



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).

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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.

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

¹Total petroleum hydrocarbons (TPH) = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO)

²Benzene, 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.

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Matador Production Company
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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
- 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

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Matador Production Company
Stebbins Federal SWD Slot 4 20-204

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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>

Matador Production Company
Stebbins Federal SWD Slot 4 20-204

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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

Responsible Party	Matador Production Company	OGRID	228937
Contact Name	Arsenio Jones	Contact Telephone	575-361-4333
Contact email	arsenio.jones@matadorresources.com	Incident # (assigned by OCD)	nAPP2102534956
Contact mailing address	5400 LBJ Freeway, Suite 1500 Dallas, TX 75240		

Location of Release Source

Latitude: 32.55263 Longitude: -104.10536
(NAD 83 in decimal degrees to 5 decimal places)

Site Name:	Stebbins Federal SWD Slot 4 20-204	Site Type:	SWD
Date Release Discovered:	01/12/2021	API#: (if applicable)	N/A

Unit Letter	Section	Township	Range	County
M	20	20S	29E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 293 bbls	Volume Recovered (bbls) 250 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

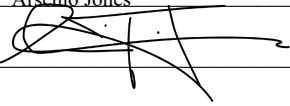
A nipple on the sand filter inlet broke.

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Release was greater than 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notification was provided to NMOCD, and the BLM, by Natalie Gordon of Vertex Resource Group via email on Wednesday, January 13, 2021 at approximately 9:30 AM.	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: 	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Arsenio Jones</u>	Title: <u>RES Specialist</u>
Signature: 	Date: <u>6/12/2021</u>
email: <u>arsenio.jones@matadorresources.com</u>	Telephone: <u>575-361-4333</u>
<u>OCD Only</u> Received by: _____ Date: _____	

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	44 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

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

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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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 SpecialistSignature:  Date: 6/12/2021email: arsenio.jones@matadorresources.com Telephone: 575-361-4333**OCD Only**

Received by: _____ Date: _____

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Facility ID	
Application ID	


Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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: 6/12/2021
email: arsenio.jones@matadorresources.com Telephone: 575-361-4333

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Release Volume Estimation Equation

Equation (1) Inputs	(LxW)/43560sqft	Equation (1) Assumptions
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1 acre = 43560 sqft

Area Length (ft) Width (ft) Acres

Equation (2) Inputs	Ksat*27,154gal/(42gal)	Equation (2) Assumptions
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1 acre/inch = 27,154 gal

Ksat in Inches per hour located at <https://websoilsurvey.nrcs.usda.gov>

1 bbl = 42gal

 BBL/Acre/hr

Equation (3)	(Eq2)X(Eq1) Area adjusted volume
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 BBL/hr max

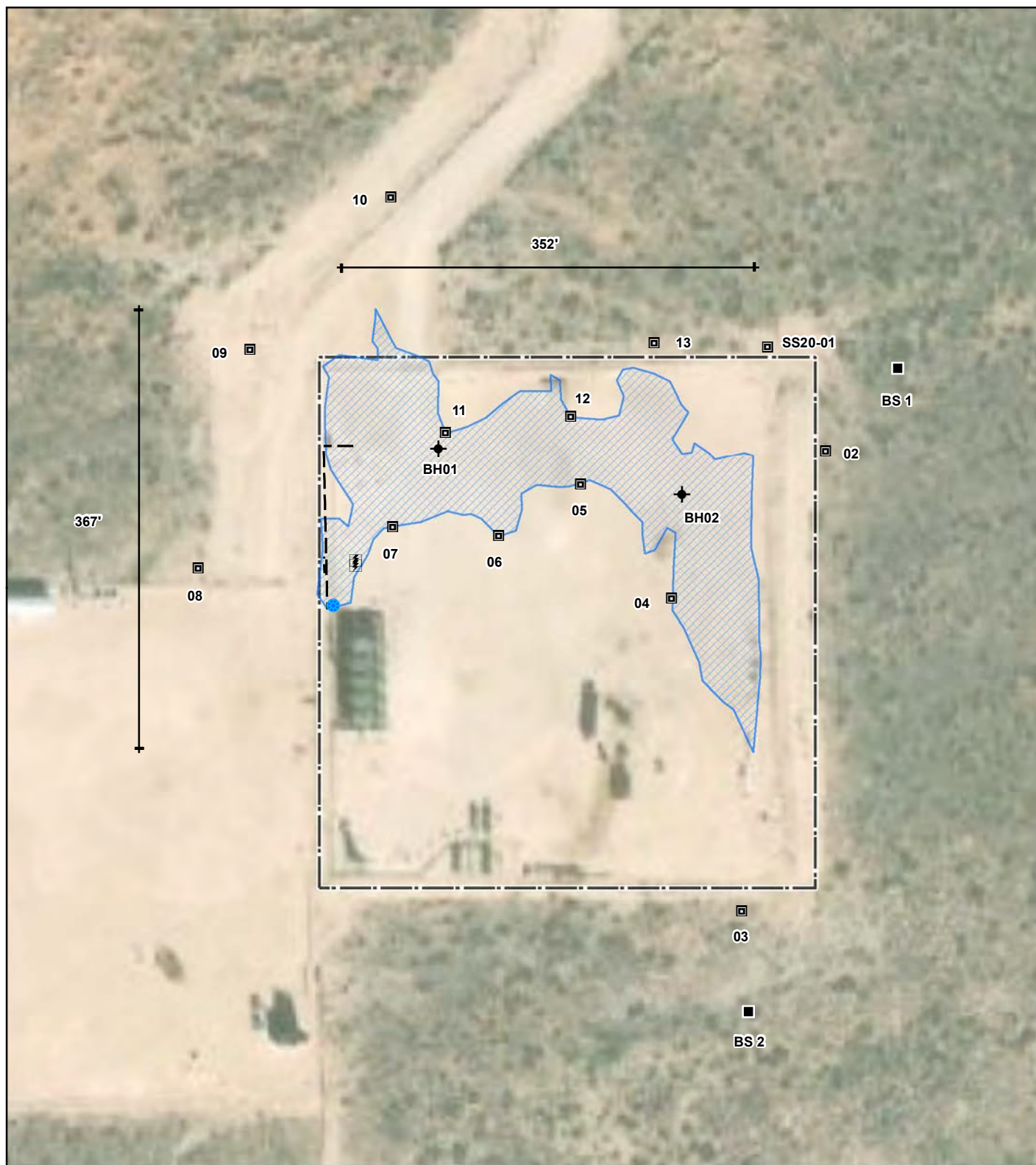
Equation (4) Inputs	(Eq3)X release duration (hours)+recovered volume	Equation (4) Assumptions
---------------------	--	--------------------------

recovered fluids are not
in soil solution BBL Duration (hr) BBL

¹ infiltration 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 Handbook (USDA))

² (Ksat) Hydraulic Conductivity. (National Soil Survey Handbook (USDA)) conductivity is often referred to as coefficient of permeability, most commonly shortened to permeability

ATTACHMENT 2



- | | | |
|---------------------|-------------------------------------|--------------------------------------|
| ■ Background Sample | □ Soil Sample (Prefixed by "SS21-") | □ Approximate Lease Boundary |
| ◆ Borehole | ● Water Transfer Pump | ▨ Visual Staining (45,249 sq. ft.) |
| ⚡ Electrical box | - - Aboveground Pipeline | |



0 20 40 80 ft.

WGS 1984 UTM Zone 13N
Date: May 12/21

Map Center:
Lat: 32.553074,
Long: -104.105192



Initial Characterization Stebbins Federal SWD

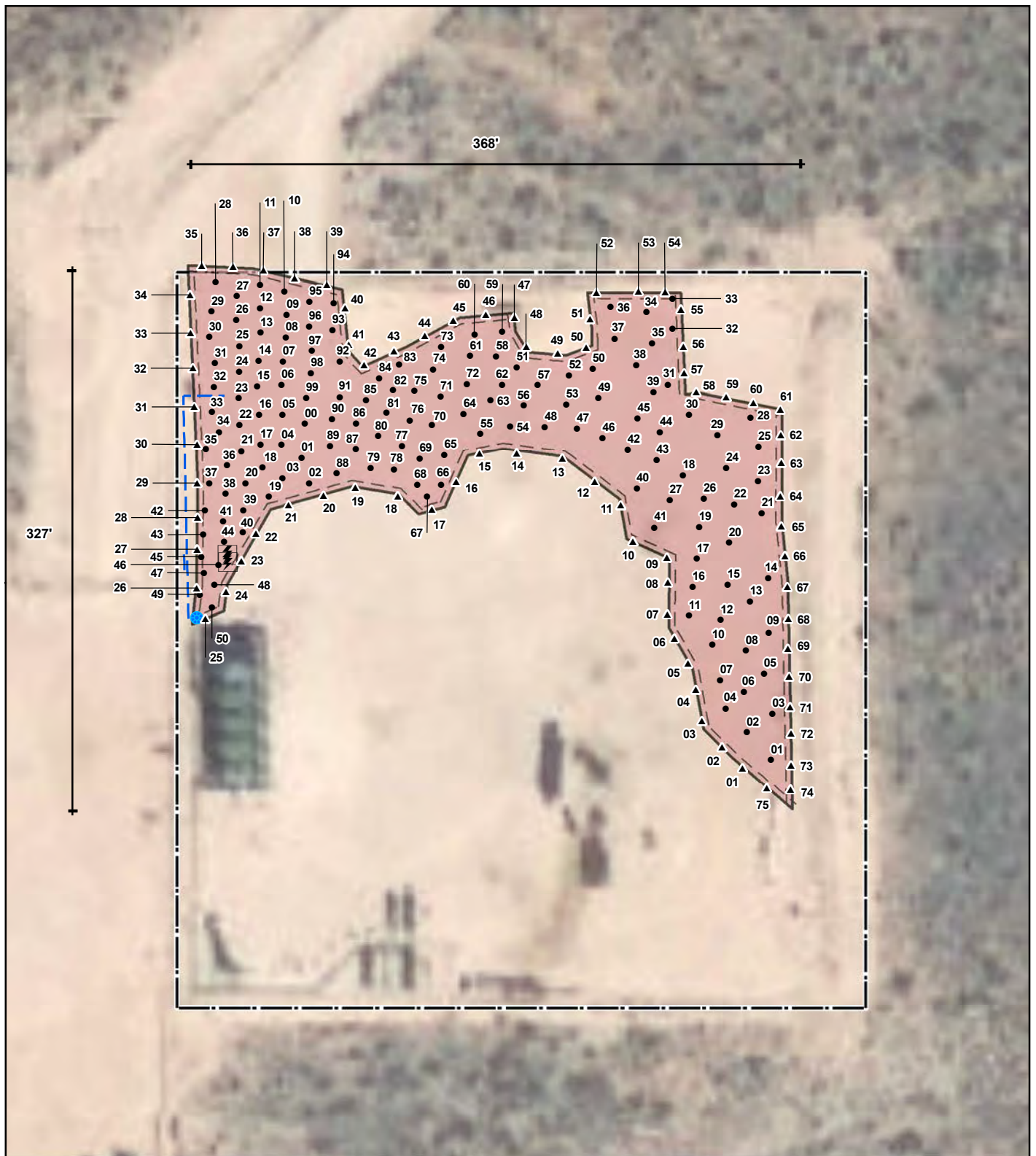
FIGURE:
1



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

Note: Background Imagery from ESRI, 2018.

VERSATILITY. EXPERTISE.



- Base Sample (Prefixed by "BS21-")
- Aboveground Pipeline
- ⚡ Electrical Box
- Excavation Area (46,812 sq. ft.)
- Water Transfer Pump
- Approximate Lease Boundary
- ▲ Wall Sample (Prefixed by "WS21-")



0 15 30 60 ft.
NAD 1983 UTM Zone 13N
Date: Apr 20/21

Map Center:
Lat: 32.553089,
Long: -104.105081



Confirmatory Schematic Stebbins Federal SWD

FIGURE:

2



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

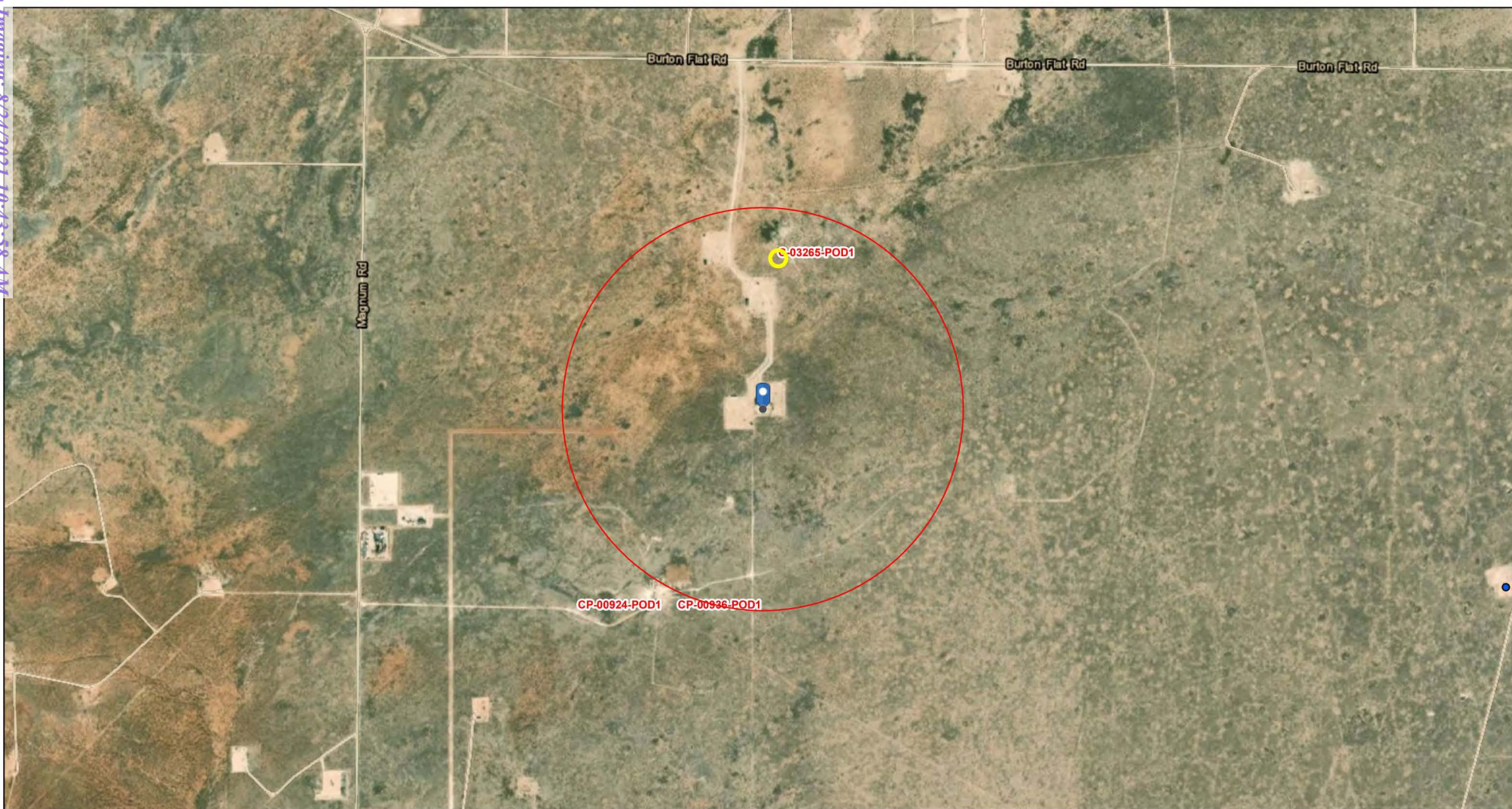
Note: Basemap imagery from ESRI 2018.

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ATTACHMENT 3

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

Stebbins Federal SWD



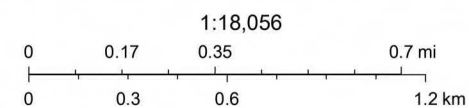
1/26/2021, 9:13:26 AM

GIS WATERS PODs

• Active

OSE District Boundary

Site Boundaries



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)				(NAD83 UTM in meters)	
		(quarters are smallest to largest)				X	Y
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng
C	03265 POD1	1	1	3	20	20S	29E
						584052	3602648*
Driller License: 122		Driller Company: UNKNOWN					
Driller Name: UNKNOWN							
Drill Start Date:		Drill Finish Date:		12/31/1920		Plug 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	

*UTM location was derived from PLSS - see Help

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



National Water Information System: Web Interface

USGS Water Resources

USGS Home
Contact USGS
Search USGS

Data Category:
Groundwater

Geographic Area:
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 =

- 323245104064501

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 323245104064501 20S.29E.30.23333

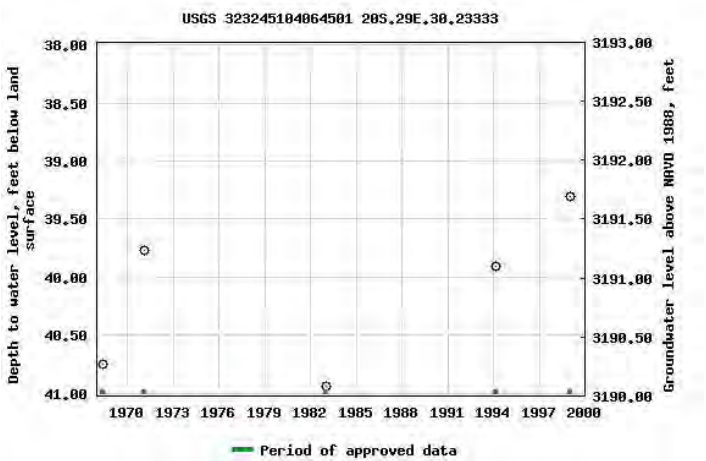
Available data for this site Groundwater: Field measurements

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

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



Breaks in the plot represent a gap of at least one year between field measurements.
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-
- [Questions about sites/data?](#)
 - [Feedback on this web site](#)
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[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: [USGS Water Data Support Team](#)
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
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Data Category:
Groundwater

Geographic Area:
United States

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- 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

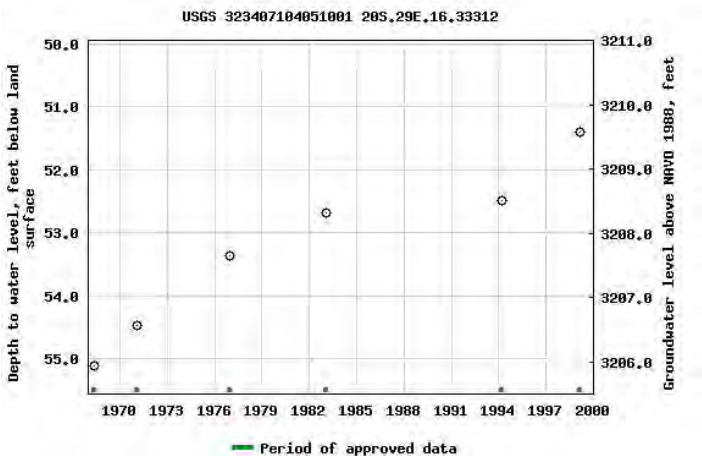
USGS 323407104051001 20S.29E.16.33312

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

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



Breaks in the plot represent a gap of at least one year between field measurements.
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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

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

Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2021-01-26 11:09:00 EST

0.66 0.57 nadww01





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

02/10/2021

DII-NMOSE
1900 W 2nd 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 lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton
lucas@atkinseng.com

Enclosures: As noted above.



DSE DII FEB 12 2021 AM 10:09

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

2/10/2021

Date

DSE DTI FEB 12 2021 PM 10:09

ACKNOWLEDGEMENT:

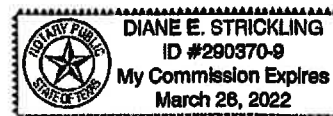
STATE OF Texas

COUNTY OF Dallas

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

Notary Public: 

My Commission Expires: 3/28/2022



Carlsbad Field Office

Operator Copy

HIGH CAVEKARST

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

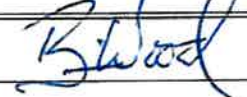

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-003677
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator MATADOR PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240		8. Lease Name and Well No. STEBBINS 20 FED 124H
3b. Phone No. (include area code) 972 371 5241		9. API Well No. 30-015-
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 361' FSL & 130' FWL 20-20S-29E At proposed prod. zone 330' FSL & 240' FEL 20-20S-29E		10. Field and Pool, or Exploratory WILDCAT; BONE SPRING*
14. Distance in miles and direction from nearest town or post office* 11 MILES NE OF CARLSBAD, NM		11. Sec., T. R. M. or Blk. and Survey or Area SHL: SWSW 20-20S-29E NMPM BHL: SESE 20-20S-29E NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL: 2279' BHL: 408'	16. No. of acres in lease BLM lease = 2150.97 acres	17. Spacing Unit dedicated to this well S2S2 20-20S-29E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL: 30' Steb. 20 114H BHL: 615' (ditto)	19. Proposed Depth TVD: 7710' MD: 12336'	20. BLM/BIA Bond No. on file BLM NMB-001079
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3244' UNGRADED	22. Approximate date work will start* 01/02/2017	23. Estimated duration 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) BRIAN WOOD (PHONE: 505 466-8120)	Date 11/05/2016
Title CONSULTANT (FAX: 505 466-9682)		
Approved by (Signature) 	Name (Printed/Typed) Cody R. Layton	Date 05/03/17
Title FIELD MANAGER	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

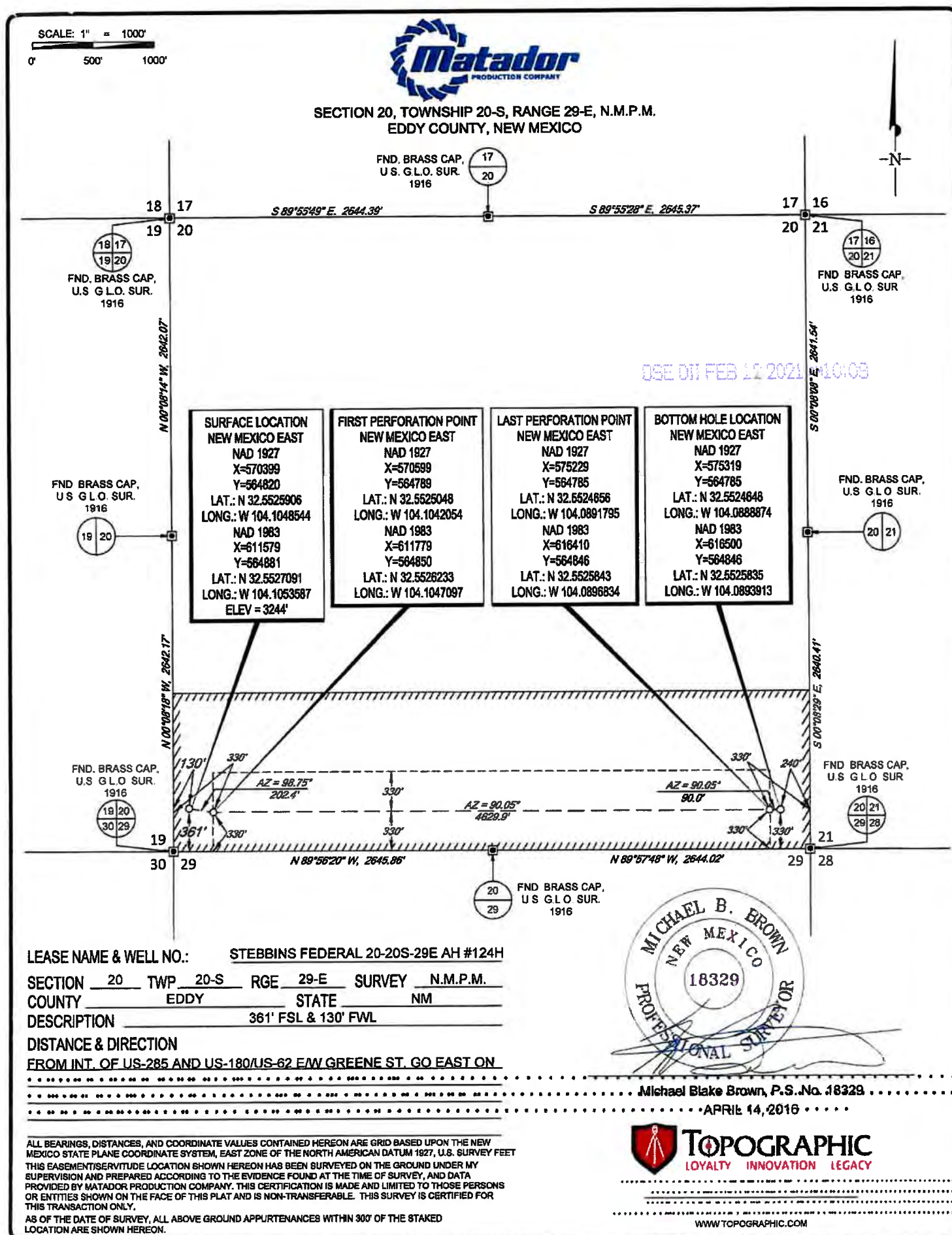
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

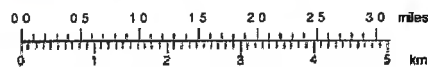
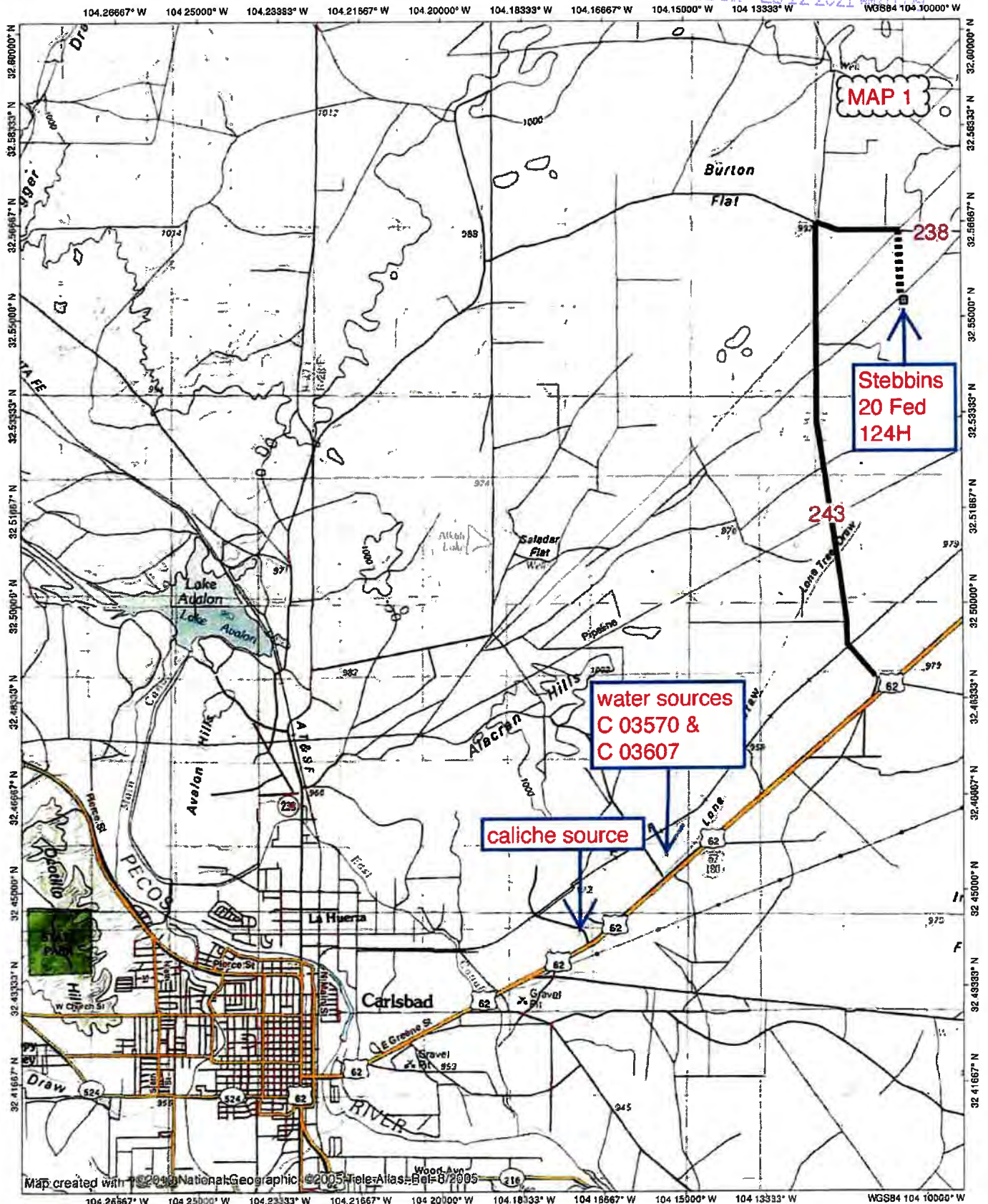
USE 071 FEB 12 2021 10:03

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**



TOPOI map printed on 08/21/16 from "Untitled.tpo"

OSE 07 FEB 12 2021 04:12:05



TN+MN
7.5°
08/21/16



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/cgma/ 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. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: CP- POD1 (BH-01)

Name of well owner: Matador Production Company attn John Hurt

Mailing address: 5400 LBJ Freeway, Suite 1500 County: Dallas

City: Dallas State: Texas Zip code: 75240

Phone number: (972) 371-5200 E-mail: jhurt@matadorresources.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Jackie D. Atkins (Atkins Engineering Associates, Inc.)

New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/2021

IV. WELL INFORMATION: ☐ Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32° deg, 33' min, 12.9" sec
Longitude: -104° deg, 06' min, 16.6" sec, NAD 83

2) Reason(s) for plugging well(s):

Soil boring to determine groundwater level

3) Was well used for any type of monitoring program? n/a If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? n/a If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: unknown feet below land surface / feet above land surface (circle one)

6) Depth of the well: 51 feet

OSE DII FEB 12 2021 10:09

- 7) Inside diameter of innermost casing: 2" 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? n/a
- 11) Was the well built with surface casing? no If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? n/a If yes, please describe:
- 12) Has all pumping equipment and associated piping been removed from the well? n/a If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING: ☐ If plugging method differs between multiple wells on same site, a separate form must be completed for each method.

Note: If 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 diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this 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. PLUGGING AND SEALING MATERIALS:

Note: The 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 from the 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: <6.0 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

DSE DTJ FEB 12 2021 AM 10:09

- 7) Grout additives requested, and percent by dry weight relative to cement:

N/A

- 8) Additional notes and calculations:

N/A

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Volumes calculated on an up to an approximate 8.5" boring.

VIII. SIGNATURE:

I, Jackie D. Atkins, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Jack Atkins

02/10/2021

Signature of Applicant

Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

_____ Approved subject to the attached conditions.
 _____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this _____ day of _____, _____

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

By: _____

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

DSE DJT FEB 12 2021 10:09

TABLE B - For plugging intervals that will employ approved non-cement based sealant(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 or 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
-  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

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):

OSE DTI FEB 12 2021 AM 10:10

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:

☐ Exploratory Well (Pump test)☐ Monitoring Well☐ Pollution Control
And/Or Recovery☐ Construction Site/Public
Works Dewatering☐ Mine Dewatering☐ Ground Source Heat Pump☒ Other(Describe): Groundwater Determination

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? ☒ Yes ☐ No

1. APPLICANT(S)

Name: Matador Production Company	Name:
Contact or Agent: check here if Agent <input type="checkbox"/> John Hurt	Contact or Agent: check here if Agent <input type="checkbox"/>
Mailing Address: 5400 LBJ Freeway, Suite 1500	Mailing Address:
City: Dallas	City:
State: TX Zip Code: 75240	State: Zip Code:
Phone: (972)371-5200 <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): jhurt@matadorresources.com	E-mail (optional):

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

OSE DJJ FEB 12 2021 AM 10:10

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

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.			
<input type="checkbox"/> NM State Plane (NAD83) (Feet) <input type="checkbox"/> NM West Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/> NM Central Zone		<input type="checkbox"/> UTM (NAD83) (Meters) <input type="checkbox"/> Zone 12N <input type="checkbox"/> Zone 13N	
<input checked="" type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10 th 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- POD1	104° 6'16.60"W	32°33'12.90"N	M-20-20S-29E
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many _____			
Other description relating well to common landmarks, streets, or other: _____			
Well is on land owned by: BUREAU OF LAND MANAGEMENT			
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Approximate depth of well (feet): 51		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 encountered 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.

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

Trn No.:

Page 2 of 3

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:

Exploratory: <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	Pollution Control and/or Recovery: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	Construction De-Watering: <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	Mine De-Watering: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water.
Monitoring: <input type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	Ground Source Heat Pump: <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

ACKNOWLEDGEMENT

I, We (name of applicant(s)), John Hurt (Matador Production Company)

Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

John M Hurt

Digitally signed by John M Hurt
DN: cn=John M Hurt, email=jhurt@matadorresources.com,
c=US
Date: 2021.02.10 09:07:31 -08'00'

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☐ approved ☐ partially approved ☐ denied

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 and further subject to the attached conditions of approval.

Witness my hand and seal this _____ day of _____ 20 _____, for the State Engineer,

_____, State Engineer

By:

Signature

Print

Title:

Print

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

Trm No.:



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

04/06/2020

DII-NMOSE
1900 W 2nd 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,

A handwritten signature in black ink, appearing to read "Lucas Middleton".

Lucas Middleton

Enclosures: as noted above





WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DTI APR 5 2021 10:31:13

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD-1 (BH01)		WELL TAG ID NO. n/a		OSE FILE NO(S). CP-1866			
	WELL OWNER NAME(S) Matador Production Company Attn. John Hurt				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 5400 LBJ Freeway, Suite 1500				CITY Dallas	STATE TX	ZIP 75240	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 33	SECONDS 12.90	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 104	6	6.60	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW SW SW Sec. 20 T20S R29E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 03/17/2021	DRILLING ENDED 03/17/2021	DEPTH OF COMPLETED WELL (FT) Temporary-Removed		BORE HOLE DEPTH (FT) ±52	DEPTH WATER FIRST ENCOUNTERED (FT) ±44		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 44.0		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	32	±6.5	Temporary well materials	Flush Thread 2 TPI	2.067	0.154	-
	32	52	±6.5	Temporary well materials	Flush Thread 2 TPI	2.067	0.154	.010
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

5. TEST: RIG SUPERVISION

6. SIGNATURE

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO.		PAGE 2 OF 2

2021_03-31_CP-1866-POD1_OSE_Well Record and Log_stibbins-forsign






OSE DJT APR 6 2021 PM 3:19

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_stibbins-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

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: CP-1866- POD1
 Well owner: Matador Production Company Attn. John Hurt Phone No.: _____
 Mailing address: 5400 LBJ Freeway, Suite 1500
 City: Dallas State: TX Zip code: 75240

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)
- 2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/21
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge
- 4) Date well plugging began: 03/23/2021 Date well plugging concluded: 03/23/2021
- 5) GPS Well Location: Latitude: 32 deg, 33 min, 12.90 sec
 Longitude: -103 deg, 6 min, 6.60 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 52 ft below ground level (bgl),
 by the following manner: water level probe
- 7) Static water level measured at initiation of plugging: 44.0 ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 02/18/2021
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):






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:

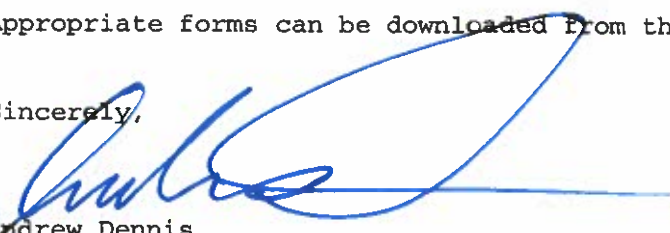
Your approved copy of the above numbered permit to drill a well for non-consumptive purposes is enclosed. You must obtain an additional permit if you intend to use the water. It is your responsibility to provide the contracted well driller with a copy of the permit that must be made available during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

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:	<input type="checkbox"/> Pollution Control And/Or Recovery	<input type="checkbox"/> Ground Source Heat Pump
<input type="checkbox"/> Exploratory Well (Pump test)	<input type="checkbox"/> Construction Site/Public Works Dewatering	<input checked="" type="checkbox"/> Other(Describe): Groundwater Determination
<input type="checkbox"/> Monitoring Well	<input type="checkbox"/> Mine Dewatering	

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

<input type="checkbox"/> Temporary Request - Requested Start Date:	Requested End Date:
--	---------------------

Plugging Plan of Operations Submitted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
--

1. APPLICANT(S)

Name: Matador Production Company	Name:
Contact or Agent: John Hurt <input type="checkbox"/> check here if Agent	Contact or Agent: <input type="checkbox"/> check here if Agent
Mailing Address: 5400 LBJ Freeway, Suite 1500	Mailing Address:
City: Dallas	City:
State: TX Zip Code: 75240	State: Zip Code:
Phone: (972)371-5200 <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): jhurt@matadorresources.com	E-mail (optional):

FOR OSE INTERNAL USE Application for Permit, Form WR-07, Rev 11/17/16

File No.: CP-1866-P001	Tm. No.: 688129	Receipt No.: 2-43000
Trans Description (optional): EXPL (Borehole)		
Sub-Basin:	PCW/LOG Due Date:	

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

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.			
<input type="checkbox"/> NM State Plane (NAD83) (Feet) <input type="checkbox"/> NM West Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/> NM Central Zone		<input type="checkbox"/> UTM (NAD83) (Meters) <input type="checkbox"/> Zone 12N <input type="checkbox"/> Zone 13N	
<input checked="" type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10 th 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 1/4 SW 1/4 Sec. 4, T20S-29E
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many _____			
Other description relating well to common landmarks, streets, or other: _____			
Well is on land owned by: BUREAU OF LAND MANAGEMENT			
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Approximate depth of well (feet): 51		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 encountered 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.

FOR USE INTERNAL USE

Application for Permit, Form WR-07

File No.: CP-1866-POD1

Trm No.: 688129

Page 2 of 3

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:

Exploratory: <input type="checkbox"/> Include a description of any proposed pump test, if applicable.	Pollution Control and/or Recovery: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	Construction De-Watering: <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	Mine De-Watering: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water. <input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: <input type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.	Ground Source Heat Pump: <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.		

ACKNOWLEDGEMENT

I, We (name of applicant(s)), John Hurt (Matador Production Company)

Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief

John M Hurt

Digitally signed by John M Hurt
DN: cn=John M Hurt, email=jmhurt@matadorresources.com,
c=US
Date: 2021.02.10 09:07:31 -06'00'

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved

☐ partially approved

☐ denied

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 and further subject to the attached conditions of approval.

Witness my hand and seal this 19th day of February, 20 21, for the State Engineer

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

By: [Signature]
Signature

Juan Hernandez
Print

Title: Water Resources Manager I
Print



FOR USE INTERNAL USE

Application for Permit, Form WR-07

File No.: CP-1866-P001

Tm No.: 688129

Page 3 of 3

**NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE**

SPECIFIC CONDITIONS OF APPROVAL

- 17-1A 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

Trn Number: 688129

page: 1

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.
- 17-C 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 conditions stated previously.

Witness my hand and seal this _____ A.D., 2021

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

By: _____

Trn Desc: CP-1866 POD1



File Number: CP 01866

Trn Number: 688129

**NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE**

JUAN HERNANDEZ

Trn Desc: CP-1866 POD1

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

2/10/2021
Date

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: 3/28/2022



OFFICIAL PUBLIC RECORD

Carlsbad Field Office Operator Copy

HIGH CAVEKARST

Form 3160-3
(March 2012)

*WC-015 G-04 S202920D; BONE SPRING

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

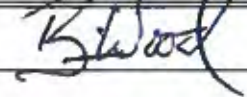
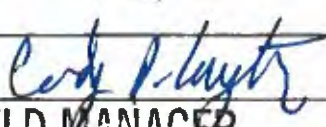
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-003677
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator MATADOR PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240		8. Lease Name and Well No. STEBBINS 20 FED 124H
3b. Phone No. (include area code) 972 371 5241		9. API Well No. 30-015-
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 361' FSL & 130' FWL 20-20S-29E At proposed prod. zone 330' FSL & 240' FEL 20-20S-29E		10. Field and Pool, or Exploratory WILDCAT; BONE SPRING*
14. Distance in miles and direction from nearest town or post office* 11 MILES NE OF CARLSBAD, NM		11. Sec., T. R. M. or Blk. and Survey or Area SHL: SWSW 20-20S-29E NMPM BHL: SESE 20-20S-29E NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL: 2279' BHL: 408'	16. No. of acres in lease BLM lease = 2150.97 acres	17. Spacing Unit dedicated to this well S2S2 20-20S-29E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL: 30' Steb. 20 114H BHL: 615' (ditto)	19. Proposed Depth TVD: 7710' MD: 12336'	20. BLM/BIA Bond No. on file BLM NMB-001079
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3244' UNGRADED	22. Approximate date work will start* 01/02/2017	23. Estimated duration 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) BRIAN WOOD (PHONE: 505 466-8120)	Date 11/05/2016
Title CONSULTANT (FAX: 505 466-9682)		
Approved by (Signature) 	Name (Printed/Typed) Cody A. Layton	Date 05/03/17
Title A FIELD MANAGER 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)

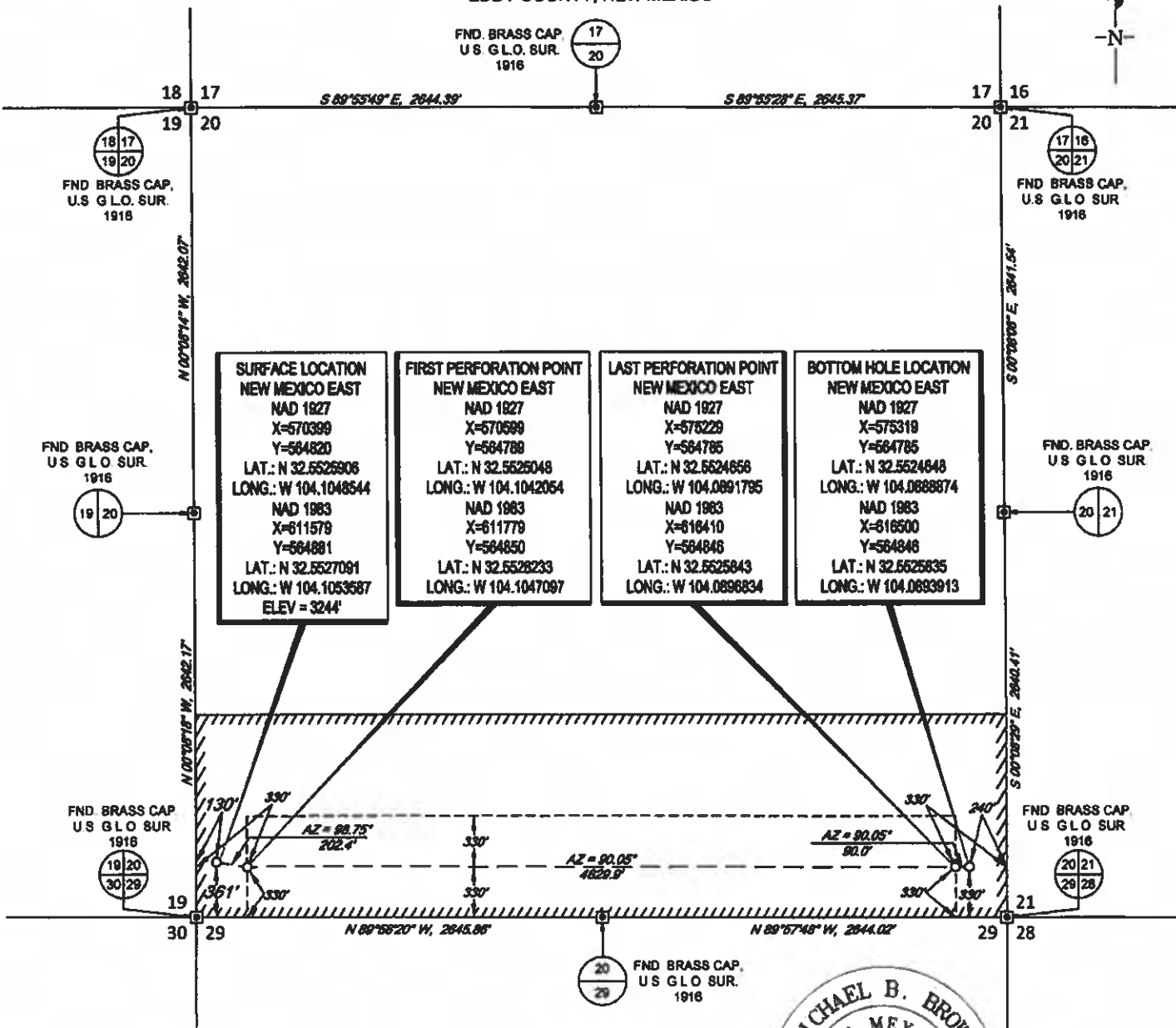
*(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

SCALE: 1" = 1000'
0' 500' 1000'



SECTION 20, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: STEBBINS FEDERAL 20-20S-29E AH #124H

SECTION 20 TWP 20-S RGE 29-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 361' FSL & 130' FWL

DISTANCE & DIRECTION

FROM INT. OF US-285 AND US-180/US-62 E/W GREENE ST. GO EAST ON

.....
.....
.....



Michael Blake Brown, P.S. No. 18329
APRIL 14, 2016

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, U.S. SURVEY FEET. THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

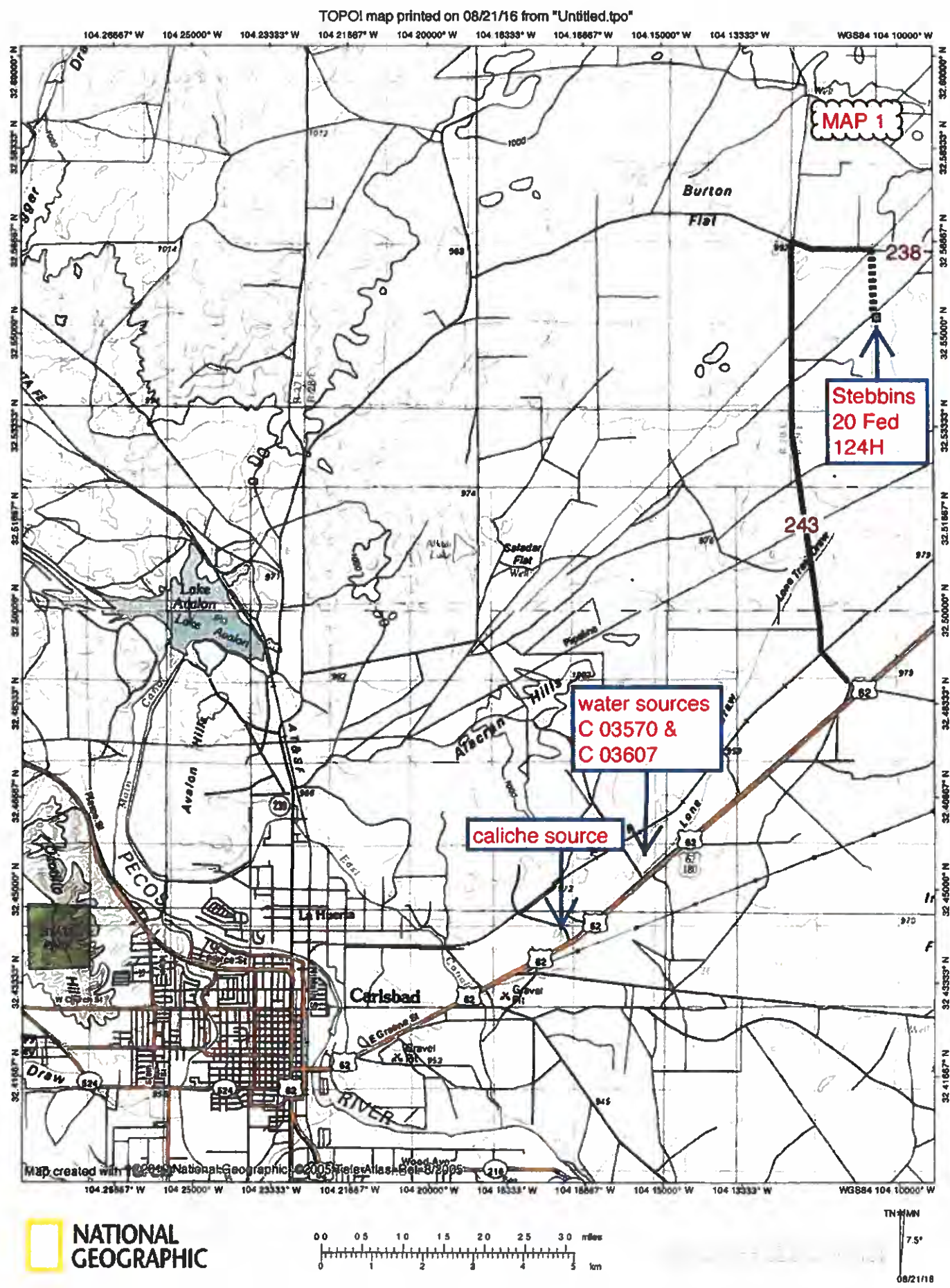
AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



WWW.TOPOGRAPHIC.COM

8 SURVEY\MATADOR_RESOURCES\STEBBINS_FEDERAL_20-20S-29E_AH_124H\FINAL_PRODUCT\STEBBINS_FEDERAL_20-20S-29E_AH_124H.DWG 4/19/2016 3:47:58 PM plaw

USE ON FEB 12 2021





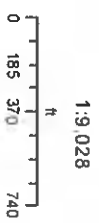
NEW MEXICO OFFICE OF THE STATE ENGINEER

Coordinates
UTM - NAD 83 (m) - Zone 13
Easting 584064.505
Northing 3602151.791
State Plane - NAD 83 (ft) - Zone E
Easting 611812.300
Northing 565198.035
Degrees Minutes Seconds
Latitude 32 : 33 : 12.900000
Longitude -104 : 6 : 16.600000
Location pulled from Coordinate Search

Image Information
Source: Maxar
Date: 11/4/2018
Resolution (m): 0.5
Accuracy (m): 5
525 fo 65 abed

POD Information
File Number: CP-1866-POD1
Owner: Matador Produc
Permit Use: NoData
POD Status: NoData
Permit Status: NoData

BLM



Author: BD
Purpose: EXPL (Borehole B)
2/17/2021

Calculated
PLSS
Coord Search
Location
OSE District
Boundary

~~New Mexico State~~
~~Trust Lands~~

☐ Bernalillo County Parcels 2020
☐ Catron County Parcels 2020
☐ Chaves County Parcels 2020

Spatial Information
OSE Administrative Area: District 2
County: Eddy
Groundwater Basin: Capitan
Abstract Area: CP
Sub-Basin: Upper Pecos-Black
Land Grant: Not in Land Grant
Restrictions:
NA
PLSS Description
SENWSW Qtr of Sec 20 of 0205 029E

SESE

BLM

SWSW

B

CP-1866-POD1: (Borehole BH-01)
Matador Production Co. (BLM)
104°6'16.6"W, 32°33'12.9"N
[Application Coordinates]

SESW



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,

A handwritten signature in blue ink, appearing to read "Chris Angel", written over a horizontal line.

Christopher Angel, PG
Water Resources Professional II
Water Resource Allocation Program

encl



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. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP: ☐ Check here if proposing one plan for multiple monitoring wells on the same site and attaching WD-08m

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: CP-1866-POD1 (BH-01)

Name of well owner: Matador Production Company attn John Hurt

Mailing address: 5400 LBJ Freeway, Suite 1500

County: Dallas

City: Dallas

State: Texas

Zip code: 75240

Phone number: (972) 371-5200

E-mail: jhurt@matadorresources.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Jackie D. Atkins (Atkins Engineering Associates, Inc.)

New Mexico Well Driller License No.: 1249

Expiration Date: 04/30/2021

IV. WELL INFORMATION: ☐ Check here if this plan describes method for plugging multiple monitoring wells on the same site and attach supplemental form WD-08m and skip to #2 in this section.

Note: A copy of the existing Well Record for the well(s) to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32° deg, 33' min, 12.9" sec
Longitude: -104° deg, 06' min, 16.6" sec, NAD 83

2) Reason(s) for plugging well(s):

NW SWSW, Section 20, T. 20S, R. 29E

Soil boring to determine groundwater level

3) Was well used for any type of monitoring program? n/a If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? n/a If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: unknown feet below land surface / feet above land surface (circle one)

6) Depth of the well: 51 feet

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

20.29.20.331

OSE DTI FEB 12 2021 PM 3:12

- 7) Inside diameter of innermost casing: 2" 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? n/a
- 11) Was the well built with surface casing? no If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? n/a If yes, please describe:

- 12) Has all pumping equipment and associated piping been removed from the well? n/a If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING: ☐ If plugging method differs between multiple wells on same site, a separate form must be completed for each method.

Note: If 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 diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal. Attach a copy of any signed OSE variance to this plugging plan.

Also, if this 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. PLUGGING AND SEALING MATERIALS:

Note: The 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 from the 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: <6.0 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

OSE 011 FEB 12 2021 PM 3:12

7) Grout additives requested, and percent by dry weight relative to cement:

N/A

8) Additional notes and calculations:

N/A

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

Volumes calculated on an up to an approximate 8.5" boring.

VIII. SIGNATURE:

I, Jackie D. Atkins, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Jack Atkins

02/10/2021

Signature of Applicant

Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

☒ 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*

Christopher Angel, PG
Water Resource Professional II

02/12/2021 PM 3:12

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

05E DII FEB 12 2021 PM 3:12

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

TABLE B - For plugging intervals that will employ approved non-cement based sealant(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

05E 011 FEB 12 2021 PM3:12






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

USE DJJ FEB 12 2021 PM3:12

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

2/10/2021
Date

ACKNOWLEDGEMENT:

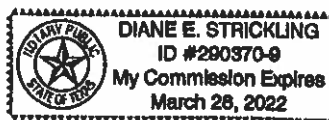
STATE OF Texas

COUNTY OF Dallas

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

Notary Public: Diane E Strickling

My Commission Expires: 3/28/2022



OSE DIV FEB 12 2021 10:31:11

Carlsbad Field Office Operator Copy

HIGH CAVEKARST

Form 3160-3
(March 2012)

*WC-015 G-04 S202920D; BONE SPRING

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

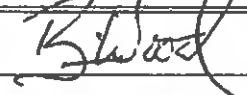

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-003677
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator MATADOR PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 5400 LBJ FREEWAY, SUITE 1500 DALLAS, TX 75240		8. Lease Name and Well No. STEBBINS 20 FED 124H
3b. Phone No. (include area code) 972 371 5241		9. API Well No. 30-015-
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 361' FSL & 130' FWL 20-20S-29E At proposed prod. zone 330' FSL & 240' FEL 20-20S-29E		10. Field and Pool, or Exploratory WILDCAT; BONE SPRING*
14. Distance in miles and direction from nearest town or post office* 11 MILES NE OF CARLSBAD, NM		11. Sec., T. R. M. or Blk. and Survey or Area SHL: SWSW 20-20S-29E NMPM BHL: SESE 20-20S-29E NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) SHL: 2279' BHL: 408'	16. No. of acres in lease BLM lease = 2150.97 acres	17. Spacing Unit dedicated to this well S2S2 20-20S-29E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. SHL: 30' Steb. 20 114H BHL: 615' (ditto)	19. Proposed Depth TVD: 7710' MD: 12336'	20. BLM/BIA Bond No. on file BLM NMB-001079
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3244' UNGRADED	22. Approximate date work will start* 01/02/2017	23. Estimated duration 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature 	Name (Printed/Typed) BRIAN WOOD (PHONE: 505 466-8120)	Date 11/05/2016
Title CONSULTANT (FAX: 505 466-9682)		
Approved by (Signature) 	Name (Printed/Typed) Cody A. Layton	Date 05/03/17
Title A FIELD MANAGER	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

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(Continued on page 2)

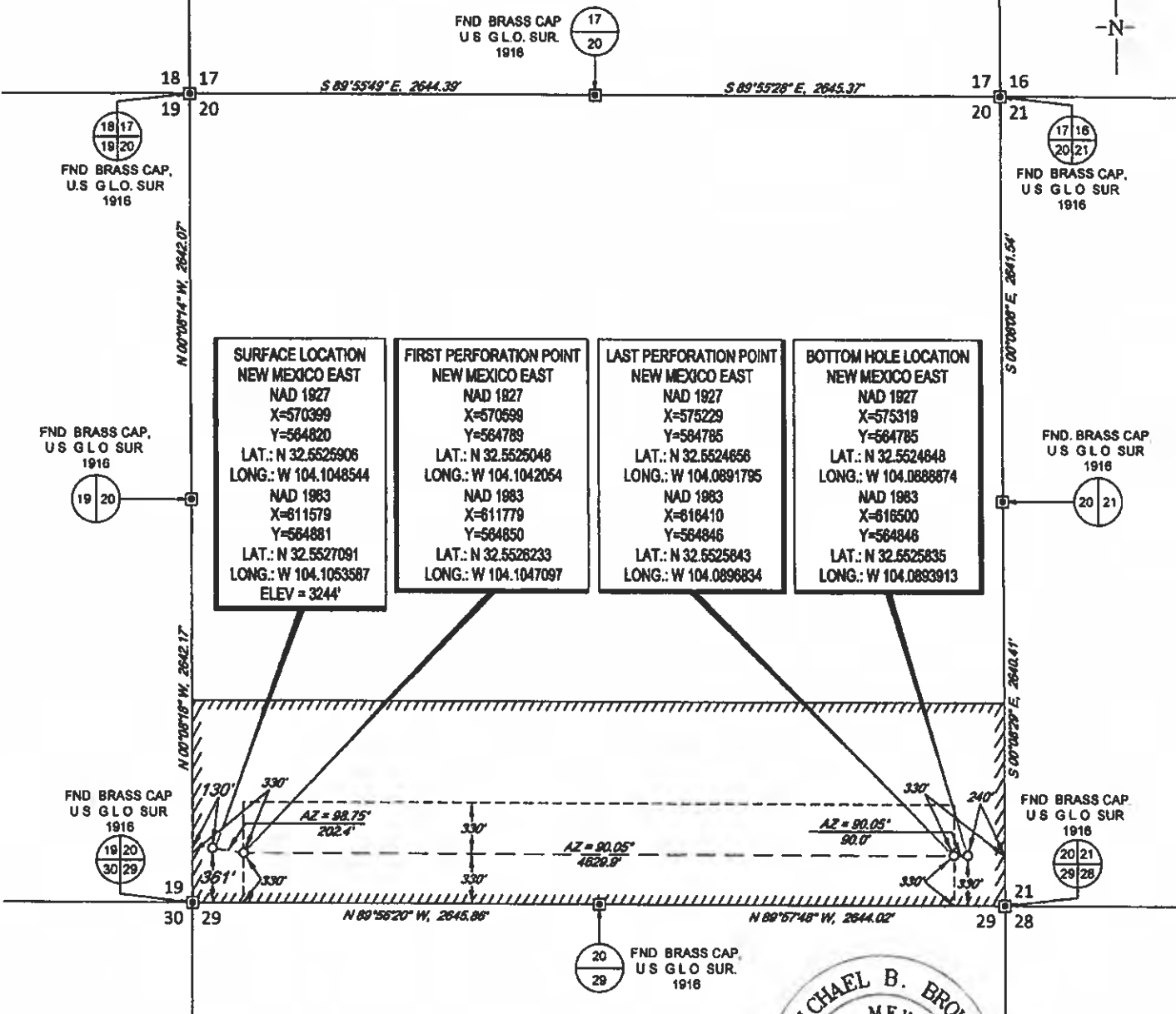
*(Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

SCALE: 1" = 1000'
0' 500' 1000'



SECTION 20, TOWNSHIP 20-S, RANGE 29-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: STEBBINS FEDERAL 20-20S-29E AH #124H

SECTION 20 TWP 20-S RGE 29-E SURVEY N.M.P.M.

COUNTY EDDY STATE NM

DESCRIPTION 361' FSL & 130' FWL

DISTANCE & DIRECTION

FROM INT. OF US-285 AND US-180/US-62 FW GREENE ST. GO EAST ON



Michael Blake Brown, P.S. No. 18329

APRIL 14, 2016

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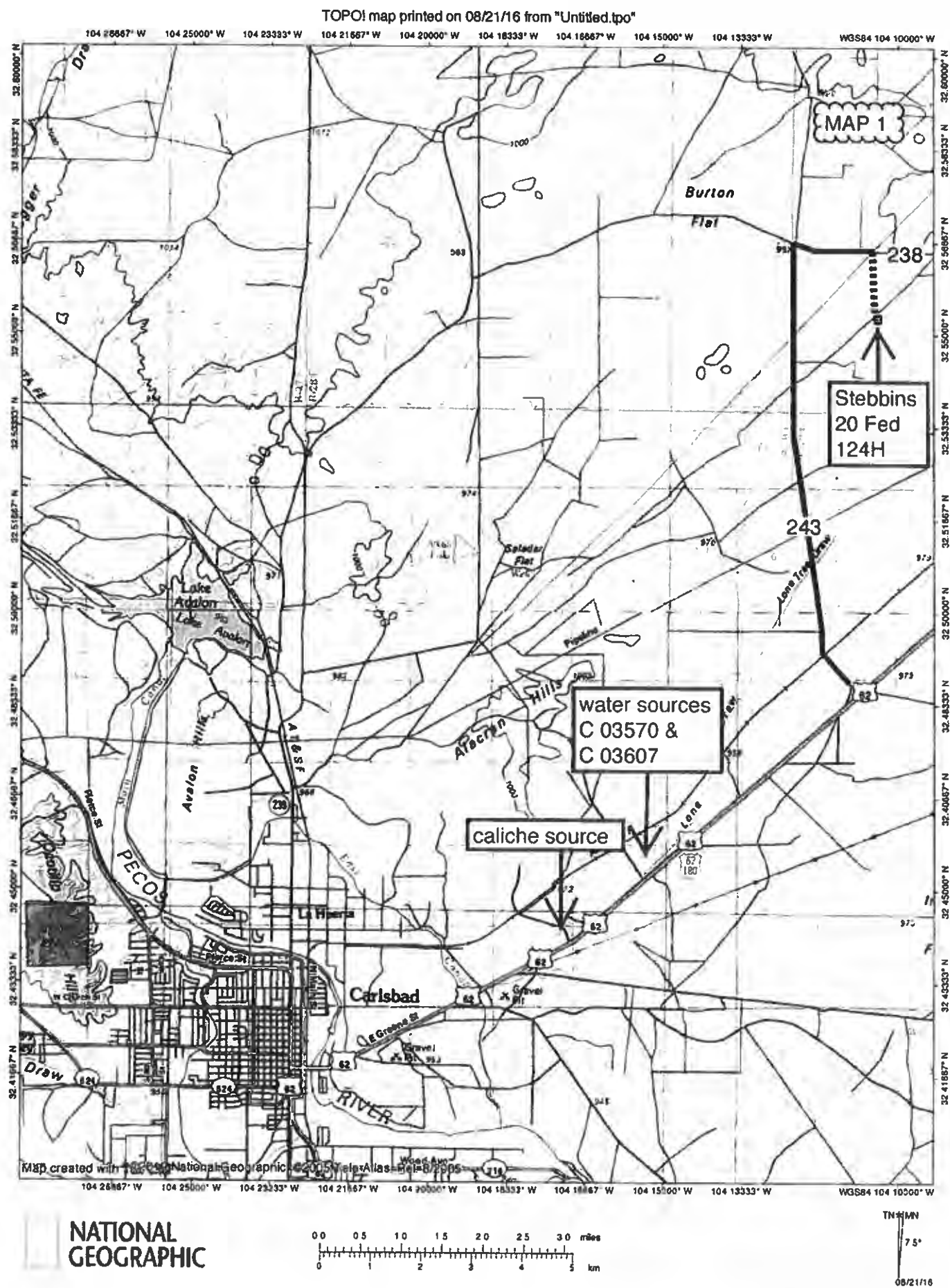
AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

WWW.TOPOGRAPHIC.COM

\\SURVEY\MATADOR_RESOURCE\ESTATES\EDDY\EDDY_FEDERAL_20-20S-29E_AH_124H\PROD\CSLO_STEBBINS_FEDERAL_20-20S-29E_AH_124H.DWG 4/16/2016 3:47:38 PM



Specific Conditions of Approval for CP-1866-POD1

- 1) If groundwater is **not** 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 **must** obtain an approved variance from this office prior to implementation.
- 6) Aggrievial 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

Nearest Watercourse: Lake Avalon
Distance: 8.56 miles (45,177 ft)

Legend

 Stebbins Federal SWD

Stebbins Federal SWD 

N Loop Rd

285

180

Hobbs Hwy

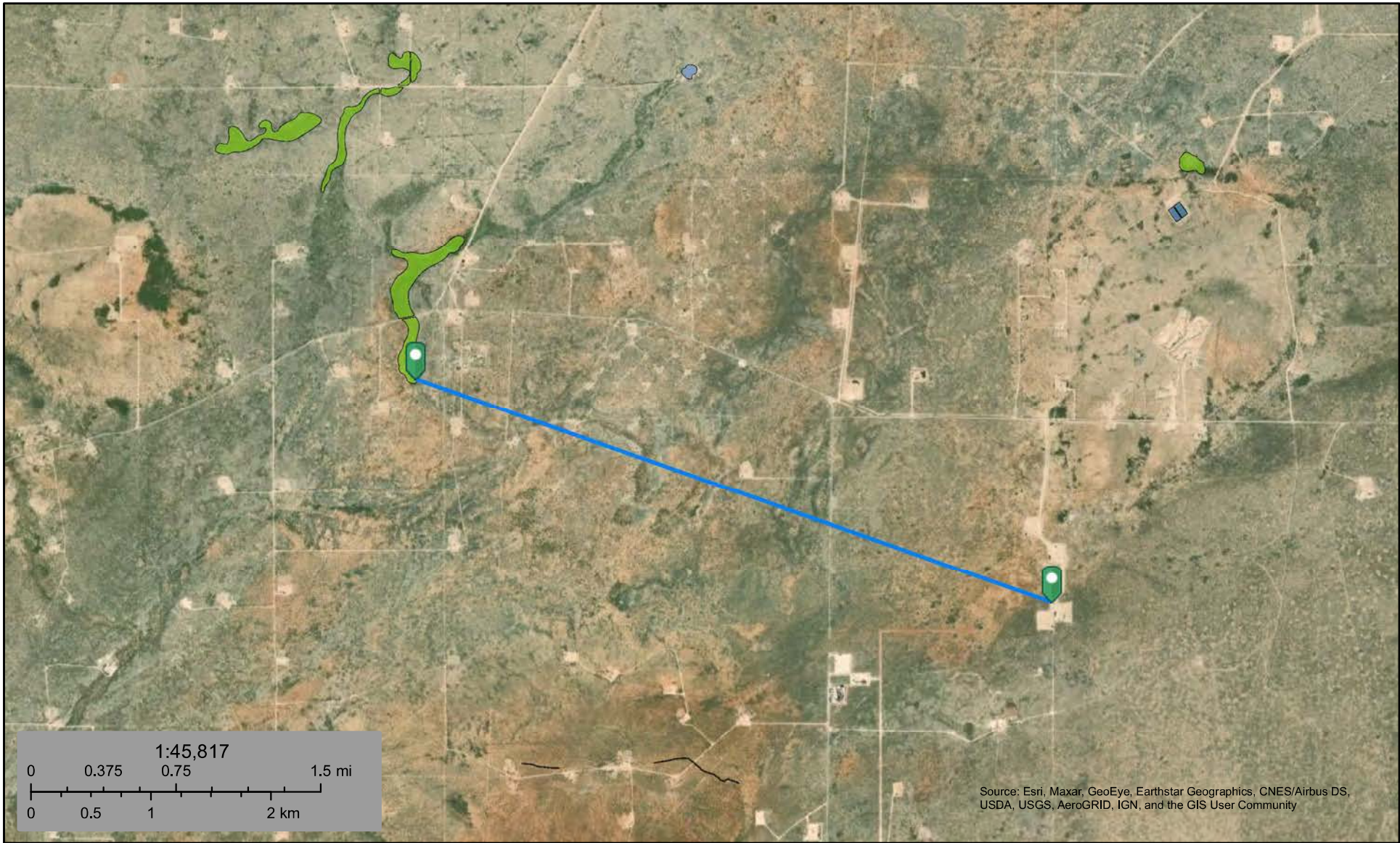
Carlsbad North

Google Earth



4 mi

Stebbins Federal SWD Lakebed



January 26, 2021

Wetlands

- | | | |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  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.

Stebbins Federal SWD

Nearest Residence: 3.34 miles (17,641 ft)

Legend

- KCDY-FM Carlsbad
- Residence

Stebbins Federal SWD

Residence

Residence

Hobbs Hwy


62



Stebbins Federal SWD

Nearest Town: Carlsbad, NM
Distance: 9.68 miles (51,087 ft)

Legend

 Stebbins Federal SWD

Stebbins Federal SWD



obs Hwy

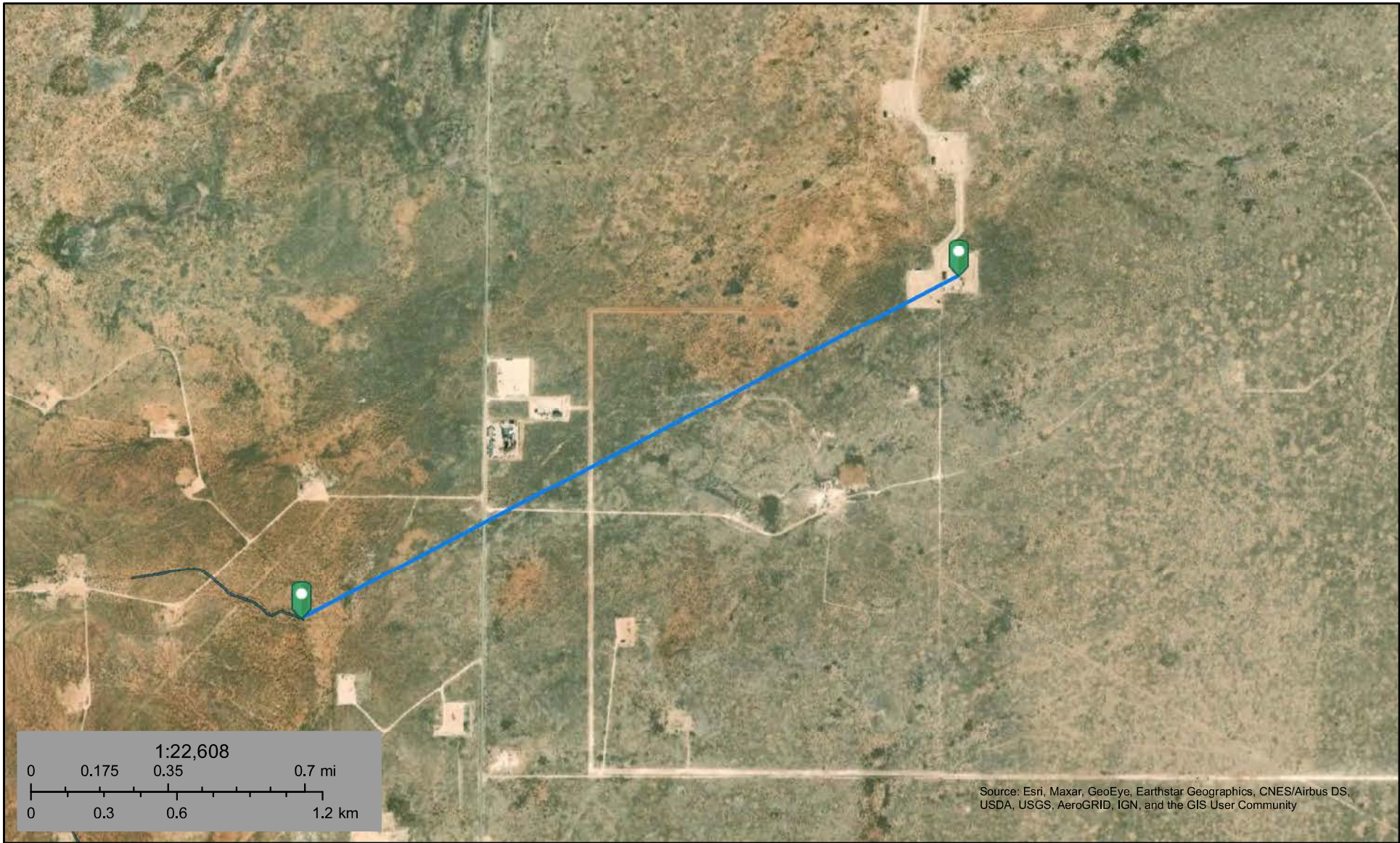
Carlsbad North

Google Earth



4 mi

Stebbins Federal SWD Wetlands



January 26, 2021

Wetlands

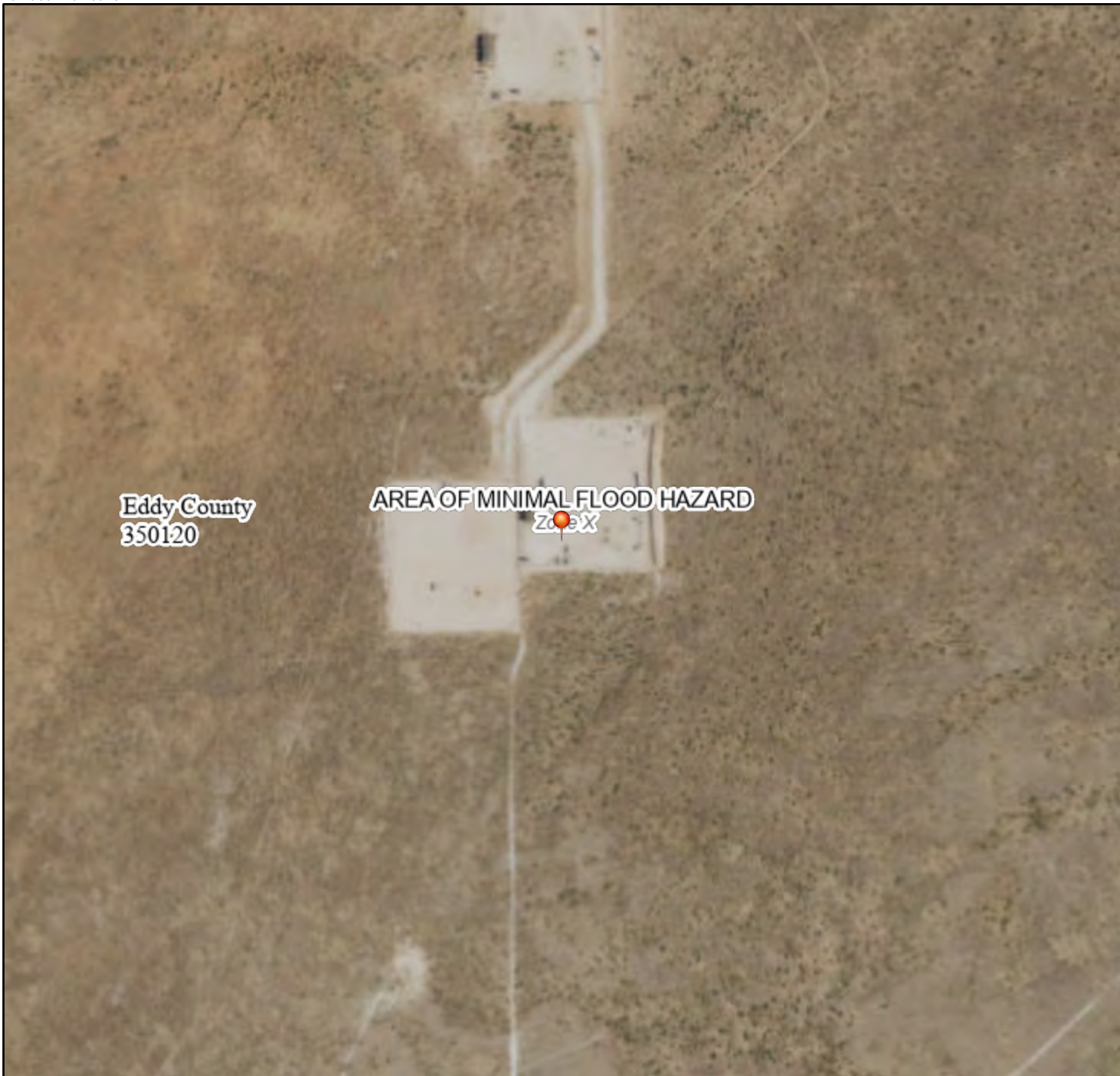
- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | 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



104°6'38"W 32°33'25"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 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.

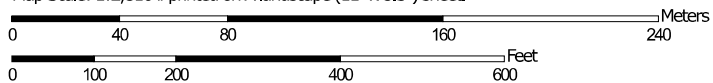
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

Soil Map—Eddy Area, New Mexico



Soil Map may not be valid at this scale.

Map Scale: 1:2,810 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84




**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

1/26/2021
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



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



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 16, Jun 8, 2020

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

Date(s) aerial images were photographed: Feb 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.

Soil Map—Eddy Area, New Mexico

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%



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

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

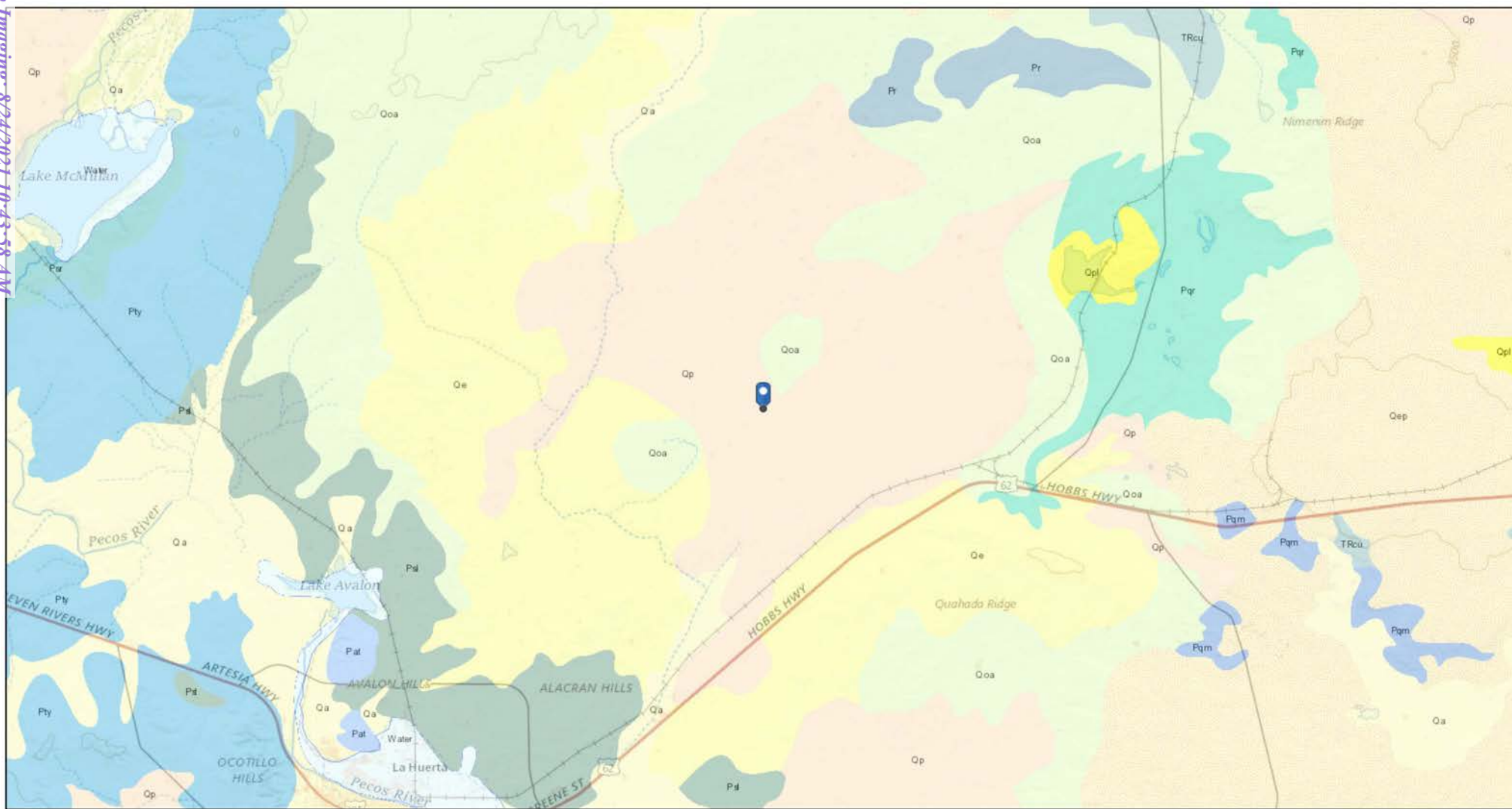
No

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

Indicators: 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 each 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 occur 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 susceptible 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.	

Stebbins Federal SWD Geology

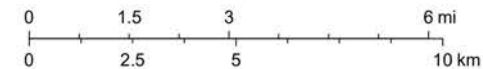


1/26/2021, 9:45:12 AM

Faults

- Fault, Exposed
- - Fault, Intermittent
- Fault, Concealed
- ~ ~ Shere Zone

1:144,448



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



Daily Site Visit Report

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

Daily Site Visit Report



Site Photos

Viewing Direction: West



Spill area.

Viewing Direction: North



Spill area

Viewing Direction: South



Spill area

Viewing Direction: Northeast



Spill area



Daily Site Visit Report

<p>Viewing Direction: East</p> <p>Descriptive Photo - 13 Viewing Direction: East Date: 6/18/2021 Created: 1/18/2021 12:43:58 AM</p>	<p>Viewing Direction: East</p> <p>Descriptive Photo - 14 Viewing Direction: East Date: 6/18/2021 Created: 1/18/2021 4:04:04 PM</p>
Spill area	BH21-02
<p>Viewing Direction: Southwest</p> <p>Descriptive Photo - 15 Viewing Direction: Southwest Date: 6/18/2021 Created: 1/18/2021 12:43:58 AM</p>	<p>Viewing Direction: North</p> <p>Descriptive Photo - 16 Viewing Direction: North Date: 6/18/2021 Created: 1/18/2021 4:04:04 PM</p>
Spill area	Spill area



Daily Site Visit Report

Viewing Direction: Northeast



Spill area

Viewing Direction: North



Spill area

Viewing Direction: West



Spill area



Viewing Direction: Northwest



Spill area



Daily Site Visit Report

Viewing Direction: North	Viewing Direction: Southwest
 <p>Descriptive Photo: 8 Viewing Direction: North Desc: Spill area Created: 1/13/2021 4:06:10 PM</p>	 <p>Descriptive Photo: 4 Viewing Direction: Southwest Desc: Spill area Created: 1/13/2021 4:06:10 PM</p>
Spill area	Spill area

Daily Site Visit Report



Daily Site Visit Signature

Inspector: John Ramirez

Signature:

Signature

A handwritten signature in black ink, appearing to be 'JR', written over a horizontal line.



Spill Response and Sampling

Client: Matador

Date: 1-14-21

Site Name: _____

Site Location: Stebbins Feed Shop

Project Owner: _____

Project Manager: _____

Project #: _____

Initial Spill Information - Record on First Visit

Spill Date: _____

Spill Volume: _____

Spill Cause: _____

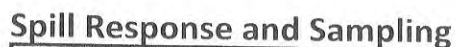
Spill Product: _____

Recovered Spill Volume: _____

Recovery Method: _____

Sampling

		Field Screening			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	Ex. 400 ppm	200 ppm	Method: Titration - EC Probe			
SS21-03	0.5			2.20 / 16.5			
SS4	0.5			0.73 / 16.6			
SS5	0.5			0.45 / 17.1			
SS6	0.5			0.25 / 18			
SS7	0.5			2.28 / 18.5			
SS8	0.5			1.77 / 18.6			
SS9	0.5			0.87 / 18.1			
SS10	0.5			0.79 / 19.4			
SS11	0.5			0.36 / 18.9			
SS12	0.5			0.79 / 18.6			
SS13	0.5			2.75 / 19.7			
3.1	0.5			2.59 / 23.7	STEPPED 12'		
4.1	0.5			0.79 / 22.1	STEPPED 4'		
7.1	0.5			2.38 / 22.0	STEPPED 12'		
8.1	0.5			2.21 / 21.0	STEPPED 12'		
9.1	0.5			1.43 / 20.7	STEPPED 4'		
10.1	0.5			2.20 / 22.0	STEPPED 4'		
12.1	0.5			1.91 / 21.4	STEPPED 4'		
13.1	0.5			1.55 / 20.7	STEPPED 12'		
3.2	0.5			2.33 / 21.2	STEPPED 16'		
3.3	0.5			0.45 / 21.2	STEPPED 20'		



Initial Spill Information - Record on First Visit	
Spill Date:	
Spill Volume:	
Spill Cause:	
Spill Product:	
Recovered Spill Volume:	
Recovery Method:	

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



Spill Response and Sampling

Initial Spill Information - Record on First Visit

Spill Date: _____

Spill Volume: _____

Spill Cause: _____

Spill Product: _____

Recovered Spill Volume: _____

Recovery Method: _____

Sampling

[illegible]



Spill Response and Sampling

Initial Spill Information - Record on First Visit

Spill Date:	
Spill Volume:	
Spill Cause:	
Spill Product:	
Recovered Spill Volume:	
Recovery Method:	

[illegible]

Spill Response and Sampling



Client: Maledor
 Date: 1-13-21
 Site Name: Stebbins SWO
 Site Location: _____
 Project Owner: _____
 Project Manager: _____
 Project #: _____

Initial Spill Information - Record on First Visit

Spill Date: _____
 Spill Volume: _____
 Spill Cause: _____
 Spill Product: _____
 Recovered Spill Volume: _____
 Recovery Method: _____

Sampling

Sample ID	Depth (ft)	Field Screening			Data Collection (Check for Yes)			
		VOC (PID)	PetroFlag TPH (ppm)	Quantab (High/Low) +/-	Lab Analysis	Picture	Trimble Coordinates	Marked on Site Sketch
SS/TP/BI - Year Number Ex. BH18-01	Ex. 2ft	Ex. 400 ppm	200 ppm	Ex. High+	Ex. Hydrocarbon Chloride			
SS21-01	0-0.5			1.57/20.9	stepped out 8'			
SS01.2				0.62/18.1	stepped out 6'			
SS01.3				1.60/17.2	stepped out 12'			
SS01.4				1.57/18.4	stepped out 12'			
SS01.5				1.36/19.5	stepped out 20'			
SS01.6				1.34/18.8	stepped out 10'			
SS01.7				2.22/18.3	stepped out 10'			
SS01.8				0.48/16.7	stepped out 4'			
★ SS01.9				0.28/18.3	stepped out 4'			
SS21-02				2.48/18.4	stepped out 20'			
SS02.2				1.67/19.7	stepped out 20'			
SS02.3				1.37/18.2	stepped out 25'			
SS02.4				1.33/18.8	stepped out 20'			
SS02.5				1.13/20.6	stepped out 10'			
SS2.6				0.49/19.3	stepped out 5'			
★ SS2.7				0.07/18.3				
SS03				1.62/19.5	stepped out			



Daily Site Visit Report

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 Times

Arrived at Site	2/9/2021 2:25 PM
Departed Site	2/9/2021 3:00 PM

Field Notes

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

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



Potential water well drill

Viewing Direction: North



Potential water well drill

Viewing Direction: Northeast



Potential water well drill

Daily Site Visit Report



Daily Site Visit Signature

Inspector: John Ramirez

Signature:

Signature 



Daily Site Visit Report

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 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

Daily Site Visit Report



Site Photos

Viewing Direction: East



Drilling area

Viewing Direction: East



Preparing to begin drill

Viewing Direction: Northeast



Drilling has begun

Viewing Direction: Northeast



Casing being ran



Daily Site Visit Report

Viewing Direction: North	
	
Auger left at 28ft	

Descriptive Photo - 3
Viewing Direction: North
Desc: Auger left at 28ft
Created: 3/17/2021 11:25:30 AM
Lat:32.553604, Long:-104.190337

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, consisting of a large 'C' followed by a 'D'.

Signature

VERTEX

[illegible]

VERSATILITY. EXPERTISE.



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:	John Hurt	API #:	30-015-44177
Client Contact Phone #:			
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	3/25/2021 7:30 AM
Departed Site	3/25/2021 3:45 PM

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.
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.

Daily Site Visit Report



Site Photos

Viewing Direction: North



Excavation on Far East side of pad at 1' depth

Viewing Direction: North



Partial excavation near flare.

Viewing Direction: South

Partial excavation near flare and tank battery.
Not complete.

Viewing Direction: East

Ongoing excavation on northern most side of site.
1' depth.



Daily Site Visit Report

Viewing Direction: Northwest



Excavation on Far East side of pad at 1' depth

Viewing Direction: South



Excavation on Far East side of pad at 1' depth

Viewing Direction: West



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

Viewing Direction: West



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



Daily Site Visit Report

Viewing Direction: West



Spoil pile, approximately 100 yards.

Viewing Direction: North



North area of excavation

Viewing Direction: West



Spill area near access road.
Not fully excavated to desired 1' depth.
Making progress towards flare area and tank battery

Viewing Direction: Northwest



Spoil pile approximately 20 yards near access road

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:

A handwritten signature in black ink, appearing to be 'AH', written over a horizontal line.

Signature

VERTEX

Recollect
Recollect



Daily Site Visit Report

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

Daily Site Visit Report



Site Photos

Viewing Direction: West



Northern most areas taken to 1.5'

Viewing Direction: West



North area of excavation

Viewing Direction: South



Approximately 30 yards of spoil on site

Viewing Direction: West



Northern most portion of excavation moving west towards flare



Daily Site Visit Report

Viewing Direction: West



Excavation just south of entryway

Viewing Direction: Southwest



Excavation near tank battery

Viewing Direction: North



Excavation near flare

Viewing Direction: Northwest



Excavation near entryway in northwest corner of site

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:

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

Signature



Spill Response and Sampling

Client: Matador
Date: 3/26/21
Site Name: Stebbins
Site Location:
Client Contact: John Hurt
Project Manager: Monice Peppin
Project #:
API:
Site Wide Picture Yes/No Circle

Initial Spill Information - Record on First Visit
Spill Date:
Spill Volume:
Spill Cause:
Spill Product:
Recovered Spill Volume:
Recovery Method:
On Lease/Off Lease:
Site Placard Picture: Yes/No Circle

		Sampling						Yes/No		Circle	
		Hydrocarbon		Field Screening						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)	Lab Analysis	Picture	Marked on Site Sketch	
SS/IP/BH: Year - Number Ex. BH18-01	Ex. 2ft	400.0	200.0	0.006	25	0		BTEX TPH None			
BS21-35	1						3187	X			
BS21-36	1.25						2247	X			
BS21-37	1.25						850	X			
BS21-38	1						1017	X			
BS21-39	1.5						615				
BS21-40	1						420				
BS21-41	1						580				
BS21-42	1						362				
BS21-43	1						220				
BS21-44	1						265				
BS21-45	1						180				
BS21-46	1						1367	X			
BS21-47	1						415				
BS21-48	1						337				
BS21-49	1						175				
BS21-50	1						220				
BS21-51	1						180				
BS21-52	1						270				
BS21-53	1						170				
BS21-54	1						190				
BS21-55	1						222				
BS21-56	1						175				
BS21-57	1						200				
BS21-58	1						275				

VERSATILITY. EXPERTISE.



Spill Response and Sampling

Client: <u>Matador</u>		Initial Spill Information - Record on First Visit	
Date: <u>3/26/21</u>		Spill Date:	
Site Name: <u>Stubbins Fed SWD</u>		Spill Volume:	
Site Location:		Spill Cause:	
Client Contact:		Spill Product:	
Project Manager: <u>Monica Pippin</u>		Recovered Spill Volume:	
Project #:		Recovery Method:	
API:		On Lease/Off Lease:	
Site Wide Picture <u>Yes/No</u> Circle		Site Placard Picture: <u>Yes/No</u> Circle	

Sampling										
		Field Screening						Data Collection (Check for Yes)		
Sample ID	Depth (ft)	Hydrocarbon		Chloride				Lab Analysis	Picture	Marked on Site Sketch
		VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)			
SS/TP/BH - Year - Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		BTEX TPH None		
BS21-11	1			2.32	13.8		605			
BS21-12	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		
BS21-16	1						105			
BS21-17	1						652			
BS21-18	1						227			
BS21-19	1						465			
BS21-20	1						3695	X		
BS21-21	1						542			
BS21-22	1						102			
BS21-23	1						315			
BS21-24	1						657			
BS21-25	1						175			
BS21-26	1						812	X		
BS21-27	1						547			
BS21-28	1						317			
BS21-29	1						445			
BS21-30	1						340			
BS21-31	1						620			
BS21-32	1						1262	X		
BS21-33	1						2255	X		
BS21-34	1						985	X		

VERSATILITY. EXPERTISE.

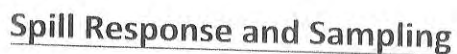


Spill Response and Sampling

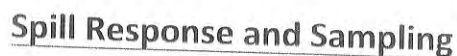
Client: _____
Date: 3-26-2021
Site Name: _____
Site Location: _____
Client Contact: _____
Project Manager: _____
Project #: _____
API: _____
Site Wide Picture Yes/No Circle

Initial Spill Information - Record on First Visit
Spill Date: _____
Spill Volume: _____
Spill Cause: _____
Spill Product: _____
Recovered Spill Volume: _____
Recovery Method: _____
On Lease/Off Lease: _____
Site Placard Picture: Yes/No Circle

		Sampling							
		Field Screening						Data Collection (Check for Yes)	
Sample ID	Depth (ft)	Hydrocarbon		EC Reading (dS/cm)	Temp (°C)	Chloride		Lab Analysis	Picture
		VOC (PID)	PetroFlag TPH (ppm)			Chloride (ppm)	Chloride Titration (ppm)		
SS/EP/BH-Year - Number Ex. BH18-01	Ex. 2ft	400.0	200.0	0.006	25	0		BTEX TPH None	
59	1						190		
60	1						360		
61	1						422		
62	1						180		
63	1						220		
64	1						320		
65	1						260		
66	1						350		
67	1						647		
68	1						630		
69	1						575		
70	1						420		
71	1						185		
72	1						530		
73	1						220		
74	1						220		
75	1						170		
76	1								
77	1								
78	1								
79	1								
80	1								
81	1								
82	1								



VERSATILITY. EXPERTISE.



VERSATILITY. EXPERTISE.

VERTEX

VERSATILITY. EXPERTISE.



Daily Site Visit Report

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.

Daily Site Visit Report



Site Photos

Viewing Direction: North



Excavation near tank battery and flare

Viewing Direction: West



Excavation and scrape near entryway

Viewing Direction: North



Excavation in northwest corner

Viewing Direction: East



Excavation going west to east across northern part of site

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:

A handwritten signature in black ink, appearing to be 'AH', written over a horizontal line.

Signature

Spill Response and Sampling

VERTEX

Client: Matador				Initial Spill Information - Record on First Visit						
Date: 02-28-2021 3-29				Spill Date:						
Site Name: Stebbins Fed SWD				Spill Volume:						
Site Location:				Spill Cause:						
Client Contact: Tommy Telfers				Spill Product:						
Project Manager: Monica Peppin				Recovered Spill Volume:						
Project #: 21E-00087				Recovery Method:						
API:				On Lease/Off Lease:						
Site Wide Picture Yes/No Circle				Site Placard Picture: Yes/No Circle						

Sampling										
		Field Screening							Data Collection (Check for Yes)	
		Hydrocarbon		Chloride						
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
SS/TP/BH - Year - Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		BTEX TPH None		
B521-74	1.0						361			
B521-75	1.0						468			
B521-76	1.0						220			
B521-77	1.0						1125			
B521-78	1.0						880			
B521-79	1.0						125			
B521-80	1.0						180			
B521-81	1.0						540			
B521-82	1.0						444			
B521-83	1.0						365			
B521-84	1.0						515			
B521-85	1.0						275			
B521-77	1.0						363			
-78	1.0						141			
B521-86	1						257			
87	1						361			
88	1						410			
89	1						223			
90	1						466			
91	1						590			

VERSATILITY. EXPERTISE.

Spill Response and Sampling

VERTEX

Client: Matador		Initial Spill Information - Record on First Visit		
Date: 06/24/2021		Spill Date:		
Site Name:		Spill Volume:		
Site Location:		Spill Cause:		
Client Contact:		Spill Product:		
Project Manager:		Recovered Spill Volume:		
Project #:		Recovery Method:		
API:		On Lease/Off Lease:		
Site Wide Picture	Yes/No	Circle	Site Placard Picture: Yes/No	Circle

Sampling										
		Field Screening						Data Collection (Check for Yes)		
		Hydrocarbon		Chloride				Lab Analysis		
Sample ID	Depth (ft)	VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)		Picture	Marked on Site Sketch
55/TP/BH - Year - Number Ex. BH18-01	Ex. '2ft	400.0	200.0	0.006	25	0		BTEX TPH None		
BS21-92	1						260			
93	1						577			
94	1						360			
95	1						545			
96	1						620			
97	1						950	X		
98	1						322			
99	1						1250	X		
100	1						1670	X		
BS21-97	1/10						270			
99	1						368			
100	1						330			
BS21-101	1						615			
102	1						420			
103	1						175			
104	1						201			
105	1						319			
106	1						220			
107	1						275			
108	1						558			

Rec'd



Daily Site Visit Report

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
Departed Site	3/30/2021 1:00 PM

Field Notes

15:14 Continued collecting samples.
Obtained BS21-121 to BS21-150
And WS21-36 to WS21-75.
No excavation performed today only sample collection.

Next Steps & Recommendations

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

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Austin Harris

Signature:

A handwritten signature in black ink, appearing to be 'AH' with a large loop and a crossbar.

Signature

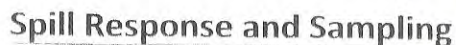


Spill Response and Sampling

Client: Martinez
 Date: 4-1-21
 Site Name: Stebbins
 Site Location: 32.55263 -104.10536
 Client Contact: Tommy Jeter
 Project Manager: M. Rappin
 Project #: 21E-00087
 API:
 Site Wide Picture: Yes/No ☐ Circle

Initial Spill Information - Record on First Visit
 Spill Date: 1/12/21
 Spill Volume: 293
 Spill Cause: Nipple on the sand filter broke
 Spill Product: PW
 Recovered Spill Volume: 250
 Recovery Method: Vac Truck
 On Leave/Off Leave:
 Site Photo Pictures: Yes/No ☐ Circle

		Sampling								
		Hydrocarbon		Field Screening						Data Collection (Check for Yes)
Sample ID	Depth (ft)	VOC (ppm)	PetroFlag TPH (ppm)	Fl. Reading (uS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis		Picture
VS/TPH - Test (Range) Ex. BH18-01	Ex. 2ft	400.0	200.0	0.006	25	0		BTEX TPH None		Marked on Site Sketch
WS21-36	0-1						207		Lab	
WS21-37	0-1						185		Lab	
WS21-38	0-1						155		Lab	
WS21-39	0-1						182		Lab	
WS21-40	0-1						145		Lab	
WS21-41	0-1						157	30	Lab	
WS21-42	0-1						157		Lab	
WS21-43	0-1						130		Lab	
WS21-44	0-1						200		Lab	
WS21-45	0-1						142		Lab	
WS21-46	0-1						205		Lab	
WS21-47	0-1						175		Lab	
WS21-48	0-1						222		Lab	
WS21-49	0-1						95		Lab	
WS21-50	0-1						162		Lab	
WS21-51	0-1						367		Lab	
WS21-52	0-1						280		Lab	
WS21-53	0-1						182		Lab	
WS21-54	0-1						110		Lab	
WS21-55	0-1						137		Lab	
WS21-56	0-1						195		Lab	
WS21-57	0-1						145		Lab	
WS21-58	0-1						210		Lab	
WS21-59	0-1						197		Lab	



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



Spill Response and Sampling

Client: Matador *Matador*

Date: *4/1/21*

Site Name: *Stebbing Feed SWD Slot 4*

Site Location: *32.55263 -104.10536*

Client Contact: *Tommy detor*

Project Manager: *M. Peppin*

Project #: *215-00087-001*

API:

Site Wide Picture Yes/No Circle

Initial Spill Information - Record on First Visit

Spill Date: *1/12/21*

Spill Volume: *293 bbls*

Spill Cause: *Nipple broke on sand filler*

Spill Product: *pnv*

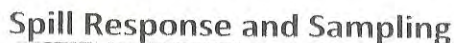
Recovered Spill Volume: *Vac Truck*

Recovery Method: *250*

On Lease/Off Lease:

Site Placard Picture: Yes/No Circle

Sampling										
		Field Screening						Data Collection (Check for Yes)		
Sample ID	Depth (ft)	Hydrocarbon		Chloride				Lab Analysis	Picture	Marked on Site Sketch
		VOC (PID)	PetroFlag TPH (ppm)	EC Reading (dS/cm)	Temp (°C)	Chloride (ppm)	Chloride Titration (ppm)			
SS/TP/BH - Year - Number Ex. BH18-01	Ex. 2ft	400.0	200.0	0.006	25	0		BTEX TPH None		
BS21-121	1						337	Lab		
BS21-122	1						162	Lab		
BS21-123	1						92	Lab		
BS21-124	1						115	Lab		
BS21-125	1						155	Lab		
BS21-126	1						175	Lab		
BS21-127	1						160	Lab		
BS21-128	1						92	Lab		
BS21-129	1						170	Lab		
BS21-130	1						90	Lab		
BS21-131	1						135	Lab		
BS21-132	1						135	Lab		
BS21-133	1						80	Lab		
BS21-134	1						42	Lab		
BS21-135	1						65	Lab		
BS21-136	1						95	Lab		
BS21-137	1						130	Lab		
BS21-138	1						152	Lab		
BS21-139	1						130	Lab		
BS21-140	1						137	Lab		
BS21-141	1						130	Lab		
BS21-142	1						175	Lab		
BS21-143	1						140	Lab		



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



Daily Site Visit Report

Client:	Matador Resources	Inspection Date:	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

Field Notes

12:27 Over seeing backfill

Next Steps & Recommendations

1 Continue backfill tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: North



Backfill area

Viewing Direction: Northwest



Backfill area

Viewing Direction: West



Backfill area

Viewing Direction: West



Backfill area



Daily Site Visit Report

Viewing Direction: Southwest



Backfill area

Viewing Direction: West



Backfill area

Viewing Direction: South



Backfill area

Daily Site Visit Report



Daily Site Visit Signature

Inspector: John Ramirez

Signature:


Signature



Spill Response and Sampling

Client: Matador
Date: 4/20/21
Site Name: Stebbing Fed SWD Slot 4
Site Location:
Client Contact: A. Jones
Project Manager: M. Peppin
Project #: 21E-00087-001
API:
Site Wide Picture Yes/No Circle

Initial Spill Information - Record on First Visit

Spill Date: 1/12/21

Spill Volume: 293

Spill Cause: nipple on sand filter

Spill Product: PW

Recovered Spill Volume: 250

Recovery Method: Vacuum

On Lease/Off Lease: On

Site Placard Picture: Yes/No

Circle

[illegible]



Daily Site Visit Report

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 Notes

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.

Daily Site Visit Report



Site Photos

Viewing Direction: North



Backfill area

Viewing Direction: West



Backfill

Viewing Direction: West



Backfill area

Viewing Direction: West



Backfill area



Daily Site Visit Report

Viewing Direction: West



Backfill area

Viewing Direction: Southwest



Backfill area

Viewing Direction: Southwest



Backfill area



Viewing Direction: West



Backfill area



Daily Site Visit Report

Viewing Direction: West	Viewing Direction: West
 <p>Descriptive Photo - 8 Viewing Direction: West Date: Backfill Created: 4/21/2021 11:34:27 AM</p>	 <p>Descriptive Photo - 8 Viewing Direction: West Date: Backfill Created: 4/21/2021 3:09:00 PM</p>
Backfill	Backfill

Daily Site Visit Report



Daily Site Visit Signature

Inspector: John Ramirez

Signature:


Signature



Daily Site Visit Report

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

Daily Site Visit Report



Site Photos

Viewing Direction: West



Backfill

Viewing Direction: West



Completed backfill

Viewing Direction: North



Backfill





Viewing Direction: Northeast



Backfill





Daily Site Visit Report

<p>Viewing Direction: North</p>  <p>Descriptive Photo: 4 Viewing Direction: North Date: 4/22/2021 Created: 4/22/2021 10:01:09 AM</p>	<p>Viewing Direction: East</p>  <p>Descriptive Photo: 5 Viewing Direction: East Date: 4/22/2021 Created: 4/22/2021 10:01:34 AM</p>
Backfill	Backfill
<p>Viewing Direction: East</p>  <p>Descriptive Photo: 6 Viewing Direction: East Date: 4/22/2021 Created: 4/22/2021 10:01:43 AM</p>	<p>Viewing Direction: East</p>  <p>Descriptive Photo: 7 Viewing Direction: East Date: 4/22/2021 Created: 4/22/2021 10:02:18 AM</p>
Backfill	Backfill



Daily Site Visit Report

Viewing Direction: Southeast	Viewing Direction: North
	
Backfill	Completed backfill

Daily Site Visit Report



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, 2021 at 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
F

www.vertex.ca

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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, December 24, 2021 at 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 <vertexresourcegroupusa@gmail.com> 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, 2021 at 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

Client Name: Matador Resources
 Site Name: Stebbins Federal SWD
 NM OCD Incident Tracking Numbers: nAPP2102534956
 Project #: 21E-00038-001
 Lab Report: 2101633

Table 2. Characterization Sampling Laboratory Results - Depth to Groundwater <50 ft													
Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic Chloride
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (Petro Flag)	Inorganics (Quantab - High/Low)	Volatile		Extractable					
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(ppm)	(ppm)	(+/-)	(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	-	-	542	<0.025	<0.224	<5.0	<8.5	<43	<13.5	<56.5	<60
SS21-04	0-0.5	January 14, 2021	-	-	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

"-" - Not applicable/assessed

Bold and shaded indicates exceedance outside of applied action level

Client Name: Matador Resources

Site Name: Stebbins Federal SWD

NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

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

Table 3. Confirmatory Sampling Laboratory Results - Depth to Groundwater >50 feet										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
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
BS21-19	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.6	<48	<14.6	<62.6	370
BS21-20	1'	March 26, 2021	<0.024	<0.215	<4.8	<9.5	<48	<14.3	<62.3	72
BS21-21	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.7	<48	<14.6	<62.6	640
BS21-21	1'	April 20, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<63.8	<59
BS21-22	1'	March 26, 2021	<0.024	<0.216	<4.8	<9.3	<47	<14.1	<61.1	<60
BS21-23	1'	March 26, 2021	<0.024	<0.213	<4.7	<9.1	<46	<13.8	<59.8	110
BS21-24	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	<14.3	<61.3	210
BS21-41	1'	March 26, 2021	<0.024	<0.217	<4.8	<9.4	<47	<14.2	<61.2	290
BS21-42	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.1	<45	<14.1	<59.1	200
BS21-43	1'	March 26, 2021	<0.025	<0.221	<4.9	<9.8	<49	<14.7	<63.7	94
BS21-44	1'	March 26, 2021	<0.025	<0.224	<5.0	<9.1	<45	<14.1	<59.1	150
BS21-45	1'	March 26, 2021	<0.025	<0.225	<5.0	<9.8	<49	<14.8	<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
BS21-57	1'	March 26, 2021	<0.025	<0.224	<5.0	<9.5	<47	<14.5	<61.5	66

Client Name: Matador Resources

Site Name: Stebbins Federal SWD

NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

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

Table 3. Confirmatory Sampling Laboratory Results - Depth to Groundwater >50 feet										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(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	<0.224	<5.0	<9.2	<46	<14.2	<60.2	92
BS21-86	1'	March 29, 2021	<0.024	<0.213	<4.7	<9.7	<48	<14.4	<62.4	85
BS21-87	1'	March 29, 2021	<0.024	<0.22	<4.9	<8.9	<45	<13.8	<58.8	93
BS21-88	1'	March 29, 2021	<0.025	<0.222	<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	1'	March 29, 2021	<0.024	<0.217	<4.8	<9.3	<46	<14.1	<60.1	74
BS21-104	1'	March 29, 2021	<0.025	<0.224	<5.0	<9.1	<46	<14.1	<60.1	75
BS21-105	1'	March 29, 2021	<0.025	<0.225	<5.0	<9.4	<47	<14.4	<61.4	76
BS21-106	1'	March 29, 2021	<0.024	<0.213	<4.7	<9.7	<48	<14.4	<62.4	82
BS21-107	1'	March 29, 2021	<0.024	<0.215	<4.8	<9.6	<48	<14.4	<62.4	87
BS21-108	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

Client Name: Matador Resources

Site Name: Stebbins Federal SWD

NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

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

Table 3. Confirmatory Sampling Laboratory Results - Depth to Groundwater >50 feet										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(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	<0.22	<4.9	<9.6	<48	<14.5	<62.5	<60
BS21-143	1'	March 30, 2021	<0.024	<0.219	<4.9	<9.6	<48	<14.5	<62.5	<60
BS21-144	1'	March 30, 2021	<0.025	<0.222	<4.9	<9.5	<47	<14.4	<61.4	<60
BS21-145	1'	March 30, 2021	<0.024	<0.217	<4.8	<9.7	<49	<14.5	<63.5	<60
BS21-146	1'	March 30, 2021	<0.024	<0.22	<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	<0.222	<4.9	<9.7	<48	<14.6	<62.6	<60
WS21-17	0-1'	March 26, 2021	<0.025	<0.221	<4.9	<9.7	<48	<14.6	<62.6	<60
WS21-18	0-1'	March 26, 2021	<0.023	<0.21	<4.7	<9.4	<47	<14.1	<61.1	81
WS21-19	0-1'	March 26, 2021	<0.024	<0.215	<4.8	<9.5	<47	<14.3	<61.3	83
WS21-20	0-1'	March 26, 2021	<0.023	<0.207	<4.6	<9.5	<47	<14.1	<61.1	<59
WS21-21	0-1'	March 26, 2021	<0.025	<0.222	<4.9	<9.8	<49	<14.7	<63.7	<60

Client Name: Matador Resources

Site Name: Stebbins Federal SWD

NM OCD Incident Tracking Number: nAPP2102534956

Project #: 21E-00087-001

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

Table 3. Confirmatory Sampling Laboratory Results - Depth to Groundwater >50 feet										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
WS21-22	0-1'	March 26, 2021	<0.025	<0.224	<5.0	<9.7	<48	<14.7	<62.7	<61
WS21-23	0-1'	March 26, 2021	<0.024	<0.22	<4.9	<9.2	<46	<14.1	<60.1	440
WS21-24	0-1'	March 26, 2021	<0.024	<0.22	<4.9	<9.7	<44	<13.6	<57.6	310
WS21-25	0-1'	March 26, 2021	<0.024	<0.215	<4.8	<9.2	<46	<14	<60	300
WS21-26	0-1'	March 26, 2021	<0.024	<0.213	<4.7	<9.3	<46	<14	<60	380
WS21-27	0-1'	March 26, 2021	<0.023	<0.21	<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	<0.216	<4.8	<9.6	<48	<14.4	<62.4	150
WS21-52	0-1.5'	March 30, 2021	<0.025	<0.22	<4.9	<9.5	<47	<14.4	<61.4	170
WS21-53	0-1.5'	March 30, 2021	<0.024	<0.217	<4.8	<9.6	<48	<14.4	<62.4	93
WS21-54	0-1.5'	March 30, 2021	<0.024	<0.216	<4.8	<9.8	<49	<14.6	<63.6	62
WS21-55	0-1.5'	March 30, 2021	<0.024	<0.213	<4.7	<9.8	<49	<14.5	<63.5	<60
WS21-56	0-1.5'	March 30, 2021	<0.024	<0.216	<4.8	<9.9	<49	<14.7	<63.7	63
WS21-57	0-1.5'	March 30, 2021	<0.024	<0.216	<4.8	<9.6	<48	<14.4	<62.4	61
WS21-58	0-1'	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
WS21-75	0-1'	March 30, 2021	<0.025	<0.221	<4.9	<9.6	<48	<14.5	<62.5	<60

Bold and shaded indicates exceedance outside of applied action level

Bold and green-shaded indicates re-collection of sample previously in exceedance 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2101633

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 ORGANICS						Analyst: BRM
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: VP
Chloride	ND	60		mg/Kg	20	1/19/2021 4:13:04 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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
EPA METHOD 8260B: VOLATILES SHORT LIST						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: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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
EPA METHOD 8260B: VOLATILES SHORT LIST						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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 LIST						Analyst: JMR
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						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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						Analyst: JMR
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						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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
EPA METHOD 8260B: VOLATILES SHORT LIST						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 RANGE						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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
EPA METHOD 8260B: VOLATILES SHORT LIST						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 RANGE						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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
EPA METHOD 8260B: VOLATILES SHORT LIST						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 RANGE						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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						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						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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 ORGANICS						Analyst: BRM
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	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
EPA METHOD 8015D: GASOLINE RANGE						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2101633

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: BRM
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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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 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

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-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			SeqNo: 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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		116	30.4	154			

Sample ID: LCS-57585	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 57585			RunNo: 74697						
Prep Date: 1/18/2021	Analysis Date: 1/20/2021			SeqNo: 2637291		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	109	68.9	141			
Surr: DNOP	5.6		5.000		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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	63	10	50.00	0	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 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

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-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 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

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-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: lcs-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	0	94.4	80	120			
Surr: BFB	1100		1000		108	75.3	105			S

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

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	SeqNo: 2637949 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.95	0	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 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

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-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	SeqNo: 2637987 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	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	SeqNo: 2637989 Units: mg/Kg								
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 Date: 1/20/2021	SeqNo: 2637990 Units: mg/Kg								
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 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

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

WO#: 2101633

25-Jan-21

Client: Vertex Resource Group Ltd.**Project:** Stebbins Fed SWD

Sample ID: Ics-57574	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 57574	RunNo: 74688								
Prep Date: 1/16/2021	Analysis Date: 1/17/2021	SeqNo: 2635943	Units: mg/Kg							
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	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 57574	RunNo: 74688								
Prep Date: 1/16/2021	Analysis Date: 1/17/2021	SeqNo: 2635944	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: 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 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

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

WO#: 2101633

25-Jan-21

Client: Vertex Resource Group Ltd.**Project:** Stebbins Fed SWD

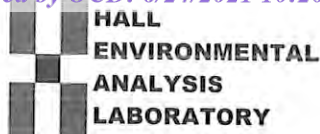
Sample ID: lcs-57574	SampType: LCS			TestCode: EPA Method 8015D Mod: Gasoline Range						
Client ID: LCSS	Batch ID: 57574			RunNo: 74688						
Prep Date: 1/16/2021	Analysis Date: 1/17/2021			SeqNo: 2635963		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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



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**Work Order Number: **2101633**

RcptNo: 1

Received By: **Isaiah Ortiz**

1/16/2021 9:15:00 AM

I-OK

Completed By: **Isaiah Ortiz**

1/16/2021 9:28:46 AM

I-OK

Reviewed By: **DF 1/16/2021**

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Not Present			



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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2103C86

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.8		mg/Kg	1	4/1/2021 4:25:04 PM
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	1	4/1/2021 4:25:04 PM
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
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	4/1/2021 4:25:04 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	560	60		mg/Kg	20	4/2/2021 2:12:06 PM

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

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

Analytical Report

Lab Order 2103C86

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	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	4.8		mg/Kg	1	4/1/2021 5:59:01 PM
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	1	4/1/2021 5:59:01 PM
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
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/1/2021 5:59:01 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	350	60		mg/Kg	20	4/2/2021 2:49:19 PM

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

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

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103C86

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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

WO#: 2103C86

05-Apr-21

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 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

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

WO#: 2103C86

05-Apr-21

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

Sample ID: MB-59087	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59087			RunNo: 76389						
Prep Date: 3/31/2021	Analysis Date: 4/1/2021			SeqNo: 2705139		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			

Sample ID: MB-59089	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59089			RunNo: 76389						
Prep Date: 3/31/2021	Analysis Date: 4/1/2021			SeqNo: 2705140		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: MB-59095	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59095			RunNo: 76389						
Prep Date: 3/31/2021	Analysis Date: 4/2/2021			SeqNo: 2705141		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		10.00		31.3	70	130			S

Sample ID: MB-59098	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59098			RunNo: 76389						
Prep Date: 3/31/2021	Analysis Date: 4/1/2021			SeqNo: 2705142		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	6.3		10.00		63.0	70	130			S

Sample ID: MB-59107	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59107			RunNo: 76389						
Prep Date: 3/31/2021	Analysis Date: 4/2/2021			SeqNo: 2705143		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		10.00		52.6	70	130			S

Sample ID: MB-59115	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59115			RunNo: 76389						
Prep Date: 3/31/2021	Analysis Date: 4/1/2021			SeqNo: 2705144		Units: %Rec				
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 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

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

WO#: 2103C86

05-Apr-21

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

Sample ID: LCS-59087	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 59087		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/1/2021		SeqNo: 2705145		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: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 59089		RunNo: 76389							
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: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/2/2021		SeqNo: 2705147		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: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/1/2021		SeqNo: 2705148		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: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 59107		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/2/2021		SeqNo: 2705149		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	2.7		5.000		53.1	70	130			S

Sample ID: LCS-59115	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 59115		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/1/2021		SeqNo: 2705150		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.8		5.000		116	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

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QC SUMMARY REPORT**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: 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: 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: lcs-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 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

QC SUMMARY REPORT**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 8021B: Volatiles								
Client ID: PBS	Batch ID: 59048	RunNo: 76388								
Prep Date: 3/29/2021	Analysis Date: 4/1/2021	SeqNo: 2705095 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		98.6	70	130			

Sample ID: LCS-59048	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59048	RunNo: 76388								
Prep Date: 3/29/2021	Analysis Date: 4/1/2021	SeqNo: 2705096 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	91.4	80	120			
Toluene	0.93	0.050	1.000	0	92.7	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.1	80	120			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.5	70	130			

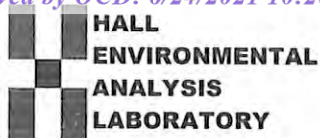
Sample ID: mb-59075	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 59075	RunNo: 76388								
Prep Date: 3/30/2021	Analysis Date: 4/1/2021	SeqNo: 2705120 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.99		1.000		98.7	70	130			

Sample ID: LCS-59075	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: 2705121 Units: %Rec								
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 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



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 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

Reviewed By: *MC 03/27/2021*

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *MC 3/27/21*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good				



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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Lab ID: 2103D36-005

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.7		mg/Kg	1	4/2/2021 4:23:00 AM
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	1	4/3/2021 3:12:32 AM
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	370	60		mg/Kg	20	4/3/2021 4:32:56 PM

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

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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.7		mg/Kg	1	4/2/2021 4:43:00 AM
Surr: BFB	96.2	70-130		%Rec	1	4/2/2021 4:43:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/3/2021 3:36:11 AM
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
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	4/3/2021 3:36:11 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/3/2021 4:45:20 PM

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/3/2021 5:57:43 AM
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	1	4/3/2021 5:57:43 AM
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	640	61		mg/Kg	20	4/3/2021 5:47:23 PM

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.7		mg/Kg	1	4/2/2021 3:01:40 AM
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	1	4/2/2021 3:01:40 AM
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
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	4/2/2021 3:01:40 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	160	60		mg/Kg	20	4/3/2021 8:03:55 PM

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	5.0		mg/Kg	1	4/2/2021 5:01:30 PM
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	1	4/2/2021 5:01:30 PM
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
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/2/2021 5:01:30 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	67	60		mg/Kg	20	4/3/2021 6:25:00 PM

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	5.0		mg/Kg	1	4/2/2021 7:45:47 PM
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	1	4/2/2021 7:45:47 PM
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
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/2/2021 7:45:47 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	200	60		mg/Kg	20	4/3/2021 7:51:52 PM

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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 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

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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: VP
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 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

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Analytical Report

Lab Order 2103D36

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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: VP
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 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

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Analytical Report

Lab Order 2103D36

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 ORGANICS						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 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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/3/2021 8:39:16 PM
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	1	4/3/2021 8:39:16 PM
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		mg/Kg	20	4/4/2021 12:36:59 AM

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

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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.8		mg/Kg	1	4/3/2021 9:02:42 PM
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	1	4/3/2021 9:02:42 PM
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
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/3/2021 9:02:42 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	100	60		mg/Kg	20	4/4/2021 12:49:23 AM

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

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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/3/2021 9:26:06 PM
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	1	4/3/2021 9:26:06 PM
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
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/3/2021 9:26:06 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	310	60		mg/Kg	20	4/4/2021 1:01:48 AM

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

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

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.8		mg/Kg	1	4/4/2021 12:11:02 AM
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	1	4/4/2021 12:11:02 AM
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
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	4/4/2021 12:11:02 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	270	60		mg/Kg	20	4/4/2021 1:26:37 AM

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

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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	5.0		mg/Kg	1	4/4/2021 12:34:42 AM
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	1	4/4/2021 12:34:42 AM
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
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/4/2021 12:34:42 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	510	60		mg/Kg	20	4/4/2021 1:39:02 AM

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

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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	60		mg/Kg	20	4/4/2021 2:16:15 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	4/2/2021 7:15:24 PM
Toluene	ND	0.049		mg/Kg	1	4/2/2021 7:15:24 PM
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	114	70-130		%Rec	1	4/2/2021 7:15:24 PM
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	4.9		mg/Kg	1	4/2/2021 7:15:24 PM
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 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

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	60		mg/Kg	20	4/4/2021 2:28:40 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	4/2/2021 8:41:05 PM
Toluene	ND	0.049		mg/Kg	1	4/2/2021 8:41:05 PM
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	4.9		mg/Kg	1	4/2/2021 8:41:05 PM
Surr: BFB	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:

- * Value exceeds Maximum Contaminant 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: BS21-71 1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 1:55:00 PM

Lab ID: 2103D36-064

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: mb
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/1/2021 2:00:14 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/1/2021 2:00:14 PM
Surr: DNOP	156	70-130	S	%Rec	1	4/1/2021 2:00:14 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	74	60		mg/Kg	20	4/4/2021 3:18:18 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	4/3/2021 12:58:10 AM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 12:58:10 AM
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	111	70-130		%Rec	1	4/3/2021 12:58:10 AM
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	4.9		mg/Kg	1	4/3/2021 12:58:10 AM
Surr: BFB	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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
Chloride	77	60		mg/Kg	20	4/4/2021 3:55:31 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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 ORGANICS						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: VP
Chloride	71	59		mg/Kg	20	4/4/2021 4:57:35 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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: JMR
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
Chloride	120	59		mg/Kg	20	4/4/2021 5:10:00 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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 SWD

Collection Date: 3/26/2021 2:30:00 PM

Lab ID: 2103D36-069

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: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 RANGE						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	91	60		mg/Kg	20	4/4/2021 5:59:38 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-09 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:00:00 PM

Lab ID: 2103D36-075

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: mb
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/1/2021 4:08:20 PM
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	60		mg/Kg	20	4/4/2021 5:22:39 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.025		mg/Kg	1	4/3/2021 6:13:28 AM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 6:13:28 AM
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	112	70-130		%Rec	1	4/3/2021 6:13:28 AM
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	4.9		mg/Kg	1	4/3/2021 6:13:28 AM
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-10 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:05:00 PM

Lab ID: 2103D36-076

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: 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	130	60		mg/Kg	20	4/4/2021 5:35:04 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
Benzene	ND	0.024		mg/Kg	1	4/3/2021 6:41:55 AM
Toluene	ND	0.049		mg/Kg	1	4/3/2021 6:41:55 AM
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
Surr: Toluene-d8	97.1	70-130		%Rec	1	4/3/2021 6:41:55 AM
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst: JMR
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/3/2021 6:41:55 AM
Surr: BFB	99.4	70-130		%Rec	1	4/3/2021 6:41:55 AM

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

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

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Analytical Report

Lab Order 2103D36

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 ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						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						Analyst: JMR
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
Chloride	ND	60		mg/Kg	20	4/4/2021 6:12:18 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-14 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:25:00 PM

Lab ID: 2103D36-080

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: mb
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: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-15 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:30:00 PM

Lab ID: 2103D36-081

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: 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	5.0		mg/Kg	1	4/4/2021 12:58:17 AM
Surr: BFB	100	70-130		%Rec	1	4/4/2021 12:58:17 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/4/2021 12:58:17 AM
Toluene	ND	0.050		mg/Kg	1	4/4/2021 12:58:17 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/4/2021 12:58:17 AM
Xylenes, Total	ND	0.10		mg/Kg	1	4/4/2021 12:58:17 AM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/4/2021 12:58:17 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/4/2021 6:37:08 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 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

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Analytical Report

Lab Order 2103D36

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 SWD

Collection Date: 3/26/2021 3:35:00 PM

Lab ID: 2103D36-082

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: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 SWD

Collection Date: 3/26/2021 3:40:00 PM

Lab ID: 2103D36-083

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: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-18 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:45:00 PM

Lab ID: 2103D36-084

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-19 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 3:50:00 PM

Lab ID: 2103D36-085

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: 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

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/4/2021 7:51:19 AM
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	1	4/4/2021 7:51:19 AM
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	310	60		mg/Kg	20	4/5/2021 12:31:15 PM

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

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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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 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

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Analytical Report

Lab Order 2103D36

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 SWD

Collection Date: 3/26/2021 4:25:00 PM

Lab ID: 2103D36-092

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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 SWD

Collection Date: 3/26/2021 4:35:00 PM

Lab ID: 2103D36-094

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Collection Date: 3/26/2021 4:45:00 PM

Lab ID: 2103D36-096

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: mb
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: VP
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
- 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

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Collection Date: 3/26/2021 4:55:00 PM

Lab ID: 2103D36-098

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: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

Date Reported: 4/8/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: WS21-34 0-1.0'

Project: Stebbins Federal SWD

Collection Date: 3/26/2021 5:05:00 PM

Lab ID: 2103D36-100

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: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D36

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/4/2021 2:10:01 PM
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	1	4/4/2021 2:10:01 PM
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
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	4/4/2021 2:10:01 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	90	60		mg/Kg	20	4/5/2021 10:49:26 PM

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

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

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

WO#: 2103D36

08-Apr-21

Client: Vertex Resource Group Ltd.**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: 4/3/2021	Analysis Date: 4/3/2021	SeqNo: 2706882 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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								
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			

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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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								
Prep Date: 4/3/2021	Analysis Date: 4/3/2021	SeqNo: 2706913 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			

Sample ID: MB-59184	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 59184	RunNo: 76426								
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
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	SeqNo: 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			

Qualifiers:

* Value exceeds Maximum Contaminant 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

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

WO#: 2103D36

08-Apr-21

Client: Vertex Resource Group Ltd.**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: 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			

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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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								
Prep Date: 4/3/2021	Analysis 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	0	93.4	90	110			

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	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 59184	RunNo: 76427								
Prep Date: 4/3/2021	Analysis Date: 4/4/2021	SeqNo: 2707061 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

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

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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: MB-59087	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59087	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705139 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	7.7		10.00		77.2	70	130			

Sample ID: MB-59089	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59089	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705140 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	9.4		10.00		94.2	70	130			

Sample ID: MB-59095	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59095	RunNo: 76389								
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)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	3.1		10.00		31.3	70	130			S

Sample ID: MB-59098	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59098	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705142 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	6.3		10.00		63.0	70	130			S

Sample ID: MB-59107	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59107	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: 2705143 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	5.3		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 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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: MB-59115	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59115	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705144 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.3		10.00		93.1	70	130			

Sample ID: LCS-59087	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59087	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705145 Units: mg/Kg								
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 Organics								
Client ID: LCSS	Batch ID: 59089	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705146 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.8	68.9	141			
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: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: 2705147 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	95.6	68.9	141			
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: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705148 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

Qualifiers:

* Value exceeds Maximum Contaminant 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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: LCS-59107	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 59107		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/2/2021		SeqNo: 2705149		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	118	68.9	141			
Surr: DNOP	2.7		5.000		53.1	70	130			S

Sample ID: LCS-59115	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 59115		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/1/2021		SeqNo: 2705150		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	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BS21-05 1.0'	Batch ID: 59089		RunNo: 76389							
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	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BS21-28 1.0'	Batch ID: 59087		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/1/2021		SeqNo: 2705154		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: 2103D36-042AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BS21-49 1.0'	Batch ID: 59107		RunNo: 76389							
Prep Date: 3/31/2021	Analysis Date: 4/2/2021		SeqNo: 2705155		Units: mg/Kg					
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: 2103D36-062AMS	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: 2705156		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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: 2103D36-062AMS	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: 2705156	Units: mg/Kg							
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								
Client ID: BS21-05 1.0'	Batch ID: 59089	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705159	Units: mg/Kg							
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: 2103D36-021AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS21-28 1.0'	Batch ID: 59087	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/1/2021	SeqNo: 2705160	Units: mg/Kg							
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: 2103D36-042AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS21-49 1.0'	Batch ID: 59107	RunNo: 76389								
Prep Date: 3/31/2021	Analysis Date: 4/2/2021	SeqNo: 2705161	Units: mg/Kg							
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	SampType: MSD	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: 2705162	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.5	47.48	0	91.5	15	184	23.9	23.9	R
Surr: DNOP	3.9		4.748		82.2	70	130	0	0	

Sample ID: MB-59156	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59156	RunNo: 76435								
Prep Date: 4/2/2021	Analysis Date: 4/3/2021	SeqNo: 2707387	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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: MB-59156	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59156	RunNo: 76435								
Prep Date: 4/2/2021	Analysis Date: 4/3/2021	SeqNo: 2707387 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	9.5		10.00		94.8	70	130			

Sample ID: MB-59161	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59161	RunNo: 76435								
Prep Date: 4/2/2021	Analysis Date: 4/3/2021	SeqNo: 2707388 Units: %Rec								
Analyte	Result	PQL	SPK 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	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59156	RunNo: 76435								
Prep Date: 4/2/2021	Analysis Date: 4/3/2021	SeqNo: 2707389 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	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range 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
Surr: DNOP	4.0		5.000		79.5	70	130			

Sample ID: MB-59133	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59133	RunNo: 76411								
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: 2707609 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: 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								
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

QC SUMMARY REPORT**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								
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: 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	9.1	45.54	0	108	15	184			
Surr: DNOP	5.3		4.554		117	70	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.5	47.71	0	86.0	15	184	17.6	23.9	
Surr: DNOP	4.4		4.771		91.6	70	130	0	0	

Qualifiers:

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

QC SUMMARY REPORT**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: 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		98.0	70	130			

Sample ID: lcs-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	0	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.49	0	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.41	0	103	61.3	114	6.50	20	
Surr: BFB	1100		976.6		110	70	130	0	0	

Sample ID: lcs-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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	78.6	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 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

QC SUMMARY REPORT**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								
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
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	0	100	61.3	114			
Surr: BFB	1100		976.6		108	70	130			

Sample ID: 2103D36-001amsd	SampType: MSD	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: 2705540 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.06	0	98.0	61.3	114	3.39	20	
Surr: BFB	990		962.5		102	70	130	0	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	990		1000		99.3	70	130			

Sample ID: lcs-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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.2	78.6	131			
Surr: BFB	1100		1000		111	70	130			

Sample ID: 2103d36-041ams	SampType: MS	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: 2707088 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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: 2103d36-041ams	SampType: MS	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: 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)	25	4.9	24.44	0	102	61.3	114	0.592	20	
Surr: BFB	1100		977.5		112	70	130	0	0	

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								
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: lcs-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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.8	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								
Prep Date: 3/30/2021	Analysis Date: 4/4/2021	SeqNo: 2707112 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.6	23.19	0	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:

* Value exceeds Maximum Contaminant 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

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

WO#: 2103D36

08-Apr-21

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

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
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: mb-59093	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								
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		99.6	70	130			

Sample ID: lcs-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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.6	78.6	131			
Surr: BFB	1100		1000		110	70	130			

Sample ID: 2103d36-101ams	SampType: MS	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: 2707136 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.9	24.65	0	90.3	61.3	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.9	24.41	0	93.3	61.3	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 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

QC SUMMARY REPORT**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								
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		98.7	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: 2705121 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	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 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								
Client ID: BS21-29 1.0'	Batch ID: 59075	RunNo: 76388								
Prep Date: 3/30/2021	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
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

QC SUMMARY REPORT**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: lcs-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								
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	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 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 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

QC SUMMARY REPORT**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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: LCS-59076	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59076	RunNo: 76428								
Prep Date: 3/30/2021	Analysis Date: 4/3/2021	SeqNo: 2707168 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	90.6	80	120			
Toluene	0.92	0.050	1.000	0	92.2	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.1	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Sample ID: 2103d36-042ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
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
Benzene	0.92	0.025	0.9872	0	93.1	76.3	120			
Toluene	0.93	0.049	0.9872	0	94.4	78.5	120			
Ethylbenzene	0.93	0.049	0.9872	0	94.2	78.1	124			
Xylenes, Total	2.8	0.099	2.962	0	94.4	79.3	125			
Surr: 4-Bromofluorobenzene	1.0		0.9872		105	70	130			

Sample ID: 2103d36-042amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS21-49 1.0'	Batch ID: 59076	RunNo: 76428								
Prep Date: 3/30/2021	Analysis Date: 4/3/2021	SeqNo: 2707172 Units: mg/Kg								
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
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

QC SUMMARY REPORT**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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	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: 2707201 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	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: 2707205 Units: mg/Kg								
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			

Sample ID: 2103d36-082amsd	SampType: MSD	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: 2707206 Units: mg/Kg								
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
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

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

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			

Sample ID: LCS-59093	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59093	RunNo: 76428								
Prep Date: 3/31/2021	Analysis Date: 4/4/2021	SeqNo: 2707226 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	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			
Surr: 4-Bromofluorobenzene	1.0		1.000		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 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 118 of 121

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

WO#: 2103D36

08-Apr-21

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

Sample ID: ics-59077	SampType: LCS4		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: BatchQC	Batch ID: 59077		RunNo: 76442							
Prep Date: 3/30/2021	Analysis Date: 4/2/2021		SeqNo: 2707673		Units: mg/Kg					
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: mb-59077	SampType: MBLK		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: PBS	Batch ID: 59077		RunNo: 76442							
Prep Date: 3/30/2021	Analysis Date: 4/2/2021		SeqNo: 2707674		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: 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	SampType: MS4		TestCode: EPA Method 8260B: Volatiles Short List							
Client ID: BS21-69 1.0'	Batch ID: 59077		RunNo: 76442							
Prep Date: 3/30/2021	Analysis Date: 4/2/2021		SeqNo: 2707677		Units: mg/Kg					
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 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

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

WO#: 2103D36

08-Apr-21

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

Sample ID: 2103d36-062amsd		SampType: MSD4		TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: BS21-69 1.0'		Batch ID: 59077		RunNo: 76442						
Prep Date: 3/30/2021		Analysis Date: 4/2/2021		SeqNo: 2707678		Units: mg/Kg				
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 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

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

WO#: 2103D36

08-Apr-21

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

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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.2	70	130			
Surr: BFB	530		500.0		106	70	130			

Sample ID: mb-59077	SampType: MBLK				TestCode: EPA Method 8015D Mod: Gasoline Range					
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			

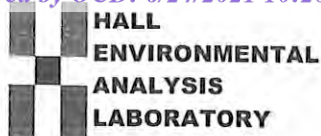
Sample ID: 2103d36-061ams	SampType: MS				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: BS21-68 1.0'	Batch ID: 59077				RunNo: 76442					
Prep Date: 3/30/2021	Analysis Date: 4/2/2021				SeqNo: 2707724	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.85	0	94.2	49.2	122			
Surr: BFB	510		497.0		104	70	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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	4.9	24.70	0	104	49.2	122	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 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



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 Number: **2103D36**

RcptNo: 1

Received By: **Juan Rojas**

3/30/2021 7:35:00 AM

Juan Rojas

Completed By: **Desiree Dominguez**

3/30/2021 8:13:25 AM

Desiree

Reviewed By:

JR 3/30/21

Chain of Custody

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

Log In

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

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

JD
3/30/21

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.2	Good				
2	0.5	Good				
3	0.9	Good				

Chain-of-Custody Record

Client: Vertex

Mailing Address:

Phone #: _____

email or Fax#: _____

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ Other _____

☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time: 5 Day

☒ Standard ☐ Rush

Project Name: Stebbins Federal SWP

Project #: 21E-06687

Project Manager: Monica Peppin

Sampler: MJP

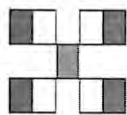
On Ice: ☒ Yes ☐ No

of Coolers: 3

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	Cooler Temp (including CF): <u>See Remarks</u> (°C)
3-26-21	1030	Soil	B521-44	402	ice	2103D36	-037
	1035		B521-45				-038
	1040		B521-46				-039
	1045		B521-47				-040
	1050		B521-48				-041
	1055		B521-49				-042
	1100		B521-50				-043
	1105		B521-51				-044
	1110		B521-52				-045
	1115		B521-53				-046
	1120		B521-54				-047
	1125		B521-55				-048

Relinquished by: [Signature] Date: 3/24/21 Time: 1300

Relinquished by: [Signature] Date: 3/24/21 Time: 1900



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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

Remarks:

1.2-0=1.2
0.5-0=0.5
0.9-0=0.9

Received by: [Signature] Date: 3/24/21 Time: 1300

Received by: [Signature] Date: 3/24/21 Time: 1900

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.

Chain-of-Custody Record

Client: <u>Vertex</u>		Turn-Around Time: <u>5 Day</u>	
Mailing Address:		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Phone #:		Project Name: <u>Stebbins Federal SWD</u>	
email or Fax#:		Project #: <u>21E-00087</u>	
QA/QC Package:		Project Manager: <u>Monica Peppin</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: <u>MJP</u>	
Accreditation: <input type="checkbox"/> Az Compliance		On Ice: <input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> NELAC <input type="checkbox"/> Other		# of Coolers: <u>3</u>	
<input type="checkbox"/> EDD (Type)		Cooler Temp (including CF): <u>See Remarks</u> (°C)	
Date	Time	Matrix	Sample Name
3-26-21	1430	Soil	WS21-03 0-1.0'
	1435		WS21-04 0-1.0'
	1440		WS21-05 0-1.0'
	1445		WS21-06 0-1.0'
	1450		WS21-07 0-1.0'
	1455		WS21-08 0-1.0'
	1500		WS21-09 0-1.0'
	1505		WS21-10 0-1.0'
	1510		WS21-11 0-1.0'
	1515		WS21-12 0-1.0'
	1520		WS21-13 0-1.0'
	1525		WS21-14 0-1.0'
Date:	Time:	Relinquished by:	
3/29/21	1300		
Date:	Time:	Relinquished by:	
3/29/21	1910		



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
BTEX, MTBE / TMB's (8021)	✓	✓	✓	✓	✓	✓	✓	✓
HEAL No. 2103D36	402	ice						
Container Type and #								
Preservative Type								
HEAL No.								
2103D36								
-073 069								
-074 070								
-075 071								
-076 072								
-077 073								
-078 074								
-079 075								
-080 076								
-081 077								
-082 078								
-083 079								
-084 080								

Remarks:

1.2-0-1.2
0.5-0-0.5
0.9-0-0.9

Received by: Date: 3/29/21 Time: 1200

Received by: Date: 3/29/21 Time: 1200

Mataador

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.

Chain-of-Custody Record

Client: Vertex

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)Turn-Around Time: 5 Day☒ Standard ☐ Rush

Project Name:

Stebbins Federal SWD

Project #:

21E-00087

Project Manager:

Monica PeppinSampler: MJPOn Ice: ☒ Yes ☐ No# of Coolers: 3Cooler Temp (including CP): See Remarks (°C)

Container Type and #

Preservative Type

HEAL No.

Date

Time

Sample Name

Matrix

Date

Time

Sample Name

Matrix

Date

Time

Sample Name

Matrix

Date

Time

Sample Name

Matrix

Date

Time

Sample Name

Matrix

Date

Time

Sample Name

Matrix

Date

Time

Relinquished by:

[Signature]

Date:

Time:

3/29/211300

Relinquished by:

[Signature]

Date:

Time:

3/30/217:35

Received by:

Date

Time

3/29/211300

Received by:

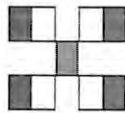
[Signature]

Date:

Time:

3/30/217:35

Remarks:

1.2-0-1.20.5-0-0.50.9-0-0.93/30/21 7:35 MatadorHALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl⁻, Br⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

BTX (MTBE / TMB's (8021))

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl⁻, Br⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

BTX (MTBE / TMB's (8021))

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl⁻, Br⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

BTX (MTBE / TMB's (8021))

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl⁻, Br⁻, NO₃⁻, NO₂⁻, PO₄³⁻, SO₄²⁻

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)



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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	5.0		mg/Kg	1	4/5/2021 8:01:00 PM
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	1	4/5/2021 8:01:00 PM
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
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	4/5/2021 8:01:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	85	60		mg/Kg	20	4/6/2021 3:12:34 AM

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

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

Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.8		mg/Kg	1	4/5/2021 8:21:00 PM
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	1	4/5/2021 8:21:00 PM
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	120	60		mg/Kg	20	4/6/2021 3:24:59 AM

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

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

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.8		mg/Kg	1	4/5/2021 9:20:00 PM
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	1	4/5/2021 9:20:00 PM
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
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	4/5/2021 9:20:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	130	60		mg/Kg	20	4/6/2021 4:02:15 AM

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

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

Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	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	4.8		mg/Kg	1	4/5/2021 9:40:00 PM
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	1	4/5/2021 9:40:00 PM
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
Surr: 4-Bromofluorobenzene	83.3	70-130		%Rec	1	4/5/2021 9:40:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	120	60		mg/Kg	20	4/6/2021 4:39:29 AM

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

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

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Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/5/2021 11:39:00 PM
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	1	4/5/2021 11:39:00 PM
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
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	4/5/2021 11:39:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	110	60		mg/Kg	20	4/6/2021 4:51:54 AM

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

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

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	5.0		mg/Kg	1	4/6/2021 1:39:00 AM
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	1	4/6/2021 1:39:00 AM
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	120	60		mg/Kg	20	4/6/2021 5:16:44 AM

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

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

Analytical Report

Lab Order 2103D82

Date Reported: 4/7/2021

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.8		mg/Kg	1	4/6/2021 1:59:00 AM
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	1	4/6/2021 1:59:00 AM
Toluene	ND	0.048		mg/Kg	1	4/6/2021 1:59:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	4/6/2021 1:59:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	4/6/2021 1:59:00 AM
Surr: 4-Bromofluorobenzene	86.5	70-130		%Rec	1	4/6/2021 1:59:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	110	60		mg/Kg	20	4/5/2021 11:26:40 PM

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

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

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Analytical Report

Lab Order 2103D82

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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	4.9		mg/Kg	1	4/6/2021 2:19:00 AM
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	1	4/6/2021 2:19:00 AM
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
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	4/6/2021 2:19:00 AM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	100	60		mg/Kg	20	4/6/2021 12:28:43 AM

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

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

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Analytical Report

Lab Order 2103D82

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)	ND	9.2		mg/Kg	1	4/2/2021 12:01:25 PM
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 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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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 ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2103D82

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**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: 4/5/2021	Analysis Date: 4/5/2021	SeqNo: 2708614 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.8	90	110			

Sample ID: MB-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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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								
Prep Date: 4/4/2021	Analysis Date: 4/5/2021	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	0	94.4	90	110			

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	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 59241	RunNo: 76503								
Prep Date: 4/6/2021	Analysis Date: 4/6/2021	SeqNo: 2710355 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.1	90	110			

Qualifiers:

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

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

QC SUMMARY REPORT**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: lcs	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 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

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

WO#: 2103D82

07-Apr-21

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

Sample ID: MB-59124	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59124	RunNo: 76411								
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: 2706303 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		87.2	70	130			

Sample ID: LCS-59124	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59124	RunNo: 76411								
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: 2706304 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.3	68.9	141			
Surr: DNOP	4.1		5.000		82.9	70	130			

Sample ID: 2103D82-007AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS21-80 1.0'	Batch ID: 59124	RunNo: 76411								
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: 2706305 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.8	49.21	0	74.4	15	184			
Surr: DNOP	3.7		4.921		75.2	70	130			

Sample ID: 2103D82-007AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS21-80 1.0'	Batch ID: 59124	RunNo: 76411								
Prep Date: 4/1/2021	Analysis Date: 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	

Sample ID: MB-59137	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59137	RunNo: 76409								
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: 2706593 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	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

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

WO#: 2103D82

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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.7	68.9	141			
Surr: DNOP	4.8		5.000		96.7	70	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	0	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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	9.7	48.73	0	89.7	15	184	7.65	23.9	
Surr: DNOP	4.6		4.873		93.5	70	130	0	0	

Sample ID: MB-59156	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59156			RunNo: 76435						
Prep Date: 4/2/2021	Analysis Date: 4/3/2021			SeqNo: 2707387		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	9.5		10.00		94.8	70	130			

Sample ID: MB-59161	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 59161			RunNo: 76435						
Prep Date: 4/2/2021	Analysis Date: 4/3/2021			SeqNo: 2707388		Units: %Rec				
Analyte	Result	PQL	SPK 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			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 59156			RunNo: 76435						
Prep Date: 4/2/2021	Analysis Date: 4/3/2021			SeqNo: 2707389		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

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

WO#: 2103D82

07-Apr-21

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

Sample ID: LCS-59156	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59156	RunNo: 76435								
Prep Date: 4/2/2021	Analysis Date: 4/3/2021	SeqNo: 2707389 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	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range 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
Surr: DNOP	4.0		5.000		79.5	70	130			

Sample ID: MB-59133	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59133	RunNo: 76411								
Prep Date: 4/1/2021	Analysis Date: 4/2/2021	SeqNo: 2707609 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: 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								
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: 76466								
Prep Date: 4/3/2021	Analysis Date: 4/6/2021	SeqNo: 2709506 Units: %Rec								
Analyte	Result	PQL	SPK value	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 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: %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:

* Value exceeds Maximum Contaminant 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

QC SUMMARY REPORT**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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		104	70	130			

Sample ID: lcs-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	0	100	78.6	131			
Surr: BFB	1100		1000		111	70	130			

Sample ID: 2103d82-047ams	SampType: MS	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: 2708314 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.15	0	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.13	0	92.9	61.3	114	4.10	20	
Surr: BFB	1100		965.3		110	70	130	0	0	

Sample ID: lcs-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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	78.6	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	Analysis Date: 4/5/2021	SeqNo: 2708459 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

QC SUMMARY REPORT**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								
Prep Date: 3/31/2021	Analysis Date: 4/5/2021	SeqNo: 2708459 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	920		1000		91.7	70	130			

Sample ID: lcs-59122	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 59122	RunNo: 76461								
Prep Date: 3/31/2021	Analysis Date: 4/5/2021	SeqNo: 2708482 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.93	0	86.9	61.3	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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.06	0	89.8	61.3	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	Analysis Date: 4/6/2021	SeqNo: 2709883 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

QC SUMMARY REPORT**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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		109	70	130			

Sample ID: lcs-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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.08	0	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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	23.83	0	91.2	61.3	114	4.12	20	
Surr: BFB	1100		953.3		113	70	130	0	0	

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: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	980		1000		98.2	70	130			

Sample ID: lcs-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
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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2103D82

07-Apr-21

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

Sample ID: lcs-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: %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

QC SUMMARY REPORT**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 8021B: Volatiles								
Client ID: PBS	Batch ID: 59138	RunNo: 76441								
Prep Date: 4/1/2021	Analysis Date: 4/5/2021	SeqNo: 2708359 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		103	70	130			

Sample ID: LCS-59138	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59138	RunNo: 76441								
Prep Date: 4/1/2021	Analysis Date: 4/5/2021	SeqNo: 2708360 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: lcs-59120	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59120	RunNo: 76461								
Prep Date: 3/31/2021	Analysis 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: mb-59120	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 59120	RunNo: 76461								
Prep Date: 3/31/2021	Analysis Date: 4/5/2021	SeqNo: 2708501 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.2	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

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

WO#: 2103D82

07-Apr-21

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

Sample ID: lcs-59122	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 59122			RunNo: 76461						
Prep Date: 3/31/2021	Analysis Date: 4/5/2021			SeqNo: 2708524		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	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: mb-59122	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 59122			RunNo: 76461						
Prep Date: 3/31/2021	Analysis Date: 4/5/2021			SeqNo: 2708525		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		86.7	70	130			

Sample ID: 2103D82-008ams	SampType: MS			TestCode: EPA Method 8021B: Volatiles						
Client ID: BS21-81 1.0'	Batch ID: 59122			RunNo: 76461						
Prep Date: 3/31/2021	Analysis Date: 4/6/2021			SeqNo: 2708528		Units: mg/Kg				
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: 2103D82-008amsd	SampType: MSD			TestCode: EPA Method 8021B: Volatiles						
Client ID: BS21-81 1.0'	Batch ID: 59122			RunNo: 76461						
Prep Date: 3/31/2021	Analysis Date: 4/6/2021			SeqNo: 2708529		Units: mg/Kg				
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 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

QC SUMMARY REPORT**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								
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		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	SeqNo: 2709963 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	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	SeqNo: 2709966 Units: mg/Kg								
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			

Sample ID: 2103d82-028amsd	SampType: MSD	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	SeqNo: 2709967 Units: mg/Kg								
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
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

QC SUMMARY REPORT**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				SeqNo: 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: lcs-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			

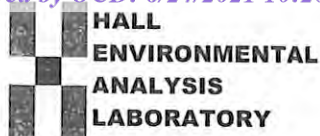
Sample ID: mb-59171	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 59171				RunNo: 76481					
Prep Date: 4/2/2021	Analysis Date: 4/6/2021				SeqNo: 2710654	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 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 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

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Hall Environmental Analysis Laboratory
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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 Number: 2103D82

RcptNo: 1

Received By: Desiree Dominguez 3/31/2021 8:00:00 AM

Completed By: Desiree Dominguez 3/31/2021 9:01:44 AM

Reviewed By: SPA 3-31-21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.3	Good				

Chain-of-Custody Record

Client: Vertex

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

5 Day☒ Standard ☐ Rush

Project Name:

Stebbins Federal SWD

Project #:

21E-00087

Project Manager:

Monica PappinSampler: MSPOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

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Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

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Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

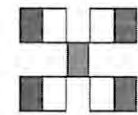
HEAL No.

Cooler Temp (including CF): 0.4 - 0.1 = 0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

HALL ENVIRONMENTAL
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

BTEX MTBE / TMB's (8021)

TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

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Total Coliform (Present/Absent)

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TPH: 8015D (GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

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PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

BTEX MTBE / TMB's (8021)

Remarks:

Received by: [Signature] Date: 3/30/21 Time: 1300Via: courierRelinquished by: [Signature]Date: 3/30/21 Time: 1900Relinquished by: [Signature]Date: 3/30/21 Time: 1900

Mataador

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

Chain-of-Custody Record

Client: Vertex

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

5 Day☒ Standard ☐ Rush

Project Name:

Stebbins Federal SWD

Project #:

21E-00087

Project Manager:

Monica PeppinSampler: MSPOn Ice: ☒ Yes ☐ No# of Coolers: 1DA0 331-21Cooler Temp (including CP): 236.4-0.1=0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

2103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040-041-042-043-044-045-046-047DA0 331-212103D82402ice-037-038-039-040



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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**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 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 2 of 5

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

WO#: 2104A33

03-May-21

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

Sample ID: MB-59659	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59659	RunNo: 77011								
Prep Date: 4/27/2021	Analysis Date: 4/28/2021	SeqNo: 2730655 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	70	130			

Sample ID: LCS-59659	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59659	RunNo: 77011								
Prep Date: 4/27/2021	Analysis Date: 4/28/2021	SeqNo: 2730657 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	10	50.00	0	119	68.9	141			
Surr: DNOP	5.9		5.000		119	70	130			

Sample ID: 2104A33-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS21-02 0-1	Batch ID: 59659	RunNo: 77011								
Prep Date: 4/27/2021	Analysis Date: 4/28/2021	SeqNo: 2730660 Units: mg/Kg								
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			

Sample ID: 2104A33-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS21-02 0-1	Batch ID: 59659	RunNo: 77011								
Prep Date: 4/27/2021	Analysis Date: 4/28/2021	SeqNo: 2730661 Units: mg/Kg								
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	5.3		4.808		110	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

QC SUMMARY REPORT**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			
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

QC SUMMARY REPORT**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 8021B: Volatiles						
Client ID: LCSS	Batch ID: 59612			RunNo: 77010						
Prep Date: 4/23/2021	Analysis Date: 4/28/2021			SeqNo: 2729852		Units: mg/Kg				
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	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 59612			RunNo: 77010						
Prep Date: 4/23/2021	Analysis Date: 4/28/2021			SeqNo: 2729853		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	0.86		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 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



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 Number: **2104A33**

RcptNo: 1

Received By: **Juan Rojas**

4/23/2021 7:20:00 AM

Juan Rojas

Completed By: **Cheyenne Cason**

4/23/2021 8:14:27 AM

Cheyenne Cason

Reviewed By:

JR 4/23/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

JO
4/23/21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good				

Chain-of-Custody Record

Client: Veritex

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

5 Day

☒ Standard ☐ Rush

Project Name:

Stebbins Federal SWP

Project #:

21E-00087-001

Project Manager:

Monica Peppin

Sampler: MJP

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CP): 0.9-0.2-0.3 (°C)

Container Type and #

402 ice

Preservative Type

2104433

HEAL No.

cel

Date: 4/20/21 8:15

Time: 1900

Relinquished by: [Signature]Relinquished by: [Signature]Received by: [Signature]Via: 4/23/21 7:20

Date: 4/23/21

Time: 7:20

Received by: [Signature]Via: 4/23/21 7:20

Remarks: CC: M. Peppin

CC: M. Peppin

Analysis Request

Total Coliform (Present/Absent)

8270 (Semi-VOA)

8260 (VOA)

C/F, Br, NO₃, NO₂, PO₄, SO₄

RCRA 8 Metals

PAHs by 8310 or 8270SIMS

EDB (Method 504.1)

8081 Pesticides/8082 PCB's

TPH:8015D(GRO / DRO / MRO)

BTEX / MTBE / TMB's (8021)

✓

✓

cel

Send all lab reports to
PermiEnviroVeritex, CA
**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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



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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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 ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	4/5/2021 3:00:54 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	4/5/2021 3:00:54 PM
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		mg/Kg	1	4/7/2021 12:41:28 PM
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	1	4/7/2021 12:41:28 PM
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
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	4/7/2021 12:41:28 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	4/7/2021 10:14:54 AM

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

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

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 RANGE						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	63	60		mg/Kg	20	4/7/2021 6:24:36 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
Chloride	61	60		mg/Kg	20	4/7/2021 6:37:01 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 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 RANGE						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: JMR
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 RANGE						Analyst: JMR
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 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

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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 LIST						Analyst: JMR
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 RANGE						Analyst: JMR
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104068

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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QC SUMMARY REPORT**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: lcs	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								

Sample ID: LCS-59266	SampType: lcs	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 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

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

WO#: 2104068

14-Apr-21

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

Sample ID: MB-59186	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59186	RunNo: 76459								
Prep Date: 4/3/2021	Analysis Date: 4/5/2021	SeqNo: 2708379 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		121	70	130			

Sample ID: LCS-59186	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59186	RunNo: 76459								
Prep Date: 4/3/2021	Analysis Date: 4/5/2021	SeqNo: 2708383 Units: mg/Kg								
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	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS21-36 0-1'	Batch ID: 59186	RunNo: 76459								
Prep Date: 4/3/2021	Analysis Date: 4/5/2021	SeqNo: 2708385 Units: mg/Kg								
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: 2104068-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS21-36 0-1'	Batch ID: 59186	RunNo: 76459								
Prep Date: 4/3/2021	Analysis Date: 4/5/2021	SeqNo: 2708387 Units: mg/Kg								
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	

Sample ID: MB-59187	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59187	RunNo: 76466								
Prep Date: 4/3/2021	Analysis Date: 4/6/2021	SeqNo: 2709506 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		134	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 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

QC SUMMARY REPORT**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: mg/Kg					
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	5.0		5.000		99.6	70	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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.1	45.50	0	116	15	184			
Surr: DNOP	6.0		4.550		132	70	130			S

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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 59218		RunNo: 76466							
Prep Date: 4/5/2021	Analysis Date: 4/6/2021		SeqNo: 2709912		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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							
Prep Date: 4/5/2021	Analysis Date: 4/6/2021		SeqNo: 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			

Qualifiers:

* Value exceeds Maximum Contaminant 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

QC SUMMARY REPORT**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: lcs-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	0	101	78.6	131			
Surr: BFB	1100		1000		109	70	130			

Sample ID: lcs-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			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.98	0	93.9	61.3	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2104068

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		Analysis Date: 4/7/2021		SeqNo: 2710558		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.13	0	98.2	61.3	114	0.979	20	
Surr: BFB	1100		965.3		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 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

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QC SUMMARY REPORT**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 8021B: Volatiles								
Client ID: PBS	Batch ID: 59167	RunNo: 76491								
Prep Date: 4/2/2021	Analysis Date: 4/7/2021	SeqNo: 2709986 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	0.97		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: 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: lcs-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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	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: 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: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	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 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

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

WO#: 2104068

14-Apr-21

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

Sample ID: 2104068-038ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: WS21-73 0-1'	Batch ID: 59171	RunNo: 76481								
Prep Date: 4/2/2021	Analysis Date: 4/7/2021	SeqNo: 2710665	Units: mg/Kg							
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	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: WS21-73 0-1'	Batch ID: 59171	RunNo: 76481								
Prep Date: 4/2/2021	Analysis Date: 4/7/2021	SeqNo: 2710666	Units: mg/Kg							
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 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

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

WO#: 2104068

14-Apr-21

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

Sample ID: Ics-59168	SampType: LCS4	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: BatchQC	Batch ID: 59168	RunNo: 76482								
Prep Date: 4/2/2021	Analysis Date: 4/6/2021	SeqNo: 2710583			Units: mg/Kg					
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: mb-59168	SampType: MBLK	TestCode: EPA Method 8260B: Volatiles Short List								
Client ID: PBS	Batch ID: 59168	RunNo: 76482								
Prep Date: 4/2/2021	Analysis Date: 4/6/2021	SeqNo: 2710584			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: 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	SampType: MS4	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 Date: 4/6/2021	SeqNo: 2710589			Units: mg/Kg					
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 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

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QC SUMMARY REPORT**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 Date: 4/7/2021		SeqNo: 2710590		Units: mg/Kg				
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
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

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

WO#: 2104068

14-Apr-21

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

Sample ID: lcs-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: 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	87.8	70	130			
Surr: BFB	520		500.0		103	70	130			

Sample ID: mb-59168	SampType: MBLK				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: PBS	Batch ID: 59168				RunNo: 76482					
Prep Date: 4/2/2021	Analysis Date: 4/6/2021				SeqNo: 2710615	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			

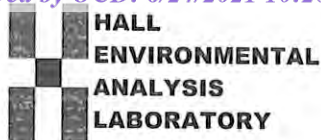
Sample ID: 2104068-017ams	SampType: MS				TestCode: EPA Method 8015D Mod: Gasoline Range					
Client ID: WS21-52 0-1.5'	Batch ID: 59168				RunNo: 76482					
Prep Date: 4/2/2021	Analysis Date: 4/6/2021				SeqNo: 2710617	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.8	23.81	0	87.2	49.2	122			
Surr: BFB	490		476.2		103	70	130			

Sample ID: 2104068-017amsd	SampType: MSD				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: 2710618	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.9	24.63	0	77.0	49.2	122	9.14	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



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 Number: **2104068**

RcptNo: 1

Received By: **Juan Rojas**

4/2/2021 7:35:00 AM

Juan Rojas

Completed By: **Desiree Dominguez**

4/2/2021 8:08:42 AM

Desiree Dominguez

Reviewed By:

JR 4/2/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good				
2	2.0	Good				

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

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

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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

Date Reported: 4/9/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resource Group Ltd.

Client Sample ID: BS21-134 1'

Project: Stebbins Federal SWD

Collection Date: 3/30/2021 12:05:00 PM

Lab ID: 2104073-014

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 ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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
EPA METHOD 8021B: VOLATILES						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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2104073

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	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: mb
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: VP
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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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	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: lcs	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 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

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-59188	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59188	RunNo: 76459								
Prep Date: 4/3/2021	Analysis Date: 4/5/2021	SeqNo: 2708381			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		113	70	130			

Sample ID: LCS-59188	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59188	RunNo: 76459								
Prep Date: 4/3/2021	Analysis Date: 4/5/2021	SeqNo: 2708384			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	107	68.9	141			
Surr: DNOP	5.2		5.000		104	70	130			

Sample ID: MB-59189	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59189	RunNo: 76466								
Prep Date: 4/3/2021	Analysis Date: 4/6/2021	SeqNo: 2709911			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.6	70	130			

Sample ID: MB-59218	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 59218	RunNo: 76466								
Prep Date: 4/5/2021	Analysis Date: 4/6/2021	SeqNo: 2709912			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		98.8	70	130			

Sample ID: LCS-59189	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 59189	RunNo: 76466								
Prep Date: 4/3/2021	Analysis Date: 4/6/2021	SeqNo: 2709914			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			

Qualifiers:

* Value exceeds Maximum Contaminant 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 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		SeqNo: 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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.5	47.26	0	102	15	184			
Surr: DNOP	4.9		4.726		103	70	130			

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					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	9.6	48.22	0	93.6	15	184	6.75	23.9	
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

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-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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	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: 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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.2	70	130			

Sample ID: lcs-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				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.5	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: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	24.15	0	97.4	61.3	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: 4/2/2021	Analysis Date: 4/7/2021				SeqNo: 2711161	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

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

WO#: 2104073

09-Apr-21

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							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.78	0	94.7	61.3	114	0.287	20	
Surr: BFB	1100		991.1		108	70	130	0	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: lcs-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 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

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-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: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.2	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: 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: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130			

Sample ID: mb-59173	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 59173				RunNo: 76526					
Prep Date: 4/2/2021	Analysis Date: 4/7/2021				SeqNo: 2711203	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	0.97		1.000		97.3	70	130			

Sample ID: LCS-59173	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 59173				RunNo: 76526					
Prep Date: 4/2/2021	Analysis Date: 4/7/2021				SeqNo: 2711204	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	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 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

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

WO#: 2104073

09-Apr-21

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

Sample ID: 2104073-018ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS21-138 1'	Batch ID: 59173	RunNo: 76526								
Prep Date: 4/2/2021	Analysis Date: 4/7/2021	SeqNo: 2711207 Units: mg/Kg								
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		97.7	70	130			

Sample ID: 2104073-018amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS21-138 1'	Batch ID: 59173	RunNo: 76526								
Prep Date: 4/2/2021	Analysis Date: 4/7/2021	SeqNo: 2711208 Units: mg/Kg								
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	

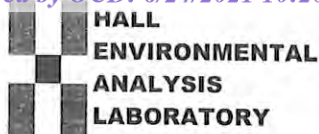
Sample ID: mb-59235	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 59235	RunNo: 76526								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711230 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	70	130			

Sample ID: LCS-59235	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59235	RunNo: 76526								
Prep Date: 4/6/2021	Analysis Date: 4/7/2021	SeqNo: 2711231 Units: %Rec								
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



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 Number: **2104073**

RcptNo: 1

Received By: **Juan Rojas**

4/2/2021 7:35:00 AM

Juan Rojas

Completed By: **Cheyenne Cason**

4/2/2021 8:34:11 AM

Reviewed By:

JK 4/2/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(≤ 2 or >12 unless noted)

Adjusted?

Checked by:

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via:

☐ eMail

☐ Phone

☐ Fax

☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good				
2	2.0	Good				

Chain-of-Custody Record

Client: VerTex

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)

Turn-Around Time:

5 Day

☒ Standard ☐ Rush

Project Name:

Stebbins Federal SWD

Project #:

21E-00087

Project Manager:

Monica Peppin

Sampler:

JR

On Ice: ☒ Yes ☐ No

of Coolers: 2

Cooler Temp (including CF): 3.2-0.1=3.1 (°C)

Container Type and #

Preservative Type

HEAL No.

2104073

402 ice

013

014

0185

016

017

018

019

020

021

022

023

024

Relinquished by:

Time: 4/1/21 11:00

Via: Alumina

Date: 4/1/21 11:00

Remarks:

BTEX MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

Analysis Request

Hall Environmental

ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

send all reports to permian@vertex.ca

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

Page 510 of 525

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

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.

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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.



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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

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 ORGANICS						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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 ORGANICS						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.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

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

WO#: 2104919

27-Apr-21

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 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

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

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	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.1	70	130			

Sample ID: 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								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	68.9	141			
Surr: DNOP	5.5		5.000		110	70	130			

Qualifiers:

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

QC SUMMARY REPORT**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: lcs-59568	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 59568	RunNo: 76925								
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			
Surr: BFB	1100		1000		110	70	130			

Qualifiers:

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

QC SUMMARY REPORT**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 8021B: Volatiles								
Client ID: PBS	Batch ID: 59568	RunNo: 76925								
Prep Date: 4/22/2021	Analysis Date: 4/24/2021	SeqNo: 2726133	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: LCS-59568	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 59568	RunNo: 76925								
Prep Date: 4/22/2021	Analysis Date: 4/24/2021	SeqNo: 2726134	Units: mg/Kg							
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
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



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 Number: **2104919**

RcptNo: 1

Received By: **Juan Rojas**

4/21/2021 7:35:00 AM

Juan Rojas

Completed By: **Cheyenne Cason**

4/21/2021 8:40:58 AM

Cheyenne Cason

Reviewed By:

JR 4/21/21

Chain of Custody

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

Log In

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

IO
4/21/21

of preserved bottles checked for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.5	Good				

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
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.

Incident ID	nAPP2102534956
District RP	
Facility ID	
Application ID	

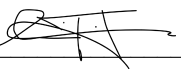
Closure

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.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Arsenio Jones Title: RES Specialist
Signature:  Date: 6/12/2021
email: arsenio.jones@matadorresources.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
Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

District I

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

District II

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

District III

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

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 28503

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 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