis Date: 4/7/2021 SeqNo: 2710387 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.3 90 110

#### Qualifiers:

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

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

Page 49 of 60

### Hall Environmental Analysis Laboratory, Inc.

Result

37

3.7

PQL

9.8

WO#: 2103D82

07-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: <b>MB-59124</b>	SampType: MBLK TestCode: EPA Method						d 8015M/D: Diesel Range Organics				
Client ID: PBS	Batch	ID: <b>59</b>	124	F	RunNo: <b>7</b>	6411					
Prep Date: 4/1/2021	Analysis Da	ate: <b>4/</b>	2/2021	S	SeqNo: 2	706303	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	8.7		10.00		87.2	70	130				
Sample ID: LCS-59124	SampTy	SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID: LCSS	Batch	ID: <b>59</b>	124	F	RunNo: <b>7</b>	6411					
Client ID: LCSS Prep Date: 4/1/2021	Batch Analysis Da				RunNo: <b>7</b> SeqNo: <b>2</b>		Units: mg/K	(g			
			2/2021				Units: mg/k	<b>(g</b> %RPD	RPDLimit	Qual	
Prep Date: 4/1/2021	Analysis Da	ate: <b>4/</b>	2/2021	5	SeqNo: 2	706304	J	·	RPDLimit	Qual	
Prep Date: 4/1/2021 Analyte	Analysis Da	ate: <b>4/</b> PQL	<b>2/2021</b> SPK value	SPK Ref Val	SeqNo: 2	706304 LowLimit	HighLimit	·	RPDLimit	Qual	
Prep Date: 4/1/2021 Analyte Diesel Range Organics (DRO)	Analysis Da Result 40 4.1	eate: <b>4/</b> PQL 10	2/2021 SPK value 50.00 5.000	SPK Ref Val 0	%REC 80.3 82.9	<b>706304</b> LowLimit  68.9  70	HighLimit 141	%RPD		Qual	
Prep Date: 4/1/2021  Analyte  Diesel Range Organics (DRO)  Surr: DNOP	Analysis Da Result 40 4.1 SampTy	eate: <b>4/</b> PQL 10	2/2021 SPK value 50.00 5.000	SPK Ref Val 0	%REC 80.3 82.9	706304 LowLimit 68.9 70 PA Method	HighLimit 141 130	%RPD		Qual	

Sample ID: 2103D82-007AMS	SD SampT	SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS21-80 1.0'	Batch	Batch ID: <b>59124</b> RunNo: <b>76411</b>								
Prep Date: 4/1/2021	Analysis D	ate: 4/	2/2021	SeqNo: 2706306 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	9.3	46.47	0	75.2	15	184	4.63	23.9	
Surr: DNOP	3.5		4.647		74.9	70	130	0	0	

0

%REC

74.4

75.2

LowLimit

15

70

HighLimit

Tarifords EDA Mathad 2045M/D. Discal Dance Consulta

184

130

%RPD

**RPDLimit** 

Qual

SPK value SPK Ref Val

49.21

4.921

Sample ID: MB-59137	Sampi	ype: INE	SLK	res	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch	n ID: <b>59</b>	137	F	RunNo: 70						
Prep Date: 4/1/2021	Analysis D	ate: 4/	2/2021	9	SeqNo: 2	706593	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	11		10.00		113	70	130				

#### Qualifiers:

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

Diesel Range Organics (DRO)

Surr: DNOP

% Recovery outside of range due to dilution or matrix

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

Page 50 of 60

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D82

Qual

%RPD

**RPDLimit** 

07-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: LCS-59137 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 59137 RunNo: 76409 Prep Date: 4/1/2021 Analysis Date: 4/2/2021 SeqNo: 2706596 Units: mg/Kg

SPK value SPK Ref Val %REC Analyte Result PQL LowLimit HighLimit Diesel Range Organics (DRO) 49 10 50.00 Λ 97.7 68.9 141 Surr: DNOP 4.8 5.000 96.7 130

Sample ID: 2103D82-027AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: BS21-100 1.0 Batch ID: 59137 RunNo: 76409

Prep Date: 4/1/2021 Analysis Date: 4/2/2021 SeqNo: 2706598 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 47 9.3 46.60 O 101 15 184 Surr: DNOP 4.9 4.660 106 70 130

Sample ID: 2103D82-027AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: BS21-100 1.0 Batch ID: 59137 RunNo: 76409 Prep Date: 4/1/2021 Analysis Date: 4/2/2021 SeqNo: 2706599 Units: mg/Kg HighLimit SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Diesel Range Organics (DRO) 44 9.7 48.73 89.7 15 184 7.65 23.9 Surr: DNOP 4.6 4.873 93.5 70 130 0 0

Sample ID: MB-59156 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MBLK Client ID: PBS Batch ID: 59156 RunNo: 76435 Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2707387 Units: mg/Kg SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Result PQL **RPDLimit** Qual Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 10.00 70 130 9.5 94.8

Sample ID: MB-59161 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MBLK Batch ID: 59161 Client ID: PBS RunNo: 76435 Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2707388 Units: %Rec Result PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte LowLimit Qual Surr: DNOP 8.3 10.00 83.1 70 130

Sample ID: LCS-59156 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS Client ID: LCSS Batch ID: 59156 RunNo: 76435 Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2707389 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** 

#### Qualifiers:

Analyte

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

Analyte detected in the associated Method Blank

LowLimit

- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 51 of 60

Qual

Result

PQL

## Hall Environmental Analysis Laboratory, Inc.

4.0

WO#: **2103D82** 

07-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: LCS-59156	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 59156			F	RunNo: 7	6435				
Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b> 3	3/2021	S	SeqNo: 2	707389	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.9	68.9	141			
Surr: DNOP	4.3		5.000		85.4	70	130			
Sample ID: LCS-59161	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	·

Client ID: LCSS Batch ID: 59161 RunNo: 76435 Prep Date: 4/2/2021 Analysis Date: 4/3/2021 SeqNo: 2707390 Units: %Rec Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

79.5

130

5.000

Sample ID: MB-59133 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 59133 RunNo: 76411 Analysis Date: 4/2/2021 Prep Date: 4/1/2021 SeqNo: 2707609 Units: mg/Kg Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual ND 10 Diesel Range Organics (DRO) Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.6 10.00 95.8 70 130

Sample ID: LCS-59133	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch	1D: <b>59</b>	133	R	RunNo: <b>76411</b>					
Prep Date: 4/1/2021	Analysis D	ate: 4/	2/2021	S	SeqNo: 2	707610	Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	68.9	141			
Surr: DNOP	4.7		5.000		94.6	70	130			

Sample ID: MB-59187	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 59187	RunNo: <b>76466</b>
Prep Date: 4/3/2021	Analysis Date: 4/6/2021	SeqNo: <b>2709506</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK value	e SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	13 10.00	) 134 70 130 S

Sample ID: LCS-59187	SampType: LCS	TestCode: EPA Method	d 8015M/D: Diesel Range Organics					
Client ID: LCSS	ent ID: LCSS Batch ID: 59187 RunNo: 76466							
Prep Date: 4/3/2021	Analysis Date: 4/6/2021	SeqNo: <b>2709507</b>	Units: %Rec					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual					
Surr: DNOP	5.0 5.000	99.6 70	130					

Qualifiers:

Surr: DNOP

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 52 of 60

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D82 07-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59138 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59138 RunNo: 76441

Prep Date: 4/1/2021 Analysis Date: 4/5/2021 SeqNo: 2708311 Units: mq/Kq

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 1000 1000 104 70 130

Sample ID: Ics-59138 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59138 RunNo: 76441

Prep Date: 4/1/2021 Analysis Date: 4/5/2021 SeqNo: 2708312 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 O 100 78.6 131 Surr: BFB

111

70

130

Sample ID: 2103d82-047ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

1000

Client ID: BS21-120 1.0 Batch ID: 59138 RunNo: 76441

1100

Prep Date: 4/1/2021 Analysis Date: 4/5/2021 SeqNo: 2708314 Units: mg/Kg

Result SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 23 4.8 24.15 96.7 61.3 114 Surr: BFB 1100 966.2 112 70 130

Sample ID: 2103d82-047amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-120 1.0 Batch ID: 59138 RunNo: 76441

Prep Date: 4/1/2021 Analysis Date: 4/5/2021 SeqNo: 2708315 Units: mg/Kg

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Gasoline Range Organics (GRO) 22 4.8 92.9 61.3 4.10 20 24 13 114 Surr: BFB 1100 965.3 110 70 130 0 0

Sample ID: Ics-59120 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59120 RunNo: 76461

Prep Date: 3/31/2021 Analysis Date: 4/5/2021 SeqNo: 2708457 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 26 5.0 0 78.6 25.00 105 131 Surr: BFB 1100 1000 105 70 130

Sample ID: mb-59120 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59120 RunNo: 76461

Prep Date: 3/31/2021 Units: mg/Kg Analysis Date: 4/5/2021 SeqNo: 2708459

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

#### Qualifiers:

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

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

Page 53 of 60

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D82

07-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59120 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59120 RunNo: 76461

Analysis Date: 4/5/2021 SeqNo: 2708459 Prep Date: 3/31/2021 Units: mg/Kg

SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual ND 5.0

Gasoline Range Organics (GRO)

Surr: BFB 920 1000 91.7 70 130

Sample ID: Ics-59122 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59122 RunNo: 76461

Prep Date: 3/31/2021 Units: mg/Kg Analysis Date: 4/5/2021 SeqNo: 2708482

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 5.0 25.00 O 95.1 78.6 131 Surr: BFB 1000 1000 103 70 130

Sample ID: mb-59122 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59122 RunNo: 76461

Prep Date: 3/31/2021 Analysis Date: 4/5/2021 SeqNo: 2708483 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 910 1000 90.9 70 130

Sample ID: 2103D82-007ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-80 1.0' Batch ID: 59122 RunNo: 76461

Prep Date: 3/31/2021 Analysis Date: 4/5/2021 SeqNo: 2708485 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 22 5.0 86.9 61.3 24.93 114 Surr: BFB 1000 997.0 102 70 130

Sample ID: 2103D82-007amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-80 1.0' Batch ID: 59122 RunNo: 76461

Prep Date: 3/31/2021 Analysis Date: 4/6/2021 SeqNo: 2708486 Units: mq/Kq

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 22 0 61.3 4.8 24.06 89.8 114 0.222 20 Surr: BFB 1000 962.5 107 70 130 0 0

Sample ID: mb-59132 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021 Units: mg/Kg Analysis Date: 4/6/2021 SeqNo: 2709883

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

#### Qualifiers:

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

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

Page 54 of 60

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D82

07-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59132 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021 Analysis Date: 4/6/2021 SeqNo: 2709883 Units: mg/Kg

SPK value SPK Ref Val %REC **RPDLimit** Analyte Result PQL LowLimit HighLimit %RPD Qual Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 1100

1000 109 70 130

Sample ID: Ics-59132 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021 Analysis Date: 4/6/2021 SeqNo: 2709884 Units: mg/Kg

HighLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 O 101 78.6 131 Surr: BFB 1200 1000 119 70 130

Sample ID: 2103d82-027ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-100 1.0 Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021 Analysis Date: 4/6/2021 SeqNo: 2709886 Units: mg/Kg

SPK value SPK Ref Val %RPD **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit Qual Gasoline Range Organics (GRO) 23 4.8 24.08 O 94.0 61.3 114 Surr: BFB 1100 963.4 110 70 130

Sample ID: 2103d82-027amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-100 1.0 Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021 Analysis Date: 4/6/2021 SeqNo: 2709887 Units: mg/Kg

SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual Gasoline Range Organics (GRO) 22 4.8 91.2 61.3 20 23.83 114 4.12 Surr: BFB 1100 953.3 113 70 130 0 0

Sample ID: mb-59167 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PRS Batch ID: 59167 RunNo: 76491

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2709908 Units: %Rec

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 70

Surr: BFB 980 1000 98.2 130

Sample ID: Ics-59167 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59167 RunNo: 76491

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2709909 Units: %Rec

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

Surr: BFB 1100 1000 109 70 130

#### Qualifiers:

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

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

Page 55 of 60

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D82** *07-Apr-21* 

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: Ics-59171 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59171 RunNo: 76481

Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SegNo: 2710542 Units: %Rec

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

Surr: BFB 1100 1000 107 70 130

Sample ID: mb-59171 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: **59171** RunNo: **76481** 

Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710543 Units: %Rec

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

Surr: BFB 940 1000 94.0 70 130

#### Qualifiers:

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

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

Page 56 of 60

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D82** 

07-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59138	ample ID: mb-59138 SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 59138			F	RunNo: 7	6441				
Prep Date: 4/1/2021	Analysis D	Date: 4/	5/2021	SeqNo: 2708359			Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: LCS-59138	Sampl	ype: <b>LC</b>	S	I es	PA Method	8021B: Volat	iles				
Client ID: LCSS	Batch	Batch ID: <b>59138</b> RunNo: <b>76441</b>									
Prep Date: 4/1/2021	Analysis D	ate: 4/	5/2021	S	SeqNo: 2	708360	360 Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.91	0.025	1.000	0	90.8	80	120	•			
Toluene	0.94	0.050	1.000	0	94.0	80	120				
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120				
Xylenes, Total	2.8	0.10	3.000	0	93.0	80	120				
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130				

Sample ID: Ics-59120	SampType: LCS TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSS	Batcl	n ID: <b>59</b> 1	120	F	RunNo: 70							
Prep Date: 3/31/2021	Analysis D	lysis Date: 4/5/2021 SeqNo: 2708500						Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.95	0.025	1.000	0	94.6	80	120					
Toluene	0.95	0.050	1.000	0	94.8	80	120					
Ethylbenzene	0.96	0.050	1.000	0	95.7	80	120					
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120					
Surr: 4-Bromofluorobenzene	0.88		1.000		88.3	70	130					

Sample ID: <b>mb-59120</b>	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 59120			RunNo: <b>76461</b>						
Prep Date: 3/31/2021	Analysis Date: 4/5/2021		SeqNo: <b>2708501</b>			Units: mg/K				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.2	70	130			

#### Qualifiers:

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

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

Page 57 of 60

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D82** 

07-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: Ics-59122	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batcl	n ID: <b>59</b> 1	122	F	RunNo: 7	6461				
Prep Date: 3/31/2021	Analysis D	Date: 4/	5/2021	8	SeqNo: 2	708524	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	80	120			
Toluene	0.91	0.050	1.000	0	90.8	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.7	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.0	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.6	70	130			

Sample ID: <b>mb-59122</b>	Samp1	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	h ID: <b>59</b>	122	F	RunNo: 7	6461				
Prep Date: 3/31/2021	Analysis D	Date: 4/	5/2021	9	SeqNo: 2	708525	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		86.7	70	130			

Sample ID: 2103D82-008ams	SampT	уре: <b>М</b> S	3	Tes	tCode: El	PA Method	8021B: Vola	iles		
Client ID: BS21-81 1.0'	Batcl	h ID: <b>59</b> ′	122	F	RunNo: 7	6461				
Prep Date: 3/31/2021	Analysis D	Date: 4/	6/2021	S	SeqNo: 2	708528	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.024	0.9699	0	86.7	76.3	120			
Toluene	0.86	0.048	0.9699	0	88.5	78.5	120			
Ethylbenzene	0.87	0.048	0.9699	0	89.5	78.1	124			
Xylenes, Total	2.6	0.097	2.910	0	88.4	79.3	125			
Surr: 4-Bromofluorobenzene	0.82		0.9699		84.8	70	130			

Sample ID: 2103D82-008amsc	I SampT	уре: <b>МЅ</b>	SD.	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: BS21-81 1.0'	Batch	ID: <b>59</b> 1	122	F	RunNo: 70	6461				
Prep Date: 3/31/2021	Analysis D	ate: 4/	6/2021	S	SeqNo: 2	708529	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9597	0	90.6	80	120	3.42	20	
Toluene	0.87	0.048	0.9597	0	90.8	80	120	1.46	20	
Ethylbenzene	0.88	0.048	0.9597	0	91.9	80	120	1.67	20	
Xylenes, Total	2.6	0.096	2.879	0	90.8	80	120	1.52	20	
Surr: 4-Bromofluorobenzene	0.84		0.9597		88.0	70	130	0	0	

#### Qualifiers:

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

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

Page 58 of 60

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D82

07-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59132 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021 Analysis Date: 4/6/2021 SeqNo: 2709962 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual Benzene ND 0.025

Toluene ND 0.050 Ethylbenzene ND 0.050 Xylenes, Total ND 0.10

Surr: 4-Bromofluorobenzene 1.1 1.000 109 70 130

Sample ID: LCS-59132 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021	Analysis [	Date: 4/	6/2021	8	SeqNo: 2	709963	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.3	80	120			
Toluene	0.94	0.050	1.000	0	94.2	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.1	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	70	130			

Sample ID: 2103d82-028ams SampType: MS TestCode: EPA Method 8021B: Volatiles

Client ID: BS21-101 1.0' Batch ID: 59132 RunNo: 76491

Prep Date: 4/1/2021	Analysis [	Date: 4/	6/2021	5	SeqNo: 2	709966	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9470	0	88.0	76.3	120			
Toluene	0.87	0.047	0.9470	0	91.6	78.5	120			
Ethylbenzene	0.86	0.047	0.9470	0	90.8	78.1	124			
Xylenes, Total	2.6	0.095	2.841	0	90.5	79.3	125			
Surr: 4-Bromofluorobenzene	0.98		0.9470		104	70	130			

TestCode: EPA Method 8021B: Volatiles Sample ID: 2103d82-028amsd SampType: MSD

Batch ID: 59132 Client ID: BS21-101 1.0' RunNo: 76491

			-							
Prep Date: 4/1/2021	Analysis D	ate: 4/	6/2021	S	SeqNo: 2	709967	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9634	0	90.5	80	120	4.54	20	
Toluene	0.90	0.048	0.9634	0	93.3	80	120	3.62	20	
Ethylbenzene	0.89	0.048	0.9634	0	92.4	80	120	3.46	20	
Xylenes, Total	2.7	0.096	2.890	0	92.2	80	120	3.62	20	
Surr: 4-Bromofluorobenzene	1.0		0.9634		103	70	130	0	0	

#### Qualifiers:

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

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

Page 59 of 60

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2103D82** 

07-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59167 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 59167 RunNo: 76491

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SegNo: 2709986 Units: %Rec

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

 Surr: 4-Bromofluorobenzene
 0.97
 1.000
 96.9
 70
 130

Sample ID: LCS-59167 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 59167 RunNo: 76491

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2709987 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.99 1.000 99.0 70 130

Sample ID: Ics-59171 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 59171 RunNo: 76481

Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710653 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.91 1.000 90.6 70 130

Sample ID: mb-59171 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: **PBS** Batch ID: **59171** RunNo: **76481** 

Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710654 Units: %Rec

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

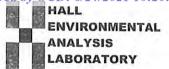
Surr: 4-Bromofluorobenzene 0.89 1.000 89.4 70 130

#### Qualifiers:

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

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

Page 60 of 60



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

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

## Sample Log-In Check List

Client Name:	Vertex Resource Group Ltd.	Work Order Num	ber: 2103D82		RcptNo:	1
Received By:	Desiree Dominguez	3/31/2021 8:00:00	АМ	1		
Completed By:	Desiree Dominguez	3/31/2021 9:01:44	AM	TO		
Reviewed By:	SPA 3.31	51				
Chain of Cus	tody					
1. Is Chain of C	ustody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the	sample delivered?		Courier			
Log In						
	npt made to cool the samples	?	Yes 🗸	No 🗌	NA 🗆	
4. Were all samp	oles received at a temperature	e of >0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗆	
5. Sample(s) in	proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sam	ple volume for indicated test(	s)?	Yes 🗸	No 🗌		
7. Are samples (	except VOA and ONG) prope	rly preserved?	Yes 🗸	No 🗌		
8. Was preserva	tive added to bottles?		Yes 🗌	No 🗸	NA 🗆	
9. Received at le	ast 1 vial with headspace <1/	4" for AQ VOA?	Yes	No 🗌	NA 🔽	70
10. Were any san	nple containers received brok	en?	Yes	No 🗹	# of preserved	
	ork match bottle labels?		Yes 🗸	No 🗆	bottles checked for pH:	3/31/2
12. Are matrices of	correctly identified on Chain of	Custody?	Yes 🗸	No 🗌	Adjusted?	
	analyses were requested?		Yes 🗸	No 🗌		
	ng times able to be met? ustomer for authorization.)		Yes 🗸	No 🗆	Checked by:	
	ing (if applicable)					
15. Was client no	tified of all discrepancies with	this order?	Yes 🗌	No 🗌	NA 🗸	
Person	Notified:	Date:				
By Who	m:	Via:	eMail	Phone   Fax	☐ In Person	
Regardi	ng:					
Client In	structions:					
16. Additional rer	marks:					
17. Cooler Information Cooler No. 1	the control of the first of the ball of th	Seal Intact   Seal No	Seal Date	Signed By		

Mailing Address:  Phone #:  email or Fax#:  QA/QC Package:  □ Standard  Accreditation: □ Az Compliance  □ NELAC □ Other  □ EDD (Type)  □ EDD (Type)  □ EDD (Type)  □ (000 \$\infty\$ \$\i		Ctandord	l	Jan (			I	HALL					
S:  Other  Other  Signature  Other  O			□ Rush		HE			Z	7	SIS	LAE	ANALYSIS LABORATOR	ORY
Matrix So 1 Corporate Sci.		Project Name:						www.h	allen	ironm	www.hallenvironmental.com	E	
Matrix So 1		Stubbins	tederal	UMS per		4901	4901 Hawkins NE -	ns NE		enbno	rque, NI	Albuquerque, NM 87109	
□ Az Cor □ Other Sov □ Other		Project #:	1			Tel.	505-345-3975	5-397		Fax 5	505-345-4107	4107	
□ Az Cor □ Other So , □		$\frac{2}{2}$	200					_	Analysis		Request		
□ Az Cor □ Other Sov □ Other		Project Manager:				(0			<sup>⊅</sup> O:		(ţu		
□ Az Cor □ Other So	I level 4 (Eull Validation)	Monica	Peppi'n	C	208)		200	SWIS	S ԠOc		əsdA\		
Matrix Matrix 50°, 1	לו מוו אמווממווסוו)							02	J 'Z		quə		
Matrix Matrix		Sampler: ( Y) (		ON.					_				
Matrix So'l		Si							_				
Matrix So'l		Cooler Temp(including CF): O, 4-6,1 = 0,3	ng CF): 0, 4-	(0.) S'Q=1'0-	TM								
7.98	Sample Name	Container Prese Type and # Type	rvative	2103 D82	(X3T8	08:H9T 9 1808	EDB (V	PAHs k	CI)E, I	v) 09Z8	8) 07S8 O lstoT		
	.0.1 38-	175	3	-013	7	1			7				
	-87 1.0'			H10-	-				_				
	-88 1.0'			-015									
	-89 1.0			410-									
	-90 1.0'			-017									
	-91 1.0'			210-	_		=						
	26 -			610-	_								
	- 93			020-			[]		7				
12581 01,01	1 66-			120-			U			k			
1045 3521	-95 1.0'			-025									
1258   18201 /	-96 1.0.			-023									
1258   18881 V	1.01			h20-	-				)				
Date: Time: Relinquished by:	1	Received by: Via:		Tin'	Remarks:	ırks:							
Jacks Time: Belinglished by:		Docement Mis-		5/50/21   500									
1 1900		· A	ya Çışı	3.31.71 X:00	5	of of o	7	,					

Chair	J-of-C	Chain-of-Custody Record	prd	Turn-Around Time:		S Cay			HALL		IN	ENVIRONMENTAL	ITAL
Client: Ver	ertex			☑ Standard	l □ Rush	ih /			AN	ILYS	SI	ANALYSIS LABORATORY	TORY
				Project Name:	V	- 1-57			www	hallenvi	ronme	www.hallenvironmental.com	
Mailing Address:	SS:			Clabor A	1	regional SUST	- 54	301 Hav	/kins N	E - Alb	ndnerd	4901 Hawkins NE - Albuquerque, NM 87109	
				Project #:	0	Г	_	Tel. 505-345-3975	345-39	75 F	ax 50	Fax 505-345-4107	
Phone #:				915-	0000	I i				Analysis	sis Re	Request	
email or Fax#:				Project Manager	ager:					<sup>⊅</sup> O <sup>5</sup>		(ţu	
QA/QC Package:	ài	☐ Level 4 (Full Validation)	idation)	Manica	ل ر	depoin			SWIS	S '⁵Od		əsdA\t	
Accreditation.	D A7 C	□ Az Compliance		Sampler.	OTO			28		'ZC	-	uəs	
□ NELAC	□ Other				KI Yes	No □		08/9			(A		
□ EDD (Type)				18				səbi					
				Cooler Temp(including CF); O	Vincluding CF); O.	(3°) 5.0=1.0-E.		oitee					
Date Time	Matrix	Sample Name		Container Type and #	Preservative Type	e HEAL No.	(X3T8) 08:H9T	9 1808	M) BD3	АСВА і СПЭЕ, Е	7) 0928 8) 0728	O lstoT	
3-25-21 1100	50.1	86-1258	1.0	405	ice	520.	7			7			
1105	)	15521-99	1,0'			- 026	_			-			
1110		13521-100	1,0,			t20°							
1115		13521-101	1,0			, 028							
1120		18521-102	1,0'			620 -							
5211		13521-103	1,0,1			- 030							
1130		13521-104	1,0			- 031							
1135	1	8521-105	1,01			750-							
0411		101-1258	1,0,1			-033							
1145	1	13521-107	1,0,			-034							
1150		13521-108	1,01			-035							
1155		13521-109	1,01	-		-036	=			_			
Date: Time:	Relinquished by:	led by:	1	Received by	Via:	Date Time \$\sqrt{30} = 1.30	Remarks:	.s.					
1	Relinquished by:	led by:		Received by:	Via:								
83121 1910	1	\		A J	Course	2,21.21 8:00	Martan	000	1				

Client:	hain	2		5	\		500			I	ALI	E	M	HALL ENVIRONMENTAL	NTA	1
	5	プレン			☑ Standard	□ Rush					AN	ANALYSIS	IS	LABORATOR	TO	RY
					Project Name:	io i					www.h	allenvir	onme	www.hallenvironmental.com		
Mailing	Mailing Address:	26			STLODIN	ns ted!	s tealing on h		4901	Hawki	4901 Hawkins NE	- Albu	duerd	Albuquerque, NM 87109		
					Project #:	1000			Tel. 5	05-34	Tel. 505-345-3975		Fax 50	505-345-4107		
Phone #:	#:					0000						Analysis	is Re	Request	H	
email or Fax#:	r Fax#:				Project Manager	iger:		(1	(0			†O:	-	(tu		
QA/QC	QA/QC Package:		į		Mon'ca	A Peppin	C.0	208)			SWIS	S ԠO		əsqY		
□ Standard	idard		☐ Level 4 (Full Validation)	/alidation)	4	0-5		s,g		_	302	d 'z	_	Дuə		
Accreditation:	itation:	□ Az C	☐ Az Compliance		<u></u>	LAN		MT	200		28 -	ON	(			
NELAC	□ NELAC	□ Otner		1	On Ice:	X Xes	ON 🗆	/3				_	AO1			
	(adki)				# of Coolers.	-	DAD 351-21	T				N				
					Cooler Lemp(including CF):		\$ 0.4-0.1=0.3(-0)			23.556		Br,				
Date	Time	Matrix	Sample Name	0	Container Type and #	Preservative Type	AIOSOS 2	BTEX	)8:H9T 7	EDB (v	PAHs ARDA	(JE,	) 0928 5) 0728	) IstoT		
3-29-21	1200	501	1 3521-110	1.0	20 h.	1,00	t20-	7	\			_				
-	1205	~	8521-111	1,0	1		850 -					1				
	1210		8521-112	1,0,			620-									
	1215		13521-113	1,0			040-									
	1220		111-1258	1.0'			-041	F								
	1225		1521-115	1.0'			240-									
	1230		8521 -116	1.0			-043									
	12 35		13521-117	1.0'			hHO-									
	12 40		13521-118	1,0'			Sho-									
	12 45		119	1.0			940-									
	1250		13521-120	1.0'			th0-									
>	<b>***</b>		<b>*************************************</b>				CB/2048									
	Time:	Relinquished by	hed by:		Received by:	Via:		Remarks:	arks:							
1096	3	>	2	1	1		7									
Date:	Time:	Relinquished by	hed by:	,	Received by:	Via:	Date Time		-	-						
12011	1700	1111			d)	> courier	1 3.51.21 D:00	/	oto	dor						



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

May 03, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX:

RE: Stebbins Federal SWD OrderNo.: 2104A33

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/23/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andy

4901 Hawkins NE

Albuquerque, NM 87109

# Analytical Report Lab Order 2104A33

Date Reported: 5/3/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-02 0-1

 Project:
 Stebbins Federal SWD
 Collection Date: 4/20/2021 8:15:00 AM

 Lab ID:
 2104A33-001
 Matrix: SOIL
 Received Date: 4/23/2021 7:20:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: SB
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/28/2021 2:01:55 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/28/2021 2:01:55 PM
Surr: DNOP	107	70-130	%Rec	1	4/28/2021 2:01:55 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/28/2021 7:07:00 PM
Surr: BFB	111	70-130	%Rec	1	4/28/2021 7:07:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/28/2021 7:07:00 PM
Toluene	ND	0.050	mg/Kg	1	4/28/2021 7:07:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/28/2021 7:07:00 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/28/2021 7:07:00 PM
Surr: 4-Bromofluorobenzene	107	70-130	%Rec	1	4/28/2021 7:07:00 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	220	60	mg/Kg	20	4/29/2021 12:43:04 AM

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

Qualifiers:

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

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

Page 1 of 5

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A33** 

03-May-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59689 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59689 RunNo: 77001

Prep Date: 4/28/2021 Analysis Date: 4/28/2021 SeqNo: 2729981 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-59689 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59689 RunNo: 77001

Prep Date: 4/28/2021 Analysis Date: 4/28/2021 SeqNo: 2729982 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 95.6 90 110

#### Qualifiers:

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

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

Page 2 of 5

#### Hall Environmental Analysis Laboratory, Inc.

Result

60

5.9

10

2104A33

WO#:

03-May-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: <b>MB-59659</b>	SampT	Туре: МЕ	BLK	Tes	tCode: E	PA Method	l 8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch	h ID: <b>59</b> 6	659	F	RunNo: 77	7011				
Prep Date: 4/27/2021	Analysis D	)ate: <b>4/</b>	/28/2021	5	SeqNo: 27	730655	Units: mg/K	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	70	130			
Sample ID: LCS-59659	SampT	Type: <b>LC</b>	s	Tes	tCode: <b>E</b>	PA Method	l 8015M/D: Die	esel Rang	e Organics	
Client ID: LCSS	Batch	h ID: <b>59</b> 6	659	F	RunNo: 77	7011				
Prep Date: 4/27/2021	Analysis D	Date: 4/	/28/2021	<i>;</i>	SeqNo: 27	730657	Units: mq/K	ία		

Sample ID: <b>2104A33-001AMS</b>	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS21-02 0-1	Batch	ID: <b>59</b>	659	F	RunNo: 7	7011				
Prep Date: 4/27/2021	Analysis D	ate: <b>4/</b>	28/2021	S	SeqNo: 2	730660	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.9	49.60	0	82.9	15	184			
Surr: DNOP	4.0		4.960		81.1	70	130			

HighLimit

141

130

LowLimit

68.9

70

119

119

%RPD

**RPDLimit** 

Qual

SPK value SPK Ref Val %REC

50.00

5.000

Sample ID: 2104A33-001AMSI	MSD SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS21-02 0-1	Batch	ID: <b>59</b> 6	659	R	tunNo: <b>7</b>	7011				
Prep Date: 4/27/2021	Analysis D	ate: <b>4/</b>	28/2021	S	SeqNo: 2	730661	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	9.6	48.08	0	107	15	184	22.1	23.9	
Surr: DNOP	53		4 808		110	70	130	0	Λ	

#### Qualifiers:

Analyte

Surr: DNOP

Diesel Range Organics (DRO)

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

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

Page 3 of 5

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A33** 

03-May-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: LCS-59612 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59612 RunNo: 77010

Prep Date: 4/23/2021 Analysis Date: 4/28/2021 SeqNo: 2729838 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Gasoline Range Organics (GRO) 28 5.0 25.00 0 110 78.6 131

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

 Surr: BFB
 1200
 1000
 118
 70
 130

Sample ID: MB-59612 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: **59612** RunNo: **77010** 

Prep Date: 4/23/2021 Analysis Date: 4/28/2021 SeqNo: 2729839 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 970 1000 96.8 70 130

#### Qualifiers:

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

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

Page 4 of 5

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104A33** 

03-May-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: LCS-59612 Client ID: LCSS	·	SampType: LCS TestCode: EPA Method 80 Batch ID: 59612 RunNo: 77010								
Prep Date: 4/23/2021	Analysis D	Date: 4/	28/2021	S	SeqNo: 2	729852	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.9	80	120			
Toluene	0.93	0.050	1.000	0	92.5	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.6	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.1	70	130			

Sample ID: MB-59612	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: PBS	Batc	h ID: <b>59</b>	612	F	RunNo: 7	7010				
Prep Date: 4/23/2021	Analysis D	Date: 4/	28/2021	8	SeqNo: 2	729853	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.9	70	130			

#### Qualifiers:

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

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

Page 5 of 5



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109

## Sample Log-In Check List

ANALYSIS

LABORATORY

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

Website: clients.hallenvironmental.com

Work Order Number: 2104A33

Client Name:	Vertex Resource Group Ltd.	Work Order Numbe	r: <b>210</b>	4A33			RcptNo:	1
Received By:	Juan Rojas	4/23/2021 7:20:00 AM	A.		Diane	D		
Completed By:	Cheyenne Cason	4/23/2021 8:14:27 AM	И		Gent			
Reviewed By:	Je 4/23/21				Ç.			
Chain of Cus	<u>tody</u>							
1. Is Chain of Cเ	ustody complete?		Yes	<b>✓</b>	No		Not Present	
2. How was the	sample delivered?		Cou	<u>rier</u>				
<u>Log In</u>								
3. Was an attem	pt made to cool the samples	5?	Yes	<b>V</b>	No [		NA 🗌	
4. Were all samp	ples received at a temperatur	re of >0° C to 6.0°C	Yes	<b>~</b>	No [		NA $\square$	
5. Sample(s) in p	proper container(s)?		Yes	<b>✓</b>	No [			
6. Sufficient sam	ple volume for indicated test	(s)?	Yes	<b>✓</b>	No [			
7. Are samples (e	except VOA and ONG) prope	erly preserved?	Yes	<b>✓</b>	No [			
8. Was preservat	tive added to bottles?		Yes		No 🛚	/	NA 🗆	
9. Received at lea	ast 1 vial with headspace <1	/4" for AQ VOA?	Yes		No [		NA 🗹	- 6
10, Were any sam	nple containers received brok	ken?	Yes		No	<b>y</b> i		
							# of preserved bottles checked	123/2
	rk match bottle labels?		Yes	✓	No [	$\exists \mid$	for pH:	4 (2)
	incles on chain of custody)					_	***	>12 unless noted)
	correctly identified on Chain of	of Custody?	Yes		No L		Adjusted?	
	analyses were requested?		Yes	<b>V</b>	No L	亅		
	ng times able to be met? ustomer for authorization.)		Yes	✓	No L	<b>⊣</b> [	Checked by:	
Special Handli	ing (if applicable)							
15, Was client not	tified of all discrepancies wit	n this order?	Yes		No [		NA 🗹	
Person I	Notified:	Date:				STEEL SOME		
By Who	m:	Via:	□ eMa	ail 🔲	Phone 🖂 I	Fax	☐ In Person	•
Regardi	ng:	· · · · · · · · · · · · · · · · · · ·	***************************************	**********	······	**************************************		
Client In	structions:		7100.F.E. 1000.IA.H.	×		. #45777783		
16. Additional ren	marks:						l	
17. Cooler Inforr Cooler No	E-H - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Seal Intact   Seal No	Seal D	ate :	Signed B	<b>y</b>		

	Tirn_Around Time:	Sendall labreports to
Chain-of-Custody Record	Julia Albania mine. SOAY	
Client: \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	□ Rus	YSIS LABORATORY
Mailing Address:	Project Name: -Stelobins Fedural SWP	www.hallenvironmental.com
		Hawkins NE - Albuquerque, NM 87109
Phone #:	21E-00087-001	Tel. 505-345-3975 Fax 505-345-4107 S
email or Fax#:	Project Manager:	,O
QA/QC Package:	Movice Peppin	PO4, S
. □ Az Con	Sampler: MTP	/8082 I 04.1) 16.8270 10.2, I 10.2, I
ype)	lers: /	(GR( 10 c 10 c 10 c 10 c
	Cooler Temp(including CF): 6 7-6.7 2-6.7	MTAD deficient of the state of
Date Time Matrix Sample Name	Container Preservative HEAL No. Type and # Type 7 10.4 3.3	6TEX) 8081 P 8081 P 8081 P 8CRA 6 8260 (/
1 8:15 Soil	14 00	>
	:	
Unity 945 Relinquisher by:	Received by: Via: 4 Parks Time	Remarks: (C. M. Pupé'n
Date: Time: Relinquished by:	Received by: Via: $\chi$ Date Time $\chi$ Date $\chi$ Dat	112 of :
If necessary, samples submitted to Hall Etylohmental may be subc	contracted to bits accredited laboratories. This serves as notice of	s possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

April 14, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX

RE: Stebbins Federal SWD OrderNo.: 2104068

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 40 sample(s) on 4/2/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued April 08, 2021.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-36 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 7:30:00 AM

 Lab ID:
 2104068-001
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/5/2021 1:52:11 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/5/2021 1:52:11 PM
Surr: DNOP	110	70-130	%Rec	1	4/5/2021 1:52:11 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 4:51:07 AM
Surr: BFB	99.4	70-130	%Rec	1	4/7/2021 4:51:07 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 4:51:07 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 4:51:07 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 4:51:07 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 4:51:07 AM
Surr: 4-Bromofluorobenzene	98.6	70-130	%Rec	1	4/7/2021 4:51:07 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	61	mg/Kg	20	4/7/2021 11:52:36 AM

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

Qualifiers:

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

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

Page 1 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-37 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 7:35:00 AM

 Lab ID:
 2104068-002
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	4/5/2021 2:21:47 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	4/5/2021 2:21:47 PM
Surr: DNOP	135	70-130	S	%Rec	1	4/5/2021 2:21:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/7/2021 9:08:19 AM
Surr: BFB	98.2	70-130		%Rec	1	4/7/2021 9:08:19 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/7/2021 9:08:19 AM
Toluene	ND	0.048		mg/Kg	1	4/7/2021 9:08:19 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/7/2021 9:08:19 AM
Xylenes, Total	ND	0.096		mg/Kg	1	4/7/2021 9:08:19 AM
Surr: 4-Bromofluorobenzene	93.9	70-130		%Rec	1	4/7/2021 9:08:19 AM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	60		mg/Kg	20	4/7/2021 12:29:40 PM

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

Qualifiers:

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

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

Page 2 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-38 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 7:40:00 AM

 Lab ID:
 2104068-003
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 2:31:37 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 2:31:37 PM
Surr: DNOP	89.3	70-130	%Rec	1	4/5/2021 2:31:37 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 11:30:26 AM
Surr: BFB	97.5	70-130	%Rec	1	4/7/2021 11:30:26 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 11:30:26 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 11:30:26 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 11:30:26 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 11:30:26 AM
Surr: 4-Bromofluorobenzene	97.1	70-130	%Rec	1	4/7/2021 11:30:26 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 12:42:03 PM

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

Qualifiers:

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

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

Page 3 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-39 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 7:45:00 AM

 Lab ID:
 2104068-004
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/5/2021 2:41:25 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2021 2:41:25 PM
Surr: DNOP	129	70-130	%Rec	1	4/5/2021 2:41:25 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 11:54:02 AM
Surr: BFB	97.5	70-130	%Rec	1	4/7/2021 11:54:02 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 11:54:02 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 11:54:02 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 11:54:02 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 11:54:02 AM
Surr: 4-Bromofluorobenzene	97.0	70-130	%Rec	1	4/7/2021 11:54:02 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 8:35:38 AM

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

Qualifiers:

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

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

Page 4 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-40 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 7:50:00 AM

 Lab ID:
 2104068-005
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 2:51:10 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 2:51:10 PM
Surr: DNOP	119	70-130	%Rec	1	4/5/2021 2:51:10 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 12:17:46 PM
Surr: BFB	97.4	70-130	%Rec	1	4/7/2021 12:17:46 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 12:17:46 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 12:17:46 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 12:17:46 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 12:17:46 PM
Surr: 4-Bromofluorobenzene	96.5	70-130	%Rec	1	4/7/2021 12:17:46 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	59	mg/Kg	20	4/7/2021 9:12:52 AM

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

Qualifiers:

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

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

Page 5 of 50

Date Reported: 4/14/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-41 0-1

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 7:55:00 AM

 Lab ID:
 2104068-006
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Result **RL Qual Units** DF **Date Analyzed** Analyses **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: mb Diesel Range Organics (DRO) 4/5/2021 3:00:54 PM ND 8.8 mg/Kg 1 Motor Oil Range Organics (MRO) 4/5/2021 3:00:54 PM ND 44 mg/Kg 1 Surr: DNOP 127 70-130 %Rec 1 4/5/2021 3:00:54 PM **EPA METHOD 8015D: GASOLINE RANGE** Analyst: NSB Gasoline Range Organics (GRO) ND 4/7/2021 12:41:28 PM 4.7 mg/Kg 1 Surr: BFB 98.1 70-130 %Rec 1 4/7/2021 12:41:28 PM **EPA METHOD 8021B: VOLATILES** Analyst: NSB Benzene ND 0.023 mg/Kg 4/7/2021 12:41:28 PM 1 Toluene ND 0.047 mg/Kg 1 4/7/2021 12:41:28 PM Ethylbenzene ND 0.047 mg/Kg 1 4/7/2021 12:41:28 PM Xylenes, Total ND 0.093 mg/Kg 1 4/7/2021 12:41:28 PM 4/7/2021 12:41:28 PM Surr: 4-Bromofluorobenzene 97.0 70-130 %Rec 1 Analyst: VP **EPA METHOD 300.0: ANIONS** Chloride ND 60 4/7/2021 10:14:54 AM ma/Ka 20

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

Qualifiers:

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

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

Page 6 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-42 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:00:00 AM

 Lab ID:
 2104068-007
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 3:10:39 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 3:10:39 PM
Surr: DNOP	105	70-130	%Rec	1	4/5/2021 3:10:39 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 1:05:10 PM
Surr: BFB	98.5	70-130	%Rec	1	4/7/2021 1:05:10 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 1:05:10 PM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 1:05:10 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 1:05:10 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 1:05:10 PM
Surr: 4-Bromofluorobenzene	95.4	70-130	%Rec	1	4/7/2021 1:05:10 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	65	60	mg/Kg	20	4/7/2021 10:27:19 AM

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

Qualifiers:

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

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

Page 7 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-43 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:05:00 AM

 Lab ID:
 2104068-008
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: mb				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 3:20:23 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 3:20:23 PM
Surr: DNOP	90.8	70-130	%Rec	1	4/5/2021 3:20:23 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 1:28:55 PM
Surr: BFB	95.9	70-130	%Rec	1	4/7/2021 1:28:55 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 1:28:55 PM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 1:28:55 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 1:28:55 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 1:28:55 PM
Surr: 4-Bromofluorobenzene	95.4	70-130	%Rec	1	4/7/2021 1:28:55 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	68	60	mg/Kg	20	4/7/2021 10:39:43 AM

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

Qualifiers:

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

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

Page 8 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-44 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:10:00 AM

 Lab ID:
 2104068-009
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 3:30:04 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 3:30:04 PM
Surr: DNOP	90.5	70-130	%Rec	1	4/5/2021 3:30:04 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/7/2021 3:03:18 PM
Surr: BFB	98.0	70-130	%Rec	1	4/7/2021 3:03:18 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 3:03:18 PM
Toluene	ND	0.047	mg/Kg	1	4/7/2021 3:03:18 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/7/2021 3:03:18 PM
Xylenes, Total	ND	0.095	mg/Kg	1	4/7/2021 3:03:18 PM
Surr: 4-Bromofluorobenzene	97.9	70-130	%Rec	1	4/7/2021 3:03:18 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	100	61	mg/Kg	20	4/7/2021 10:52:08 AM

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

Qualifiers:

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

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

Page 9 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-45 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:15:00 AM

 Lab ID:
 2104068-010
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 3:39:50 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 3:39:50 PM
Surr: DNOP	73.3	70-130	%Rec	1	4/5/2021 3:39:50 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 3:26:53 PM
Surr: BFB	97.4	70-130	%Rec	1	4/7/2021 3:26:53 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 3:26:53 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 3:26:53 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 3:26:53 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 3:26:53 PM
Surr: 4-Bromofluorobenzene	96.6	70-130	%Rec	1	4/7/2021 3:26:53 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	110	61	mg/Kg	20	4/7/2021 11:04:33 AM

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

Qualifiers:

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

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

Page 10 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-46 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:20:00 AM

 Lab ID:
 2104068-011
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 3:49:38 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 3:49:38 PM
Surr: DNOP	93.3	70-130	%Rec	1	4/5/2021 3:49:38 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 3:50:26 PM
Surr: BFB	96.7	70-130	%Rec	1	4/7/2021 3:50:26 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 3:50:26 PM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 3:50:26 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 3:50:26 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 3:50:26 PM
Surr: 4-Bromofluorobenzene	96.3	70-130	%Rec	1	4/7/2021 3:50:26 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	95	60	mg/Kg	20	4/7/2021 11:16:58 AM

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

Qualifiers:

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

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

Page 11 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-47 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:25:00 AM

 Lab ID:
 2104068-012
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 3:59:23 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 3:59:23 PM
Surr: DNOP	99.1	70-130	%Rec	1	4/5/2021 3:59:23 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 4:13:55 PM
Surr: BFB	98.1	70-130	%Rec	1	4/7/2021 4:13:55 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 4:13:55 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 4:13:55 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 4:13:55 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 4:13:55 PM
Surr: 4-Bromofluorobenzene	97.6	70-130	%Rec	1	4/7/2021 4:13:55 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	110	61	mg/Kg	20	4/7/2021 11:29:22 AM

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

Qualifiers:

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

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

Page 12 of 50

Date Reported: 4/14/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-48 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:30:00 AM

 Lab ID:
 2104068-013
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/5/2021 4:09:08 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 4:09:08 PM
Surr: DNOP	97.0	70-130	%Rec	1	4/5/2021 4:09:08 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 4:37:22 PM
Surr: BFB	97.4	70-130	%Rec	1	4/7/2021 4:37:22 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 4:37:22 PM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 4:37:22 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 4:37:22 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/7/2021 4:37:22 PM
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	4/7/2021 4:37:22 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	150	60	mg/Kg	20	4/7/2021 11:41:46 AM

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

Qualifiers:

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

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

Page 13 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-49 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:35:00 AM

 Lab ID:
 2104068-014
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	4/5/2021 4:18:50 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	4/5/2021 4:18:50 PM
Surr: DNOP	87.0	70-130	%Rec	1	4/5/2021 4:18:50 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/7/2021 5:00:57 PM
Surr: BFB	98.8	70-130	%Rec	1	4/7/2021 5:00:57 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.023	mg/Kg	1	4/7/2021 5:00:57 PM
Toluene	ND	0.047	mg/Kg	1	4/7/2021 5:00:57 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/7/2021 5:00:57 PM
Xylenes, Total	ND	0.093	mg/Kg	1	4/7/2021 5:00:57 PM
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	4/7/2021 5:00:57 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	130	60	mg/Kg	20	4/7/2021 12:18:59 PM

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

Qualifiers:

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

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

Page 14 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-50 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:40:00 AM

 Lab ID:
 2104068-015
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 4:28:31 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 4:28:31 PM
Surr: DNOP	88.5	70-130	%Rec	1	4/5/2021 4:28:31 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/7/2021 5:24:24 PM
Surr: BFB	97.2	70-130	%Rec	1	4/7/2021 5:24:24 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 5:24:24 PM
Toluene	ND	0.047	mg/Kg	1	4/7/2021 5:24:24 PM
Ethylbenzene	ND	0.047	mg/Kg	1	4/7/2021 5:24:24 PM
Xylenes, Total	ND	0.094	mg/Kg	1	4/7/2021 5:24:24 PM
Surr: 4-Bromofluorobenzene	96.5	70-130	%Rec	1	4/7/2021 5:24:24 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	160	60	mg/Kg	20	4/7/2021 12:31:24 PM

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

Qualifiers:

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

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

Page 15 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-51 0-1.5'

Project: Stebbins Federal SWD

Collection Date: 3/30/2021 8:45:00 AM

**Lab ID:** 2104068-016 **Matrix:** SOIL **Received Date:** 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OI	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/5/2021 4:38:14 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 4:38:14 PM
Surr: DNOP	86.5	70-130	%Rec	1	4/5/2021 4:38:14 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 5:47:56 PM
Surr: BFB	96.6	70-130	%Rec	1	4/7/2021 5:47:56 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 5:47:56 PM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 5:47:56 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 5:47:56 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/7/2021 5:47:56 PM
Surr: 4-Bromofluorobenzene	95.9	70-130	%Rec	1	4/7/2021 5:47:56 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	150	60	mg/Kg	20	4/7/2021 12:43:48 PM

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

Qualifiers:

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

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

Page 16 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-52 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:50:00 AM

 Lab ID:
 2104068-017
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (	ORGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/5/2021 4:48:01 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2021 4:48:01 PM
Surr: DNOP	72.4	70-130	%Rec	1	4/5/2021 4:48:01 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	170	60	mg/Kg	20	4/7/2021 12:56:13 PM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/6/2021 9:51:25 PM
Toluene	ND	0.049	mg/Kg	1	4/6/2021 9:51:25 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/6/2021 9:51:25 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/6/2021 9:51:25 PM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	4/6/2021 9:51:25 PM
Surr: 4-Bromofluorobenzene	85.2	70-130	%Rec	1	4/6/2021 9:51:25 PM
Surr: Dibromofluoromethane	110	70-130	%Rec	1	4/6/2021 9:51:25 PM
Surr: Toluene-d8	100	70-130	%Rec	1	4/6/2021 9:51:25 PM
EPA METHOD 8015D MOD: GASOLINE RA	ANGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/6/2021 9:51:25 PM
Surr: BFB	96.7	70-130	%Rec	1	4/6/2021 9:51:25 PM

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

Qualifiers:

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

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

Page 17 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-53 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 8:55:00 AM

 Lab ID:
 2104068-018
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/5/2021 4:57:50 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 4:57:50 PM
Surr: DNOP	81.9	70-130	%Rec	1	4/5/2021 4:57:50 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	93	60	mg/Kg	20	4/7/2021 5:22:23 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JMR
Benzene	ND	0.024	mg/Kg	1	4/6/2021 11:17:21 PM
Toluene	ND	0.048	mg/Kg	1	4/6/2021 11:17:21 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/6/2021 11:17:21 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/6/2021 11:17:21 PM
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	4/6/2021 11:17:21 PM
Surr: 4-Bromofluorobenzene	92.9	70-130	%Rec	1	4/6/2021 11:17:21 PM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/6/2021 11:17:21 PM
Surr: Toluene-d8	102	70-130	%Rec	1	4/6/2021 11:17:21 PM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/6/2021 11:17:21 PM
Surr: BFB	103	70-130	%Rec	1	4/6/2021 11:17:21 PM

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

Qualifiers:

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

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

Page 18 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-54 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:00:00 AM

 Lab ID:
 2104068-019
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 5:07:38 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 5:07:38 PM
Surr: DNOP	97.9	70-130	%Rec	1	4/5/2021 5:07:38 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	62	60	mg/Kg	20	4/7/2021 5:34:56 PM
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst: JMR
Benzene	ND	0.024	mg/Kg	1	4/7/2021 2:37:40 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 2:37:40 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 2:37:40 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/7/2021 2:37:40 AM
Surr: 1,2-Dichloroethane-d4	100	70-130	%Rec	1	4/7/2021 2:37:40 AM
Surr: 4-Bromofluorobenzene	93.8	70-130	%Rec	1	4/7/2021 2:37:40 AM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	4/7/2021 2:37:40 AM
Surr: Toluene-d8	106	70-130	%Rec	1	4/7/2021 2:37:40 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 2:37:40 AM
Surr: BFB	104	70-130	%Rec	1	4/7/2021 2:37:40 AM

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

Qualifiers:

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

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

Page 19 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-55 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:05:00 AM

 Lab ID:
 2104068-020
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 5:17:26 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 5:17:26 PM
Surr: DNOP	76.1	70-130	%Rec	1	4/5/2021 5:17:26 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	4/7/2021 5:47:21 PM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 3:06:10 AM
Toluene	ND	0.047	mg/Kg	1	4/7/2021 3:06:10 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/7/2021 3:06:10 AM
Xylenes, Total	ND	0.095	mg/Kg	1	4/7/2021 3:06:10 AM
Surr: 1,2-Dichloroethane-d4	93.7	70-130	%Rec	1	4/7/2021 3:06:10 AM
Surr: 4-Bromofluorobenzene	92.1	70-130	%Rec	1	4/7/2021 3:06:10 AM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	4/7/2021 3:06:10 AM
Surr: Toluene-d8	108	70-130	%Rec	1	4/7/2021 3:06:10 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/7/2021 3:06:10 AM
Surr: BFB	99.2	70-130	%Rec	1	4/7/2021 3:06:10 AM

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

Qualifiers:

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

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

Page 20 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-56 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:10:00 AM

 Lab ID:
 2104068-021
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/6/2021 10:36:42 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 10:36:42 AM
Surr: DNOP	103	70-130	%Rec	1	4/6/2021 10:36:42 AM
<b>EPA METHOD 300.0: ANIONS</b>					Analyst: VP
Chloride	63	60	mg/Kg	20	4/7/2021 6:24:36 PM
EPA METHOD 8260B: VOLATILES SHOR	T LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 3:34:51 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 3:34:51 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 3:34:51 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/7/2021 3:34:51 AM
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	4/7/2021 3:34:51 AM
Surr: 4-Bromofluorobenzene	94.9	70-130	%Rec	1	4/7/2021 3:34:51 AM
Surr: Dibromofluoromethane	115	70-130	%Rec	1	4/7/2021 3:34:51 AM
Surr: Toluene-d8	103	70-130	%Rec	1	4/7/2021 3:34:51 AM
EPA METHOD 8015D MOD: GASOLINE R.	ANGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 3:34:51 AM
Surr: BFB	103	70-130	%Rec	1	4/7/2021 3:34:51 AM

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

Qualifiers:

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

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

Page 21 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-57 0-1.5'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:15:00 AM

 Lab ID:
 2104068-022
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	DRGANICS	_	_		Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 11:15:25 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 11:15:25 AM
Surr: DNOP	117	70-130	%Rec	1	4/6/2021 11:15:25 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	61	60	mg/Kg	20	4/7/2021 6:37:01 PM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 4:03:33 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 4:03:33 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 4:03:33 AM
Xylenes, Total	ND	0.096	mg/Kg	1	4/7/2021 4:03:33 AM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	4/7/2021 4:03:33 AM
Surr: 4-Bromofluorobenzene	91.8	70-130	%Rec	1	4/7/2021 4:03:33 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	4/7/2021 4:03:33 AM
Surr: Toluene-d8	105	70-130	%Rec	1	4/7/2021 4:03:33 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 4:03:33 AM
Surr: BFB	102	70-130	%Rec	1	4/7/2021 4:03:33 AM

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

Qualifiers:

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

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

Page 22 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-58 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:20:00 AM

 Lab ID:
 2104068-023
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	4/6/2021 11:25:06 AM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/6/2021 11:25:06 AM
Surr: DNOP	113	70-130	%Rec	1	4/6/2021 11:25:06 AM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	72	60	mg/Kg	20	4/7/2021 6:49:25 PM
EPA METHOD 8260B: VOLATILES SHORT LI	ST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 4:32:10 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 4:32:10 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 4:32:10 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 4:32:10 AM
Surr: 1,2-Dichloroethane-d4	108	70-130	%Rec	1	4/7/2021 4:32:10 AM
Surr: 4-Bromofluorobenzene	91.9	70-130	%Rec	1	4/7/2021 4:32:10 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/7/2021 4:32:10 AM
Surr: Toluene-d8	109	70-130	%Rec	1	4/7/2021 4:32:10 AM
EPA METHOD 8015D MOD: GASOLINE RANG	SE .				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 4:32:10 AM
Surr: BFB	105	70-130	%Rec	1	4/7/2021 4:32:10 AM

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

Qualifiers:

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

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

Page 23 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-59 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:25:00 AM

 Lab ID:
 2104068-024
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OI	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.4	mg/Kg	1	4/6/2021 11:34:44 AM
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	4/6/2021 11:34:44 AM
Surr: DNOP	112	70-130	%Rec	1	4/6/2021 11:34:44 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	77	60	mg/Kg	20	4/7/2021 1:19:06 PM
EPA METHOD 8260B: VOLATILES SHORT I	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 5:00:49 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 5:00:49 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 5:00:49 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 5:00:49 AM
Surr: 1,2-Dichloroethane-d4	97.1	70-130	%Rec	1	4/7/2021 5:00:49 AM
Surr: 4-Bromofluorobenzene	89.4	70-130	%Rec	1	4/7/2021 5:00:49 AM
Surr: Dibromofluoromethane	108	70-130	%Rec	1	4/7/2021 5:00:49 AM
Surr: Toluene-d8	107	70-130	%Rec	1	4/7/2021 5:00:49 AM
EPA METHOD 8015D MOD: GASOLINE RAM	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 5:00:49 AM
Surr: BFB	99.0	70-130	%Rec	1	4/7/2021 5:00:49 AM

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

Qualifiers:

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

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

Page 24 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-60 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:30:00 AM

 Lab ID:
 2104068-025
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/6/2021 11:44:23 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/6/2021 11:44:23 AM
Surr: DNOP	73.2	70-130	%Rec	1	4/6/2021 11:44:23 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	85	59	mg/Kg	20	4/7/2021 2:20:50 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 5:29:25 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 5:29:25 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 5:29:25 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 5:29:25 AM
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	4/7/2021 5:29:25 AM
Surr: 4-Bromofluorobenzene	91.5	70-130	%Rec	1	4/7/2021 5:29:25 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/7/2021 5:29:25 AM
Surr: Toluene-d8	102	70-130	%Rec	1	4/7/2021 5:29:25 AM
EPA METHOD 8015D MOD: GASOLINE RANG	BE .				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 5:29:25 AM
Surr: BFB	98.3	70-130	%Rec	1	4/7/2021 5:29:25 AM

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

Qualifiers:

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

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

Page 25 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-61 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:35:00 AM

 Lab ID:
 2104068-026
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/6/2021 11:54:00 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/6/2021 11:54:00 AM
Surr: DNOP	98.7	70-130	%Rec	1	4/6/2021 11:54:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	66	60	mg/Kg	20	4/7/2021 2:57:51 PM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 5:58:05 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 5:58:05 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 5:58:05 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 5:58:05 AM
Surr: 1,2-Dichloroethane-d4	96.6	70-130	%Rec	1	4/7/2021 5:58:05 AM
Surr: 4-Bromofluorobenzene	89.3	70-130	%Rec	1	4/7/2021 5:58:05 AM
Surr: Dibromofluoromethane	110	70-130	%Rec	1	4/7/2021 5:58:05 AM
Surr: Toluene-d8	108	70-130	%Rec	1	4/7/2021 5:58:05 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 5:58:05 AM
Surr: BFB	101	70-130	%Rec	1	4/7/2021 5:58:05 AM

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

Qualifiers:

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

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

Page 26 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-62 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:40:00 AM

 Lab ID:
 2104068-027
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OI	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.8	mg/Kg	1	4/6/2021 12:03:40 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	4/6/2021 12:03:40 PM
Surr: DNOP	108	70-130	%Rec	1	4/6/2021 12:03:40 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 3:10:12 PM
EPA METHOD 8260B: VOLATILES SHORT I	LIST				Analyst: JMR
Benzene	ND	0.025	mg/Kg	1	4/7/2021 6:26:46 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 6:26:46 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 6:26:46 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 6:26:46 AM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	4/7/2021 6:26:46 AM
Surr: 4-Bromofluorobenzene	93.2	70-130	%Rec	1	4/7/2021 6:26:46 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/7/2021 6:26:46 AM
Surr: Toluene-d8	106	70-130	%Rec	1	4/7/2021 6:26:46 AM
EPA METHOD 8015D MOD: GASOLINE RAM	IGE				Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 6:26:46 AM
Surr: BFB	102	70-130	%Rec	1	4/7/2021 6:26:46 AM

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

Qualifiers:

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

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

Page 27 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-63 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:45:00 AM

 Lab ID:
 2104068-028
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/6/2021 12:13:21 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 12:13:21 PM
Surr: DNOP	112	70-130	%Rec	1	4/6/2021 12:13:21 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	59	mg/Kg	20	4/7/2021 3:22:33 PM
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	т				Analyst: <b>JMR</b>
Benzene	ND	0.023	mg/Kg	1	4/7/2021 6:55:24 AM
Toluene	ND	0.047	mg/Kg	1	4/7/2021 6:55:24 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/7/2021 6:55:24 AM
Xylenes, Total	ND	0.093	mg/Kg	1	4/7/2021 6:55:24 AM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	4/7/2021 6:55:24 AM
Surr: 4-Bromofluorobenzene	96.2	70-130	%Rec	1	4/7/2021 6:55:24 AM
Surr: Dibromofluoromethane	104	70-130	%Rec	1	4/7/2021 6:55:24 AM
Surr: Toluene-d8	105	70-130	%Rec	1	4/7/2021 6:55:24 AM
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/7/2021 6:55:24 AM
Surr: BFB	102	70-130	%Rec	1	4/7/2021 6:55:24 AM

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

Qualifiers:

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

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

Page 28 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-64 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:50:00 AM

 Lab ID:
 2104068-029
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.2	mg/Kg	1	4/6/2021 2:39:18 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/6/2021 2:39:18 PM
Surr: DNOP	93.9	70-130	%Rec	1	4/6/2021 2:39:18 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 3:34:53 PM
EPA METHOD 8260B: VOLATILES SHORT	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/7/2021 7:24:02 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 7:24:02 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 7:24:02 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 7:24:02 AM
Surr: 1,2-Dichloroethane-d4	110	70-130	%Rec	1	4/7/2021 7:24:02 AM
Surr: 4-Bromofluorobenzene	90.9	70-130	%Rec	1	4/7/2021 7:24:02 AM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	4/7/2021 7:24:02 AM
Surr: Toluene-d8	108	70-130	%Rec	1	4/7/2021 7:24:02 AM
EPA METHOD 8015D MOD: GASOLINE RAM	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 7:24:02 AM
Surr: BFB	103	70-130	%Rec	1	4/7/2021 7:24:02 AM

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

Qualifiers:

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

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

Page 29 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-65 0-1

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 9:55:00 AM

 Lab ID:
 2104068-030
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	4/6/2021 2:49:13 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	4/6/2021 2:49:13 PM
Surr: DNOP	83.4	70-130	%Rec	1	4/6/2021 2:49:13 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 3:47:15 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/7/2021 7:52:37 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 7:52:37 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 7:52:37 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 7:52:37 AM
Surr: 1,2-Dichloroethane-d4	107	70-130	%Rec	1	4/7/2021 7:52:37 AM
Surr: 4-Bromofluorobenzene	91.7	70-130	%Rec	1	4/7/2021 7:52:37 AM
Surr: Dibromofluoromethane	111	70-130	%Rec	1	4/7/2021 7:52:37 AM
Surr: Toluene-d8	107	70-130	%Rec	1	4/7/2021 7:52:37 AM
EPA METHOD 8015D MOD: GASOLINE RANG	Ε				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 7:52:37 AM
Surr: BFB	96.8	70-130	%Rec	1	4/7/2021 7:52:37 AM

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

Qualifiers:

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

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

Page 30 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-66 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:00:00 AM

 Lab ID:
 2104068-031
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	4/6/2021 2:59:10 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/6/2021 2:59:10 PM
Surr: DNOP	80.6	70-130	%Rec	1	4/6/2021 2:59:10 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 4:24:17 PM
EPA METHOD 8260B: VOLATILES SHORT LI	ST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/7/2021 8:21:17 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 8:21:17 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 8:21:17 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 8:21:17 AM
Surr: 1,2-Dichloroethane-d4	106	70-130	%Rec	1	4/7/2021 8:21:17 AM
Surr: 4-Bromofluorobenzene	92.8	70-130	%Rec	1	4/7/2021 8:21:17 AM
Surr: Dibromofluoromethane	110	70-130	%Rec	1	4/7/2021 8:21:17 AM
Surr: Toluene-d8	104	70-130	%Rec	1	4/7/2021 8:21:17 AM
EPA METHOD 8015D MOD: GASOLINE RANG	SE .				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 8:21:17 AM
Surr: BFB	99.7	70-130	%Rec	1	4/7/2021 8:21:17 AM

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

Qualifiers:

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

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

Page 31 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-67 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:05:00 AM

 Lab ID:
 2104068-032
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/6/2021 3:09:04 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 3:09:04 PM
Surr: DNOP	87.1	70-130	%Rec	1	4/6/2021 3:09:04 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	59	mg/Kg	20	4/7/2021 4:36:40 PM
EPA METHOD 8260B: VOLATILES SHORT LIS	ST				Analyst: <b>JMR</b>
Benzene	ND	0.023	mg/Kg	1	4/7/2021 8:49:58 AM
Toluene	ND	0.046	mg/Kg	1	4/7/2021 8:49:58 AM
Ethylbenzene	ND	0.046	mg/Kg	1	4/7/2021 8:49:58 AM
Xylenes, Total	ND	0.092	mg/Kg	1	4/7/2021 8:49:58 AM
Surr: 1,2-Dichloroethane-d4	105	70-130	%Rec	1	4/7/2021 8:49:58 AM
Surr: 4-Bromofluorobenzene	91.8	70-130	%Rec	1	4/7/2021 8:49:58 AM
Surr: Dibromofluoromethane	109	70-130	%Rec	1	4/7/2021 8:49:58 AM
Surr: Toluene-d8	108	70-130	%Rec	1	4/7/2021 8:49:58 AM
EPA METHOD 8015D MOD: GASOLINE RANG	Ε				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	4/7/2021 8:49:58 AM
Surr: BFB	102	70-130	%Rec	1	4/7/2021 8:49:58 AM

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 32 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-68 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:10:00 AM

 Lab ID:
 2104068-033
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 3:18:59 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 3:18:59 PM
Surr: DNOP	108	70-130	%Rec	1	4/6/2021 3:18:59 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	62	59	mg/Kg	20	4/7/2021 4:49:00 PM
<b>EPA METHOD 8260B: VOLATILES SHORT</b>	LIST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 9:18:40 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 9:18:40 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 9:18:40 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 9:18:40 AM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	4/7/2021 9:18:40 AM
Surr: 4-Bromofluorobenzene	90.4	70-130	%Rec	1	4/7/2021 9:18:40 AM
Surr: Dibromofluoromethane	112	70-130	%Rec	1	4/7/2021 9:18:40 AM
Surr: Toluene-d8	110	70-130	%Rec	1	4/7/2021 9:18:40 AM
EPA METHOD 8015D MOD: GASOLINE RA	NGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 9:18:40 AM
Surr: BFB	106	70-130	%Rec	1	4/7/2021 9:18:40 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 33 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-69 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:15:00 AM

 Lab ID:
 2104068-034
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	4/6/2021 3:28:53 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	4/6/2021 3:28:53 PM
Surr: DNOP	91.8	70-130	%Rec	1	4/6/2021 3:28:53 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	63	60	mg/Kg	20	4/7/2021 5:01:20 PM
EPA METHOD 8260B: VOLATILES SHORT L	.IST				Analyst: <b>JMR</b>
Benzene	ND	0.024	mg/Kg	1	4/7/2021 9:47:20 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 9:47:20 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 9:47:20 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 9:47:20 AM
Surr: 1,2-Dichloroethane-d4	102	70-130	%Rec	1	4/7/2021 9:47:20 AM
Surr: 4-Bromofluorobenzene	92.2	70-130	%Rec	1	4/7/2021 9:47:20 AM
Surr: Dibromofluoromethane	114	70-130	%Rec	1	4/7/2021 9:47:20 AM
Surr: Toluene-d8	102	70-130	%Rec	1	4/7/2021 9:47:20 AM
EPA METHOD 8015D MOD: GASOLINE RAN	IGE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 9:47:20 AM
Surr: BFB	96.2	70-130	%Rec	1	4/7/2021 9:47:20 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 34 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-70 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:20:00 AM

 Lab ID:
 2104068-035
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/6/2021 3:38:43 PM
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	4/6/2021 3:38:43 PM
Surr: DNOP	124	70-130	%Rec	1	4/6/2021 3:38:43 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	64	59	mg/Kg	20	4/7/2021 5:13:41 PM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: <b>JMR</b>
Benzene	ND	0.025	mg/Kg	1	4/7/2021 10:16:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 10:16:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 10:16:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 10:16:00 AM
Surr: 1,2-Dichloroethane-d4	103	70-130	%Rec	1	4/7/2021 10:16:00 AM
Surr: 4-Bromofluorobenzene	91.6	70-130	%Rec	1	4/7/2021 10:16:00 AM
Surr: Dibromofluoromethane	110	70-130	%Rec	1	4/7/2021 10:16:00 AM
Surr: Toluene-d8	107	70-130	%Rec	1	4/7/2021 10:16:00 AM
EPA METHOD 8015D MOD: GASOLINE RANG	GE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 10:16:00 AM
Surr: BFB	101	70-130	%Rec	1	4/7/2021 10:16:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 35 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-71 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:25:00 AM

 Lab ID:
 2104068-036
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS	_	_		Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.4	mg/Kg	1	4/6/2021 3:48:35 PM
Motor Oil Range Organics (MRO)	ND	42	mg/Kg	1	4/6/2021 3:48:35 PM
Surr: DNOP	116	70-130	%Rec	1	4/6/2021 3:48:35 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	72	60	mg/Kg	20	4/7/2021 5:26:02 PM
EPA METHOD 8260B: VOLATILES SHORT L	IST				Analyst: <b>JMR</b>
Benzene	ND	0.023	mg/Kg	1	4/7/2021 10:44:46 AM
Toluene	ND	0.047	mg/Kg	1	4/7/2021 10:44:46 AM
Ethylbenzene	ND	0.047	mg/Kg	1	4/7/2021 10:44:46 AM
Xylenes, Total	ND	0.093	mg/Kg	1	4/7/2021 10:44:46 AM
Surr: 1,2-Dichloroethane-d4	104	70-130	%Rec	1	4/7/2021 10:44:46 AM
Surr: 4-Bromofluorobenzene	97.5	70-130	%Rec	1	4/7/2021 10:44:46 AM
Surr: Dibromofluoromethane	107	70-130	%Rec	1	4/7/2021 10:44:46 AM
Surr: Toluene-d8	108	70-130	%Rec	1	4/7/2021 10:44:46 AM
EPA METHOD 8015D MOD: GASOLINE RAN	GE				Analyst: <b>JMR</b>
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	4/7/2021 10:44:46 AM
Surr: BFB	99.4	70-130	%Rec	1	4/7/2021 10:44:46 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 36 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-72 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:30:00 AM

 Lab ID:
 2104068-037
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/6/2021 3:58:23 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/6/2021 3:58:23 PM
Surr: DNOP	105	70-130	%Rec	1	4/6/2021 3:58:23 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/6/2021 11:41:00 PM
Surr: BFB	92.3	70-130	%Rec	1	4/6/2021 11:41:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/6/2021 11:41:00 PM
Toluene	ND	0.050	mg/Kg	1	4/6/2021 11:41:00 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/6/2021 11:41:00 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/6/2021 11:41:00 PM
Surr: 4-Bromofluorobenzene	86.9	70-130	%Rec	1	4/6/2021 11:41:00 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	60	60	mg/Kg	20	4/7/2021 5:38:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 37 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-73 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:35:00 AM

 Lab ID:
 2104068-038
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	8.7	mg/Kg	1	4/6/2021 4:08:11 PM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	4/6/2021 4:08:11 PM
Surr: DNOP	115	70-130	%Rec	1	4/6/2021 4:08:11 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 12:41:00 AM
Surr: BFB	97.9	70-130	%Rec	1	4/7/2021 12:41:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 12:41:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 12:41:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 12:41:00 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 12:41:00 AM
Surr: 4-Bromofluorobenzene	92.2	70-130	%Rec	1	4/7/2021 12:41:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 5:50:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 38 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-74 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:40:00 AM

 Lab ID:
 2104068-039
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/6/2021 4:18:03 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/6/2021 4:18:03 PM
Surr: DNOP	108	70-130	%Rec	1	4/6/2021 4:18:03 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 2:21:00 AM
Surr: BFB	96.3	70-130	%Rec	1	4/7/2021 2:21:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 2:21:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 2:21:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 2:21:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 2:21:00 AM
Surr: 4-Bromofluorobenzene	91.3	70-130	%Rec	1	4/7/2021 2:21:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	63	59	mg/Kg	20	4/7/2021 6:03:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 39 of 50

Date Reported: 4/14/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-75 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 10:45:00 AM

 Lab ID:
 2104068-040
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 4:27:53 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 4:27:53 PM
Surr: DNOP	110	70-130	%Rec	1	4/6/2021 4:27:53 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 2:41:00 AM
Surr: BFB	94.2	70-130	%Rec	1	4/7/2021 2:41:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 2:41:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 2:41:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 2:41:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 2:41:00 AM
Surr: 4-Bromofluorobenzene	90.6	70-130	%Rec	1	4/7/2021 2:41:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/7/2021 6:15:28 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 40 of 50

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104068** 

14-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59264 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59264 RunNo: 76515

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711320 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-59264 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59264 RunNo: 76515

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711321 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 94.3 90 110

Sample ID: MB-59261 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **59261** RunNo: **76517** 

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711758 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-59261 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59261 RunNo: 76517

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711759 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 95.1 90 110

Sample ID: MB-59266 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **59266** RunNo: **76517** 

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711788 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual Chloride ND 1.5

Chiloride ND 1.5

Sample ID: LCS-59266 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59266 RunNo: 76517

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711789 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.5 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 41 of 50

#### Hall Environmental Analysis Laboratory, Inc.

SampType: MBLK

Batch ID: 59187

PQL

10

50

10.00

Analysis Date: 4/6/2021

Result

ND

ND

13

WO#: **2104068** 

14-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59186	SampT	ype: <b>ME</b>	BLK	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: PBS	Batch	ID: <b>59</b>	186	F	RunNo: <b>7</b>	6459				
Prep Date: 4/3/2021	Analysis D	ate: <b>4/</b>	5/2021	S	SeqNo: 2	708379	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10	<b>0.</b> 11 Taila	<b>0</b>	701120		g	70.11.2		<b>4</b> 4 4 4
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		121	70	130			
Sample ID: LCS-59186	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: LCSS	Batch	ID: <b>59</b>	186	F	RunNo: 7	6459				
Prep Date: 4/3/2021	Analysis D	ate: 4/	5/2021	S	SeqNo: 2	708383	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	68.9	141			
Surr: DNOP	5.9		5.000		118	70	130			
Sample ID: 2104068-001AMS	SampT	уре: <b>М</b> \$	6	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: WS21-36 0-1'	Batch	ID: <b>59</b>	186	F	RunNo: <b>7</b>	6459				
Prep Date: 4/3/2021	Analysis D	ate: 4/	5/2021	S	SeqNo: 2	708385	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.6	47.85	0	114	15	184			
Surr: DNOP	4.9		4.785		102	70	130			
Sample ID: 2104068-001AMSI	D SampT	уре: <b>М</b> \$	SD	Tes	tCode: El	PA Method	8015M/D: Di	esel Range	e Organics	
Client ID: WS21-36 0-1'	Batch	ID: <b>59</b>	186	F	RunNo: <b>7</b>	6459				
Prep Date: 4/3/2021	Analysis D	ate: 4/	5/2021	S	SeqNo: 2	708387	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	57	9.7	48.31	0	118	15	184	4.50	23.9	
Surr: DNOP	5.1		4.831		105	70	130	0	0	

#### Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

Sample ID: MB-59187

Prep Date: 4/3/2021

Diesel Range Organics (DRO)

Motor Oil Range Organics (MRO)

Client ID: PBS

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

RunNo: 76466

134

SeqNo: 2709506

TestCode: EPA Method 8015M/D: Diesel Range Organics

Units: mg/Kg

130

%RPD

**RPDLimit** 

Qual

S

HighLimit

70

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range

SPK value SPK Ref Val %REC LowLimit

RL Reporting Limit

Page 42 of 50

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104068** *14-Apr-21* 

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: LCS-59187 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 59187 RunNo: 76466 Prep Date: 4/3/2021 Analysis Date: 4/6/2021 SeqNo: 2709507 Units: mq/Kq SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Diesel Range Organics (DRO) 50 10 50.00 Λ 100 68.9 141 Surr: DNOP 5.0 5.000 99.6 130

Sample ID: 2104068-021AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: WS21-56 0-1.5' Batch ID: 59187 RunNo: 76466 Prep Date: 4/3/2021 Analysis Date: 4/6/2021 SeqNo: 2709508 Units: mg/Kg HighLimit Analyte Result PQL SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 53 45.50 O 116 15 184 Surr: DNOP 70 S 6.0 4.550 132 130

Sample ID: 2104068-021AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: WS21-56 0-1.5' Batch ID: 59187 RunNo: 76466 Prep Date: 4/3/2021 Analysis Date: 4/6/2021 SeqNo: 2709509 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result PQL LowLimit Qual Diesel Range Organics (DRO) 56 9.6 48.22 0 116 15 184 5.96 23.9 Surr: DNOP 6.0 4.822 125 70 130 0 0

Sample ID: MB-59218 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: MBLK Client ID: PBS Batch ID: 59218 RunNo: 76466 Prep Date: 4/5/2021 Analysis Date: 4/6/2021 SeqNo: 2709912 Units: %Rec PQL SPK value SPK Ref Val %REC %RPD **RPDLimit** Result LowLimit HighLimit Qual Surr: DNOP 9.9 10.00 98.8 70 130

Sample ID: LCS-59218 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 59218 RunNo: 76466 4/5/2021 Analysis Date: 4/6/2021 SeqNo: 2709915 Prep Date: Units: %Rec %RPD **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit Qual Surr: DNOP 4.8 5.000 95.8 130

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 43 of 50

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104068** 

14-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59167 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59167 RunNo: 76491

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2709908 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 980 1000 98.2 70 130

Sample ID: Ics-59167 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59167 RunNo: 76491

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2709909 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 25 5.0 25.00 O 101 78.6 131 Surr: BFB 1100 1000 109 70 130

Sample ID: Ics-59171 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59171 RunNo: 76481

Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710542 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 24 5.0 25.00 0 97.0 78.6 131 Surr: BFB 1100 1000 107 70 130

Sample ID: mb-59171 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59171 RunNo: 76481

Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710543 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 940 1000 94.0 70 130

Sample ID: 2104068-037ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: WS21-72 0-1' Batch ID: 59171 RunNo: 76481

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2710557 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 5.0 0 61.3 24.98 93.9 114 Surr: BFB 1000 999.0 105 70 130

Sample ID: 2104068-037amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: WS21-72 0-1' Batch ID: 59171 RunNo: 76481

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2710558 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 44 of 50

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2104068

Qual

14-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: 2104068-037amsd

SampType: MSD

TestCode: EPA Method 8015D: Gasoline Range

Client ID: WS21-72 0-1'

Batch ID: 59171

RunNo: 76481

Prep Date: 4/2/2021

Surr: BFB

Analysis Date: 4/7/2021

SeqNo: 2710558 Units: mg/Kg

61.3

70

Analyte Gasoline Range Organics (GRO) Result PQL SPK value SPK Ref Val 24 4.8 24.13 1100 965.3

%REC LowLimit 98.2 109

0

HighLimit %RPD 0.979 114 130 0

20 0

**RPDLimit** 

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 45 of 50

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2104068

14-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59167	SampT	уре: МЕ	BLK	TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batcl	h ID: <b>59</b>	167	F	RunNo: 7	6491					
Prep Date: 4/2/2021	Analysis D	Analysis Date: 4/7/2021			SeqNo: <b>2709986</b>			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xvlenes Total	ND	0.10									

Surr: 4-Bromofluorobenzene 0.97

1.000 96.9 70 130

Sample ID: LCS-59167	SampT	Type: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Volat	iles			
Client ID: LCSS	Batcl	h ID: <b>59</b> '	167	F	RunNo: 7	6491					
Prep Date: 4/2/2021	Analysis D	Date: <b>4/</b>	7/2021	8	SeqNo: 2	709987	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.92	0.025	1.000	0	91.7	80	120				
Toluene	0.94	0.050	1.000	0	94.1	80	120				
Ethylbenzene	0.93	0.050	1.000	0	93.1	80	120				
Xylenes, Total	2.8	0.10	3.000	0	92.9	80	120				
Surr: 4-Bromofluorobenzene	0.99		1.000		99.0	70	130				

Sample ID: Ics-59171	Sampl	Гуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID: LCSS	Batc	h ID: <b>59</b>	171	R	RunNo: <b>7</b> 0	6481				
Prep Date: 4/2/2021	Analysis D	Date: 4/	6/2021	S	SeqNo: 2	710653	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.1	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.6	70	130			

Sample ID: <b>mb-59171</b>	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	h ID: <b>59</b>	171	F	RunNo: 70	6481				
Prep Date: 4/2/2021	Analysis D	Date: <b>4/</b>	6/2021	S	SeqNo: 2	710654	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 46 of 50

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104068** 

14-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: 2104068-038ams	·	Гуре: М\$					8021B: Vola	iles		
Client ID: WS21-73 0-1'		h ID: <b>59</b> '			RunNo: <b>7</b>					
Prep Date: 4/2/2021	Analysis D	Date: <b>4/</b>	7/2021	\$	SeqNo: 2	710665	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	0.9911	0	92.1	76.3	120			
Toluene	0.93	0.050	0.9911	0	94.1	78.5	120			
Ethylbenzene	0.96	0.050	0.9911	0	96.5	78.1	124			
Xylenes, Total	2.8	0.099	2.973	0	95.5	79.3	125			
Surr: 4-Bromofluorobenzene	0.91		0.9911		92.2	70	130			

Sample ID: 2104068-038amsd	SampT	ype: <b>MS</b>	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: WS21-73 0-1'	Batch	ID: <b>59</b>	171	F	RunNo: 7	6481				
Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b>	7/2021	S	SeqNo: 2	710666	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9911	0	94.4	80	120	2.42	20	
Toluene	0.95	0.050	0.9911	0	96.1	80	120	2.06	20	
Ethylbenzene	0.98	0.050	0.9911	0	99.2	80	120	2.80	20	
Xylenes, Total	2.9	0.099	2.973	0	98.3	80	120	2.88	20	
Surr: 4-Bromofluorobenzene	0.92		0.9911		93.2	70	130	0	0	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 47 of 50

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104068** 

14-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: Ics-59168	SampT	Type: <b>LC</b>	S4	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: BatchQC	Batcl	h ID: <b>59</b> ′	168	F	RunNo: 7	6482				
Prep Date: 4/2/2021	Analysis D	Date: 4/	6/2021	S	SeqNo: 2	710583	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.9	80	120			
Toluene	0.95	0.050	1.000	0	95.4	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		94.0	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.8	70	130			
Surr: Dibromofluoromethane	0.53		0.5000		106	70	130			
Surr: Toluene-d8	0.50		0.5000		99.7	70	130			
Sample ID: <b>mb-59168</b>	SampT	уре: <b>МЕ</b>	BLK	Tes	tCode: El	PA Method	8260B: Vola	iles Short	List	·

Campio izi iiib corco	• • • • • • • • • • • • • • • • • • •	, po				, , , , , , , , , , , , , , , , , , ,	0200D. 10.a.			
Client ID: PBS	Batcl	h ID: <b>59</b>	168	F	RunNo: 7	6482				
Prep Date: 4/2/2021	Analysis D	Date: <b>4/</b>	6/2021	S	SeqNo: 2	710584	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.5	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.5000		91.5	70	130			
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130			
Surr: Toluene-d8	0.50		0.5000		99.9	70	130			

Sample ID: 2104068-018ams	SampT	ype: MS	64	Tes	tCode: <b>EF</b>	PA Method	8260B: Volat	iles Short	List	
Client ID: WS21-53 0-1.5'	Batch	n ID: <b>59</b> 1	168	F	RunNo: <b>7</b> 0	6482				
Prep Date: 4/2/2021	Analysis D	ate: 4/0	6/2021	8	SeqNo: 27	710589	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	0.9911	0	92.2	71.1	115			
Toluene	0.89	0.050	0.9911	0.005498	89.2	79.6	132			
Ethylbenzene	0.92	0.050	0.9911	0	92.6	83.8	134			
Xylenes, Total	2.7	0.099	2.973	0	89.4	82.4	132			
Surr: 1,2-Dichloroethane-d4	0.53		0.4955		107	70	130			
Surr: 4-Bromofluorobenzene	0.46		0.4955		93.6	70	130			
Surr: Dibromofluoromethane	0.56		0.4955		113	70	130			
Surr: Toluene-d8	0.51		0.4955		103	70	130			

#### Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 48 of 50

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2104068

14-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: 2104068-018amsd SampType: MSD4 TestCode: EPA Method 8260B: Volatiles Short List

Client ID: WS21-53 0-1.5' Batch ID: 59168 RunNo: 76482

Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b>	7/2021	S	SeqNo: 2	710590	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.024	0.9515	0	90.1	71.1	115	6.39	20	
Toluene	0.83	0.048	0.9515	0.005498	86.2	79.6	132	7.46	20	
Ethylbenzene	0.91	0.048	0.9515	0	96.2	83.8	134	0.309	20	
Xylenes, Total	2.6	0.095	2.854	0	92.4	82.4	132	0.762	20	
Surr: 1,2-Dichloroethane-d4	0.49		0.4757		102	70	130	0	0	
Surr: 4-Bromofluorobenzene	0.46		0.4757		96.1	70	130	0	0	
Surr: Dibromofluoromethane	0.49		0.4757		104	70	130	0	0	
Surr: Toluene-d8	0.47		0.4757		99.7	70	130	0	0	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 49 of 50

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104068** 

14-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: Ics-59168 SampType: LCS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: LCSS Batch ID: 59168 RunNo: 76482 Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710614 Units: mq/Kq SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual 25.00 Gasoline Range Organics (GRO) 22 5.0 Λ 87.8 70 130 Surr: BFB 520 500.0 103 70 130 Sample ID: mb-59168 TestCode: EPA Method 8015D Mod: Gasoline Range SampType: MBLK

Client ID: PBS Batch ID: 59168 RunNo: 76482 Prep Date: Analysis Date: 4/6/2021 4/2/2021 SeqNo: 2710615 Units: mg/Kg **RPDLimit** Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 500 70 500.0 101 130

Sample ID: 2104068-017ams SampType: MS TestCode: EPA Method 8015D Mod: Gasoline Range Client ID: WS21-52 0-1.5' Batch ID: 59168 RunNo: 76482 Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710617 Units: mg/Kg Result SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte PQL LowLimit Qual Gasoline Range Organics (GRO) 21 4.8 23.81 0 87.2 49.2 122 Surr: BFB 70 490 476.2 103 130

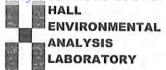
TestCode: EPA Method 8015D Mod: Gasoline Range Sample ID: 2104068-017amsd SampType: MSD Client ID: WS21-52 0-1.5' Batch ID: 59168 RunNo: 76482 Prep Date: 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710618 Units: mg/Kg SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Result PQL LowLimit Qual 122 Gasoline Range Organics (GRO) 19 77.0 49.2 9.14 4.9 24.63 20 Surr: BFB 480 492.6 97.0 70 130 0 0

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 50 of 50



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Client Name:	Vertex Resource Group Ltd.	Work Order Num	ber: 2104068		RcptNo:	1
Received By:	Juan Rojas	4/2/2021 7:35:00 A	м	Heaving		
Completed By	Desiree Dominguez	4/2/2021 8:08:42 A	M	(Juanany)		
Reviewed By:		3.33.72		113		
Chain of Cu	stody					
1. Is Chain of	Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was th	e sample delivered?		Courier			
Log In						
	empt made to cool the samp	les?	Yes 🗸	No 🗌	NA 🗆	
4. Were all sar	mples received at a tempera	ture of >0° C to 6.0°C	Yes 🗸	No 🗆	NA 🗆	
5. Sample(s) in	n proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sa	mple volume for indicated te	est(s)?	Yes 🗸	No 🗆		
7. Are samples	(except VOA and ONG) pro	perly preserved?	Yes 🗸	No 🗌		
8. Was presen	vative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. Received at	least 1 vial with headspace	<1/4" for AQ VOA?	Yes	No 🗆	NA 🗹	
10. Were any sa	ample containers received be	roken?	Yes	No 🗹	# of preserved	70
	work match bottle labels? pancies on chain of custody)		Yes 🗸	No 🗆	bottles checked for pH:	2   2   2 12 unless noted)
	correctly identified on Chair		Yes 🗸	No 🗌	Adjusted?	
13. Is it clear wh	at analyses were requested	?	Yes 🗸	No 🗌		
	ding times able to be met? customer for authorization.)		Yes 🗹	No 🗌	Checked by:	
	lling (if applicable)					
	notified of all discrepancies v	vith this order?	Yes	No 🗌	NA 🗹	
Perso	n Notified:	Date:				
By Wh	nom:	Via:	eMail	Phone Fax	☐ In Person	
Regar	ding:					
Client	Instructions:					
16. Additional r	emarks:					
17. Cooler Info	ormation					
Cooler N	The same and the s	Seal Intact Seal No	Seal Date	Signed By		
1	3.1 Good					
2	2.0 Good					

Chain-of-Cu	Chain-of-Custody Record	Turn-Around	Time:	7				į				eive
Client: Vertex		☑ Standard	_ 	har?			NAL		> V	MALL ENVIKONMENTAL ANALYSTS LABORATORY	NIAL	a by c
		Project Name	l io				d www	allenvi		www hallenvironmental com		JCD.
Mailing Address:		Stebb	ins teal	Stebbins teeling SWD	490	Haw	4901 Hawkins NE	,	naner	Albuquerque, NM 87109		: 0/24
		Project #:	9		Tel	505-3	Tel. 505-345-3975		ax 50	Fax 505-345-4107		4/202
Phone #:		131E-C	0000					√nal	sis R	Analysis Request		
email or Fax#:		Project Manager:	iger:					<sup>⊅</sup> O <sup>5</sup>		(ţu		:20
QA/QC Package: □ Standard	☐ Level 4 (Full Validation)	monica)	A Pappin	ر ار		PCB's	SMISO	PO₄, S		əsdA∖tr		:30 AM
Accreditation:	npliance	Sampler: M	NP		AO /			10 <sup>5</sup> '				
□ NELAC □ Other		On Ice:	sə,	oN □	0		10					
□ EDD (Type)		# of Coolers:			4Đ)		018					
		Cooler Temp(	(including CF): 3	.2-0.1=3.1 (°C)	2D	1.75	83		_			
Date Time Matrix	Sample Name	Container Type and #	Preservative Type	2.1-0-1-2.0 HEAL NO.	108:H9T	8081 Pe EDB (Ma	PAHs by 8 AЯЭЯ	CDE, B	V) 0528	oO (Se Total Co		
2	WS31-36 0-	1	100	100-	7			7	-			
1 7:35 1	-0 LE-165M	1 /	- 1004	700-	=			-				
06:40	W521-38 0-	<i>j</i>		- 603								
)	N591-39 0-			h00 -								
05;4	-0 04-165W			- 005								
)	-0 1h-185m			900 -								
)   %;&	W521-42 0-			-004					0			
	W521.43 0-	/		-008								
8,10	W521-44 0.			-009								
8,15	WS21-45 0-	1		-010								
	-0 94-165W	1		110-								
5	1-0 Lh-185M			210-	_			1				
Date: Time: Relinquished by	The North	Received by:	Via:	Wate Time	Remarks:							Pa
3	)	COMMAN	2	1114 1100								ge 4
Uate: Kelinquished by:	d by:	Received by	/ Na	e .	-	-						103 0
11 1400 Yan		1	1 cone	- 412121 7:35	100/	SOO						J
If necessary, samples subn	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report	subcontracted to other;	ccredited laboratories	s. This serves as notice of this	possibility. Ar	y sub-cor	tracted da	ta will be	clearly n	otated on the analytica	al report.	23

Chain-of-Custody Record	Turn-Around Time:	S Day		1	=	NWT	HAII ENVIDONMENTA	
Client: Vertex	☑ Standard □ Rush	Sh.			ANALYSTS	STS	ABORATOR	. >
				W	www.hallenvironmental.com	ironmen	tal.com	
Mailing Address:	Stebbins te	tederal SWD	4901	4901 Hawkins NE	1	ndnerd	Albuquerque, NM 87109	: 6/24
	Project #: 	,	Tel. 5	505-345-3975	975		505-345-4107	1/202
Phone #:	8000 710				Analysis		Request	110
email or Fax#:	Project Manager:				<sup>†</sup> O9		(ju	):20
QA/QC Package:	Monica	Pupoin	AM / C				əsdA\	:36 A
	-		ORC	(			ĵuə:	M
Accreditation:   Az Compliance			J / C	r.4(		(/	S-J-C	
□ EDD (Type)	# of Coolers:	200	ово	)g p	tals		<u>վ</u> ) ա	
	(including CF);	3.7-0.1=3.1 (°C)	2D(	oqt	əΜ		lifor	
Date Time Matrix Sample Name	Container Preservative Type and # Type	12.1-011-2.0 HEAL NO.	(X3T8) 108:H9T 99 1808	EDB (Me	RCRA 8	oV) 0828 e2) 0728	oO lstoT	
3/30 8:30 GO: 11231-48 0	1	- 013	7					
8,35	-	H10-			_			
18:40   WS21-50 0	- 1 -	510-						
	1,	- 016						
8:50   W531-52 0.	,	+10-						
8:55   WS21-53 0-	-	-018						
9:00 10501 90:00 1		-019						
9:05 WS 21-55 0-		- 020						
9:10 NS21-56 0-		120-						
9:15   WSDI-57 0-		-077						
9:00   WS21-58 0-	<u> </u>	-023						
1 WS21-59		, 02H	-					
Date Time: Relinquished by	Received by: Via:	UNI WINE	Remarks:					Page
dey Time: Relinquished by:	Received by: Via: 0	Date Time	Y Y	7				466 oj
1100	1 1 (Buri	44 41121 4:30	5	0				

O	hain	of-C	Chain-of-Custody Record	y Rec	ord	Turn-Around Time:	round T		5				. A	2	3	8	180	permian avertex. Ca	Received
Client:	3	Sertex				☑ Standard	ndard	_ Rush_	h					Z	<b>□</b>		¥	MALL ENVIKONIMENTAL ANALYSTS LABORATOR	, >
						Project	Project Name:		17/17					www	www.hallenvironmental.com	vironn	nental	com	
Mailing	Mailing Address:	S:				15/2	Stabbin	n	reduced own	5		4901	4901 Hawkins NE -	ns N		endnq	rane	Albuqueraue, NM 87109	0/24
						Project #:	(					Tel. 5	505-345-3975	5-397		Fax	505-3	505-345-4107	F/202
Phone #:	#:					ONE-	$\cup$	1008/							Anal		Request	est	1 10
email or Fax#:	r Fax#:					Project	Project Manager:	er:			1.14.	(0			<sup>⊅</sup> O:			(ju	.20
QA/QC Packa	QA/QC Package:		9/9	I A (Full)	Level 4 (Enll Velidation)	3	Manice	Peppin	C		208) 8			SMIS	S ԠOc		107	əsq\/	30 AA
Accreditation:	tation:	□ Az C	Az Compliance			Sampler:	ir. 50							0728	O <sub>2</sub> , I			ıuəs	
□ NELAC	AC	□ Other	٠. ج			On Ice:	,	₽-Yes	oN □		- 11.7				_			914,	
	□ EDD (Type)					# of Coolers: 2	olers:	7				- 9-3			_			) w.	
						Cooler	Temp(in	Cooler Temp(including cF): 9.	2-0-1=3	(o <sub>c</sub> ) /					_		1000	OIIIO	
	Time	Matrix	Sampl	Sample Name	0	Container Type and #		Preservative Type	2:(-0:1=2 HEAL NO. 21D4068	No. 0	A CLEAN ASSESSMENT	.08:H9T 99 1808	EDB (W	d sHA9	ВСВА 8 ©, F, В	V) 0928	S) 0728	Total Co	
3/30	9:30	50.1	165W	1-100	0.1	40		ice		8	>	_			7		1.		
	9:35		W521-	19-	0-1			1	920-	36					-				
	04;6		MSal	cog-	0-1				-0-	623									
= =1	9:45		W521-63	1/03	-0		Ī		-028	28									
	9:50		LUS31-	49-1	0-1		Ī		120-	62									
	9:55		W521	5	0-1				-030	30									
	0;0		(MS2)	19-185M	0-1				- 031	31									
	10,05		105W	1	0				0 -	-032									
	10:10		W521-1	1-68	0-1				0	-033									
	10:15			-69	1-0				-03H	34							-		
	10:30		esm	1-10	0-0				0-	035				Ħ					
	10,25		W531	1-	d	-				-036			I		_				
Unite:	Time: 1/00	Relinquished by:	hed by:	$\bigvee$		Received by: Via:	by:	Z, <ā;	d/Date	Time // 100	Remarks:	rks:							Page
Dafe:	Time:	Relinquished by:	hed by:			Received	by:	Via: O	Date	Time									40/
12/1/2	11/21 1900	Gun	3	9		1	1	Marit	1 4121 Motodo	7512	Ĕ	2	9	1					oj s
	fnecessary	, samples su	ubmitted to Ha	III Environme	ntal may be su	bcontracted to	other acc	edited laboratorie	es. This serves as	s notice of this	ilidissoa	w. Anv	sub-cont	acted	ata will b	e clearly	notatec	If necessary, samples submitted to Hall Bryironmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.	43

Page 468 of 525 Received by OCD: 6/24/2021 10:20:36 AM Sond all labraports to Definion a vertex , ca ANALYSIS LABORATORY HALL ENVIRONMENTAL If necessary, samples submitted to Hell Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report 4901 Hawkins NE - Albuquerque, NM 87109 Tel. 505-345-3975 Fax 505-345-4107 www.hallenvironmental.com **Analysis Request** Total Coliform (Present/Absent) (AOV-imaR) 07S8 NO3<sup>1</sup> NO5, PO4, SO4 Br, RCRA 8 Metals PAHs by 8310 or 8270SIMS 10 2011 er uloja 7 25tMatador EDB (Method 504.1) 8081 Pesticides/8082 PCB's Remarks: (PH:8015D(GRO / DRO / MRO) TMB's (8021) Cooler Temp(including cF): 3. 2-0.1 = 3. [ (°C) 2.1-0.1=2.0 2104068 globins federal SWD -037 -038 Oho -039 oN □ Peppin □ Rush Project #: 01E - 00087 Preservative 75 Sa Ves mi Turn-Around Time: Monica Project Manager: # of Coolers: 2 Sampler: JR Project Name: Standard Type and # 20 5 Container Received by: On Ice: □ Level 4 (Full Validation) ć -0 0 -0 Chain-of-Custody Record Sample Name GC-1652 WS21-73 2001-74 21501-15 ☐ Az Compliance Relinquished by: Relinquished by: □ Other 3/30 10:30 50 Matrix Mailing Address: 10:45 10:35 04:01 QA/QC Package: Time 1/M (Pro ☐ EDD (Type) email or Fax#: 100 Accreditation: Time: Time: □ Standard □ NELAC Client: \ Phone #: Date Released to Imaging: 8/24/2021

From: Monica Peppin
To: Michelle Garcia

**Subject:** Stebbins Report 2104068

**Date:** Tuesday, April 13, 2021 8:46:53 AM

#### Good morning,

I was wondering if you can revise the above report for sample points WS21-50 through WS21-57 to be at depths 0-1.5' please. The guys must have forgot about that area being deeper than the rest.

Thank you! Monica

#### **Monica Peppin**

Project Manager in Training

Vertex Resource Group Ltd. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 Ext. 711 C 575.361.9880 F

#### www.vertex.ca

Confidentiality Notice: This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachment is prohibited. If you have received this communication in error, please notify us by reply email and immediately and permanently delete this message and any attachments. Thank you.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

April 09, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX

RE: Stebbins Federal SWD OrderNo.: 2104073

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 30 sample(s) on 4/2/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

Indes

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-121 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:00:00 AM

 Lab ID:
 2104073-001
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/5/2021 10:29:09 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2021 10:29:09 AM
Surr: DNOP	107	70-130	%Rec	1	4/5/2021 10:29:09 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 3:01:00 AM
Surr: BFB	96.9	70-130	%Rec	1	4/7/2021 3:01:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 3:01:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 3:01:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 3:01:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 3:01:00 AM
Surr: 4-Bromofluorobenzene	92.4	70-130	%Rec	1	4/7/2021 3:01:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 10:04:34 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 37

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-122 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:05:00 AM

 Lab ID:
 2104073-002
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/5/2021 10:38:50 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 10:38:50 AM
Surr: DNOP	97.0	70-130	%Rec	1	4/5/2021 10:38:50 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 3:20:00 AM
Surr: BFB	92.2	70-130	%Rec	1	4/7/2021 3:20:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 3:20:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 3:20:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 3:20:00 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 3:20:00 AM
Surr: 4-Bromofluorobenzene	89.0	70-130	%Rec	1	4/7/2021 3:20:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 10:41:49 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-123 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:10:00 AM

 Lab ID:
 2104073-003
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	8.6	mg/Kg	1	4/5/2021 11:14:16 AM
Motor Oil Range Organics (MRO)	ND	43	mg/Kg	1	4/5/2021 11:14:16 AM
Surr: DNOP	110	70-130	%Rec	1	4/5/2021 11:14:16 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 3:40:00 AM
Surr: BFB	99.4	70-130	%Rec	1	4/7/2021 3:40:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 3:40:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 3:40:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 3:40:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 3:40:00 AM
Surr: 4-Bromofluorobenzene	92.3	70-130	%Rec	1	4/7/2021 3:40:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 10:54:14 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-124 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:15:00 AM

 Lab ID:
 2104073-004
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/5/2021 11:23:51 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 11:23:51 AM
Surr: DNOP	104	70-130	%Rec	1	4/5/2021 11:23:51 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 4:00:00 AM
Surr: BFB	98.7	70-130	%Rec	1	4/7/2021 4:00:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 4:00:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 4:00:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 4:00:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 4:00:00 AM
Surr: 4-Bromofluorobenzene	93.6	70-130	%Rec	1	4/7/2021 4:00:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 11:31:00 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-125 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:20:00 AM

 Lab ID:
 2104073-005
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/5/2021 11:33:32 AM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 11:33:32 AM
Surr: DNOP	103	70-130	%Rec	1	4/5/2021 11:33:32 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 4:20:00 AM
Surr: BFB	97.6	70-130	%Rec	1	4/7/2021 4:20:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 4:20:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 4:20:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 4:20:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 4:20:00 AM
Surr: 4-Bromofluorobenzene	93.5	70-130	%Rec	1	4/7/2021 4:20:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	61	60	mg/Kg	20	4/8/2021 11:43:52 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 37

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-126 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:25:00 AM

 Lab ID:
 2104073-006
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.3	mg/Kg	1	4/5/2021 11:43:15 AM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/5/2021 11:43:15 AM
Surr: DNOP	110	70-130	%Rec	1	4/5/2021 11:43:15 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 4:40:00 AM
Surr: BFB	95.3	70-130	%Rec	1	4/7/2021 4:40:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 4:40:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 4:40:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 4:40:00 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 4:40:00 AM
Surr: 4-Bromofluorobenzene	91.6	70-130	%Rec	1	4/7/2021 4:40:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 11:56:16 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 6 of 37

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-127 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:30:00 AM

 Lab ID:
 2104073-007
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 11:52:56 AM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 11:52:56 AM
Surr: DNOP	109	70-130	%Rec	1	4/5/2021 11:52:56 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 5:00:00 AM
Surr: BFB	97.3	70-130	%Rec	1	4/7/2021 5:00:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 5:00:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 5:00:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 5:00:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 5:00:00 AM
Surr: 4-Bromofluorobenzene	92.9	70-130	%Rec	1	4/7/2021 5:00:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	59	mg/Kg	20	4/8/2021 12:08:41 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-128 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:35:00 AM

 Lab ID:
 2104073-008
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.1	mg/Kg	1	4/5/2021 12:02:43 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	4/5/2021 12:02:43 PM
Surr: DNOP	99.2	70-130	%Rec	1	4/5/2021 12:02:43 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 5:20:00 AM
Surr: BFB	96.9	70-130	%Rec	1	4/7/2021 5:20:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 5:20:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 5:20:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 5:20:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 5:20:00 AM
Surr: 4-Bromofluorobenzene	93.5	70-130	%Rec	1	4/7/2021 5:20:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 12:21:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-129 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:40:00 AM

 Lab ID:
 2104073-009
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 12:12:33 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 12:12:33 PM
Surr: DNOP	108	70-130	%Rec	1	4/5/2021 12:12:33 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 6:00:00 AM
Surr: BFB	98.5	70-130	%Rec	1	4/7/2021 6:00:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 6:00:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 6:00:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 6:00:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 6:00:00 AM
Surr: 4-Bromofluorobenzene	94.3	70-130	%Rec	1	4/7/2021 6:00:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 12:33:31 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-130 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:45:00 AM

 Lab ID:
 2104073-010
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS				Analyst: <b>mb</b>	
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/5/2021 12:22:26 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2021 12:22:26 PM
Surr: DNOP	129	70-130	%Rec	1	4/5/2021 12:22:26 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 6:20:00 AM
Surr: BFB	96.5	70-130	%Rec	1	4/7/2021 6:20:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 6:20:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 6:20:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 6:20:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 6:20:00 AM
Surr: 4-Bromofluorobenzene	93.1	70-130	%Rec	1	4/7/2021 6:20:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 12:45:56 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-131 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:50:00 AM

 Lab ID:
 2104073-011
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR				Analyst: <b>mb</b>	
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/5/2021 12:32:21 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 12:32:21 PM
Surr: DNOP	106	70-130	%Rec	1	4/5/2021 12:32:21 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 6:40:00 AM
Surr: BFB	96.0	70-130	%Rec	1	4/7/2021 6:40:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 6:40:00 AM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 6:40:00 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 6:40:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 6:40:00 AM
Surr: 4-Bromofluorobenzene	93.5	70-130	%Rec	1	4/7/2021 6:40:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 12:58:21 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 11 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-132 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 11:55:00 AM

 Lab ID:
 2104073-012
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: mb
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/5/2021 12:42:16 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 12:42:16 PM
Surr: DNOP	99.4	70-130	%Rec	1	4/5/2021 12:42:16 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 7:00:00 AM
Surr: BFB	95.4	70-130	%Rec	1	4/7/2021 7:00:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 7:00:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 7:00:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 7:00:00 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 7:00:00 AM
Surr: 4-Bromofluorobenzene	91.7	70-130	%Rec	1	4/7/2021 7:00:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 1:10:45 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 12 of 37

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-133 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:00:00 PM

 Lab ID:
 2104073-013
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/5/2021 12:52:29 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 12:52:29 PM
Surr: DNOP	120	70-130	%Rec	1	4/5/2021 12:52:29 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 7:19:00 AM
Surr: BFB	97.4	70-130	%Rec	1	4/7/2021 7:19:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 7:19:00 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 7:19:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 7:19:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 7:19:00 AM
Surr: 4-Bromofluorobenzene	91.9	70-130	%Rec	1	4/7/2021 7:19:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 1:23:11 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 13 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-134 1'

Project:Stebbins Federal SWDCollection Date: 3/30/2021 12:05:00 PMLab ID:2104073-014Matrix: SOILReceived Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE C	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/5/2021 1:02:33 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/5/2021 1:02:33 PM
Surr: DNOP	95.2	70-130	%Rec	1	4/5/2021 1:02:33 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 7:39:00 AM
Surr: BFB	96.7	70-130	%Rec	1	4/7/2021 7:39:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 7:39:00 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 7:39:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 7:39:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 7:39:00 AM
Surr: 4-Bromofluorobenzene	92.9	70-130	%Rec	1	4/7/2021 7:39:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 2:00:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 14 of 37

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-135 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:10:00 PM

 Lab ID:
 2104073-015
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/5/2021 1:12:32 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/5/2021 1:12:32 PM
Surr: DNOP	102	70-130	%Rec	1	4/5/2021 1:12:32 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 7:59:00 AM
Surr: BFB	93.3	70-130	%Rec	1	4/7/2021 7:59:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.024	mg/Kg	1	4/7/2021 7:59:00 AM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 7:59:00 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 7:59:00 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 7:59:00 AM
Surr: 4-Bromofluorobenzene	91.0	70-130	%Rec	1	4/7/2021 7:59:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 2:12:50 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 15 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-136 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:15:00 PM

 Lab ID:
 2104073-016
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/5/2021 1:22:28 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/5/2021 1:22:28 PM
Surr: DNOP	89.9	70-130	%Rec	1	4/5/2021 1:22:28 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 8:19:00 AM
Surr: BFB	95.2	70-130	%Rec	1	4/7/2021 8:19:00 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: CCM
Benzene	ND	0.025	mg/Kg	1	4/7/2021 8:19:00 AM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 8:19:00 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 8:19:00 AM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 8:19:00 AM
Surr: 4-Bromofluorobenzene	92.1	70-130	%Rec	1	4/7/2021 8:19:00 AM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 2:25:15 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 16 of 37

Date Reported: 4/9/2021

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-137 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:20:00 PM

 Lab ID:
 2104073-017
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/6/2021 4:57:25 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/6/2021 4:57:25 PM
Surr: DNOP	102	70-130	%Rec	1	4/6/2021 4:57:25 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 6:11:35 PM
Surr: BFB	96.2	70-130	%Rec	1	4/7/2021 6:11:35 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 6:11:35 PM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 6:11:35 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 6:11:35 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 6:11:35 PM
Surr: 4-Bromofluorobenzene	95.0	70-130	%Rec	1	4/7/2021 6:11:35 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 2:37:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 17 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-138 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:25:00 PM

 Lab ID:
 2104073-018
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 5:36:49 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 5:36:49 PM
Surr: DNOP	103	70-130	%Rec	1	4/6/2021 5:36:49 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 7:22:08 PM
Surr: BFB	96.6	70-130	%Rec	1	4/7/2021 7:22:08 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 7:22:08 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 7:22:08 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 7:22:08 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 7:22:08 PM
Surr: 4-Bromofluorobenzene	97.1	70-130	%Rec	1	4/7/2021 7:22:08 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	61	mg/Kg	20	4/8/2021 2:50:04 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 18 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-139 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:30:00 PM

 Lab ID:
 2104073-019
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	4/6/2021 5:46:42 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 5:46:42 PM
Surr: DNOP	109	70-130	%Rec	1	4/6/2021 5:46:42 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/7/2021 9:20:45 PM
Surr: BFB	94.7	70-130	%Rec	1	4/7/2021 9:20:45 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 9:20:45 PM
Toluene	ND	0.050	mg/Kg	1	4/7/2021 9:20:45 PM
Ethylbenzene	ND	0.050	mg/Kg	1	4/7/2021 9:20:45 PM
Xylenes, Total	ND	0.10	mg/Kg	1	4/7/2021 9:20:45 PM
Surr: 4-Bromofluorobenzene	94.2	70-130	%Rec	1	4/7/2021 9:20:45 PM
EPA METHOD 300.0: ANIONS					Analyst: MRA
Chloride	ND	60	mg/Kg	20	4/8/2021 3:02:29 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
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 19 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-140 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:35:00 PM

 Lab ID:
 2104073-020
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/6/2021 5:56:35 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 5:56:35 PM
Surr: DNOP	104	70-130	%Rec	1	4/6/2021 5:56:35 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 9:44:28 PM
Surr: BFB	96.1	70-130	%Rec	1	4/7/2021 9:44:28 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 9:44:28 PM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 9:44:28 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 9:44:28 PM
Xylenes, Total	ND	0.096	mg/Kg	1	4/7/2021 9:44:28 PM
Surr: 4-Bromofluorobenzene	96.0	70-130	%Rec	1	4/7/2021 9:44:28 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 7:26:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 20 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-141 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:40:00 PM

 Lab ID:
 2104073-021
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE O	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/6/2021 6:06:29 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 6:06:29 PM
Surr: DNOP	107	70-130	%Rec	1	4/6/2021 6:06:29 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 10:08:10 PM
Surr: BFB	95.8	70-130	%Rec	1	4/7/2021 10:08:10 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 10:08:10 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 10:08:10 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 10:08:10 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 10:08:10 PM
Surr: 4-Bromofluorobenzene	95.3	70-130	%Rec	1	4/7/2021 10:08:10 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 8:03:54 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 21 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-142 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:45:00 PM

 Lab ID:
 2104073-022
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE (	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 6:16:22 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 6:16:22 PM
Surr: DNOP	99.4	70-130	%Rec	1	4/6/2021 6:16:22 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 10:31:43 PM
Surr: BFB	97.8	70-130	%Rec	1	4/7/2021 10:31:43 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 10:31:43 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 10:31:43 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 10:31:43 PM
Xylenes, Total	ND	0.098	mg/Kg	1	4/7/2021 10:31:43 PM
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	4/7/2021 10:31:43 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 9:05:59 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 22 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-143 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:50:00 PM

 Lab ID:
 2104073-023
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	Analyst: <b>mb</b>				
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 6:26:15 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 6:26:15 PM
Surr: DNOP	107	70-130	%Rec	1	4/6/2021 6:26:15 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 10:55:07 PM
Surr: BFB	96.4	70-130	%Rec	1	4/7/2021 10:55:07 PM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 10:55:07 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 10:55:07 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 10:55:07 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 10:55:07 PM
Surr: 4-Bromofluorobenzene	96.1	70-130	%Rec	1	4/7/2021 10:55:07 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 9:18:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 23 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-144 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 12:55:00 PM

 Lab ID:
 2104073-024
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/6/2021 6:36:10 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/6/2021 6:36:10 PM
Surr: DNOP	99.9	70-130	%Rec	1	4/6/2021 6:36:10 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/7/2021 11:18:31 PM
Surr: BFB	97.5	70-130	%Rec	1	4/7/2021 11:18:31 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/7/2021 11:18:31 PM
Toluene	ND	0.049	mg/Kg	1	4/7/2021 11:18:31 PM
Ethylbenzene	ND	0.049	mg/Kg	1	4/7/2021 11:18:31 PM
Xylenes, Total	ND	0.099	mg/Kg	1	4/7/2021 11:18:31 PM
Surr: 4-Bromofluorobenzene	97.3	70-130	%Rec	1	4/7/2021 11:18:31 PM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 9:30:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 24 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-145 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 1:00:00 PM

 Lab ID:
 2104073-025
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	4/6/2021 6:46:05 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 6:46:05 PM
Surr: DNOP	96.0	70-130	%Rec	1	4/6/2021 6:46:05 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/7/2021 11:42:00 PM
Surr: BFB	98.1	70-130	%Rec	1	4/7/2021 11:42:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/7/2021 11:42:00 PM
Toluene	ND	0.048	mg/Kg	1	4/7/2021 11:42:00 PM
Ethylbenzene	ND	0.048	mg/Kg	1	4/7/2021 11:42:00 PM
Xylenes, Total	ND	0.097	mg/Kg	1	4/7/2021 11:42:00 PM
Surr: 4-Bromofluorobenzene	98.4	70-130	%Rec	1	4/7/2021 11:42:00 PM
EPA METHOD 300.0: ANIONS					Analyst: VP
Chloride	ND	60	mg/Kg	20	4/7/2021 9:43:13 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 25 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-146 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 1:05:00 PM

 Lab ID:
 2104073-026
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	4/6/2021 6:55:59 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 6:55:59 PM
Surr: DNOP	114	70-130	%Rec	1	4/6/2021 6:55:59 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/8/2021 12:05:43 AM
Surr: BFB	95.8	70-130	%Rec	1	4/8/2021 12:05:43 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/8/2021 12:05:43 AM
Toluene	ND	0.049	mg/Kg	1	4/8/2021 12:05:43 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/8/2021 12:05:43 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/8/2021 12:05:43 AM
Surr: 4-Bromofluorobenzene	95.2	70-130	%Rec	1	4/8/2021 12:05:43 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 9:55:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 26 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-147 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 1:10:00 PM

 Lab ID:
 2104073-027
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	4/6/2021 7:05:51 PM
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	4/6/2021 7:05:51 PM
Surr: DNOP	104	70-130	%Rec	1	4/6/2021 7:05:51 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/8/2021 12:29:24 AM
Surr: BFB	97.3	70-130	%Rec	1	4/8/2021 12:29:24 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/8/2021 12:29:24 AM
Toluene	ND	0.049	mg/Kg	1	4/8/2021 12:29:24 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/8/2021 12:29:24 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/8/2021 12:29:24 AM
Surr: 4-Bromofluorobenzene	97.4	70-130	%Rec	1	4/8/2021 12:29:24 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 10:08:03 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 27 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-148 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 1:15:00 PM

 Lab ID:
 2104073-028
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.4	mg/Kg	1	4/6/2021 7:15:42 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	4/6/2021 7:15:42 PM
Surr: DNOP	94.7	70-130	%Rec	1	4/6/2021 7:15:42 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	4/8/2021 12:53:01 AM
Surr: BFB	96.5	70-130	%Rec	1	4/8/2021 12:53:01 AM
<b>EPA METHOD 8021B: VOLATILES</b>					Analyst: NSB
Benzene	ND	0.024	mg/Kg	1	4/8/2021 12:53:01 AM
Toluene	ND	0.048	mg/Kg	1	4/8/2021 12:53:01 AM
Ethylbenzene	ND	0.048	mg/Kg	1	4/8/2021 12:53:01 AM
Xylenes, Total	ND	0.097	mg/Kg	1	4/8/2021 12:53:01 AM
Surr: 4-Bromofluorobenzene	96.1	70-130	%Rec	1	4/8/2021 12:53:01 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	220	61	mg/Kg	20	4/7/2021 10:20:28 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 28 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-149 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 1:20:00 PM

 Lab ID:
 2104073-029
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/6/2021 7:25:30 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	4/6/2021 7:25:30 PM
Surr: DNOP	87.5	70-130	%Rec	1	4/6/2021 7:25:30 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	4/8/2021 1:39:56 AM
Surr: BFB	96.4	70-130	%Rec	1	4/8/2021 1:39:56 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/8/2021 1:39:56 AM
Toluene	ND	0.050	mg/Kg	1	4/8/2021 1:39:56 AM
Ethylbenzene	ND	0.050	mg/Kg	1	4/8/2021 1:39:56 AM
Xylenes, Total	ND	0.10	mg/Kg	1	4/8/2021 1:39:56 AM
Surr: 4-Bromofluorobenzene	96.7	70-130	%Rec	1	4/8/2021 1:39:56 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	60	mg/Kg	20	4/7/2021 10:32:53 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 29 of 37

Date Reported: 4/9/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-150 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 3/30/2021 1:25:00 PM

 Lab ID:
 2104073-030
 Matrix: SOIL
 Received Date: 4/2/2021 7:35:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>mb</b>
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	4/6/2021 7:35:19 PM
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	4/6/2021 7:35:19 PM
Surr: DNOP	104	70-130	%Rec	1	4/6/2021 7:35:19 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	4/8/2021 2:03:41 AM
Surr: BFB	96.7	70-130	%Rec	1	4/8/2021 2:03:41 AM
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	0.025	mg/Kg	1	4/8/2021 2:03:41 AM
Toluene	ND	0.049	mg/Kg	1	4/8/2021 2:03:41 AM
Ethylbenzene	ND	0.049	mg/Kg	1	4/8/2021 2:03:41 AM
Xylenes, Total	ND	0.098	mg/Kg	1	4/8/2021 2:03:41 AM
Surr: 4-Bromofluorobenzene	96.6	70-130	%Rec	1	4/8/2021 2:03:41 AM
EPA METHOD 300.0: ANIONS					Analyst: <b>VP</b>
Chloride	ND	59	mg/Kg	20	4/7/2021 11:10:06 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 30 of 37

#### **QC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104073** 

09-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59273 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59273 RunNo: 76515

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711367 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-59273 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59273 RunNo: 76515

Prep Date: 4/7/2021 Analysis Date: 4/7/2021 SeqNo: 2711368 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit

Chloride 14 1.5 15.00 0 94.2 90 110

Sample ID: MB-59267 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **59267** RunNo: **76566** 

Prep Date: 4/7/2021 Analysis Date: 4/8/2021 SeqNo: 2712653 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-59267 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59267 RunNo: 76566

Prep Date: 4/7/2021 Analysis Date: 4/8/2021 SeqNo: 2712654 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.4 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 31 of 37

### **QC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104073** 

09-Apr-21

Client: Vertex Resource Group Ltd.
Project: Stebbins Federal SWD

Sample ID: <b>MB-59188</b>	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59	188	R	6459					
Prep Date: 4/3/2021	Analysis Date: 4/	5/2021	S	eqNo: 2	708381	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10								
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	11	10.00		113	70	130			
Sample ID: LCS-59188	SampType: LC	s	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 59	188	R	RunNo: <b>76459</b>					
Prep Date: 4/3/2021	Analysis Date: 4/	5/2021	S	eqNo: 2	708384	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53 10	50.00	0	107	68.9	141			
Surr: DNOP	5.2	5.000		104	70	130			
Sample ID: <b>MB-59189</b>	SampType: ME	BLK	Tes	Code: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch ID: 59	189	R	unNo: 70	6466				
Prep Date: 4/3/2021	Analysis Date: 4/	6/2021	S	eqNo: 2	709911	Units: mg/K	(g		
Analyte	Result PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND 10								
Motor Oil Range Organics (MRO)	ND 50								
Surr: DNOP	9.8	10.00		97.6	70	130			
Sample ID: <b>MB-59218</b>	SampType: <b>ME</b>	BLK	Tes	Code: El	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch ID: 59	218	R	unNo: 70	6466				

Sample ID: LCS-59189	SampType: LCS TestCode: EPA Method 86						d 8015M/D: Diesel Range Organics				
Client ID: LCSS	Batch	Batch ID: <b>59189</b> RunNo: <b>76466</b>									
Prep Date: 4/3/2021	Analysis D	ate: <b>4/</b>	6/2021	SeqNo: 2709914			4 Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	48	10	50.00	0	96.0	68.9	141				
Surr: DNOP	4.8		5.000		96.5	70	130				

SPK value SPK Ref Val

10.00

#### Qualifiers:

Prep Date:

Surr: DNOP

Analyte

4/5/2021

Analysis Date: 4/6/2021

Result

9.9

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

B Analyte detected in the associated Method Blank

SeqNo: 2709912

LowLimit

70

%REC

98.8

Units: %Rec

HighLimit

130

%RPD

**RPDLimit** 

- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 32 of 37

#### **QC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104073** 

09-Apr-21

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: LCS-59218 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 59218 RunNo: 76466

Prep Date: 4/5/2021 Analysis Date: 4/6/2021 SegNo: 2709915 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: DNOP 4.8 5.000 95.8 70 130

Sample ID: 2104073-017AMS SampType: MS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: **BS21-137 1'** Batch ID: **59189** RunNo: **76466** 

Prep Date: 4/3/2021 Analysis Date: 4/6/2021 SeqNo: 2709920 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Diesel Range Organics (DRO) 48 9.5 47.26 0 102 15 184

Surr: DNOP 4.9 4.726 0 102 15 184

Sample ID: 2104073-017AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: BS21-137 1' Batch ID: 59189 RunNo: 76466

Prep Date: 4/3/2021 Analysis Date: 4/6/2021 SeqNo: 2709922 Units: mg/Kg

PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 45 48.22 93.6 15 6.75 23.9 Diesel Range Organics (DRO) 9.6 184 Surr: DNOP 4.6 4.822 96.4 70 130 0 0

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 33 of 37

#### **OC SUMMARY REPORT**

#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2104073 09-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: Ics-59171 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 59171 RunNo: 76481 Prep Date: Analysis Date: 4/6/2021 SeqNo: 2710542 4/2/2021 Units: mq/Kq SPK value SPK Ref Val **RPDLimit** Analyte Result PQL %REC LowLimit HighLimit %RPD Qual 25.00 Gasoline Range Organics (GRO) 24 5.0 Λ 97.0 78.6 131

Surr: BFB 1100 1000 107 130

Sample ID: mb-59171 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59171 RunNo: 76481

Prep Date: Units: mg/Kg 4/2/2021 Analysis Date: 4/6/2021 SeqNo: 2710543

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 940 1000 94.0 70 130

Sample ID: mb-59173 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59173 RunNo: 76526

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2711157 Units: mg/Kg

SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte Result PQL HighLimit Qual Gasoline Range Organics (GRO) ND 5.0 Surr: BFB 970 1000 97.2 70 130

Sample ID: Ics-59173 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59173 RunNo: 76526

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2711158 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Result PQL LowLimit HighLimit Qual Gasoline Range Organics (GRO) 25 99.5 5.0 25.00 78.6 131 Surr: BFB 1100 1000 108 70 130

Sample ID: 2104073-017ams SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-137 1' Batch ID: 59173 RunNo: 76526

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2711160 Units: mq/Kq

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 24 0 61.3 4.8 24.15 97.4 114 Surr: BFB 1000 966.2 107 70 130

Sample ID: 2104073-017amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-137 1' Batch ID: 59173 RunNo: 76526

Prep Date: Units: mg/Kg 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2711161

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result PQL LowLimit HighLimit Qual

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 34 of 37

### Hall Environmental Analysis Laboratory, Inc.

0#: 2104073 09-Apr-21

WO#:

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: 2104073-017amsd SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: BS21-137 1' Batch ID: 59173 RunNo: 76526

Prep Date: 4/2/2021 Analysis Date: 4/7/2021 SeqNo: 2711161 Units: mg/Kg

PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Analyte Result LowLimit Qual Gasoline Range Organics (GRO) 23 5.0 24.78 Λ 94.7 61.3 114 0.287 20 Surr: BFB 1100 991.1 108 130 0

Sample ID: mb-59235 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: **59235** RunNo: **76526** 

Prep Date: 4/6/2021 Analysis Date: 4/7/2021 SeqNo: 2711181 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Surr: BFB
 970
 1000
 97.4
 70
 130

Sample ID: Ics-59235 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 59235 RunNo: 76526

Prep Date: 4/6/2021 Analysis Date: 4/7/2021 SeqNo: 2711182 Units: %Rec

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Surr: BFB 1100 1000 106 70 130

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 35 of 37

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104073** 

09-Apr-21

Client: Vertex Resource Group Ltd.
Project: Stebbins Federal SWD

Sample ID: Ics-59171	Samp	Гуре: <b>LC</b>	S	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	h ID: <b>59</b> ′	171	F	RunNo: <b>7</b>	6481						
Prep Date: 4/2/2021	Analysis [	Date: <b>4/</b>	6/2021	5	SeqNo: 2	710653	Units: mg/k	<b>(</b> g				
Analyte	Result PQL SPK value SPK Ref Val %REC LowLimit						HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.93	0.025	1.000	0	93.2	80	120					
Toluene	0.96	0.050	1.000	0	95.6	80	120					
Ethylbenzene	0.97	0.050	1.000	0	97.1	80	120					
Xylenes, Total	2.9	0.10	3.000									
Surr: 4-Bromofluorobenzene	0.91		1.000	.000 90.6 70								

Sample ID: <b>mb-59171</b>	Samp1	ype: ME	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	h ID: <b>59</b>	171	F	RunNo: 7	6481				
Prep Date: 4/2/2021	Analysis D	Date: 4/	6/2021	8	SeqNo: 2	710654	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

Sample ID: <b>mb-59173</b>	SampT	уре: МЕ	BLK	Test	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: <b>59</b>	173	R	tunNo: 7	6526				
Prep Date: 4/2/2021	Analysis D	oate: 4/	7/2021	S	SeqNo: 2	711203	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000	97.3 70			130			

Sample ID: LCS-59173	SampT	ype: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batcl	n ID: <b>59</b> 1	173	F	RunNo: 7	6526							
Prep Date: 4/2/2021	Analysis D	Date: 4/	7/2021	9	SeqNo: 2	711204	Units: mg/K	(g					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Benzene	0.91	0.025	1.000	0	91.1	80	120						
Toluene	0.95	0.050	1.000	0	95.0	80	120						
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120						
Xylenes, Total	2.8	0.10	3.000	0	94.2	80	120						
Surr: 4-Bromofluorobenzene	0.99		1.000		99.4	70	130						

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 36 of 37

### Hall Environmental Analysis Laboratory, Inc.

2104073 09-Apr-21

WO#:

Client: Vertex Resource Group Ltd.
Project: Stebbins Federal SWD

Sample ID: 2104073-018ams	SampT	ype: MS	}	Tes	tCode: El	PA Method	8021B: Vola	iles		
Client ID: <b>BS21-138 1'</b>	Batch	ID: <b>59</b> 1	173	F	RunNo: 70	6526				
Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b>	7/2021	9	SeqNo: 2	711207	Units: mg/k	ίg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9901	0	86.3	76.3	120			
Toluene	0.90	0.050	0.9901	0	91.2	78.5	120			
Ethylbenzene	0.90	0.050	0.9901	0	90.9	78.1	124			
Xylenes, Total	2.7	0.099	2.970	0	90.4	79.3	125			
Surr: 4-Bromofluorobenzene	0.97		0.9901		70	130				

Sample ID: 2104073-018amsd	SampT	ype: MS	D	TestCode: EPA Method 8021B: Volatiles							
Client ID: <b>BS21-138 1'</b>	Batch	ID: <b>59</b> 1	173	F	tunNo: <b>7</b> 0	6526					
Prep Date: 4/2/2021	Analysis D	ate: <b>4/</b> 7	7/2021	S	SeqNo: 27	711208	Units: mg/K	(g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.83	0.025	0.9862	0	83.9	80	120	3.23	20		
Toluene	0.87	0.049	0.9862	0	88.3	80	120	3.61	20		
Ethylbenzene	0.87	0.049	0.9862	0	88.3	80	120	3.33	20		
Xylenes, Total	2.6	0.099	2.959	0	88.9	80	120	2.13	20		
Surr: 4-Bromofluorobenzene	0.96		0.9862		97.7	70	130	0	0		

Sample ID: mb-59235	SampT	уре: М	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	ID: <b>59</b>	235	F	RunNo: 7	6526				
Prep Date: 4/6/2021	Analysis D	ate: 4/	7/2021	S	SeqNo: 2	711230	Units: %Red	:		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	70	130			

Sample ID: LCS-59235	SampT	ype: <b>LC</b>	s	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	n ID: <b>59</b>	235	F	RunNo: 7	6526				
Prep Date: 4/6/2021	Analysis D	oate: 4	/7/2021	S	SeqNo: 2	711231	Units: %Red	С		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1 000		97.2	70	130			

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

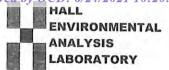
E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 37 of 37



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

Sample Log-In Check List

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Client Name:	Vertex Res Ltd.	source Group	Work	Order Nun	nber: 210	4073			RcptNo:	1
Received By:	Juan Roja	as	4/2/202	21 7:35:00	AM		Lun	39		
Completed By:	Cheyenne	e Cason	4/2/202	1 8:34:11	AM					
Reviewed By:	JK 4/2	121								
Chain of Cus	stody									
1. Is Chain of C	ustody comp	lete?			Yes	<b>V</b>	No		Not Present	
2. How was the	sample deliv	vered?			Cou	rier				
Log In										
3. Was an atten	npt made to	cool the samp	es?		Yes	<b>V</b>	No		NA 🗆	
4. Were all sam	ples received	l at a tempera	ure of >0° C	to 6.0°C	Yes	<b>V</b>	No		NA 🗆	
5. Sample(s) in	proper conta	iner(s)?			Yes	<b>V</b>	No			
6. Sufficient sam	nple volume f	or indicated te	st(s)?		Yes	<b>V</b>	No			
7. Are samples (	(except VOA	and ONG) pro	perly preserve	ed?	Yes	<b>V</b>	No			
8. Was preserva	tive added to	bottles?			Yes		No	<b>V</b>	NA 🗌	
9. Received at le	east 1 vial wit	h headspace	<1/4" for AQ V	OA?	Yes		No		NA 🗹	0
10. Were any sar	mple containe	ers received b	oken?		Yes		No	<b>V</b>		
11. Does paperwo					Yes	V	No		# of preserved bottles checked for pH:	>12 unless noted)
12. Are matrices					Yes	V	No	П	Adjusted?	12 dilloss flotody
13. Is it clear wha					Yes	V	No			
14. Were all holdi (If no, notify c					Yes	<b>V</b>	No		Checked by:	
Special Handl										
15. Was client no			vith this order?		Yes		No		NA 🗹	
Person	Notified:			Date				-		
By Who	om:			Via:	eMa	ail 🗍	Phone	Fax	In Person	
Regard	ing:									
Client In	nstructions:									
16. Additional re	marks:									
17. Cooler Infor	mation									
Cooler No	The second second	Condition	Seal Intact	Seal No	Seal Da	ate	Signed I	Зу		
1	3.1	Good								
2	2.0	Good								

Received by OCD: 6/24/202 110:20:36 AM Page 509 of 525 ANALYSIS LABORATORY HALL ENVIRONMENTAL permian a verbezica If necessary, samples submitted to Hall Environmental may be subcontracted to other acadedited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report 4901 Hawkins NE - Albuquerque, NM 87109 Fax 505-345-4107 www.hallenvironmental.com Analysis Request Total Coliform (Present/Absent) (AOV-ima2) 07S8 sendall labreports to (AOV) 09S8 CITE, NO2, PO4, SO4 NO3' Br, Tel. 505-345-3975 RCRA 8 Metals 2MIS0728 to 0168 vd eHA9 rough 4/2/21 7:35 IN Datodor Pesticides/8082 PCB's Remarks: (PH:8015D(GRO / DRO / MRO) TMB's (8021) (၁) Stubbins tederal SWIJ 21074073 2.1-0.1-2.0 100 Time HEAL No: 080 300 Cooler Temp(including CF): 7,2-0,1-3 503 005 200 100 504 800 600 010 10 % □ Movie Puppin 216-00087 □ Rush Preservative 日 Yes Type Turn-Around Time: Project Manager: Sampler: JR V Standard # of Coolers: Type and # 2 Container Received by: Project #: Received by On Ice: □ Level 4 (Full Validation) Chain-of-Custody Record Sample Name 3521-126 B521-130 PS21 - 127 8521-125 BS21-127 8521-128 3521-129 BS21-123 Bel-168 1531-131 151-158 B521-1 □ Az Compliance Relinquished by: Relinquished by: □ Other Matrix 501 Mailing Address: 01:11 11.55 8 1:15 11:50 1:30 11:35 QA/QC Package: □ NELAC □ EDD (Type) 11,00 1.45 4/1/24 1900 1:28 1:40 1:30 1:05 Time email or Fax#: Accreditation: Time: □ Standard Phone #: 3/301 Client:\ 7 Date

5 Day   Sept   Swp   Swp				S	Dal	3.5	500t	sendall reports to permian a vertex.Ca	.Ca	Rece
Signature   Section   Standard   Rush   Project Name:   Standard	in-of-Custody Record	Turn-Around Time:	5 Day		I	110	NNH	NCOL	MENTAI	eived
Stock   Sample   Project Name   Sample   Project Name   Sample	とうたべ		-			MAL	YSTS	LABC	RATORY	by C
Sample Name					;	ww.hall	environn	ental.com		OCD:
Project #:   Diff - OOO87	Iress:	Stelebinstea	and one;	490	Hawkin	s NE -	Albuque	rque, NM 8	17109	6/24
Container   Project Manager:   Container   Project Manager:   Container   Co				Tel.	505-345	-3975	Fax &	05-345-41	70	1/202
Project Manager:   Project Man			1			Ā	alysis F	Rednest	A Company of the company	21 10
Cooler Temples   Cool	<b>X#</b> :	Project Manager:		1	L		<b>*</b> O\$	(tu		):20
Az Compliance   Container   Sampler: TR   Configuration   Container   Contai		Manica Pepp	(3	AM \ C			S ԠOc	əsqy/		:36 AA
Outloop   Matrix   Sample Name   Molecular   Molecular   Matrix   Sample Name   Molecular	□ Az Con			סאמ	(1		0 <sup>2</sup> ' ا	uəs		1
Matrix   Sample Name			□ No	10	.408	5	N '			
Matrix   Sample Name   Cooler Templosourons of St.   Col.   St.   Col.   St.   Col.   St.   Col.   St.   Col.   St.   Col.   St.   Contains   St.   Contains   St.   Contains   St.   Contains   St.   Contains   St.   Contains   St.   Col.   Col.   St.				4Đ)	g po	stals				
Matrix Sample Name		(including CF).	2-0.1=3.1 (	<b>Q</b> 9	oqje	₽W				
BS31-137			2.1-2	108:HG	M) 80	8 AAO		1.72		
BS21-134	Matrix — — — — — — — — — — — — — — — — — — —		1007	Τ .	3	Я	-			
BS21-135   1   016     BS21-136   1   017     BS21-137   1   018     BS21-137   1   018     BS21-139   1   018     BS21-140   1   021     BS21-141   1   022     BS21-141   1   022     BS21-141   1   022     BS21-143   1   022     BS21-144   1   022     BS21-143   1   022     BS21-144   1   022     BS21-144   1   022     BS21-144   1   022     BS21-143   1   022     BS21-144   1   022     BS21-143   1   022     BS21-144   1   022	-	-	614				_			
BS21-136   1	BS21-135		0185							1
	BS21-136		010							
BS21-139   1   018   018   018   019   019   020   021   022   0	Bs31-137		219							
RS31-139   1   019   020   0	B521-138		810							
	B521-139		019							
BS31-141   1   021   022   BS31-143   1   022   022   022   023   023   024   023   024	1628		oro							
	1-1858		120							
	1 6891-142 I		022							= }
Relinquished by: Received by: Received by: Received by: Received by: Received by: Relinquished by: Received b	BSa1-143		023							
Relinquished by: Via: Pate Time Received by: Via: Pate Time Relinquished by:	1-168		720							
Relinquished by: Via: Date T	Relinquish	1444		Remarks:						Pag
, , , , , , , , , , , , , , , , , , ,		7								e 51
William Sold College 40/70	of frame	Je Course	or 411/21 7:35	S	ado	(				0 of S

	ENVIKONMENTAL SYSTS LABORATORY		37109		- 1	0.40	2:36 AN															ruge	e 511 of
(		www.hallenvironmental.com	N N	505-345-4107	est	(tue	əsdA\ti	eseu	1 <u>4</u> )	шJ	Olifo	Total											
-	¥ _	nenta	erque	505-3	Request				(AC	ΟΛ-	imə2)	0728										1	
	MALL ENVI ANAI YSTS	ironr	andne	Fax	/sis							8260	_										
	7	allen	- Alk		Analysis	<sup>†</sup> O5	PO4, 5	10 <sup>5</sup> '		_			1	1									
	HALL	w.h.	R	3975			011110				M 8 A												
		3	vkins	-345-			SMIS				4.5	EDB (	-					4	+	+			5
			4901 Hawkins NE	Tel. 505-345-3975			bcB,2					1000											Joseph
			490	Tel			AM / O				71.7		1		_			_				Remarks:	Í
						(1	208) s	LWB	L /	38.	TM /	(EX	>	,				}				Rem	8
Turn-Around Time:	☐ Standard ☐ Rush		Totalobing tederal Sul)	Project #:	01E-00081	Project Manager:	Movice Peppin	Sampler: 12	On Ice: The Ves In No	# of Coolers: $\mathcal L$	Cooler Temp(including cF): 3.2-0.1=3.1 (°C)	Container Preservative HEAL No. (Type and # Type	3)	20 1 1	027	026	029	1   030				Received by: Via: Pate Time	Received-by Via: Date Time
Chain-of-Custody Record	, X7						☐ Level 4 (Full Validation)	□ Az Compliance	□ Other			trix Sample Name		1 941-1658 1	11 rt-1258	11 841-1CS8	1 BS1-149 1	1 RS31-160 11				Relinquished by:	Relinquished by:
Chain-of	Client: Cot	mag	Mailing Address:	8/24/	202 Phone #:	email or Fax#:	QA/QC Package:	٠.	□ NELAC □	□ EDD (Type)		Date Time Matrix	17.00	1:05	01:10	1.15	1:30	11.25				Date: Time: Relin	



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

April 27, 2021

Monica Peppin Vertex Resource Group Ltd. 3101 Boyd Drive Carlsbad, NM 88220 TEL: (505) 506-0040

FAX:

RE: Stebbins Federal SWD OrderNo.: 2104919

#### Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 3 sample(s) on 4/21/2021 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

anded

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report**Lab Order **2104919** 

Date Reported: 4/27/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: WS21-09 0-1'

 Project:
 Stebbins Federal SWD
 Collection Date: 4/20/2021 8:20:00 AM

 Lab ID:
 2104919-002
 Matrix: SOIL
 Received Date: 4/21/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/23/2021 3:43:42 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2021 3:43:42 PM
Surr: DNOP	58.9	70-130	S	%Rec	1	4/23/2021 3:43:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/24/2021 11:57:45 AM
Surr: BFB	98.9	70-130		%Rec	1	4/24/2021 11:57:45 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/24/2021 11:57:45 AM
Toluene	ND	0.049		mg/Kg	1	4/24/2021 11:57:45 AM
Ethylbenzene	ND	0.049		mg/Kg	1	4/24/2021 11:57:45 AM
Xylenes, Total	ND	0.097		mg/Kg	1	4/24/2021 11:57:45 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/24/2021 11:57:45 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	250	60		mg/Kg	20	4/24/2021 2:24:23 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 6

# **Analytical Report**Lab Order **2104919**

Date Reported: 4/27/2021

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd. Client Sample ID: BS21-21 1'

 Project:
 Stebbins Federal SWD
 Collection Date: 4/20/2021 8:25:00 AM

 Lab ID:
 2104919-003
 Matrix: SOIL
 Received Date: 4/21/2021 7:35:00 AM

Analyses	Result	RL (	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/23/2021 3:56:23 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2021 3:56:23 PM
Surr: DNOP	50.1	70-130	S	%Rec	1	4/23/2021 3:56:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/24/2021 12:21:38 PM
Surr: BFB	100	70-130		%Rec	1	4/24/2021 12:21:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/24/2021 12:21:38 PM
Toluene	ND	0.050		mg/Kg	1	4/24/2021 12:21:38 PM
Ethylbenzene	ND	0.050		mg/Kg	1	4/24/2021 12:21:38 PM
Xylenes, Total	ND	0.10		mg/Kg	1	4/24/2021 12:21:38 PM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	4/24/2021 12:21:38 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	59		mg/Kg	20	4/26/2021 9:37:27 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 6

### Hall Environmental Analysis Laboratory, Inc.

27-Apr-21

2104919

WO#:

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59610 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59610 RunNo: 76937

Prep Date: 4/23/2021 Analysis Date: 4/23/2021 SeqNo: 2726806 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-59610 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59610 RunNo: 76937

Prep Date: 4/23/2021 Analysis Date: 4/23/2021 SeqNo: 2726807 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 15 1.5 15.00 0 97.5 90 110

Sample ID: MB-59623 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 59623 RunNo: 76958

Prep Date: 4/26/2021 Analysis Date: 4/26/2021 SeqNo: 2727606 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID: LCS-59623 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 59623 RunNo: 76958

Prep Date: 4/26/2021 Analysis Date: 4/26/2021 SeqNo: 2727607 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 94.5 90 110

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 6

### Hall Environmental Analysis Laboratory, Inc.

5.5

WO#: **2104919 27-Apr-21** 

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: MB-59577 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 59577 RunNo: 76915 Prep Date: 4/22/2021 Analysis Date: 4/23/2021 SeqNo: 2725822 Units: mg/Kg Analyte PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Result Diesel Range Organics (DRO) ND 10 Motor Oil Range Organics (MRO) ND 50 Surr: DNOP 9.0 10.00 90.1 70 130

Sample ID: LCS-59577 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 59577 RunNo: 76915 Prep Date: 4/22/2021 Analysis Date: 4/23/2021 SeqNo: 2725823 Units: mg/Kg SPK value SPK Ref Val %REC Analyte Result PQL LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 51 10 50.00 102 68.9 141

110

70

130

5.000

#### Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2104919 27-***Apr-21* 

Client: Vertex Resource Group Ltd.

Project: Stebbins Federal SWD

Sample ID: mb-59568 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 59568 RunNo: 76925

Prep Date: 4/22/2021 Analysis Date: 4/24/2021 SeqNo: 2726069 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 1000 1000 101 70 130

Sample ID: Ics-59568 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

1000

Client ID: LCSS Batch ID: 59568 RunNo: 76925

1100

Prep Date: 4/22/2021 Analysis Date: 4/24/2021 SeqNo: 2726070 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 23 5.0 25.00 0 90.8 78.6 131

70

130

110

#### Qualifiers:

Surr: BFB

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 6

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2104919

27-Apr-21

**Client:** Vertex Resource Group Ltd. **Project:** Stebbins Federal SWD

Sample ID: mb-59568	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batcl	n ID: <b>59</b>	568	F	RunNo: <b>7</b> 0	6925				
Prep Date: 4/22/2021	Analysis D	Date: 4/	24/2021	8	SeqNo: 2	726133	Units: mg/K			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

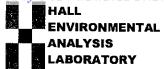
Sample ID: LCS-59568	Samp	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles											
Client ID: LCSS	Batc	h ID: <b>59</b>	568	F											
Prep Date: 4/22/2021	Analysis [	Date: 4/	24/2021	\$	SeqNo: 2	726134	Units: mg/K	(g							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual					
Benzene	0.98	0.025	1.000	0	98.4	80	120								
Toluene	0.99	0.050	1.000	0	98.9	80	120								
Ethylbenzene	0.98	0.050	1.000	0	97.8	80	120								
Xylenes, Total	2.9	0.10	3.000	0	97.7	80	120								
Surr: 4-Bromofluorobenzene	1.0		1.000		105	70	130								

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Sample Log-In Check List Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

Client Name	e: Vertex Resource Group Ltd.	Work Order Nun	nber: 2104919		RcptNo:	1
Received B	y: <b>Juan Rojas</b>	4/21/2021 7:35:00	A <b>M</b>	Grandy 13		
Completed 8	By: Cheyenne Cason	4/21/2021 8:40:58	AM	Generally.		
Reviewed B	y: JR4/21/21					
Chain of C	<u>Custody</u>					
1, Is Chain o	of Custody complete?		Yes 🗹	No 🗌	Not Present	
2. How was	the sample delivered?		Courier			
Log In						
3. Was an a	ttempt made to cool the samp	les?	Yes 🗹	No 🗌	NA 🗌	
4. Were all s	amples received at a tempera	ture 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 to	est(s)?	Yes 🗹	No 🗌		
7. Are sampl	es (except VOA and ONG) pro	perly preserved?	Yes 🗹	No 🗌		
8. Was prese	ervative added to bottles?		Yes 🗌	No 🗸	NA 🗌	
9. Received	at least 1 vial with headspace	<1/4" for AQ <b>V</b> OA?	Yes 🗌	No 🗌	NA 🗹	
	sample containers received b		Yes	No 🗹		
					# of preserved bottles checked	11/21/7
	erwork match bottle labels?		Yes 🗹	No 🗌	for pH:	ع <sub>ا</sub> ادر اد
	repancies on chain of custody				(<2-or	12 unless noted)
	es correctly identified on Chair		Yes 🗹	No ∐	riajustou:	
	what analyses were requested olding times able to be met?	<i>!</i>	Yes 🗹 Yes 🗹	No ∐ No □	Checked by:	
	fy customer for authorization.)		Yes 🗹	NO 🗀	- ····	
Special Hai	ndling (if applicable)					
15. Was clien	t notified of all discrepancies v	vith this order?	Yes 🗌	No 🗆	NA 🗹	
Per	son Notified:	Date	2: [			
Ву \	Whom:	Via:	eMail F	Phone Tax	n Person	
Reg	arding:					
Clie	nt Instructions:					
16. Additiona	l remarks:				1	
17. <u>Cooler Ir</u>	nformation					
Cooler		Seal Intact   Seal No	Seal Date	Signed By		
1	3.5 Good					

R	eceive			: 6/2	4/202	21 1	:20	:36 A	M														Page	520	of 5
		ANAI VETE I ABODATODA		37109	Fax 505-345-4107	Analysis Request	.bO	Vpsei O <sup>†</sup> ' S	d 'z	808\ <sub>2</sub> (1.40 (1.40 S8 10 ON	desed 10 o	otici 83 Me (AC	TPH:801 8081 Peg PAHs by RCRA 8 CI)F, Br SZ60 (VC		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7							CC. M. Peppin		Labelo
B					1							HW History	BTEX		/								Remarks	1	$\subseteq$
	Turn-Around Time:	女 Standard   Rush	- L	yesterns tederal own	Project #:	AIR * 0008   001	Project Manager:	Monica Peppin	1	Sampler: MO On Ice.	lers: .	Cooler Temp(including cF): 名下のこえて ("C)	Container Preservative HEAL No. Type and # Type	402 lice	30/1 20 h	402 ice (23				- Company		Bereived hr. Mid. Date Time	Harly 1	Received by Via: Date Time	1 1 100 Et 4/2/2 7:35
	Chain-of-Custody Record	Client: Vox + ex		Mailing Address:		Phone #:	email or Fax#:	age:		Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other	(pd)		Date Time Matrix Sample Name	8.15 50; 1	8:30 50:1 WSDI-09			101		-		Date: Time: Relinenished by:	130	Jate: Time: Relinquished by:	1 (a) x (a)

### **ATTACHMENT 8**



Dhugal Hanton <vertexresourcegroupusa@gmail.com>

### (Extension Approval) Stebbins Federal SWD nAPP2102534956

1 message

Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>

Tue, Mar 30, 2021 at 9:59 AM

To: Dhugal Hanton <vertexresourcegroupusa@gmail.com>, "mpeppin@vertex.ca" <mpeppin@vertex.ca>, "Hensley, Chad, EMNRD" <Chad.Hensley@state.nm.us>, "Enviro, OCD, EMNRD" <OCD.Enviro@state.nm.us>

Cc: "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, "jhurt@matadorresources.com"

<jhurt@matadorresources.com>, "arsenio.jones@matadorresources.com" <arsenio.jones@matadorresources.com>

RE: Incident #NAPP2102534956

Monica,

Your request for an extension to **May 30th, 2021** is approved. Vertex Resources is requesting a 60-day extension for the Stebbins Federal SWD. Field work is ongoing with confirmation sampling underway. Vertex is expecting to have excavation and confirmation sampling completed this week and will be waiting on lab analysis. Closure report will be underway as soon as lab analysis is received.

Robert Hamlet • Environmental Specialist - Advanced

**Environmental Bureau** 

**EMNRD** - Oil Conservation Division

811 S. First Street | Artesia, NM 88210

575.909.0302 | robert.hamlet@state.nm.us

http://www.emnrd.state.nm.us/OCD/



From: Dhugal Hanton <vertexresourcegroupusa@gmail.com>

Sent: Tuesday, March 30, 2021 9:46 AM

To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; mpeppin@vertex.ca; Hensley, Chad, EMNRD

<Chad.Hensley@state.nm.us>; Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>

Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; jhurt@matadorresources.com; arsenio.jones@

matadorresources.com

Subject: [EXT] Stebbins Federal SWD nAPP2102534956 Extension Request

Good morning,

Vertex Resources is requesting a 60-day extension for the Stebbins Federal SWD. Field work is ongoing with confirmation sampling underway. We are expecting to have excavation and confirmation sampling completed this week and will be waiting on lab analysis.

Closure report will be underway as soon as lab analysis is received.

Incident # nAPP2102534956 DOR: January 12, 2021.

Thank you,

Monica

#### **Monica Peppin**

Project Manager in Training

Vertex Resource Group Ltd. 3101 Boyd Drive, Carlsbad, NM 88220

P 575.725.5001 Ext. 711 C 575.361.9880

#### www.vertex.ca

Confidentiality Notice: This message and any attachments are solely for the intended recipient and may contain confidential or privileged information. If you are not the intended recipient, any disclosure, copying, use, or distribution of the information included in this message and any attachment is prohibited. If you have received this communication in error, please notify us by reply email and immediately and permanently delete this message and any attachments. Thank you.

Page 524 of 525

Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

X A scaled site and sampling diagram as described in 19.15.29.11 NMAC
X Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
X Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
X Description of remediation activities
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.
Printed Name: Arsenio Jones Title: RES Specialist
Signature: Date: Date:
email:arsenio.jones@matadorresouces.com Telephone:575-361-4333
OCD Only
Received by: Robert Hamlet Date: 8/24/2021
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.
Closure Approved by: Robert Hamlet Date: 8/24/2021

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

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

Action 28503

#### CONDITIONS

Operator:	OGRID:
MATADOR PRODUCTION COMPANY	228937
One Lincoln Centre	Action Number:
Dallas, TX 75240	28503
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2102534956 STEBBINS FEDERAL SWD SLOT 4 20 204, thank you. This closure is approved.	8/24/2021