



August 29, 2022

Vertex Project #: 22E-00123-04

Spill Closure Report: Cooper AHH #1 Battery (Section 1, Township 20 South, Range 24 East)
API: 30-015-26299
County: Eddy
Incident Report: NMLB1027336691/2RP-439

Prepared For: EOG Resources, Inc.
104 South 4th Street
Artesia, New Mexico 88210

New Mexico Oil Conservation Division - District 2 - Artesia

811 South 1st Street
Artesia, New Mexico 88210

EOG Resources, Inc. retained Vertex Resource Services Inc. (Vertex) to conduct a Spill Assessment for a release of produced water caused by the breaking of a nipple on the discharge of a water pump at the Cooper AHH #1 Battery, API 30-015-26299, Incident NMLB1027336691/2RP-439 (hereafter referred to as "Cooper"). EOG provided notification to New Mexico Oil Conservation District (NMOCD) District 2 and the Bureau of Land Management (BLM), who own the land, via submission of an initial C-141 Release Notifications (Attachment 1). This letter provides a description of the Spill Assessment and includes a request for Spill Closure. The spill area is located at N 32.6055794, W -104.544754.

Background

The site is located approximately 7.21 miles west of Seven Rivers, New Mexico. The legal location for the site is Section 1, Township 20 South and Range 24 East in Eddy County, New Mexico. The spill area is located on BLM property. An aerial photograph and site schematic are included in Figure 1, Attachment 2.

The Geological Map of New Mexico (New Mexico Bureau of Geology and Mineral Resources, 2021) indicates the site's surface geology is comprised primarily of Qp - Piedmont alluvial deposits (Holocene to lower Pleistocene) and is characterized as Reagon loam. Predominant soil texture on the site is loamy. Ecological settings of the area consist of grasslands with uniformly distributed grass patches on uncompacted soils. Dominant vegetation within this area includes black grama, tobosa, bunchgrasses, soap tree yucca, forbs, broom snakeweed, prickly pear and threeawns. Mesquite, tarbrush, creosote, and lovegrass are the greatest threat to dominate the area in the long term after disturbance.

The surrounding landscape is associated with alluvial fans and fan remnants typical of elevations between 1,100 to 4,400 feet above sea level. The climate is semi-arid with an average annual precipitation ranging between 7 to 14 inches. This soil tends to be well drained with low runoff and moderate available water supply (United States Department of Agriculture, Natural Resource Conservation Service, 2021).

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There is no surface water located on-site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 of the New Mexico Administrative Code (NMAC), is Brantley Lake, located approximately 8.58 miles east-southeast of the site (United States Fish and Wildlife Service, 2021). There are no continuously flowing watercourses, lakebeds, sinkholes, play lakes, or other critical water or community features at Cooper, as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Incident Description

The spill occurred on August 17, 2010, due to a failure of the nipple on the discharge of the water pump. The spill was reported on September 3, 2010 and involved the release of approximately 925 barrels (bbl) of produced water into the unlined containment. Approximately 910 bbl of free fluid was removed during initial spill clean-up. The NMOCD C-141 Report: NMLB1027336691/2RP-439 is included in Attachment 1.

Closure Criteria Determination

The depth to groundwater was determined using information from the New Mexico Office of the State Engineer Water Depth to Water report and United States Department of the Interior, United States Geological Survey. A 0.5-mile search radius was used to determine groundwater depth. The closest recorded depth to groundwater was determined to be 300 feet below ground surface (bgs) and 0.13 miles from the site. This site is located within a high karst potential area and within 1,000 feet of a fresh water well.

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Closure Criteria Worksheet			
Site Name: Cooper AHH #1 Battery			
Spill Coordinates:		X: 32.60535	Y: -104.54472
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	300	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	45,311	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	45,311	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	8,945	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	710	feet
	ii) Within 1000 feet of any fresh water well or spring	No	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	1,623	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
10	Within a 100-year Floodplain	Zone X unshaded	year
11	Soil Type	Reagan Loam	
12	Ecological Classification	Loamy	
13	Geology	Qp	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

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The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 1.

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

TDS – total dissolved solids, TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics, BTEX – benzene, toluene, ethylbenzene and xylenes

Remedial Actions Taken

An initial site inspection of the spill area was completed on October 8, 2021, which identified the area of the spill specified in the initial C-141 Report, estimated the approximate volume of the spill and white lined the area required for the 811 One Call request. The impacted area was determined to be approximately 121 feet long and 88 feet wide; the total affected area was determined to be 5,309 square feet and the site schematic is included in Figure 1, Attachment 2. Field screening and laboratory results are included in Table 2, Attachment 3. The DFR and Daily Sampling Form associated with the site inspection is included in Attachment 4.

Remediation efforts began on November 29, 2021 and were completed on July 9, 2022. Vertex personnel supervised the excavation of impacted soils. Field screening was completed each day on multiple samples and consisted of analysis using on a photo ionization detector (volatile hydrocarbons), Dexsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and titration (chlorides). Field screening results were used to identify areas requiring further remediation from those areas showing concentrations below determined closure criteria levels. Soils were removed to a depth of 4, 12, 14, 17, and 20 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility. Field screening results are presented in Table 3 Attachment 3, as well as in the DFRs in Attachment 4. The site schematic is included in Figure 2, Attachment 2.

Notification that confirmatory samples were being collected was provided to the NMOCD on November 24, 2021, June 9, 2022, June 16, 2022, and June 23, 2022 and are included in Attachment 5. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. Confirmatory sampling was stopped along with remediation efforts so that the battery could be decommissioned and prepped for reclamation.

Remediation efforts resumed on April 18, 2022. Due to the removal of the equipment, confirmatory samples previously collected were not used due to additional excavation being required. A total of 184 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Hall Environmental Analysis Laboratory under chain-of-custody (COC) protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0). Laboratory results are

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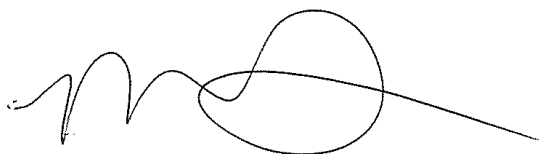
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presented in Table 3, Attachment 3 and the laboratory data report can be found in Attachment 6. All confirmatory samples collected and analyzed were below closure criteria for the site.

Closure Request

The spill area was fully delineated, remediated and backfilled with local soils. Confirmatory Sample Notification email is presented in Attachment 6. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release locations "under 50 feet to groundwater". Based on these findings, EOG Resources, Inc. requests that this spill be closed.

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



Monica Peppin, A.S.
PROJECT MANAGER, REPORTING

August 29, 2022

Date

Attachments

- Attachment 1. NMOCD C-141 Report
- Attachment 2. Figures
- Attachment 3. Tables
- Attachment 4. Daily Field Reports with Photographs
- Attachment 5. Confirmatory Sample Notification
- Attachment 6. Laboratory Data Reports and COCs

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References

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- New Mexico Bureau of Geology and Mineral Resources. (2019). *Interactive Geologic Map*. Retrieved from <http://geoinfo.nmt.edu>
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- United State Fish and Wildlife Service. (2019). *National Wetland Inventory Surface Waters and Wetland*. Retrieved from <https://www.fws.gov/wetlands/data/mapper.html>

EOG Resources, Inc.
Cooper AHH #1 Battery, NMLB1027336691/2RP-439

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Limitations

This report has been prepared for the sole benefit of EOG Resources, Inc. 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 EOG Resources, Inc. 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
1301 W. Grand Avenue, 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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

SEP 29 2010

Form C-141
Revised October 10, 2003

NMOCD ARTESIA

Submit 2 copies to appropriate
Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

NMCB1027336691

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Amanda Trujillo
Address 104 S. 4 th Street		Telephone No. 575-748-1471
Facility Name Cooper AHH #1 Battery	API Number 30-015-26299	Facility Type Battery
		Order Number 2RP-439
Surface Owner fee	Mineral Owner fee	Lease No.

LOCATION OF RELEASE

Unit Letter F	Section J	Township 20S	Range 24E	Feet from the 1650	North/South Line NORTH	Feet from the 1650	East/West Line WEST	County EDDY
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Latitude N33 13240 Longitude W104 13323

NATURE OF RELEASE

Type of Release WATER	Volume of Release 925	Volume Recovered 910
Source of Release Nipple on discharge of water pump blow out	Date and Hour of Occurrence 8/17/2010	Date and Hour of Discovery 8/17/2010 - PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher - NMOCD/Artesia	
By Whom? Amanda Trujillo - Yates Petroleum Corporation	Date and Hour 8/18/2010 pm 9/3/10 11:57am email ME	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse N/A	

If a Watercourse was Impacted, Describe Fully *
N/A

Describe Cause of Problem and Remedial Action Taken.*

Nipple on discharge of water pump broke. Closed valves and repaired damage. Vacuum trucks and clean up crew was dispatched immediately to make necessary repairs and remedial steps.

Describe Area Affected and Cleanup Action Taken.*

An approximate size of 125' x 50' was impacted. The impacted area is located within the battery around the storage tanks. Soil from the pooling areas was excavated and disposed of at an NMOCD approved facility. Vertical and horizontal delineation samples will be taken and analysis run for TPH and BTEX once all contaminated material has been removed. Chlorides analysis upon request. Depth to Ground Water: >100' (approx. 286' per New Mexico State Engineers Office); Wellhead Protection Area: No; Distance to Surface Water Body: >1000'; SITE RANKING IS 0. Based on site ground water quality and enclosed analytical results.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: A. Trujillo

Printed Name: Amanda Trujillo

Title: Environmental Scientist

E-mail Address: atrujillo@yatespetroleum.com

Date: Wednesday, September 29, 2010

Phone: 575-748-4310

Attach Additional Sheets If Necessary

OIL CONSERVATION DIVISION

Approved by: Signed By: Mike Bratcher

SEP 30 2010

Approval Date

Expiration Date:

Conditions of Approval:

Attached ☐

REMEDATION per OCD Rules and
Guidelines. SUBMIT REMEDIATION
PROPOSAL BY: 10/30/10

2RP-439

Ⓢ Chloride analysis Required

PNCB1027337331

Incident ID	NMLB1027336691
District RP	2RP-439
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: Chase Settle Title: Rep Safety & Environmental Sr
Signature: Chase Settle Date: 08/30/2022
email: chase_settle@eogresources.com Telephone: 575-748-4171

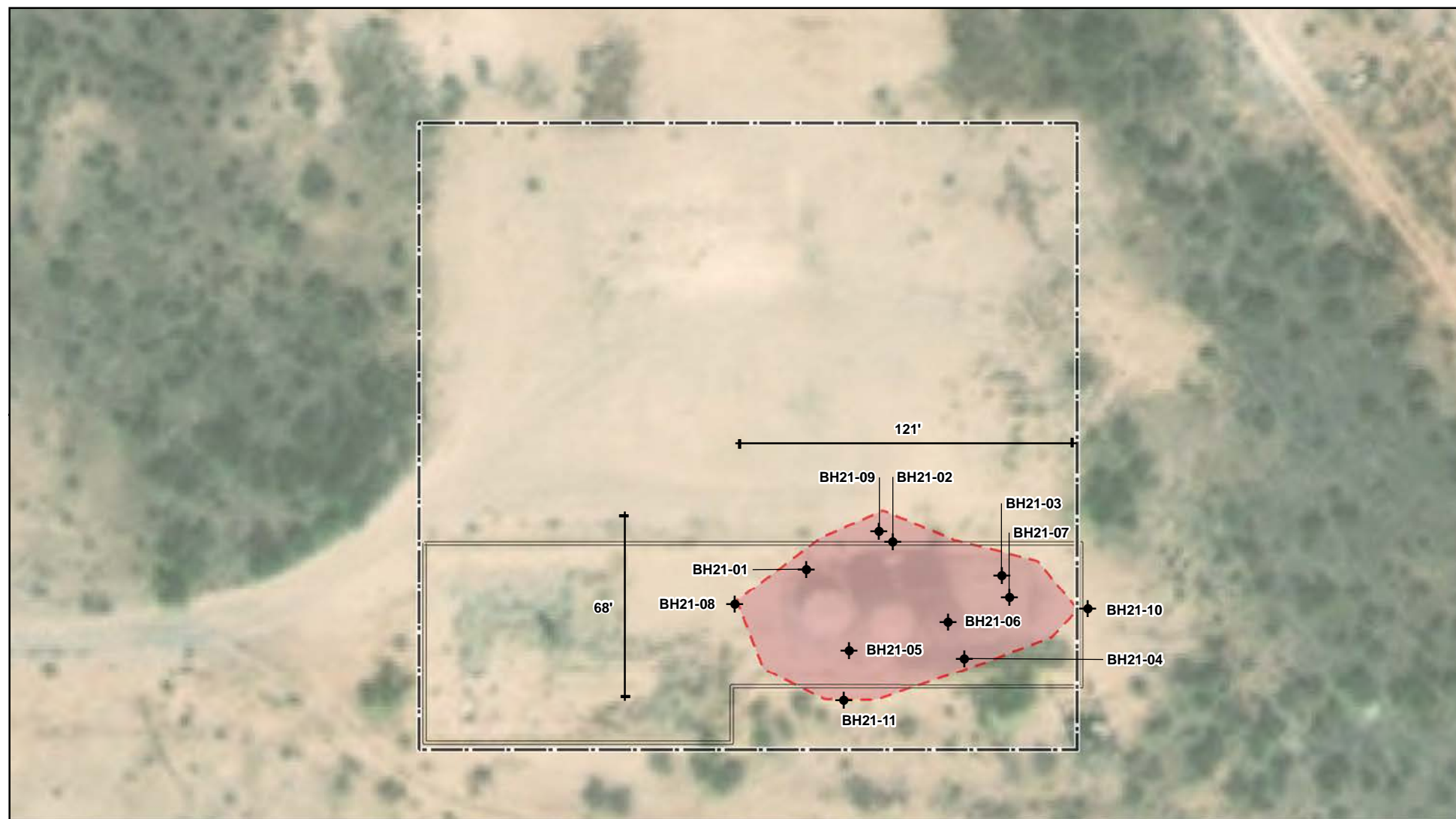
OCD Only

Received by: OCD Date: 8/30/2022

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: Ashley Maxwell Date: 2/24/2023
Printed Name: Ashley Maxwell Title: Environmental Specialist

ATTACHMENT 2



◆ Borehole
 [Red Shaded Area] Approximate Spill Extent (5,309 sq. ft.)
 [Dashed Line] Approximate Lease Boundary
 [Solid Line] Containment



0 10 20 40 60 ft
 Map Center:
 Lat/Long: 32.605543, -104.544869

NAD 1983 UTM Zone 13N
 Date: Nov 23/21



Initial Characterization Cooper AHH #1 Battery

FIGURE:

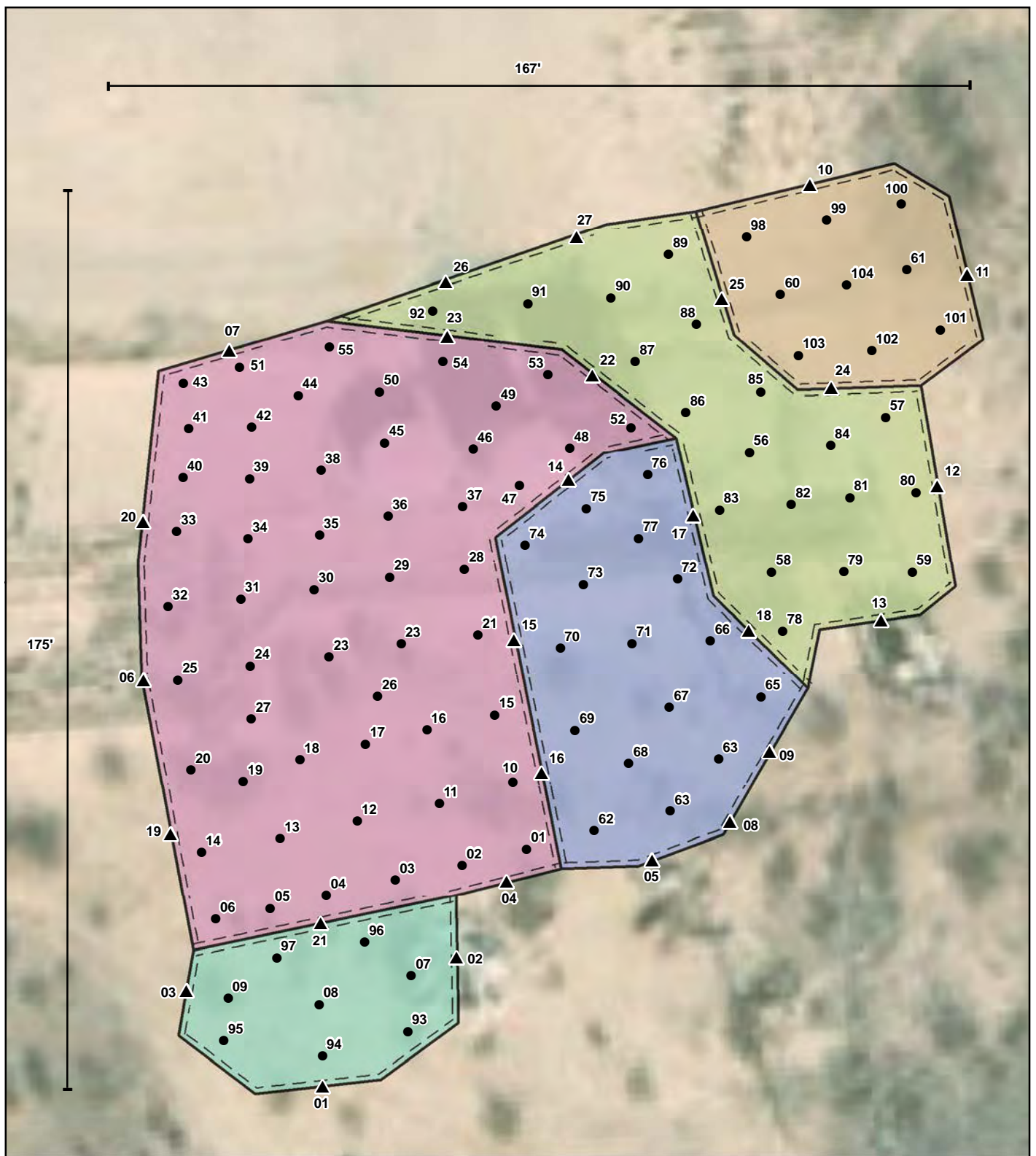
1



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: Imagery from ESRI, 2020. Testpit locations from GPS, Vertex Professional Services, Ltd., 2019.

VERSATILITY. EXPERTISE.



- Base Sample (Prefixed by "BS22-")
 - ▲ Wall Sample (Prefixed by "WS22-")
 - 4' Excavation Area (~3,758 sq. ft.)
 - 12' Excavation Area (~1,763 sq. ft.)
 - 14' Excavation Area (~1,498 sq. ft.)
 - 17' Excavation Area (~8,427 sq. ft.)
 - 20' Excavation Area (~3,110 sq. ft.)
- Total Excavation Area ~18, 557 sq. ft.



0 5 10 20 ft.
NAD 1983 UTM Zone 12N
Date: Jul 11/22

Map Center:
Lat: 32.605290,
Long: -104.544718



Confirmatory Sample Locations Cooper AHH #1 Battery

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: Background image from Esri, 2018. Feature locations from GPS, Vertex Professional Service., 2022.

VERSATILITY. EXPERTISE.

ATTACHMENT 3

Client Name: EOG Resources, Inc.
 Site Name: Cooper AHH #1 Battery
 NMOCD Tracking #: NML01027336691
 Project #: 21E-03278-04
 Lab Report: 2109D87, 2112A21, 2110781, 2112853, 2112930

Table 2. Initial Characterization Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs																
Sample Description			Field Screening			Petroleum Hydrocarbons										
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile							Extractable			
						Benzene	Toluene	Ethylbenzene	Xylenes (o&m)	Xylenes (p)	Xylenes (Total)	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Total Petroleum Hydrocarbons (TPH)
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BH21-01	0	9/22/2021	-	1,142	412	ND	ND	ND	ND	ND	ND	ND	ND	51	130	181
BH21-01	0.5	9/22/2021	-	-	687	-	-	-	-	-	-	-	-	-	-	-
BH21-01	1	9/22/2021	-	99	850	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	230
BH21-02	0	9/22/2021	-	82	290	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH21-02	0.5	9/22/2021	-	-	582	-	-	-	-	-	-	-	-	-	-	-
BH21-02	1	9/22/2021	-	1,000	330	ND	ND	ND	ND	ND	ND	ND	ND	160	440	600
BH21-03	0	9/22/2021	-	2,500	372	ND	ND	ND	ND	ND	ND	ND	ND	140	420	560
BH21-03	0.5	9/22/2021	-	-	527	-	-	-	-	-	-	-	-	-	-	-
BH21-03	1	9/22/2021	-	165	895	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	420
BH21-04	0	9/22/2021	-	1,249	220	ND	ND	ND	ND	ND	ND	ND	ND	72	380	452
BH21-04	0.5	9/22/2021	-	-	155	-	-	-	-	-	-	-	-	-	-	-
BH21-04	1	9/22/2021	-	837	525	ND	ND	ND	ND	ND	ND	ND	ND	120	400	520
BH21-04	2	10/8/2021	1	895	312	ND	ND	ND	ND	ND	ND	ND	ND	30	68	98
BH21-04	3	10/8/2021	1	47	615	ND	ND	ND	ND	ND	ND	ND	ND	31	61	92
BH21-04	4	10/8/2021	1	27	637	-	-	-	-	-	-	-	-	-	-	-
BH21-05	0	9/22/2021	-	2,500	185	ND	ND	ND	ND	ND	ND	ND	ND	1600	3200	4800
BH21-05	0.5	9/22/2021	-	-	165	-	-	-	-	-	-	-	-	-	-	-
BH21-05	1	9/22/2021	-	597	435	ND	ND	ND	ND	ND	ND	ND	ND	110	360	470
BH21-05	2	10/8/2021	1	220	157	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH21-05	3	10/8/2021	1	28	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH21-05	4	10/8/2021	1	189	182	-	-	-	-	-	-	-	-	-	-	-
BH21-05	5	10/8/2021	1	-	-	-	-	-	-	-	-	-	-	-	-	-
BH21-05	6	10/8/2021	1	-	-	-	-	-	-	-	-	-	-	-	-	-
BH21-05	7	10/8/2021	1	-	-	-	-	-	-	-	-	-	-	-	-	-
BH21-05	8	10/8/2021	1	-	-	-	-	-	-	-	-	-	-	-	-	-
BH21-06	0	10/8/2021	0	-	135	ND	ND	ND	ND	ND	ND	ND	ND	43	170	213
BH21-06	1	10/8/2021	0	-	325	-	-	-	-	-	-	-	-	-	-	-
BH21-06	2	10/8/2021	1	530	247	-	-	-	-	-	-	-	-	-	-	-
BH21-06	3	10/8/2021	1	128	260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH21-06	4	10/8/2021	0	83	177	-	-	-	-	-	-	-	-	-	-	-
BH21-07	0	10/8/2021	1	1,232	217	ND	ND	ND	ND	ND	ND	ND	ND	270	540	810
BH21-07	1	10/8/2021	1	808	415	-	-	-	-	-	-	-	-	-	-	-
BH21-07	2	10/8/2021	1	895	312	-	-	-	-	-	-	-	-	-	-	-
BH21-07	3	10/8/2021	1	47	615	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	350
BH21-07	4	10/8/2021	1	27	637	-	-	-	-	-	-	-	-	-	-	-
BH21-08	0	10/8/2021	0	2	620	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	380
BH21-08	1	10/8/2021	0	17	602	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	340
BH21-08	2	10/8/2021	0	7	570	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	210
BH21-08	3	10/8/2021	0	21	275	-	-	-	-	-	-	-	-	-	-	-
BH21-08	4	10/8/2021	0	25	332	-	-	-	-	-	-	-	-	-	-	-
BH21-09	0	10/8/2021	0	56	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150
BH21-09	1	10/8/2021	0	48	407	-	-	-	-	-	-	-	-	-	-	-
BH21-09	2	10/8/2021	0	21	442	ND	ND	ND	ND	ND	ND	ND	ND	38	96	134
BH21-10	0	10/8/2021	0	70	332	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH21-10	1	10/8/2021	0	62	277	-	-	-	-	-	-	-	-	-	-	-
BH21-10	2	10/8/2021	0	31	297	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH21-11	0	10/8/2021	0	84	262	ND	ND	ND	ND	ND	ND	ND	ND	12	51	63
BH21-11	1	10/8/2021	0	79	280	-	-	-	-	-	-	-	-	-	-	-
BH21-11	2	10/8/2021	0	51	265	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	99

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

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

Client Name: EOG Resources, Inc.

Site Name: Cooper AHH #001

NMOCD Tracking #: NMLB1027336691/2RP-439

Project #: 22E-00123-04

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Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

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Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	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)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BS22-01	17	6/13/2022	-	51	133	ND	ND	ND	ND	ND	ND	ND	93
BS22-02	17	6/14/2022	-	20	590	ND	ND	ND	ND	ND	ND	ND	110
BS22-03	17	6/13/2022	-	57	91	ND	ND	ND	ND	ND	ND	ND	89
BS22-04	17	6/13/2022	-	39	273	ND	ND	ND	ND	ND	ND	ND	ND
BS22-05	17	6/13/2022	-	56	45	ND	ND	ND	ND	ND	ND	ND	ND
BS22-06	17	6/13/2022	-	16	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-07	14	6/13/2022	-	25	89	ND	ND	ND	ND	ND	ND	ND	ND
BS22-08	14	6/13/2022	-	35	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-09	14	6/13/2022	-	24	14	ND	ND	ND	ND	ND	ND	ND	ND
BS22-10	17	6/14/2022	-	48	666	ND	ND	ND	ND	ND	ND	ND	240
BS22-11	17	6/16/2022	-	68	512	ND	ND	ND	ND	ND	ND	ND	440
BS22-12	17	6/14/2022	-	21	521	ND	ND	ND	ND	ND	ND	ND	460
BS22-13	17	6/14/2022	-	24	493	ND	ND	ND	ND	ND	ND	ND	110
BS22-14	17	6/14/2022	-	63	218	ND	ND	ND	ND	ND	ND	ND	ND
BS22-15	17	6/14/2022	-	89	589	ND	ND	ND	ND	ND	ND	ND	250
BS22-16	17	6/16/2022	-	34	394	ND	ND	ND	ND	ND	ND	ND	130
BS22-17	17	6/15/2022	-	23	183	ND	ND	ND	ND	ND	ND	ND	ND
BS22-18	17	6/15/2022	-	47	523	ND	ND	ND	ND	ND	ND	ND	150
BS22-19	17	6/14/2022	-	28	133	ND	ND	ND	ND	ND	ND	ND	78
BS22-20	17	6/16/2022	-	33	376	ND	ND	ND	ND	ND	ND	ND	460
BS22-21	17	6/16/2022	-	56	302	ND	ND	ND	ND	ND	ND	ND	300
BS22-22	17	6/16/2022	-	28	246	ND	ND	ND	ND	ND	ND	ND	240
BS22-23	17	6/16/2022	-	12	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-24	17	6/15/2022	-	53	347	ND	ND	ND	ND	ND	ND	ND	600
BS22-24	17	7/8/2022	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
BS22-25	17	6/15/2022	-	53	539	ND	ND	ND	ND	ND	ND	ND	370
BS22-26	17	6/15/2022	-	14	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-27	17	6/15/2022	-	27	242	ND	ND	ND	ND	ND	ND	ND	ND
BS22-28	17	6/15/2022	-	27	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-29	17	6/17/2022	-	45	431	ND	ND	ND	ND	ND	ND	ND	190
BS22-30	17	6/17/2022	-	59	511	ND	ND	ND	ND	ND	ND	ND	620
BS22-30	17	7/8/2022	0.3	-	18	ND	ND	ND	ND	ND	ND	ND	61
BS22-31	17	6/17/2022	-	52	575	ND	ND	ND	ND	ND	ND	ND	730
BS22-31	17	7/8/2022	0.3	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
BS22-32	17	6/17/2022	-	51	438	ND	ND	ND	ND	ND	ND	ND	600
BS22-32	17	7/8/2022	0.3	-	ND	ND	ND	ND	ND	ND	ND	ND	61
BS22-33	17	6/17/2022	-	29	226	ND	ND	ND	ND	ND	ND	ND	84
BS22-34	17	6/17/2022	-	22	122	ND	ND	ND	ND	ND	ND	ND	77
BS22-35	17	6/17/2022	-	15	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-36	17	6/17/2022	-	64	252	ND	ND	ND	ND	ND	ND	ND	210
BS22-37	17	6/17/2022	-	5	363	ND	ND	ND	ND	ND	ND	ND	280
BS22-38	17	6/17/2022	-	45	109	ND	ND	ND	ND	ND	ND	ND	110
BS22-39	17	6/17/2022	-	31	79	ND	ND	ND	ND	ND	ND	ND	ND
BS22-40	17	6/17/2022	-	41	131	ND	ND	ND	ND	ND	ND	ND	230
BS22-41	17	6/17/2022	-	58	212	ND	ND	ND	ND	ND	ND	ND	160
BS22-42	17	6/17/2022	-	65	349	ND	ND	ND	ND	ND	ND	ND	160
BS22-43	17	6/17/2022	-	28	138	ND	ND	ND	ND	ND	ND	ND	71
BS22-44	17	7/8/2022	0.2	-	124	ND	ND	ND	ND	ND	ND	ND	ND
BS22-45	17	6/17/2022	-	37	464	ND	ND	ND	ND	ND	ND	ND	250
BS22-46	17	6/17/2022	-	47	69	ND	ND	ND	ND	ND	ND	ND	120

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Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (Petroflag)	Chloride Concentration	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)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BS22-47	17	6/17/2022	-	22	0	ND	ND	ND	ND	ND	ND	ND	ND
BS22-48	17	7/6/2022	-	50	274	ND	ND	ND	ND	ND	ND	ND	500
BS22-49	17	7/6/2022	-	64	574	ND	ND	ND	ND	ND	ND	ND	100
BS22-50	17	7/6/2022	-	20	482	ND	ND	ND	ND	ND	ND	ND	120
BS22-51	17	7/6/2022	-	55	284	ND	ND	ND	ND	ND	ND	ND	120
BS22-52	17	7/6/2022	-	50	538	ND	ND	ND	ND	ND	ND	ND	120
BS22-53	17	7/6/2022	-	38	450	ND	ND	ND	ND	ND	ND	ND	120
BS22-54	17	7/6/2022	-	39	372	ND	ND	ND	ND	ND	ND	ND	63
BS22-55	17	7/6/2022	-	29	199	ND	ND	ND	ND	ND	ND	ND	ND
BS22-56	4	7/6/2022	-	49	532	ND	ND	ND	ND	ND	ND	ND	190
BS22-57	4	7/6/2022	-	39	492	ND	ND	ND	ND	ND	ND	ND	94
BS22-58	4	7/6/2022	-	42	327	ND	ND	ND	ND	ND	ND	ND	ND
BS22-59	4	7/6/2022	-	36	418	ND	ND	ND	ND	ND	ND	ND	80
BS22-60	12	7/6/2022	-	33	138	ND	ND	ND	ND	ND	ND	ND	150
BS22-61	12	7/6/2022	-	24	279	ND	ND	ND	ND	ND	ND	ND	110
BS22-62	20	7/8/2022	0.1	-	ND	ND	ND	ND	ND	ND	ND	ND	82
BS22-63	20	7/8/2022	0	-	63	ND	ND	ND	ND	ND	ND	ND	74
BS22-64	20	7/8/2022	0	-	96	ND	ND	ND	ND	ND	ND	ND	76
BS22-65	20	7/8/2022	0	-	131	ND	ND	ND	ND	ND	ND	ND	71
BS22-66	20	7/8/2022	0.1	-	ND	ND	ND	ND	ND	ND	ND	ND	69
BS22-67	20	7/8/2022	0.1	-	20	ND	ND	ND	ND	ND	ND	ND	69
BS22-68	20	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	68
BS22-69	20	7/8/2022	0.2	-	99	ND	ND	ND	ND	ND	ND	ND	65
BS22-70	20	7/8/2022	0.2	-	118	ND	ND	ND	ND	ND	ND	ND	ND
BS22-71	20	7/8/2022	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	64
BS22-72	20	7/8/2022	0	-	124	ND	ND	ND	ND	ND	ND	ND	65
BS22-73	20	7/8/2022	0	-	118	ND	ND	ND	ND	ND	ND	ND	64
BS22-74	20	7/8/2022	0.1	-	ND	ND	ND	ND	ND	ND	ND	ND	61
BS22-75	20	7/8/2022	0.3	-	62	ND	ND	ND	ND	ND	ND	ND	69
BS22-76	20	7/8/2022	0.2	-	23	ND	ND	ND	ND	ND	ND	ND	ND
BS22-77	20	7/8/2022	0	-	167	ND	ND	ND	ND	ND	ND	ND	ND
BS22-78	4	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	67
BS22-79	4	7/8/2022	0	-	109	ND	ND	ND	ND	ND	ND	ND	70
BS22-80	4	7/8/2022	0	-	47	ND	ND	ND	ND	ND	ND	ND	74
BS22-81	4	7/8/2022	0	-	217	ND	ND	ND	ND	ND	ND	ND	70
BS22-82	4	7/8/2022	0	-	118	ND	ND	ND	ND	ND	ND	ND	73
BS22-83	4	7/8/2022	0	-	83	ND	ND	ND	ND	ND	ND	ND	65
BS22-84	4	7/8/2022	0.2	-	161	ND	ND	ND	ND	ND	ND	ND	63
BS22-85	4	7/8/2022	0.2	-	150	ND	ND	ND	ND	ND	ND	ND	69
BS22-86	4	7/8/2022	0.2	-	285	ND	ND	ND	ND	ND	ND	ND	68
BS22-87	4	7/8/2022	0.1	-	219	ND	ND	ND	ND	ND	ND	ND	72
BS22-88	4	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	73
BS22-89	4	7/8/2022	0	-	370	ND	ND	ND	ND	ND	ND	ND	67
BS22-90	4	7/8/2022	0	-	230	ND	ND	ND	ND	ND	ND	ND	71
BS22-91	4	7/8/2022	0	-	269	ND	ND	ND	ND	ND	ND	ND	79
BS22-92	4	7/8/2022	0	-	96	ND	ND	ND	ND	ND	ND	ND	80
BS22-93	14	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
BS22-94	14	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
BS22-95	14	7/8/2022	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
BS22-96	14	7/8/2022	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	ND

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						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)		
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BS22-97	14	7/8/2022	0.1	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	
BS22-98	12	7/8/2022	0	-	277	ND	ND	ND	ND	ND	ND	ND	80	
BS22-99	12	7/8/2022	0	-	223	ND	ND	ND	ND	ND	ND	ND	90	
BS22-100	12	7/8/2022	0	-	310	ND	ND	ND	ND	ND	ND	ND	88	
BS22-101	12	7/8/2022	0.1	-	186	ND	ND	ND	ND	ND	ND	ND	87	
BS22-102	12	7/8/2022	0.1	-	200	ND	ND	ND	ND	ND	ND	ND	88	
BS22-103	12	7/8/2022	0	-	184	ND	ND	ND	ND	ND	ND	ND	76	
BS22-104	12	7/8/2022	0.1	-	161	ND	ND	ND	ND	ND	ND	ND	83	
WS22-01	0-4	7/5/2022	-	-	1,818	ND	ND	ND	ND	ND	ND	ND	ND	
	4-8	7/5/2022	-	-	1,708	ND	ND	ND	ND	ND	ND	ND	73	
	8-12	7/5/2022	-	-	165	ND	ND	ND	ND	ND	ND	ND	72	
	12-16	7/5/2022	-	9	2,234	ND	ND	ND	ND	ND	ND	ND	ND	
WS22-02	0-4	7/5/2022	-	-	1,824	ND	ND	ND	ND	ND	ND	ND	ND	
	4-8	7/5/2022	-	-	2,351	ND	ND	ND	ND	ND	ND	ND	ND	
	8-12	7/5/2022	-	9	2,206	ND	ND	ND	ND	ND	ND	ND	ND	
	12-16	7/5/2022	-	-	115	ND	ND	ND	ND	ND	ND	ND	ND	
WS22-03	0-4	7/5/2022	-	-	2,564	ND	ND	ND	ND	ND	ND	ND	190	
	4-8	7/5/2022	-	17	2,911	ND	ND	ND	ND	ND	ND	ND	140	
	8-12	7/5/2022	-	-	350	ND	ND	ND	ND	ND	ND	ND	140	
	12-14	7/5/2022	-	-	2,665	ND	ND	ND	ND	ND	ND	ND	120	
WS22-04	0-4	7/5/2022	-	-	2,312	ND	ND	ND	ND	ND	ND	ND	ND	
	4-8	7/5/2022	-	50	243	ND	ND	ND	ND	ND	ND	ND	ND	
	8-12	7/5/2022	-	-	2,053	ND	ND	ND	ND	ND	ND	ND	ND	
	12-17	7/5/2022	-	-	2,241	ND	ND	ND	ND	ND	ND	ND	ND	
WS22-05	0-4	7/5/2022	-	-	130	ND	ND	ND	ND	ND	ND	ND	ND	
	0-8	7/5/2022	-	8	2,351	ND	ND	ND	ND	ND	ND	ND	ND	
	8-12	7/5/2022	-	-	2,307	ND	ND	ND	ND	ND	ND	ND	ND	
	12-20	7/5/2022	-	-	2,019	ND	ND	ND	ND	ND	ND	ND	ND	
WS22-06	0-4	7/5/2022	-	27	1,770	ND	ND	ND	ND	ND	ND	ND	130	
	4-8	7/5/2022	-	-	1,233	ND	ND	ND	ND	ND	ND	ND	170	
	8-12	7/5/2022	-	-	1,345	ND	ND	ND	ND	ND	ND	ND	170	
	12-17	7/5/2022	-	-	260	ND	ND	ND	ND	ND	ND	ND	110	
WS22-07	0-4	7/5/2022	-	-	1,078	ND	ND	ND	ND	ND	ND	ND	ND	
	4-8	7/5/2022	-	-	135	ND	ND	ND	ND	ND	ND	ND	ND	
	8-12	7/5/2022	-	9	1,915	ND	ND	ND	ND	ND	ND	ND	ND	
	12-17	7/5/2022	-	-	1,985	ND	ND	ND	ND	ND	ND	ND	ND	
WS22-08	0-4	7/5/2022	-	82	1,081	ND	ND	ND	ND	ND	ND	ND	320	
	0-8	7/5/2022	-	-	870	ND	ND	ND	ND	ND	ND	ND	310	
	8-12	7/5/2022	-	-	425	ND	ND	ND	ND	ND	ND	ND	330	
	12-20	7/5/2022	-	-	760	ND	ND	ND	ND	ND	ND	ND	280	
WS22-09	0-4	7/5/2022	-	-	395	ND	ND	ND	ND	ND	ND	ND	300	
	0-8	7/5/2022	-	-	1,326	ND	ND	ND	ND	ND	ND	ND	290	
	8-12	7/5/2022	-	-	962	ND	ND	ND	ND	ND	ND	ND	310	
	12-20	7/5/2022	-	49	977	ND	ND	ND	ND	ND	ND	ND	280	
WS22-10	0-4	7/5/2022	-	-	605	ND	ND	ND	ND	ND	ND	ND	480	
	4-8	7/5/2022	-	0	457	ND	ND	ND	ND	ND	ND	ND	470	
	8-12	7/5/2022	-	-	533	ND	ND	ND	ND	ND	ND	ND	440	

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						Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	(GRO + DRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
WS22-11	0-3	7/5/2022	-	103	0	ND	ND	ND	ND	ND	ND	ND	ND
	3-6	7/5/2022	-	-	0	ND	ND	ND	ND	ND	ND	ND	ND
	6-9	7/5/2022	-	-	0	ND	ND	ND	ND	ND	ND	ND	ND
	9-12	7/5/2022	-	-	38	ND	ND	ND	ND	ND	ND	ND	110
WS22-12	4	7/5/2022	-	54	343	ND	ND	ND	ND	ND	ND	ND	64
WS22-13	4	7/5/2022	-	35	577	ND	ND	ND	ND	ND	ND	ND	300
WS22-14	17-20	7/8/2022	0.2	-	33	ND	ND	ND	ND	ND	ND	ND	62
WS22-15	17-20	7/8/2022	0.1	-	109	ND	ND	ND	ND	ND	ND	ND	65
WS22-16	17-20	7/8/2022	0.1	-	196	ND	ND	ND	ND	ND	ND	ND	70
WS22-17	4-8	7/8/2022	0	-	70	ND	ND	ND	ND	ND	ND	ND	62
	8-12	7/8/2022	0	-	118	ND	ND	ND	ND	ND	ND	ND	62
	12-16	7/8/2022	0.1	-	41	ND	ND	ND	ND	ND	ND	ND	63
	16-20	7/8/2022	0.1	-	138	ND	ND	ND	ND	ND	ND	ND	67
WS22-18	4-8	7/8/2022	0	-	27	ND	ND	ND	ND	ND	ND	ND	70
	8-12	7/8/2022	0.2	-	ND	ND	ND	ND	ND	ND	ND	ND	87
	12-16	7/8/2022	0.1	-	105	ND	ND	ND	ND	ND	ND	ND	77
	16-20	7/8/2022	0.2	-	167	ND	ND	ND	ND	ND	ND	ND	67
WS22-19	0-4	7/8/2022	0	-	73	ND	ND	ND	ND	ND	ND	ND	77
	4-8	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	76
	8-12	7/8/2022	0.1	-	115	ND	ND	ND	ND	ND	ND	ND	75
	12-17	7/8/2022	0.1	-	47	ND	ND	ND	ND	ND	ND	ND	78
WS22-20	0-4	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	75
	4-8	7/8/2022	0.2	-	154	ND	ND	ND	ND	ND	ND	ND	70
	8-12	7/8/2022	0.1	-	72	ND	ND	ND	ND	ND	ND	ND	73
	12-17	7/8/2022	0.2	-	18	ND	ND	ND	ND	ND	ND	ND	76
WS22-21	14-17	7/8/2022	0.1	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
WS22-22	4-8	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	75
	8-12	7/8/2022	0.1	-	77	ND	ND	ND	ND	ND	ND	ND	69
	12-15	7/8/2022	0.1	-	ND	ND	ND	ND	ND	ND	ND	ND	73
	15-17	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	68
WS22-23	4-8	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
	8-12	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	81
	12-15	7/8/2022	0.1	-	99	ND	ND	ND	ND	ND	ND	ND	78
	15-17	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	69
WS22-24	4-8	7/8/2022	0.2	-	427	ND	ND	ND	ND	ND	ND	ND	86
	8-12	7/8/2022	0.3	-	311	ND	ND	ND	ND	ND	ND	ND	87
WS22-25	4-8	7/8/2022	0.2	-	292	ND	ND	ND	ND	ND	ND	ND	86
	8-12	7/8/2022	0.1	-	360	ND	ND	ND	ND	ND	ND	ND	90
WS22-26	0-4	7/8/2022	0	-	66	ND	ND	ND	ND	ND	ND	ND	83
WS22-27	0-4	7/8/2022	0	-	ND	ND	ND	ND	ND	ND	ND	ND	65

"ND" Not Detected at the Reporting Limit

"- " indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NMOCD Closure Criteria

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

ATTACHMENT 4



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/16/2021
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	12/17/2021 7:04 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/16/2021 8:00 AM
Departed Site	12/16/2021 4:00 PM

Field Notes

8:38 Continuance of excavation to finish confirmation sampling

10:27 On 14' excavation, base is narrower than top due to benching to prevent cave-in. Schematic outline marks outer edge of top of excavation.

15:19 More hot base samples west of battery

Next Steps & Recommendations

1 Stop work until discussion with client, finish excavation and confirmation sampling

Daily Site Visit Report



Site Photos

Viewing Direction: East



Excavation down to 14' to reach clean sample

Viewing Direction: Northeast



Deepest extent of excavation

Viewing Direction: North



Ramp to 0'

Viewing Direction: South



Removed another layer on the west end

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Sally Carttar

Signature: 
Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/18/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/18/2022 11:20 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	4/18/2022 8:30 AM
Departed Site	4/18/2022 4:15 PM

Field Notes

- 9:17** Brought a loader on site first thing
- 9:32** Will continue sampling and digging to strictest closure criteria
- 10:02** Removing staining and cleaning up north wall so I can get some samples
- 13:52** Tanks too hot to stay

Next Steps & Recommendations

- 1 Load up dirt
- 2 Continue with sampling

Daily Site Visit Report



Site Photos

Viewing Direction: South



Cleaning up the site

Viewing Direction: West



Piles of dirt where equipment was removed

Viewing Direction: Northeast



Disturbed ground around power poles



Viewing Direction: Northwest



Excavation



Daily Site Visit Report

<p>Viewing Direction: North</p>  <p>Descriptive Photo - 13 Viewing Direction: North Desc: Deep excavation Created: 4/18/2022 8:28:25 AM Lat:32.805382, Long:-104.544881</p> <p>Deep excavation</p>	<p>Viewing Direction: East</p>  <p>Descriptive Photo - 14 Viewing Direction: East Desc: Deep excavation Created: 4/18/2022 8:28:35 AM Lat:32.805401, Long:-104.544881</p> <p>Deep excavation</p>
<p>Viewing Direction: West</p>  <p>Descriptive Photo - 15 Viewing Direction: West Desc: North of tanks Created: 4/18/2022 8:30:28 AM Lat:32.805773, Long:-104.544881</p> <p>North of tanks</p>	<p>Viewing Direction: Northeast</p>  <p>Descriptive Photo - 16 Viewing Direction: Northeast Desc: Stockpile Created: 4/18/2022 8:31:08 AM Lat:32.805482, Long:-104.544878</p> <p>Stockpile</p>







Daily Site Visit Report

<p>Viewing Direction: South</p>  <p>Descriptive Photo - 17 Viewing Direction: South Desc: Taking a foot out of the 12' Created: 4/18/2022 2:43:51 PM Lat:32.805524, Long:-104.544816</p> <p>Pulled this out</p>	<p>Viewing Direction: Southeast</p>  <p>Descriptive Photo - 18 Viewing Direction: Southeast Desc: Taking a foot out of the 12' Created: 4/18/2022 2:43:51 PM Lat:32.805524, Long:-104.544816</p> <p>Taking a foot out of the 12'</p>
<p>Viewing Direction: West</p>  <p>Descriptive Photo - 19 Viewing Direction: West Desc: Same line as previous, we excavated it to the edge of the excavation Created: 4/18/2022 2:44:12 PM Lat:32.805524, Long:-104.544816</p> <p>Same line continues, we excavated it to the edge of the excavation</p>	<p>Viewing Direction: South</p>  <p>Descriptive Photo - 20 Viewing Direction: South Desc: Lots of dirt piles left over from battery removal Created: 4/18/2022 2:44:12 PM Lat:32.805524, Long:-104.544816</p> <p>Lots of dirt piles left over from battery removal</p>







Daily Site Visit Report

<p>Viewing Direction: Southwest</p>  <p>Descriptive Photo - 28 Viewing Direction: Southwest Event: Site closed up for the day Created: 4/18/2022 3:55:52 PM Lat: 32.805886, Long: -104.544874</p> <p>Site closed up for the day</p>	<p>Viewing Direction: Southeast</p>  <p>Descriptive Photo - 2 Viewing Direction: Southeast Event: Meter loop still up, flagged Frontier Created: 4/18/2022 4:07:21 AM Lat: 32.805886, Long: -104.544874</p> <p>Meter loop still up, flagged Frontier</p>
<p>Viewing Direction: East</p>  <p>Descriptive Photo - 4 Viewing Direction: East Event: Excavation Created: 4/18/2022 4:11:35 AM Lat: 32.805886, Long: -104.544874</p> <p>Excavation</p>	<p>Viewing Direction: Northeast</p>  <p>Descriptive Photo - 3 Viewing Direction: Northeast Event: West of tanks Created: 4/18/2022 4:07:21 AM Lat: 32.805886, Long: -104.544874</p> <p>West of tanks</p>



Daily Site Visit Report

<p>Viewing Direction: Northeast</p>  <p>Descriptive Photo - 6 Viewing Direction: Northeast Date: 4/18/2022 Created: 4/18/2022 8:22:17 AM Lat:32.044877, Long: -104.344829</p> <p>Southwest of tanks</p>	<p>Viewing Direction: Northeast</p>  <p>Descriptive Photo - 6 Viewing Direction: Northeast Date: 4/18/2022 Created: 4/18/2022 8:22:17 AM Lat:32.044877, Long: -104.344829</p> <p>South of tanks</p>
<p>Viewing Direction: North</p>  <p>Descriptive Photo - 6 Viewing Direction: North Date: 4/18/2022 Created: 4/18/2022 8:24:27 AM Lat:32.044877, Long: -104.344829</p> <p>Tank footing</p>	<p>Viewing Direction: Northeast</p>  <p>Descriptive Photo - 6 Viewing Direction: Northeast Date: 4/18/2022 Created: 4/18/2022 8:24:27 AM Lat:32.044877, Long: -104.344829</p> <p>East of tanks</p>

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1

Date: (SD: 4/18/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-09	13.0	0	50	0.82	25.4	894				✓	
BH22-01	4.0	0	318	0.60	24.2	629					
BH22-02	4.0	0		17.38	23.2	24891					
BH22-03	4.0	0	1030	0.72	24.6	785					
BH22-04	4.0	0	125	0.22	24.6	63					
BH22-05	2.0	0	176	0.34	25.1	215					
BH22-06	4.0	0	75	0.33	24.6	222					
BH22-07	4.0	0	170	0.22	24.5	67					
BH22-08	4.0	0	164	0.14	24.8	0					
BH22-09	4.0	0	110	0.67	31.5	414					
BH22-10	4.0	0	116	0.51	31.2	196					
BH22-11	4.0	0	67	0.57	26.4	490					



Daily Site Visit Report

Client:	<u>EOG Resources Inc.</u>	Inspection Date:	<u>4/19/2022</u>
Site Location Name:	<u>Cooper AHH #1 Battery</u>	Report Run Date:	<u>4/19/2022 10:48 PM</u>
Client Contact Name:	<u>Chase Settle</u>	API #:	<u></u>
Client Contact Phone #:	<u>575-703-6537</u>		
Unique Project ID	<u></u>	Project Owner:	<u></u>
Project Reference #	<u></u>	Project Manager:	<u></u>

Summary of Times

Arrived at Site	<u>4/19/2022 11:45 AM</u>
Departed Site	<u>4/19/2022 3:45 PM</u>

Field Notes

12:03 Checked in with WWS, completed safety meeting

14:03 Loading three more trucks

14:20 Clean under the east tank

Next Steps & Recommendations

- 1 Continue sampling on the west side
- 2 Move on to confirmation

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



Taking down the fence to prepare for more excavation

Viewing Direction: West



Battery foundation removed

Viewing Direction: Northeast



Stockpile after two bellies

Viewing Direction: East



Cleaned up west end of site, moving dirt to stockpile



Daily Site Visit Report

Viewing Direction: Northeast



Fencing around the trench

Viewing Direction: South



At end of day

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 4/19/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	4.0		78	0.48	25.9	382					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/20/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/20/2022 9:53 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	4/20/2022 8:45 AM
Departed Site	4/20/2022 2:45 PM

Field Notes

8:54 WWS exchanging trackhoes for one with working A/C

9:54 Running samples from the west side, planning to dig out deep areas next.

9:57 Someone should be coming out today or tomorrow to remove the meter and associated lines

10:34 Samples from west side all hot on chlorides, will continue excavation.

11:28 Loading 4 trucks

11:48 Loading another truck

14:19 Loading four trucks, one having mechanical trouble left empty (three loads to landfill)

Next Steps & Recommendations

- 1 Sample the west end again, now that he's taken out more
- 2 Continue with walls and base

Daily Site Visit Report



Site Photos

Viewing Direction: East



Cleaned up the west end for better sampling

Viewing Direction: Southeast



Big rocks

Viewing Direction: Southwest



Excavation

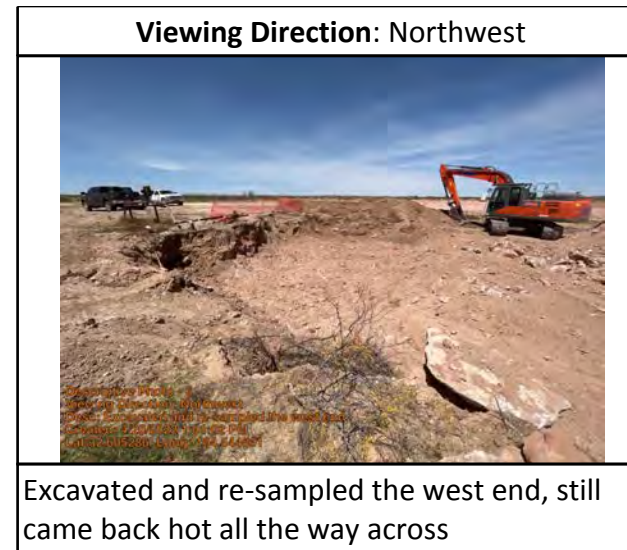
Viewing Direction: West



Excavation



Daily Site Visit Report



Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 4/20/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	3.0			1.07	22.2	1394					
BES22-01	4.0			2.40	25.8	3157					
BES22-02	3.0			2.46	21.4	3435					
BES22-02	4.0			2.27	24.7	3017					
BES22-03	3.0			1.88	21	2615					
BES22-03	4.0			2.50	24.9	3341					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/21/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/21/2022 9:35 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 4/21/2022 8:15 AM

Departed Site 4/21/2022 3:45 PM

Field Notes

8:23 Loading first round of trucks and servicing track hoe

9:25 6 trucks so far today sent to landfill

11:51 4 more trucks loaded

12:15 One more truck

14:15 Another 3 trucks, planned total today will be 17

14:42 2 more trucks

Next Steps & Recommendations

- 1 Clean up north and south walls of the west section
- 2 Sample base under center and west tanks
- 3 Continue with confirmation and closure

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



Excavation this morning

Viewing Direction: East



Backfilling the trench along the line with the clean soil we took out of it

Viewing Direction: Northwest



Working north and west walls of this corner

Viewing Direction: East



North wall still hot

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 4/21/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	6.0			1.98	23.9	2633					
BES22-02	6.0			1.81	23.6	2401					
BES22-03	6.0			2.48	24.8	3316					
BES22-04	0.0		75	0.49	23.4	505					
BES22-05	0.0		113	0.52	23.9	526					
WES22-06	6.0			0.95	23.9	1147					
WES22-07	6.0		63	0.54	23.5	572					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/22/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/22/2022 10:41 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 4/22/2022 8:15 AM

Departed Site 4/22/2022 3:30 PM

Field Notes

9:09 Loaded one truck, only have three loads planned for the day.

11:55 Second of three bellies

12:59 Durango stopped by, planning to have someone come out to take down the meter run on Monday

13:28 Wind has picked up significantly on the last hour.

15:08 Clean on chlorides under the ramp and almost clean to the south.

15:18 Big rocks have been a challenge making flat walls and base of the excavation

Next Steps & Recommendations

- 1 Continue working on north and south walls and base of the western section
- 2 Clean up the base of the rest of the excavation
- 3 Clean up the southwest corner once the meter run is removed, hopefully on Monday

Daily Site Visit Report



Site Photos

Viewing Direction: East



Taking some base samples to characterize the excavation since infrastructure removal, now that the base has been cleaned up

Viewing Direction: Northwest



Discoloration under the meter run on the west wall

Viewing Direction: Southeast



Scraping the base again, since it was all hot

Viewing Direction: Southeast



After the base was scraped up



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/25/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/25/2022 11:10 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 4/25/2022 8:45 AM

Departed Site 4/25/2022 4:00 PM

Field Notes

8:49 WWS on site

9:22 Hoping to see Durango today to have the meter run removed

15:01 Durango stopped by to look at the riser, close up the valves, and make a plan. Hopefully there will be a crew out tomorrow to pull it.

Next Steps & Recommendations

- 1 Clean up base and southwest corner walls
- 2 Take some samples to determine how far west we have to go from meter

Daily Site Visit Report



Site Photos

Viewing Direction: East



Excavation this morning

Viewing Direction: West



Starting sampling on the north and south walls of the west end while WWS services the trackhoe

Viewing Direction: South



North wall clean, still working on south wall

Viewing Direction: Southeast



More large rocks in this corner



Daily Site Visit Report

Viewing Direction: Southwest



Got the go-ahead from Durango to start uncovering the manifold



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/26/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/26/2022 9:31 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 4/26/2022 8:30 AM

Departed Site 4/26/2022 3:45 PM

Field Notes

9:17 Loading the first truck

9:47 Big rocks in the southwest corner are slowing progress

11:49 Loading the second truck

14:33 Meter run still here, no sign of roustabouts

15:01 Third truck load

15:25 Still not clean in the southwest corner

Next Steps & Recommendations

- 1 Get the meter run removed
- 2 Clean up the southwest corner
- 3 Get clean on the base



Daily Site Visit Report

Site Photos

Viewing Direction: Northwest



Descriptive Photo - 9
Viewing Direction: Northwest
Spec: West wall
Created: 4/26/2022 9:21:29 AM
Lat:32.605355, Long:-104.544823

West wall

Viewing Direction: Southeast



Descriptive Photo - 9
Viewing Direction: Southeast
Spec: Excavation
Created: 4/26/2022 9:21:42 AM
Lat:32.605355, Long:-104.544823

Excavation

Viewing Direction: South



Descriptive Photo - 9
Viewing Direction: South
Spec: Still working on the stubborn section of the south wall. Once it cleans up we'll start working on the base again
Created: 4/26/2022 10:28:28 AM
Lat:32.605355, Long:-104.544823

Still working on that one stubborn section of the south wall. Once it cleans up we'll start working on the base again

Viewing Direction: West



Descriptive Photo - 9
Viewing Direction: West
Spec: Excavation
Created: 4/26/2022 10:28:28 AM
Lat:32.605355, Long:-104.544823

Excavation



Daily Site Visit Report

Viewing Direction: Southeast



Descriptive Photo
Viewing Direction: Southeast
Desc: Dirt still sparkling with chlorides on the south
Created: 4/26/2022 9:02:30 AM
Lat: 32.605219, Long: -104.344824

Dirt still sparkling with chlorides on the south wall

Viewing Direction: Southwest



Descriptive Photo
Viewing Direction: Southwest
Desc: Still working on the south wall
Created: 4/26/2022 2:24:40 PM
Lat: 32.605394, Long: -104.344824

Still working on the south wall



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/27/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/27/2022 10:20 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 4/27/2022 8:15 AM

Departed Site 4/27/2022 4:00 PM

Field Notes

9:12 Section of south wall still hot, will start there. Hoping to have it clean today so we can move on to the base

9:13 No sign yet of roustabouts, so we can't clean up the west wall

11:34 Two trucks loaded first thing this morning, loading the third now

13:52 Fourth truck

Next Steps & Recommendations

1 Follow the salt in the southwest corner and base

Daily Site Visit Report



Site Photos

Viewing Direction: East



Excavation this morning

Viewing Direction: South



West end

Viewing Direction: Southeast



Battery area

Viewing Direction: East



Steel line about 50' south of berm. Called Michael Jordan who reported that the line has been purged and we can continue digging around it



Daily Site Visit Report

Viewing Direction: Southwest



Line uncovered

Viewing Direction: Northeast



Pushed out the south wall

Viewing Direction: Southeast



South lobe



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/28/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/28/2022 11:00 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 4/28/2022 8:45 AM

Departed Site 4/28/2022 3:40 PM

Field Notes

- 12:01** Arrived on site, did walkthrough of site with Terrel Wyllard from Wild West
- 10:20** Collected and ran samples from south and west wall of lobe on southwest end of excavation
- 11:04** Began removing riser from west side of location- discovered pressure and liquid still in line
- 10:41** Vacuum truck arrived on location to remove liquid from line
- 11:04** Vacuum truck completed removing liquid from line and left location
- 11:29** Capped west end of line connected to riser
- 11:48** Capped west end of line connected to riser
- 12:00** Began removing riser from location
- 12:32** Completed removing riser from location
- 14:48** Resumed excavating wall on west side of location in former location of riser @ ~1330

Next Steps & Recommendations

- 1 Continue wall excavation to west and base excavation

Daily Site Visit Report



Site Photos

Viewing Direction: East



Riser and excavated line on west side of location

Viewing Direction: East



Cut section of pipe and ditch after riser was removed

Viewing Direction: East



Former location of riser

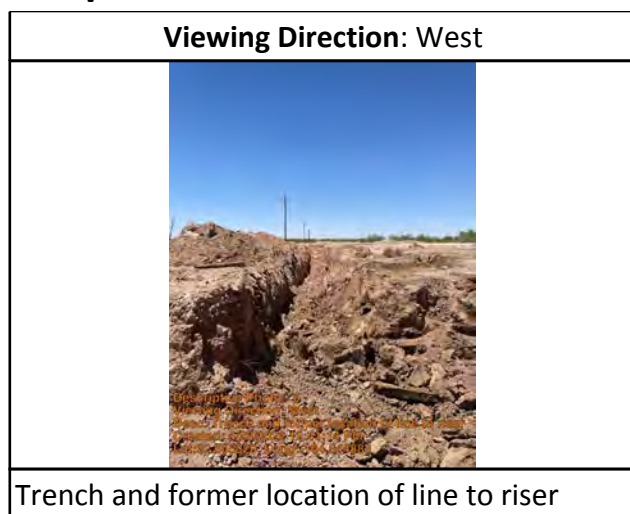
Viewing Direction: West



West wall beneath former location of riser



Daily Site Visit Report



Daily Site Visit Report



Daily Site Visit Signature

Inspector: McKitric Wier

Signature:


Signature

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 4/28/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES22-02	4.0			0.96	26.6	1044					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	4/29/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	4/29/2022 9:32 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	4/29/2022 8:15 AM
Departed Site	4/29/2022 2:30 PM

Field Notes

- 13:05** Arrived on location @ ~8:15 and discussed plans for the day with Wild West crew
- 13:06** Began clearing large boulder debris from base of west end of excavation to prep for collection of base samples
- 13:07** Collected samples from base of west end of excavation
- 14:23** Cleared 1ft of base from central section of excavation

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: West



West wall of excavation and base

Viewing Direction: South



West wall of excavation

Viewing Direction: East



Clearing of large rock debris to prep for base sampling

Viewing Direction: Southeast



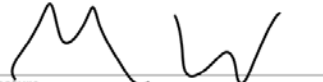
Staining on excavated large rock

Daily Site Visit Report



Daily Site Visit Signature

Inspector: McKitric Wier

Signature: 
Signature

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 4/29/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	8.0			1.46	23.1	1918					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/3/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/3/2022 10:26 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/3/2022 8:00 AM
Departed Site	5/3/2022 3:30 PM

Field Notes

8:56 Two trucks loaded

8:57 Pot holing base to find clean

10:50 Pothole 5 clean at 9', clearing the quadrant to 9' to get a composite while we continue with the other 4 potholes

10:58 Loading a third truck

11:21 Loading the fourth truck

14:09 Loading truck #6

Next Steps & Recommendations

- 1 Excavate around BS22-04 to 11', get a composite sample, excavate to 20' if not clean
- 2 Pothole out to the south of the pad
- 3 Have WWS excavate out on Thursday and Friday

Daily Site Visit Report



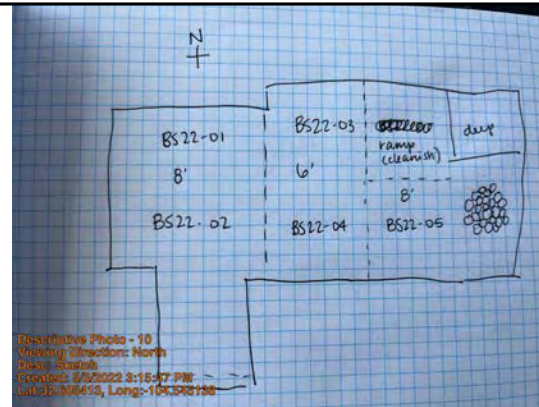
Site Photos

Viewing Direction: East



Excavation

Viewing Direction: North



Sketch

Viewing Direction: South



Pothole 1

Viewing Direction: South



Pothole 2





Daily Site Visit Report

<p>Viewing Direction: Southeast</p>  <p>Descriptive Photo - 3 Viewing Direction: Southeast Date: 8/30/2022 Created: 8/30/2022 11:47:53 AM Lat: 32.508386, Long: 104.544797</p> <p>Pothole 3</p>	<p>Viewing Direction: Southeast</p>  <p>Descriptive Photo - 4 Viewing Direction: Southeast Date: 8/30/2022 Created: 8/30/2022 11:48:01 AM Lat: 32.508386, Long: 104.544797</p> <p>Pothole 4</p>
<p>Viewing Direction: East</p>  <p>Descriptive Photo - 5 Viewing Direction: East Date: 8/30/2022 Created: 8/30/2022 11:48:48 PM Lat: 32.508386, Long: 104.544797</p> <p>Sampling</p>	<p>Viewing Direction: Northeast</p>  <p>Descriptive Photo - 7 Viewing Direction: Northeast Date: Sampling BS22-03 Created: 8/30/2022 1:48:01 PM Lat: 32.508386, Long: 104.544797</p> <p>Sampling BS22-03</p>



Daily Site Visit Report

Viewing Direction: South	Viewing Direction: Southeast
 <p>Descriptive Photo - 8 Viewing Direction: South Date: 5/3 Created: 5/3/2022 3:06:58 PM Lat:32.605476, Long:-104.544824</p>	 <p>Descriptive Photo - 8 Viewing Direction: Southeast Date: 5/3 Created: 5/3/2022 3:07:33 PM Lat:32.605501, Long:-104.544824</p>
Site	Excavation

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Sally Carttar

Signature:


Signature

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 5/3/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	11.0			1.10	18	1619				✓	
BES22-01	13.0			1.58	22.4	2121				✓	
BES22-01	15.0			0.86	26.8	891				✓	
BES22-01	17.0			0.69	22.9	815				✓	
BES22-02	11.0			1.15	18	1691				✓	
BES22-02	13.0			0.81	23.1	979				✓	
BES22-02	15.0			0.62	23.8	675				✓	
BES22-02	16.0			0.37	25.9	223				✓	
BES22-03	9.0			0.63	18	941				✓	
BES22-03	11.0			1.44	22.8	1902				✓	
BES22-03	13.0			1.00	22.8	1267				✓	
BES22-03	15.0			0.61	22.3	725				✓	
BES22-04	9.0			2.12	19	3048				✓	
BES22-04	11.0			1.75	23.7	2310				✓	
BES22-04	13.0			2.07	22.4	2828				✓	
BES22-04	15.0			3.90	22.9	5448				✓	
BES22-04	17.0			6.14	26	8547				✓	
BES22-04	20.0			3.05	22.1	4256				✓	
BES22-05	9.0			0.43	19.2	600				✓	
BES22-05	9.0			1.58	22	2138				✓	



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/4/2022
Site Location Name:		Report Run Date:	5/4/2022 10:29 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/4/2022 8:00 AM
Departed Site	5/4/2022 3:30 PM

Field Notes

8:32 Loading first two trucks
8:32 Durango stopped by for the one-call
8:54 Starting trenching south into pasture east of dogleg
9:03 Loading a third truck
9:27 Fighting more rocks south of the south wall
9:57 Getting very windy
11:11 Two more trucks (now 5 so far)
13:53 Loading truck 7
14:12 Loading another truck
14:27 Truck # 9

Next Steps & Recommendations

1 Dig to sketch, then re-test base and walls with composites

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Excavation

Viewing Direction: East



Trenching

Viewing Direction: Southeast



Big rocks

Viewing Direction: Southeast



West side of excavation



Daily Site Visit Report

Viewing Direction: South



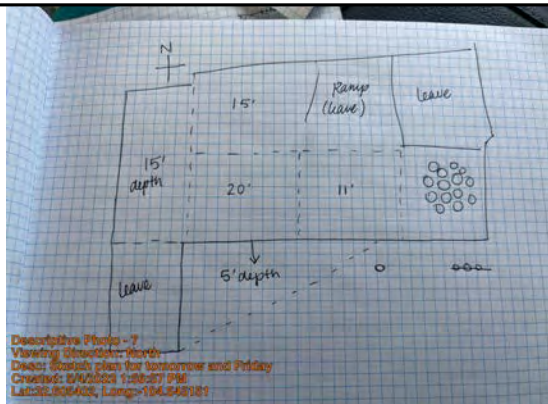
Center section of excavation

Viewing Direction: Southeast



East end of excavation

Viewing Direction: North



Sketch plan for tomorrow and Friday for WWS

Viewing Direction: South



West end



Daily Site Visit Report





Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/9/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/10/2022 2:51 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 5/9/2022 8:30 AM

Departed Site 5/9/2022 2:00 PM

Field Notes

9:36 Arrived on site and discussed operations plan with Jeremy from Wild West

11:07 Began digging section of excavation down to 11'

12:53 Removed excavated soil from pit and began digging down to 7' in south central quadrant of pit

Next Steps & Recommendations

1 Continue excavating pit

Daily Site Visit Report



Site Photos

Viewing Direction: North



Freshly excavated section of excavation.

Viewing Direction: Northeast



South/southeast wall of excavation @5' depth

Viewing Direction: South



West end of excavation

Viewing Direction: North



Central area of excavation @11' depth

Daily Site Visit Report



Daily Site Visit Signature

Inspector: McKitric Wier

Signature: 
Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/10/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/10/2022 9:57 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/10/2022 8:25 AM
Departed Site	5/10/2022 3:15 PM

Field Notes

- 13:50** Arrived on site and began loading trucks.
- 13:50** Collected base samples @ 7' in south central portion of excavation. Samples came back hot for chlorides
- 13:51** Excavated south central portion of pit down to 8' and screened base samples. Came back hot on chlorides.
- 13:52** Excavated south central portion of pit down to 9'

Next Steps & Recommendations

- 1 Continue excavation of pit

Daily Site Visit Report



Site Photos

Viewing Direction: North



Excavated south central portion of pit down to 8'

Viewing Direction: Northeast



Wall of south central portion of pit and excavator

Viewing Direction: South



East wall of south central portion of excavation area



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/11/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/11/2022 10:25 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/11/2022 8:30 AM
Departed Site	5/11/2022 3:30 PM

Field Notes

- 11:40** Arrived on site and field screened samples in south central portion of excavation at 9', which came back hot on chlorides
- 14:34** Excavated south central portion of pit down to 10'
- 15:13** Continued excavating south central section of pit and began moving spoils pile inside pit to create more room for excavator

Next Steps & Recommendations

- 1 Continue excavation operations

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



South central portion of pit excavated to 11'

Viewing Direction: Northwest



South central portion of pit excavated to 11'

Viewing Direction: Southwest



Excavated portion of south central section of pit



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/12/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/12/2022 10:22 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/12/2022 8:10 AM
Departed Site	5/12/2022 3:30 PM

Field Notes

9:05 Began loading trucks and pulling back rocks/rebuilding ramp to prepare for excavation of south wall of pit

13:17 Began cleaning up south wall to take composite samples along length of wall.

14:53 Completed cleaning up wall

Next Steps & Recommendations

1 Continue excavation of pit

Daily Site Visit Report



Site Photos

Viewing Direction: South



Rock pile and south wall of excavation site

Viewing Direction: Northeast



South wall of excavation site

Viewing Direction: South



South wall after clearing rock debris out of the way

Viewing Direction: Northeast



South wall at 12'



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/16/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/16/2022 9:17 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 5/16/2022 8:45 AM

Departed Site 5/16/2022 3:40 PM

Field Notes

9:48 Arrived on site and walked through site with new employees from Wild West

14:04 Began taking the wall in the south central portion of excavation back in 1' increments and field screening wall samples.

15:03 Cleaned up piles of large rocks excavated from pit and loaded trucks during field screening and wall excavation

Next Steps & Recommendations

- 1 Continue excavation of wall

Daily Site Visit Report



Site Photos

Viewing Direction: East



Fluid from transformer dropped into bottom of pit.

Viewing Direction: South



Excavation of south central wall portion of pit

Viewing Direction: Southwest



Excavated section of south central portion of pit

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 5/16/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES22-01	5.0			1.00	25.7	1141					
WES22-02	5.0			1.30	23.8	1656					
WES22-03	5.0			0.76	24.7	838					
WES22-04	5.0			1.14	25	1373					



Daily Site Visit Report

Client:	<u>EOG Resources Inc.</u>	Inspection Date:	<u>5/17/2022</u>
Site Location Name:	<u>Cooper AHH #1 Battery</u>	Report Run Date:	<u>5/17/2022 11:02 PM</u>
Client Contact Name:	<u>Chase Settle</u>	API #:	<u></u>
Client Contact Phone #:	<u>575-703-6537</u>		
Unique Project ID	<u></u>	Project Owner:	<u></u>
Project Reference #	<u></u>	Project Manager:	<u></u>

Summary of Times

Arrived at Site 5/17/2022 9:27 AM

Departed Site 5/17/2022 4:00 PM

Field Notes

9:59 Resume excavation of south wall, base of pit, and begin loading trucks

14:59 Collected clean sample from south wall, began lowering base of site

15:00 Lowered south central portion of base down to 10' and cleaned up walls in central portion of pit

15:01 Began cleaning up ramp while continuing to field screen samples

Next Steps & Recommendations

1 Continue excavation of base of site



Daily Site Visit Report

Site Photos

Viewing Direction: South



West end of excavation

Viewing Direction: East



South wall in central portion of excavation

Viewing Direction: Northeast



South wall in central portion of excavation

Viewing Direction: West



North wall in central portion of excavation

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 5/17/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	5.0			1.69	26.4	2107					
BES22-02	5.0			1.72	26.3	2154					
BES22-03	7.0			1.37	28.2	1567					
BES22-04	7.0			1.05	26.8	1166					
BES22-05	9.0			1.45	29.8	1613				✓	
BES22-06	9.0			1.34	26.6	1593					
WES22-01	6.0		82	0.57	27.6	438					
WES22-02	4.0			1.06	25.8	1223					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/18/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/18/2022 10:52 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/18/2022 8:10 AM
Departed Site	5/18/2022 3:55 PM

Field Notes

- 13:01** Arrived on location and began loading trucks and working west wall back while conducting field screens.
- 13:08** Uncovered odorous grey/black stained soil while excavating west wall
- 13:09** Uncovered open end of unknown pipe in vicinity of west wall
- 13:45** Began excavating and field screening soil around pipe to prep for cutting and capping pipe while continuing to excavate west wall
- 15:18** Chased pipe back into wall 8 feet
- 15:19** Pulled clean samples from west wall, began excavating west portion of south wall and base on west portion of pit

Next Steps & Recommendations

- 1 Continue excavation of west side of pit

Daily Site Visit Report



Site Photos

Viewing Direction: West



Discolored soil with hydrocarbon odor on south side of former pipe location on west wall

Viewing Direction: West



Encountered open pipe while excavating west wall

Viewing Direction: South



Pipe prior to cutting and capping during excavation

Viewing Direction: Northwest



Excavated section of west wall and pipe



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/19/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/19/2022 10:28 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/19/2022 8:10 AM
Departed Site	5/19/2022 3:30 PM

Field Notes

- 9:36** Continue excavation of south wall and base on west side of pit
- 15:23** Excavated as far south as possible with pipe in the way and moved to focus on base in west end of pit
- 15:23** Excavated base on west end of pit down to 10'

Next Steps & Recommendations

- 1 Continue excavation of west end of pit and south wall

Daily Site Visit Report



Site Photos

Viewing Direction: East



Pipe crossing location and excavated section of south wall of pit



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/23/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/23/2022 10:31 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 5/23/2022 8:10 AM

Departed Site 5/23/2022 3:50 PM

Field Notes

14:50 Excavate base at west end of pit and south wall at west end of pit while field screening samples

14:51 Excavated west end of pit to 12'. Samples came back clean at 12'

14:57 Excavated south wall of pit in west section out 5'. Samples still returning hot

14:57 Loaded 15 trucks

Next Steps & Recommendations

1



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/24/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/24/2022 10:07 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/24/2022 8:35 AM
Departed Site	5/24/2022 3:25 PM

Field Notes

- 9:14** Begin truck loading and excavation of the East base of pit
- 15:00** Field screens of South wall section came back clean
- 15:01** Dug base below south wall on west end down 2' and base in central portion of pit down 2'. Field screens returned hot
- 15:03** Loaded 28 trucks

Next Steps & Recommendations

- 1 Continue base excavation of pit

Daily Site Visit Report



Site Photos

Viewing Direction: South



Southwest portion of pit

Viewing Direction: East



Central portion of excavation

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 5/24/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	4.0			1.51	21.6	2055					
BES22-02	4.0			1.31	21.5	1770					
BES22-03	12.0			1.26	22.2	1668					
BES22-04	12.0			0.82	22	1042					
BES22-05	12.0			1.31	21.9	1753					
BES22-06	5.0			1.56	27.4	1876					
BES22-07	5.0			1.32	25.6	1607					
BES22-08	13.0			1.01	27.7	1069					
BES22-09	13.0			0.73	25.4	764					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/26/2022
Site Location Name:	Cooper AHH #1	Report Run Date:	5/26/2022 9:10 PM
Client Contact Name:	Chase Settle	API #:	30-015-26299
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 5/26/2022 8:15 AM

Departed Site 5/26/2022 3:30 PM

Field Notes

12:16 Begin loading trucks and excavating base of pit

14:46 Begin moving ramp to clean up base

14:47 Clean up around areas where samples have come back clean and begin excavating soil in northwest section of pit

14:51 Moved spoils from pit to spoils pile

Next Steps & Recommendations

1 Continue excavation of base and pulling back ramp of pit

Daily Site Visit Report



Site Photos

Viewing Direction: North



Base,north wall, and ramp of excavation site

Viewing Direction: West



Southwest portion of excavation



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/27/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/31/2022 3:04 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/27/2022 8:05 AM
Departed Site	5/27/2022 10:00 AM

Field Notes

9:00 Moved spoils from pit to spoils pile

Next Steps & Recommendations

1 Continue excavation of base of pit and removal of ramp

Daily Site Visit Report



Site Photos

Viewing Direction: South



Excavation site and spoils pile

Viewing Direction: North



East side of excavation site

Viewing Direction: West



West side of excavation

Viewing Direction: North



Southwest cutout of excavation and ramp



Daily Site Visit Report

Viewing Direction: East



Central and west portion of excavation



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	5/31/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	5/31/2022 9:57 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	5/31/2022 8:10 AM
Departed Site	5/31/2022 3:00 PM

Field Notes

- 9:02** Begin excavation of base of pit and truck loading.
- 14:49** Excavated base of pit in central portion of excavation.
- 14:49** Removed unneeded portion of ramp
- 14:58** Loaded 9 trucks

Next Steps & Recommendations

- 1 Continue excavation of base in central portion of pit and removal/cleanup of ramp area

Daily Site Visit Report



Site Photos

Viewing Direction: East



central portion of pit and East wall of central portion of pit

Viewing Direction: South



Southwest portion of pit

Viewing Direction: North



Base of pit and ramp

Viewing Direction: West



Base of pit and ramp



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/2/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/2/2022 10:18 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/2/2022 7:55 AM
Departed Site	6/2/2022 3:30 PM

Field Notes

- 8:01** Begin loading trucks, excavating base of site, and field screening samples.
- 15:18** Excavated center of pit to 20' and west side of pit down to 13'. Pulled portion of unneeded ramp back
- 15:19** Excavated southwest section of pit down to 3'
- 15:19** Loaded 15 trucks

Next Steps & Recommendations

- 1 Continue excavation of west base of pit and southeast corner of pit. Continue pulling back unneeded sections of ramp

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Base of excavation

Viewing Direction: Northeast



Base of excavation and ramp

Viewing Direction: Northwest



Base of excavation and ramp being pulled back

Viewing Direction: Southeast



Base of excavation from bottom of ramp



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/6/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/6/2022 10:04 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/6/2022 8:32 AM
Departed Site	6/6/2022 3:15 PM

Field Notes

8:32 Begin truck loading and field screening location of ramp
13:56 Lowered southeast corner of pit 1'
13:56 Continue pulling back ramp
15:59 Loaded 14 trucks

Next Steps & Recommendations

1 Continue with pulling back ramp and field screening

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Southeast portion of excavation

Viewing Direction: West



Central base of pit and west wall of excavation

Viewing Direction: North



Ramp being pulled back

Viewing Direction: North



West portion of excavation and ramp being pulled back



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/7/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/7/2022 9:12 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/7/2022 8:50 AM
Departed Site	6/7/2022 3:25 PM

Field Notes

9:39 Begin loading trucks and continue pulling back ramp into pit while conducting field screens

14:52 Lowered west central base of pit 2' in 1' increments. Samples in west central base of pit came back clean

14:53 Lowered southwest corner of pit 1', samples still hot

14:53 Continued pulling ramp out of pit and field screening under ramp

15:03 Loaded 11 trucks

Next Steps & Recommendations

1 Continue pulling ramp out and field screening beneath ramp

Daily Site Visit Report



Site Photos

Viewing Direction: South



West central portion of excavation

Viewing Direction: East



West central section of pit and ramp

Viewing Direction: North



Ramp being pulled back

Viewing Direction: East



Ramp being pulled back

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 6/7/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	17.0			0.74	25.1	792					
BES22-02	17.0			1.13	25	1359					
BES22-03	17.0			0.90	24.5	1049					
BES22-04	18.0		35	0.48	25.8	386					
BES22-05	18.0		23	0.35	24.3	264					
BES22-06	18.0		48	0.63	25.9	598					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/8/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/8/2022 10:26 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/8/2022 8:30 AM
Departed Site	6/8/2022 3:30 PM

Field Notes

13:55 Begin loading trucks and field screens under ramp
13:55 Begin pulling ramp back
13:56 Dig down northwest and north central portion of ramp
14:21 Moved large rocks while clearing ramp
15:03 Loaded 17 trucks

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



Pulled back portion of ramp and northwest base of pit

Viewing Direction: North



West base of pit and remainder of ramp

Viewing Direction: Northwest



West base and wall of pit

Viewing Direction: West



West side of excavation

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 6/8/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-01	17.0			0.82	24	955					
BES22-02	17.0			0.70	24.1	777					
BES22-03	15.0			1.67	23.8	2190					
BES22-04	15.0			1.63	24.1	2120					



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/9/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/9/2022 9:46 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/9/2022 8:30 AM
Departed Site	6/9/2022 2:30 PM

Field Notes

14:14 Begin truck loading and do walkthrough of site with Monica Peppin

14:14 Continue to pull back ramp to north wall of excavation site

15:42 Pull down northwest and west central corner of excavation site while mapping site

15:42 Loaded 21 trucks

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: North



West base and north wall of excavation with remainder of ramp

Viewing Direction: Northwest



West central base of excavation

Viewing Direction: North



Remainder of ramp

Viewing Direction: West



West base of pit and west wall



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/14/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/15/2022 3:07 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/14/2022 8:30 AM
Departed Site	6/14/2022 2:10 PM

Field Notes

- 9:25** Begin truck loading and field screening base samples
- 13:29** Continue collecting base samples for confirmation
- 13:29** Continue pulling ramp into pit back and screening beneath location of ramp
- 15:29** Loaded 5 trucks today

Next Steps & Recommendations

- 1 Continue field screens in base for confirmation



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/15/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/16/2022 1:52 AM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/15/2022 8:30 AM
Departed Site	6/15/2022 2:10 PM

Field Notes

9:08 Begin loading trucks and field screening base samples for confirmation

19:49 Field screen base samples for confirmation

19:49 Continue lowering ramp and field screening under ramp

19:49 Loaded 7 trucks today

Next Steps & Recommendations

1 Continue confirmation sampling of base and pulling down/field screening ramp



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/16/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/16/2022 9:38 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 6/16/2022 8:30 AM

Departed Site 6/16/2022 2:05 PM

Field Notes

9:26 Arrive on site and begin loading trucks

9:26 Dig central portion of pit down 1' while conducting field screens

15:35 Loaded 9 trucks today

Next Steps & Recommendations

1 Continue with collecting base samples and pulling out ramp



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/17/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/20/2022 6:57 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/17/2022 8:30 AM
Departed Site	6/17/2022 2:45 PM

Field Notes

10:58 Arrived on location. Begin loading trucks
10:58 Level remainder of ramp and field screen base samples
12:22 Pull ramp back further and level ramp
12:22 Jar collected samples
12:23 Loaded 9 trucks

Next Steps & Recommendations

1 Continue with screening samples and excavation when necessary



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/20/2022
Site Location Name:	Cooper AHH #1 Battery	Report Run Date:	6/21/2022 5:08 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/20/2022 8:30 AM
Departed Site	6/20/2022 10:00 AM

Field Notes

- 14:22** Arrived on location and began loading trucks
- 14:22** Bottom of pit has standing water, and rest of pit is slightly washed out/very muddy
- 20:36** Loaded 3 trucks today

Next Steps & Recommendations

- 1 Allow pit to dry out and continue samples/excavation

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Bottom of pit with standing water

Viewing Direction: Northeast



Flooded section of pit

Viewing Direction: North



Flooded base of pit and washed out section of ramp



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	6/27/2022
Site Location Name:	Cooper AHH #1	Report Run Date:	6/27/2022 9:02 PM
Client Contact Name:	Chase Settle	API #:	30-015-26299
Client Contact Phone #:	575-703-6537		
Unique Project ID	-Cooper AHH #1	Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	6/27/2022 8:24 AM
Departed Site	6/27/2022 9:22 AM

Field Notes

8:35 Arrived on-site at 0824

8:35 Site received large amounts of rain over the week making it unsafe for work

8:35 Will continue operating once site has dried

8:37 Access road heavily flooded

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Standing water in excavation

Viewing Direction: West



Water pooling on pad and road

Viewing Direction: Southeast



Ramp washed out from rains

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Michael Barnes

Signature:

A handwritten signature in black ink, appearing to be 'MB', written over a horizontal line. Below the line, the word 'Signature' is printed in a small font.



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	7/5/2022
Site Location Name:	Cooper AHH #1	Report Run Date:	7/6/2022 12:07 AM
Client Contact Name:	Chase Settle	API #:	30-015-26299
Client Contact Phone #:	575-703-6537		
Unique Project ID	-Cooper AHH #1	Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	7/5/2022 10:13 AM
Departed Site	7/5/2022 4:52 PM

Field Notes

- 16:03** Arrived on-site at 1013
- 16:04** Wall samples taken around the edge of the excavation
- 16:05** WS22-01 to WS22-11 were taken at 0-4', 4-8', 8-12', and 12-16'
- 16:06** WS22-12 to WS22-13 were taken at 0-4'
- 16:06** Field screenings on chlorides and TPH came back clean under NMOCD criteria
- 16:08** Standing water still present in southeast corner of excavation

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Northwest corner of excavation

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1

Date: (SD: 7/5/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC ()	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES22-01	4.0			1.58	29.4	1818		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-01	8.0			1.48	28.6	1708		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-01	12.0			1.35	28.4	1529		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-01	16.0		9	1.85	28.8	2234	165	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-02	4.0			1.59	29.6	1824		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-02	8.0			1.94	29.1	2351		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-02	12.0		9	1.84	29.1	2206		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-02	16.0			1.20	29.4	1270	115	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-03	4.0			2.10	29.5	2564		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	

Daily Soil Sampling



WES22-03	8.0		17	2.34	29.5	2911		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-03	12.0			2.35	30.2	2895	350	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-03	16.0			2.20	30.5	2665		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-04	4.0			1.88	28	2312		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-04	8.0		50	1.59	27.4	1919	243	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-04	12.0			1.68	27.3	2053		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-04	16.0			1.81	27.3	2241		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-05	4.0			1.87	27.1	2336	130	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-05	8.0		8	1.88	27.1	2351		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-05	12.0			1.85	27.1	2307		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-05	16.0			1.65	27.1	2019		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-06	4.0		27	1.46	26.5	1770		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	

Daily Soil Sampling



WES22-06	8.0			1.10	26.9	1233		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-06	12.0			1.18	27	1345		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-06	16.0			1.50	27.3	1793	260	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-07	4.0			1.01	27.5	1078		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-07	8.0			0.88	27.4	894	135	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-07	12.0		9	1.59	27.5	1915		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-07	16.0			1.66	28.2	1985		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-08	4.0		82	1.12	31.1	1081		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-08	8.0			0.92	29.3	870		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-08	12.0			0.78	29.7	650	425	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-08	16.0			0.85	29.5	760		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-09	4.0			0.80	28.7	723	395	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	

Daily Soil Sampling



WES22-09	8.0			1.23	29.1	1326		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-09	12.0			0.96	28.5	962		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-09	16.0		49	0.97	28.5	977		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-10	4.0			0.75	29.1	633	605	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-10	12.0		0	0.61	28.5	457		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-10	16.0			0.66	28.4	533		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-11	4.0		103	0.18	29.8	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-11	8.0			0.25	28.9	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-11	12.0			0.24	28.8	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-11	16.0			0.32	28.5	38		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-12	4.0		54	0.54	28.8	343		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
WES22-13	4.0		35	0.69	28.4	577		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	7/6/2022
Site Location Name:	Cooper AHH #1	Report Run Date:	7/6/2022 8:14 PM
Client Contact Name:	Chase Settle	API #:	30-015-26299
Client Contact Phone #:	575-703-6537		
Unique Project ID	-Cooper AHH #1	Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	7/6/2022 8:28 AM
Departed Site	7/6/2022 12:28 PM

Field Notes

- 11:59** Arrived at site and filled out safety paperwork. Will continue gathering soil samples at the base of excavation and possibly remaining walls.
- 12:00** Gathered soil samples: BS22-48 - BS22-61 at the bases near the northwest and northeast corner.
- 12:01** Field screened samples for Chlorides and TPH.
- 12:02** All field screened samples can be considered clean according to NMOCDS regulations.
- 12:04** Still need to gather wall and surface samples of access ramp. Currently waiting for standing water at the deepest base to dry off. Need to gather soil samples here before touching the ramp.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: West



BS22-48 - BS22-55

Viewing Direction: Southeast



BS22-56 - BS22-59

Viewing Direction: Northeast



BS22-60 - BS22-61

Viewing Direction: South



Standing water from recent rains



Daily Site Visit Report

Viewing Direction: Northeast



Ramp needing sampling


Daily Site Visit Report



Daily Site Visit Signature

Inspector: Fernando Rodriguez

Signature:


Signature

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1 Battery

Date: (SD: 7/6/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (l)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-48	0.0		50	0.54	30.4	274		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-49	0.0		64	0.64	26.8	574		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-50	0.0		20	0.57	26.6	482		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-51	0.0		55	0.43	26.5	284		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-52	0.0		50	0.63	27.3	538		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-53	0.0		38	0.56	27	450		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-54	0.0		39	0.50	26.8	372		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-55	0.0		29	0.38	26.8	199		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-56	0.0		49	0.52	27.1	388		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	



Daily Soil Sampling

BES22-57	0.0		39	0.58	26.7	492		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-58	0.0		42	0.46	26.5	327		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-59	0.0		36	0.52	26.4	418		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-60	0.0		33	0.75	27.8	689	138	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	
BES22-61	0.0		24	0.46	27.6	279		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)	✓	✓	



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	7/8/2022
Site Location Name:	Cooper AHH #1	Report Run Date:	7/9/2022 12:34 AM
Client Contact Name:	Chase Settle	API #:	30-015-26299
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	7/8/2022 7:29 AM
Departed Site	7/8/2022 4:47 PM

Field Notes

- 16:08** Completed safety paperwork on arrival. On site to collect confirmation samples.
- 16:38** Swept base and walls of excavation with magnetic locator prior to sampling. Collected and field screened confirmation samples from 20-foot portion of excavation. Collected remaining wall excavation confirmation samples. Re-collected confirmation samples from points with slightly elevated laboratory results for chloride. Collected remaining base excavation confirmation samples from 4, 12, 14, and 16-foot areas.
- 16:37** Collected confirmation samples on ramps within excavation.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: West



Northeast corner of excavation facing west. Beginning of day.

Viewing Direction: North



South edge of excavation facing north. End of day. (Recent rain pooled water in the bottom)

Viewing Direction: Northeast



Southwest corner of excavation facing northeast. End of day. (Rain water in corner)





Viewing Direction: Southeast



Northwest corner of excavation facing southeast. End of day.







Daily Site Visit Report

<p>Viewing Direction: Southwest</p>  <p>Descriptive Photo - 1 Viewing Direction: Southwest Desc: Northeast corner of excavation facing southwest. End of day. Created: 7/7/2022 4:18:15 PM Lat:32.805517, Long:-106.544479</p> <p>Northeast corner of excavation facing southwest. End of day.</p>	<p>Viewing Direction: South</p>  <p>Descriptive Photo - 2 Viewing Direction: South Desc: Northeast corner of excavation facing south. Beginning of day. Created: 7/8/2022 8:14:04 AM Lat:32.805527, Long:-106.544461</p> <p>Northeast corner of excavation facing south. Beginning of day.</p>
<p>Viewing Direction: Southwest</p>  <p>Descriptive Photo - 3 Viewing Direction: Southwest Desc: Southeast corner of excavation facing southwest. Beginning of day. Created: 7/8/2022 8:14:04 AM Lat:32.805522, Long:-106.544461</p> <p>Southeast corner of excavation facing southwest. Beginning of day.</p>	<p>Viewing Direction: North</p>  <p>Descriptive Photo - 4 Viewing Direction: North Desc: Southeast corner of excavation facing north. Beginning of day. Created: 7/8/2022 8:14:04 AM Lat:32.805522, Long:-106.544461</p> <p>Southeast corner of excavation facing north. Beginning of day.</p>



Daily Site Visit Report

<p>Viewing Direction: Northeast</p>  <p> <small>Description Photo - 7 Viewing Direction: Northeast Desc: Southwest corner of excavation facing northeast. Beginning of day. Created: 7/8/2022 8:07:33 AM Lat:32.805041, Long:-104.544929</small> </p> <p>Southwest corner of excavation facing northeast. Beginning of day.</p>	<p>Viewing Direction: North</p>  <p> <small>Description Photo - 8 Viewing Direction: North Desc: Southwest corner of excavation facing northeast. Beginning of day. Created: 7/8/2022 8:07:59 AM Lat:32.805028, Long:-104.544901</small> </p> <p>Southwest corner of excavation facing northeast. Beginning of day.</p>
<p>Viewing Direction: South</p>  <p> <small>Description Photo - 9 Viewing Direction: South Desc: Northwest corner of excavation facing south. Beginning of day. Created: 7/8/2022 8:11:04 AM Lat:32.806413, Long:-104.544993</small> </p> <p>Northwest corner of excavation facing south. Beginning of day.</p>	<p>Viewing Direction: East</p>  <p> <small>Description Photo - 9 Viewing Direction: East Desc: Northwest corner of excavation facing east. Beginning of day. Created: 7/8/2022 8:12:34 AM Lat:32.806413, Long:-104.544993</small> </p> <p>Northwest corner of excavation facing east. Beginning of day. (Rain water in corner)</p>



Daily Site Visit Report

Viewing Direction: Northwest



Southeast corner of excavation facing northwest. End of day.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Lakin Pullman

Signature:


Signature

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Cooper AHH #1

Date: (SD: 7/8/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-100	12.0	0		0.67	33.9	310				✓	
BES22-101	12.0	0		0.59	34.1	186				✓	
BES22-102	12.0	0		0.60	34.1	200				✓	
BES22-103	12.0	0		0.58	33.8	184				✓	
BES22-104	12.0	0		0.57	34	161				✓	
BES22-24	17.0	0		0.37	32.5	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-30	17.0	0		0.42	32.3	18		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-31	17.0	0		0.33	32.5	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-32	17.0	0		0.39	32.2	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-44	17.0	0		0.49	32.2	124		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-62	20.0	0		0.37	32.5	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-63	20.0	0		0.46	32.6	63		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



BES22-64	20.0	0		0.48	32.5	96		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-65	20.0	0		0.51	32.7	131		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-66	20.0	0		0.39	32.8	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-67	20.0	0		0.43	32.6	20		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-68	20.0	0		0.37	32.7	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-69	20.0	0		0.50	33.1	99		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-70	20.0	0		0.51	33	118		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-71	20.0	0		0.43	33.1	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-72	20.0	0		0.52	33.2	124		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-73	20.0	0		0.51	33	118		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-74	20.0	0		0.40	33.1	0		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-75	20.0	0		0.48	33.3	62		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



BES22-76	20.0	0		0.45	33.2	23		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-77	20.0	0		0.55	33.2	167		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-78	4.0	0		0.40	33.3	0				✓	
BES22-79	4.0	0		0.45	31.2	109				✓	
BES22-80	4.0	0		0.41	31.3	47				✓	
BES22-81	4.0	0		0.54	31.7	217				✓	
BES22-82	4.0	0		0.48	32	118				✓	
BES22-83	4.0	0		0.42	30.8	83				✓	
BES22-84	4.0	0		0.60	35	161				✓	
BES22-85	4.0	0		0.58	34.6	150				✓	
BES22-86	4.0	0		0.68	34.8	285				✓	
BES22-87	4.0	0		0.64	35	219				✓	
BES22-88	4.0	0		0.32	33.7	0				✓	
BES22-89	4.0	0		0.61	30.5	370				✓	
BES22-90	4.0	0		0.51	30.4	230				✓	
BES22-91	4.0	0		0.54	30.5	269		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-92	4.0	0		0.42	30.5	96		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (SW-4500 Cl), TPH (EPA SW-846 Method 8015M)		✓	
BES22-93	14.0	0		0.38	37.5	0				✓	
BES22-94	14.0	0		0.40	37.3	0				✓	
BES22-95	14.0	0		0.35	37	0				✓	
BES22-96	14.0	0		0.39	36.9	0				✓	
BES22-97	14.0	0		0.33	36.9	0				✓	
BES22-98	12.0	0		0.65	34	277				✓	
BES22-99	12.0	0		0.61	33.9	223				✓	
WES22-14	20.0	0		0.46	33.3	33				✓	
WES22-15	20.0	0		0.51	33.2	109				✓	
WES22-16	20.0	0		0.57	33.2	196				✓	
WES22-17	8.0	0		0.48	33.1	70				✓	
WES22-17	12.0	0		0.51	33	118				✓	

Daily Soil Sampling



WES22-17	16.0	0		0.46	33.1	41				✓	
WES22-17	20.0	0		0.47	31.2	138				✓	
WES22-18	8.0	0		0.39	31.1	27					
WES22-18	12.0	0		0.32	31	0					
WES22-18	16.0	0		0.45	31.3	105					
WES22-18	20.0	0		0.49	31.2	167					
WES22-19	4.0	0		0.53	34.7	73				✓	
WES22-19	8.0	0		0.47	34.4	0				✓	
WES22-19	12.0	0		0.55	34.4	115				✓	
WES22-19	17.0	0		0.50	34.3	47				✓	
WES22-20	4.0	0		0.42	34.5	0				✓	
WES22-20	8.0	0		0.58	34.5	154				✓	
WES22-20	12.0	0		0.52	34.4	72				✓	
WES22-20	17.0	0		0.48	34.3	18				✓	
WES22-21	17.0	0		0.37	37.4	0				✓	
WES22-22	8.0	0		0.48	36.6	0				✓	
WES22-22	12.0	0		0.56	35.6	77				✓	
WES22-22	15.0	0		0.49	35.8	0				✓	
WES22-22	17.0	0		0.37	36	0				✓	
WES22-23	8.0	0		0.41	36.1	0				✓	
WES22-23	12.0	0		0.42	36	0				✓	
WES22-23	15.0	0		0.59	36.1	99				✓	
WES22-23	17.0	0		0.42	36.1	0				✓	
WES22-24	8.0	0		0.76	34.2	427				✓	
WES22-24	8.0	0		0.76	34.2	427				✓	
WES22-24	12.0	0		0.68	34.2	311				✓	
WES22-25	8.0	0		0.67	34.3	292				✓	
WES22-25	12.0	0		0.72	34.4	360				✓	
WES22-26	4.0	0		0.48	33.2	66				✓	
WES22-27	4.0	0		0.42	33.3	0				✓	



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	7/9/2022
Site Location Name:	Cooper AHH #1	Report Run Date:	7/9/2022 11:28 PM
Client Contact Name:	Chase Settle	API #:	30-015-26299
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	7/9/2022 7:13 AM
Departed Site	7/9/2022 4:17 PM

Field Notes

7:40 Completed safety paperwork at office. On site to continue confirmation sampling.

16:08 Collected remaining confirmation base and wall excavation samples. Samples were field screened for VOC and chloride. Soil samples were packaged for submission to laboratory for analyses.

Next Steps & Recommendations

- 1 Remove ramp on north side.
- 2 Wait for laboratory results prior to backfill.

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Northeast corner facing southwest. Beginning of day.

Viewing Direction: Northeast



South edge of excavation facing northeast. End of day. (Rain water pooled up at bottom)

Viewing Direction: Southwest



East edge of excavation facing southwest. End of day.

Viewing Direction: West



East edge of excavation facing west. End of day.



Daily Site Visit Report

Viewing Direction: Northwest



East edge of excavation facing northwest. End of day.

Viewing Direction: Southwest



Northeast corner of excavation facing southwest. End of day.

Viewing Direction: South



North edge of excavation facing south. End of day. (Water is from recent rains)

Viewing Direction: Southeast



North edge of excavation facing southeast. End of day.



Daily Site Visit Report

Viewing Direction: Southwest



North edge of excavation facing southwest.
End of day.

Viewing Direction: Northeast



West edge of excavation facing northeast. End of day.

Viewing Direction: Southeast



West edge of excavation facing southeast. End of day.

Viewing Direction: Northeast



Southeast corner of excavation facing northeast. End of day.



Daily Site Visit Report

Viewing Direction: Northwest



South edge of excavation facing northwest.
End of day.

Viewing Direction: North



South edge of excavation facing north. End
of day. Water in corner is from recent rains.

ATTACHMENT 5

Monica Peppin

From: Chase Settle <Chase_Settle@eogresources.com>
Sent: Wednesday, November 24, 2021 10:22 AM
To: Monica Peppin
Cc: Michael Moffitt
Subject: FW: Cooper AHH 1 (NMLB1027336691/2RP-439) Sampling Notification

From: Yolanda Ybarra <Yolanda_Ybarra@eogresources.com>
Sent: Wednesday, November 24, 2021 8:55 AM
To: robert.hamlet@state.nm.; blm_nm_cfo_spill@blm.gov
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>; Yvette Moore <Yvette_Moore@eogresources.com>; Ashley Bravo <Ashley_Bravo@eogresources.com>
Subject: FW: Cooper AHH 1 (NMLB1027336691/2RP-439) Sampling Notification

Good morning,

EOG Resources, Inc. respectfully submits changes to original notification of sampling activities to be conducted at the below location.

Cooper AHH 1
NMLB1027336691/2RP-439

Sampling will begin at 8:00 a.m. November 30, 2021, and be continuous as the excavation progresses.

Thank you,



Yolanda A. Ybarra

Sr. Regulatory Assistant
Artesia Division
104 S. 4th Street
Artesia, NM 88210
(575) 748-4329 Office
(575) 703-1882 Cell

From: Miriam Morales <Miriam_Morales@eogresources.com>
Sent: Tuesday, November 23, 2021 4:01 PM
To: Robert.Hamlet@state.nm.us; blm_nm_cfo_spill@blm.gov
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; Chase Settle <Chase_Settle@eogresources.com>; Yvette Moore <Yvette_Moore@eogresources.com>; Ashley Bravo

<[Ashley Bravo@eogresources.com](mailto:Ashley_Bravo@eogresources.com)>

Subject: Cooper AHH 1 (NMLB1027336691/2RP-439) Sampling Notification

Good Afternoon,

EOG Resources, Inc. respectfully submits notification of sampling activities to be conducted at the below location.

Cooper AHH 1
NMLB1027336691/2RP-439

Sampling will begin at 8:00 a.m. on November 30, 2021.

Thank you,

Miriam Morales

Monica Peppin

From: Amber Griffin <Amber_Griffin@eogresources.com>
Sent: Thursday, June 9, 2022 1:42 PM
To: Monica Peppin
Subject: FW: Cooper AHH 1 Battery (NMLB1027336691/2RP-439) Sampling Notification

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, June 9, 2022 10:19 AM
To: Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Cooper AHH 1 Battery (NMLB1027336691/2RP-439) Sampling Notification

Good Morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Cooper AHH 1 Battery
F-1-20S-24E; Eddy County, NM
NMLB1027336691/2RP-439

Sampling will begin at 8:00 a.m. on Monday, June 13, 2022 and continue through Friday, June 17, 2022.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

Monica Peppin

From: Chase Settle <Chase_Settle@eogresources.com>
Sent: Thursday, June 16, 2022 11:51 AM
To: Monica Peppin
Cc: Michael Moffitt
Subject: FW: Cooper AHH 1 Battery (NMLB1027336691/2RP-439) Sampling Notification

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, June 16, 2022 9:40 AM
To: blm_nm_cfo_spill@blm.gov; Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Cooper AHH 1 Battery (NMLB1027336691/2RP-439) Sampling Notification

Good Morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Cooper AHH 1 Battery
F-1-20S-24E; Eddy County, NM
NMLB1027336691/2RP-439

Samplng will begin at 10:00 a.m. on Monday, June 20, 2022 through Friday, June 24, 2022.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

Monica Peppin

From: Chase Settle <Chase_Settle@eogresources.com>
Sent: Monday, June 27, 2022 7:51 AM
To: Monica Peppin
Subject: FW: Cooper AHH 1 Battery (NMLB1027336691/2RP-439) Sampling Notification

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, June 23, 2022 7:25 AM
To: blm_nm_cfo_spill@blm.gov; Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Cooper AHH 1 Battery (NMLB1027336691/2RP-439) Sampling Notification

Good Morning,

EOG Resources, Inc. respectfully submits notification of sampling to be conducted at the below location.

Cooper AHH 1 Battery
F-1-20S-24E
Eddy County, NM
NMLB1027336691/2RP-439

Sampling will begin at 8:00 a.m. on Monday, June 27, 2022 and continue through Friday, July 1, 2022.

Thank you,

Tina Huerta
Regulatory Specialist
Direct: 575.748.4168
Cell: 575.703.3121
Email: tina_huerta@eogresources.com



Artesia Division

ATTACHMENT 6



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

October 06, 2021

Chase Settle

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX

RE: Cooper AHH 1

OrderNo.: 2109D87

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 10 sample(s) on 9/24/2021 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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-01 0'

Project: Cooper AHH 1

Collection Date: 9/22/2021 10:45:00 AM

Lab ID: 2109D87-001

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	95	60		mg/Kg	20	9/29/2021 10:41:07 PM	62900
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	51	9.1		mg/Kg	1	10/1/2021 9:49:13 AM	62875
Motor Oil Range Organics (MRO)	130	46		mg/Kg	1	10/1/2021 9:49:13 AM	62875
Surr: DNOP	59.2	70-130	S	%Rec	1	10/1/2021 9:49:13 AM	62875
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	9/28/2021 3:57:00 AM	62829
Surr: BFB	89.1	70-130		%Rec	1	9/28/2021 3:57:00 AM	62829
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	9/28/2021 3:57:00 AM	62829
Toluene	ND	0.046		mg/Kg	1	9/28/2021 3:57:00 AM	62829
Ethylbenzene	ND	0.046		mg/Kg	1	9/28/2021 3:57:00 AM	62829
Xylenes, Total	ND	0.093		mg/Kg	1	9/28/2021 3:57:00 AM	62829
Surr: 4-Bromofluorobenzene	76.2	70-130		%Rec	1	9/28/2021 3:57:00 AM	62829

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-01 1'

Project: Cooper AHH 1

Collection Date: 9/22/2021 10:55:00 AM

Lab ID: 2109D87-002

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	230	60		mg/Kg	20	9/29/2021 11:18:22 PM	62900
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	9/28/2021 2:03:10 PM	62840
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2021 2:03:10 PM	62840
Surr: DNOP	94.4	70-130		%Rec	1	9/28/2021 2:03:10 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/28/2021 10:39:57 AM	62834
Surr: BFB	104	70-130		%Rec	1	9/28/2021 10:39:57 AM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2021 10:39:57 AM	62834
Toluene	ND	0.050		mg/Kg	1	9/28/2021 10:39:57 AM	62834
Ethylbenzene	ND	0.050		mg/Kg	1	9/28/2021 10:39:57 AM	62834
Xylenes, Total	ND	0.10		mg/Kg	1	9/28/2021 10:39:57 AM	62834
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	9/28/2021 10:39:57 AM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-02 0'

Project: Cooper AHH 1

Collection Date: 9/22/2021 11:00:00 AM

Lab ID: 2109D87-003

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	9/29/2021 11:30:47 PM	62900
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	9/28/2021 2:40:18 PM	62840
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/28/2021 2:40:18 PM	62840
Surr: DNOP	84.6	70-130		%Rec	1	9/28/2021 2:40:18 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2021 11:50:25 AM	62834
Surr: BFB	107	70-130		%Rec	1	9/28/2021 11:50:25 AM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2021 11:50:25 AM	62834
Toluene	ND	0.049		mg/Kg	1	9/28/2021 11:50:25 AM	62834
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2021 11:50:25 AM	62834
Xylenes, Total	ND	0.099		mg/Kg	1	9/28/2021 11:50:25 AM	62834
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	9/28/2021 11:50:25 AM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-02 1'

Project: Cooper AHH 1

Collection Date: 9/22/2021 11:10:00 AM

Lab ID: 2109D87-004

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	210	60		mg/Kg	20	9/30/2021 8:38:12 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	160	20		mg/Kg	2	10/1/2021 12:46:30 PM	62840
Motor Oil Range Organics (MRO)	440	100		mg/Kg	2	10/1/2021 12:46:30 PM	62840
Surr: DNOP	83.6	70-130		%Rec	2	10/1/2021 12:46:30 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2021 1:01:17 PM	62834
Surr: BFB	106	70-130		%Rec	1	9/28/2021 1:01:17 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/28/2021 1:01:17 PM	62834
Toluene	ND	0.049		mg/Kg	1	9/28/2021 1:01:17 PM	62834
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2021 1:01:17 PM	62834
Xylenes, Total	ND	0.098		mg/Kg	1	9/28/2021 1:01:17 PM	62834
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	9/28/2021 1:01:17 PM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-03 0'

Project: Cooper AHH 1

Collection Date: 9/22/2021 11:30:00 AM

Lab ID: 2109D87-005

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	160	61		mg/Kg	20	9/30/2021 8:50:37 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	140	49		mg/Kg	5	9/30/2021 3:12:57 PM	62840
Motor Oil Range Organics (MRO)	420	240		mg/Kg	5	9/30/2021 3:12:57 PM	62840
Surr: DNOP	88.6	70-130		%Rec	5	9/30/2021 3:12:57 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2021 1:24:47 PM	62834
Surr: BFB	105	70-130		%Rec	1	9/28/2021 1:24:47 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2021 1:24:47 PM	62834
Toluene	ND	0.049		mg/Kg	1	9/28/2021 1:24:47 PM	62834
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2021 1:24:47 PM	62834
Xylenes, Total	ND	0.098		mg/Kg	1	9/28/2021 1:24:47 PM	62834
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	9/28/2021 1:24:47 PM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-03 1'

Project: Cooper AHH 1

Collection Date: 9/22/2021 11:40:00 AM

Lab ID: 2109D87-006

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	420	60		mg/Kg	20	9/30/2021 9:03:01 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	9/28/2021 3:05:01 PM	62840
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/28/2021 3:05:01 PM	62840
Surr: DNOP	90.4	70-130		%Rec	1	9/28/2021 3:05:01 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/28/2021 1:48:09 PM	62834
Surr: BFB	107	70-130		%Rec	1	9/28/2021 1:48:09 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2021 1:48:09 PM	62834
Toluene	ND	0.050		mg/Kg	1	9/28/2021 1:48:09 PM	62834
Ethylbenzene	ND	0.050		mg/Kg	1	9/28/2021 1:48:09 PM	62834
Xylenes, Total	ND	0.099		mg/Kg	1	9/28/2021 1:48:09 PM	62834
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	9/28/2021 1:48:09 PM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-04 0'

Project: Cooper AHH 1

Collection Date: 9/22/2021 11:45:00 AM

Lab ID: 2109D87-007

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	9/30/2021 9:15:26 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	72	47		mg/Kg	5	9/30/2021 4:47:54 PM	62840
Motor Oil Range Organics (MRO)	380	230		mg/Kg	5	9/30/2021 4:47:54 PM	62840
Surr: DNOP	87.3	70-130		%Rec	5	9/30/2021 4:47:54 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/28/2021 2:11:43 PM	62834
Surr: BFB	106	70-130		%Rec	1	9/28/2021 2:11:43 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2021 2:11:43 PM	62834
Toluene	ND	0.050		mg/Kg	1	9/28/2021 2:11:43 PM	62834
Ethylbenzene	ND	0.050		mg/Kg	1	9/28/2021 2:11:43 PM	62834
Xylenes, Total	ND	0.10		mg/Kg	1	9/28/2021 2:11:43 PM	62834
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	9/28/2021 2:11:43 PM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-04 1'

Project: Cooper AHH 1

Collection Date: 9/22/2021 11:55:00 AM

Lab ID: 2109D87-008

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	9/30/2021 9:27:51 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	120	18		mg/Kg	2	9/30/2021 3:24:49 PM	62840
Motor Oil Range Organics (MRO)	400	90		mg/Kg	2	9/30/2021 3:24:49 PM	62840
Surr: DNOP	102	70-130		%Rec	2	9/30/2021 3:24:49 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2021 2:35:14 PM	62834
Surr: BFB	106	70-130		%Rec	1	9/28/2021 2:35:14 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	9/28/2021 2:35:14 PM	62834
Toluene	ND	0.049		mg/Kg	1	9/28/2021 2:35:14 PM	62834
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2021 2:35:14 PM	62834
Xylenes, Total	ND	0.099		mg/Kg	1	9/28/2021 2:35:14 PM	62834
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	9/28/2021 2:35:14 PM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-05 0'

Project: Cooper AHH 1

Collection Date: 9/22/2021 12:00:00 PM

Lab ID: 2109D87-009

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	9/30/2021 9:40:16 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	1600	190		mg/Kg	20	9/28/2021 10:03:50 PM	62840
Motor Oil Range Organics (MRO)	3200	930		mg/Kg	20	9/28/2021 10:03:50 PM	62840
Surr: DNOP	0	70-130	S	%Rec	20	9/28/2021 10:03:50 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	9/28/2021 2:58:48 PM	62834
Surr: BFB	103	70-130		%Rec	1	9/28/2021 2:58:48 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/28/2021 2:58:48 PM	62834
Toluene	ND	0.049		mg/Kg	1	9/28/2021 2:58:48 PM	62834
Ethylbenzene	ND	0.049		mg/Kg	1	9/28/2021 2:58:48 PM	62834
Xylenes, Total	ND	0.097		mg/Kg	1	9/28/2021 2:58:48 PM	62834
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	9/28/2021 2:58:48 PM	62834

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 2109D87

Date Reported: 10/6/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BH21-05 1'

Project: Cooper AHH 1

Collection Date: 9/22/2021 12:10:00 PM

Lab ID: 2109D87-010

Matrix: SOIL

Received Date: 9/24/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	9/30/2021 9:52:41 AM	62931
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	110	48		mg/Kg	5	9/30/2021 4:59:47 PM	62840
Motor Oil Range Organics (MRO)	360	240		mg/Kg	5	9/30/2021 4:59:47 PM	62840
Surr: DNOP	86.0	70-130		%Rec	5	9/30/2021 4:59:47 PM	62840
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	9/28/2021 4:32:56 PM	62834
Surr: BFB	105	70-130		%Rec	1	9/28/2021 4:32:56 PM	62834
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	9/28/2021 4:32:56 PM	62834
Toluene	ND	0.047		mg/Kg	1	9/28/2021 4:32:56 PM	62834
Ethylbenzene	ND	0.047		mg/Kg	1	9/28/2021 4:32:56 PM	62834
Xylenes, Total	ND	0.095		mg/Kg	1	9/28/2021 4:32:56 PM	62834
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	9/28/2021 4:32:56 PM	62834

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#: 2109D87

06-Oct-21

Client: EOG
Project: Cooper AHH 1

Sample ID: MB-62900	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 62900	RunNo: 81677								
Prep Date: 9/29/2021	Analysis Date: 9/29/2021	SeqNo: 2886779	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-62900	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 62900	RunNo: 81677								
Prep Date: 9/29/2021	Analysis Date: 9/29/2021	SeqNo: 2886780	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			

Sample ID: MB-62931	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 62931	RunNo: 81698								
Prep Date: 9/30/2021	Analysis Date: 9/30/2021	SeqNo: 2888474	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-62931	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 62931	RunNo: 81698								
Prep Date: 9/30/2021	Analysis Date: 9/30/2021	SeqNo: 2888475	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

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

WO#: 2109D87

06-Oct-21

Client: EOG
Project: Cooper AHH 1

Sample ID: MB-62840	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 62840		RunNo: 81609							
Prep Date: 9/27/2021	Analysis Date: 9/28/2021		SeqNo: 2886147		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		94.9	70	130			

Sample ID: LCS-62840	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 62840		RunNo: 81609							
Prep Date: 9/27/2021	Analysis Date: 9/28/2021		SeqNo: 2886148		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	87.2	68.9	135			
Surr: DNOP	4.6		5.000		92.4	70	130			

Sample ID: MB-62875	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 62875		RunNo: 81663							
Prep Date: 9/28/2021	Analysis Date: 9/29/2021		SeqNo: 2888175		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		112	70	130			

Sample ID: LCS-62875	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 62875		RunNo: 81663							
Prep Date: 9/28/2021	Analysis Date: 9/29/2021		SeqNo: 2888176		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	10	50.00	0	122	68.9	135			
Surr: DNOP	5.4		5.000		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

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

WO#: 2109D87

06-Oct-21

Client: EOG
Project: Cooper AHH 1

Sample ID: lcs-62829	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 62829				RunNo: 81607					
Prep Date: 9/24/2021	Analysis Date: 9/27/2021				SeqNo: 2884005	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	116	78.6	131			
Surr: BFB	1100		1000		111	70	130			

Sample ID: mb-62829	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 62829				RunNo: 81607					
Prep Date: 9/24/2021	Analysis Date: 9/27/2021				SeqNo: 2884006	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	950		1000		95.2	70	130			

Sample ID: mb-62834	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 62834				RunNo: 81634					
Prep Date: 9/25/2021	Analysis Date: 9/28/2021				SeqNo: 2885069	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-62834	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 62834				RunNo: 81634					
Prep Date: 9/25/2021	Analysis Date: 9/28/2021				SeqNo: 2885070	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	78.6	131			
Surr: BFB	1100		1000		114	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#: 2109D87

06-Oct-21

Client: EOG
Project: Cooper AHH 1

Sample ID: lcs-62829	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 62829			RunNo: 81607						
Prep Date: 9/24/2021	Analysis Date: 9/27/2021			SeqNo: 2884094		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	94.3	80	120			
Toluene	0.93	0.050	1.000	0	93.1	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.8	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.2	80	120			
Surr: 4-Bromofluorobenzene	0.81		1.000		80.6	70	130			

Sample ID: mb-62829	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 62829			RunNo: 81607						
Prep Date: 9/24/2021	Analysis Date: 9/27/2021			SeqNo: 2884095		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	0.79		1.000		79.1	70	130			

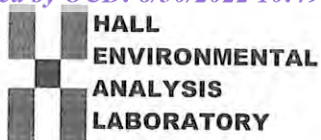
Sample ID: mb-62834	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 62834			RunNo: 81634						
Prep Date: 9/25/2021	Analysis Date: 9/28/2021			SeqNo: 2885119		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		89.8	70	130			

Sample ID: LCS-62834	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 62834			RunNo: 81634						
Prep Date: 9/25/2021	Analysis Date: 9/28/2021			SeqNo: 2885120		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	95.1	80	120			
Toluene	0.99	0.050	1.000	0	98.7	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.5	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.6	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



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: EOG

Work Order Number: 2109D87

RcptNo: 1

Received By: Cheyenne Cason

9/24/2021 7:25:00 AM

Completed By: Isaiah Ortiz

9/24/2021 8:01:27 AM

Reviewed By: KPG

9/24/21

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: TME 9.24.21

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	0.4	Good	Not Present			

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

October 26, 2021

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

RE: Cooper AHH 1 Battery

OrderNo.: 2110781

Dear Dennis Williams:

Hall Environmental Analysis Laboratory received 21 sample(s) on 10/16/2021 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".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 10:55:00 AM

Lab ID: 2110781-001

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	30	9.9		mg/Kg	1	10/20/2021 7:38:22 PM
Motor Oil Range Organics (MRO)	68	49		mg/Kg	1	10/20/2021 7:38:22 PM
Surr: DNOP	92.7	70-130		%Rec	1	10/20/2021 7:38:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 2:54:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 2:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 2:54:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 2:54:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 2:54:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/19/2021 2:54:00 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	10/19/2021 2:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 8:38:37 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		

Analytical Report

Lab Order 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-05 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 10:10:00 AM

Lab ID: 2110781-004

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2021 12:40:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2021 12:40:10 PM
Surr: DNOP	120	70-130		%Rec	1	10/19/2021 12:40:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/19/2021 3:14:00 PM
Surr: BFB	102	70-130		%Rec	1	10/19/2021 3:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.023		mg/Kg	1	10/19/2021 3:14:00 PM
Toluene	ND	0.046		mg/Kg	1	10/19/2021 3:14:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	10/19/2021 3:14:00 PM
Xylenes, Total	ND	0.091		mg/Kg	1	10/19/2021 3:14:00 PM
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	10/19/2021 3:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 8:51:01 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-05 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 10:15:00 AM

Lab ID: 2110781-005

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 12:50:55 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 12:50:55 PM
Surr: DNOP	60.4	70-130	S	%Rec	1	10/19/2021 12:50:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 3:33:00 PM
Surr: BFB	106	70-130		%Rec	1	10/19/2021 3:33:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 3:33:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 3:33:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 3:33:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	10/19/2021 3:33:00 PM
Surr: 4-Bromofluorobenzene	88.0	70-130		%Rec	1	10/19/2021 3:33:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 9:03:26 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-06 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 9:00:00 AM

Lab ID: 2110781-007

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	43	9.5		mg/Kg	1	10/20/2021 7:49:03 PM
Motor Oil Range Organics (MRO)	170	48		mg/Kg	1	10/20/2021 7:49:03 PM
Surr: DNOP	102	70-130		%Rec	1	10/20/2021 7:49:03 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 4:32:00 PM
Surr: BFB	103	70-130		%Rec	1	10/19/2021 4:32:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 4:32:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 4:32:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 4:32:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 4:32:00 PM
Surr: 4-Bromofluorobenzene	87.5	70-130		%Rec	1	10/19/2021 4:32:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 9:15:51 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-06 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 9:15:00 AM

Lab ID: 2110781-008

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/19/2021 1:12:35 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 1:12:35 PM
Surr: DNOP	126	70-130		%Rec	1	10/19/2021 1:12:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 4:51:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 4:51:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 4:51:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 4:51:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 4:51:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	10/19/2021 4:51:00 PM
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	10/19/2021 4:51:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 9:53:06 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-07 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 12:00:00 PM

Lab ID: 2110781-010

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	270	49		mg/Kg	5	10/20/2021 5:34:27 PM
Motor Oil Range Organics (MRO)	540	250		mg/Kg	5	10/20/2021 5:34:27 PM
Surr: DNOP	96.2	70-130		%Rec	5	10/20/2021 5:34:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 5:11:00 PM
Surr: BFB	99.9	70-130		%Rec	1	10/19/2021 5:11:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 5:11:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 5:11:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 5:11:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	10/19/2021 5:11:00 PM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	10/19/2021 5:11:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	91	60		mg/Kg	20	10/22/2021 10:05:31 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		

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Analytical Report

Lab Order 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-07 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 12:15:00 PM

Lab ID: 2110781-011

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 2:31:35 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 2:31:35 PM
Surr: DNOP	92.0	70-130		%Rec	1	10/19/2021 2:31:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 5:30:00 PM
Surr: BFB	102	70-130		%Rec	1	10/19/2021 5:30:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 5:30:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 5:30:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 5:30:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 5:30:00 PM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	10/19/2021 5:30:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	350	60		mg/Kg	20	10/22/2021 10:17:55 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-08 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:00:00 PM

Lab ID: 2110781-013

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2021 2:42:32 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2021 2:42:32 PM
Surr: DNOP	103	70-130		%Rec	1	10/19/2021 2:42:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 5:50:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 5:50:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/19/2021 5:50:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 5:50:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 5:50:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	10/19/2021 5:50:00 PM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	10/19/2021 5:50:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	380	61		mg/Kg	20	10/22/2021 10:30:20 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		

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Analytical Report

Lab Order 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-08 1'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:05:00 PM

Lab ID: 2110781-014

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 2:53:24 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 2:53:24 PM
Surr: DNOP	108	70-130		%Rec	1	10/19/2021 2:53:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 6:10:00 PM
Surr: BFB	109	70-130		%Rec	1	10/19/2021 6:10:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 6:10:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 6:10:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 6:10:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 6:10:00 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	10/19/2021 6:10:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	340	60		mg/Kg	20	10/22/2021 10:42:45 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-08 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:10:00 PM

Lab ID: 2110781-015

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 3:04:25 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/19/2021 3:04:25 PM
Surr: DNOP	131	70-130	S	%Rec	1	10/19/2021 3:04:25 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 6:29:00 PM
Surr: BFB	99.8	70-130		%Rec	1	10/19/2021 6:29:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 6:29:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 6:29:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 6:29:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 6:29:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	10/19/2021 6:29:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	210	60		mg/Kg	20	10/22/2021 10:55:10 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-09 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:45:00 PM

Lab ID: 2110781-016

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2021 3:15:21 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 3:15:21 PM
Surr: DNOP	96.3	70-130		%Rec	1	10/19/2021 3:15:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 6:49:00 PM
Surr: BFB	101	70-130		%Rec	1	10/19/2021 6:49:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 6:49:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 6:49:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 6:49:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	10/19/2021 6:49:00 PM
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	10/19/2021 6:49:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	150	60		mg/Kg	20	10/22/2021 11:07:34 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-09 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:55:00 PM

Lab ID: 2110781-017

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	38	9.6		mg/Kg	1	10/20/2021 9:36:39 PM
Motor Oil Range Organics (MRO)	96	48		mg/Kg	1	10/20/2021 9:36:39 PM
Surr: DNOP	108	70-130		%Rec	1	10/20/2021 9:36:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 7:08:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 7:08:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/19/2021 7:08:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 7:08:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 7:08:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/19/2021 7:08:00 PM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	10/19/2021 7:08:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	130	60		mg/Kg	20	10/22/2021 11:19:59 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-10 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:00:00 PM

Lab ID: 2110781-018

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2021 3:37:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2021 3:37:13 PM
Surr: DNOP	87.3	70-130		%Rec	1	10/19/2021 3:37:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/19/2021 7:28:00 PM
Surr: BFB	103	70-130		%Rec	1	10/19/2021 7:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.023		mg/Kg	1	10/19/2021 7:28:00 PM
Toluene	ND	0.046		mg/Kg	1	10/19/2021 7:28:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	10/19/2021 7:28:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	10/19/2021 7:28:00 PM
Surr: 4-Bromofluorobenzene	83.9	70-130		%Rec	1	10/19/2021 7:28:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 11:32:25 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-10 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:10:00 PM

Lab ID: 2110781-019

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/21/2021 5:48:23 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2021 5:48:23 AM
Surr: DNOP	115	70-130		%Rec	1	10/21/2021 5:48:23 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/20/2021 8:11:00 PM
Surr: BFB	97.1	70-130		%Rec	1	10/20/2021 8:11:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/20/2021 8:11:00 PM
Toluene	ND	0.049		mg/Kg	1	10/20/2021 8:11:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/20/2021 8:11:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/20/2021 8:11:00 PM
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	10/20/2021 8:11:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 11:44:49 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-11 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:15:00 PM

Lab ID: 2110781-020

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	10/21/2021 5:58:59 AM
Motor Oil Range Organics (MRO)	51	49		mg/Kg	1	10/21/2021 5:58:59 AM
Surr: DNOP	106	70-130		%Rec	1	10/21/2021 5:58:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/20/2021 9:10:00 PM
Surr: BFB	105	70-130		%Rec	1	10/20/2021 9:10:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/20/2021 9:10:00 PM
Toluene	ND	0.047		mg/Kg	1	10/20/2021 9:10:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	10/20/2021 9:10:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	10/20/2021 9:10:00 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	10/20/2021 9:10:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 12:22:03 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 2110781

Date Reported: 10/26/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-11 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:25:00 PM

Lab ID: 2110781-021

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/21/2021 6:09:35 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/21/2021 6:09:35 AM
Surr: DNOP	85.5	70-130		%Rec	1	10/21/2021 6:09:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/20/2021 10:09:00 PM
Surr: BFB	100	70-130		%Rec	1	10/20/2021 10:09:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/20/2021 10:09:00 PM
Toluene	ND	0.050		mg/Kg	1	10/20/2021 10:09:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/20/2021 10:09:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	10/20/2021 10:09:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	10/20/2021 10:09:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	99	61		mg/Kg	20	10/22/2021 12:59:18 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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#: 2110781

26-Oct-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: MB-63465	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 63465	RunNo: 82233								
Prep Date: 10/21/2021	Analysis Date: 10/22/2021	SeqNo: 2915810 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-63465	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 63465	RunNo: 82233								
Prep Date: 10/21/2021	Analysis Date: 10/22/2021	SeqNo: 2915811 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Sample ID: MB-63489	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 63489	RunNo: 82259								
Prep Date: 10/22/2021	Analysis Date: 10/22/2021	SeqNo: 2917878 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-63489	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 63489	RunNo: 82259								
Prep Date: 10/22/2021	Analysis Date: 10/22/2021	SeqNo: 2917879 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.4	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#: 2110781

26-Oct-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: MB-63366	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63366	RunNo: 82153								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2910930			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		109	70	130			

Sample ID: MB-63393	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63393	RunNo: 82185								
Prep Date: 10/19/2021	Analysis Date: 10/20/2021	SeqNo: 2914634			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		112	70	130			

Sample ID: LCS-63393	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63393	RunNo: 82185								
Prep Date: 10/19/2021	Analysis Date: 10/20/2021	SeqNo: 2914635			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	112	68.9	135			
Surr: DNOP	5.8		5.000		116	70	130			

Sample ID: LCS-63366	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63366	RunNo: 82184								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914776			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.9	68.9	135			
Surr: DNOP	5.0		5.000		100	70	130			

Sample ID: LCS-63449	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63449	RunNo: 82184								
Prep Date: 10/20/2021	Analysis Date: 10/21/2021	SeqNo: 2916079			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.3		5.000		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#: 2110781

26-Oct-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: MB-63449	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63449	RunNo: 82184								
Prep Date: 10/20/2021	Analysis Date: 10/21/2021	SeqNo: 2916080		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		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 19 of 23

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

WO#: 2110781

26-Oct-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: mb-63356	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2910913			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		98.8	70	130			

Sample ID: lcs-63356	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2911927			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	118	78.6	131			
Surr: BFB	1200		1000		117	70	130			

Sample ID: mb-63360	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913955			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	70	130			

Sample ID: lcs-63360	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913957			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	120	78.6	131			
Surr: BFB	1200		1000		122	70	130			

Sample ID: 2110781-019ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH21-10 2'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913959			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	23.81	0	120	61.3	114			S
Surr: BFB	1200		952.4		121	70	130			

Sample ID: 2110781-019amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH21-10 2'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913961			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#: 2110781
26-Oct-21

Client: Vertex Resources Services, Inc.
Project: Cooper AHH 1 Battery

Sample ID: 2110781-019amsd		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH21-10 2'		Batch ID: 63360		RunNo: 82187						
Prep Date: 10/18/2021		Analysis Date: 10/20/2021		SeqNo: 2913961		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	23.99	0	120	61.3	114	0.765	20	S
Surr: BFB	1200		959.7		122	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#: 2110781

26-Oct-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: mb-63356	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2910914 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		86.3	70	130			

Sample ID: lcs-63356	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2911967 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	92.5	80	120			
Toluene	0.90	0.050	1.000	0	90.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.3	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.5	70	130			

Sample ID: mb-63360	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914003 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		85.8	70	130			

Sample ID: lcs-63360	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914005 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	92.1	80	120			
Toluene	0.92	0.050	1.000	0	91.8	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.1	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	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#: 2110781

26-Oct-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

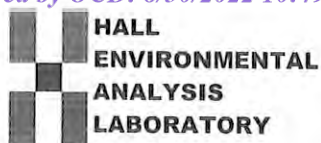
Sample ID: 2110781-020ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH21-11 0'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914007	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9625	0	90.3	80	120			
Toluene	0.91	0.048	0.9625	0	95.0	80	120			
Ethylbenzene	0.94	0.048	0.9625	0	97.7	80	120			
Xylenes, Total	2.9	0.096	2.887	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.92		0.9625		95.7	70	130			

Sample ID: 2110781-020amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH21-11 0'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914009	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	0.9891	0	91.2	80	120	3.73	20	
Toluene	0.95	0.049	0.9891	0	95.9	80	120	3.65	20	
Ethylbenzene	0.98	0.049	0.9891	0	99.1	80	120	4.13	20	
Xylenes, Total	3.0	0.099	2.967	0	103	80	120	3.52	20	
Surr: 4-Bromofluorobenzene	0.94		0.9891		95.2	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



*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 Resources
Services, Inc.**

Work Order Number: 2110781

RcptNo: 1

Received By: Cheyenne Cason 10/16/2021 7:50:00 AM

Completed By: Cheyenne Cason 10/16/2021 8:39:49 AM

Reviewed By: IO 10/18/21

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 <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 5. Sample(s) in proper container(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Sufficient sample volume for indicated test(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Was preservative added to bottles? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/> |
| 9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| 10. Were any sample containers received broken? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 13. Is it clear what analyses were requested? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 14. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
- # of preserved bottles checked for pH: 2

Adjusted? No

Checked by [Signature]

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good				
2	0.8	Good				

Chain-of-Custody Record

Client: EOG / Vertex

C Seville

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:

Cooper AHH #1 Battery

Project #:

01E-03278

Project Manager:

Dennis Williams

Sampler: MJP

On Ice: ☒ Yes ☐ No

of Coolers: 2 2.6-022.6

Cooler Temp (including CF): 0.8-020.8 (°C)

Container Type and #

402 ice

Preservative Type

ice

HEAL No.

2110781

2001

002

003

004

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Chain-of-Custody Record	Turn-Around Time: 5 Day
	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush
	Project Name: Cooper ANH #1 Battery
	Project #: DIE-03278
	Phone #:
Client: EOG/Vortex	
C. Settle	
Mailing Address:	

Turn-Around Time:	5 Day
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush
Project Name:	Cooper ANH #1 Battery
Project #:	DIE-03278

email or Fax#:	Project Manager: <i>Dennis Williams</i>
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	Sampler: <i>MJP</i>
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type)	# of Coolers: <i>2</i>

Project Manager:	Dennis Williams
Sampler:	MJP
On Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
# of Coolers:	2

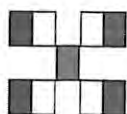
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
10/8	1:00	Soil	BH21-08	402	ice	2110781
	1:05		BH21-08			013
	1:10		BH21-08			014
	1:45		BH21-09			015
	1:55		BH21-09			016
	2:00		BH21-10			017
	2:10		BH21-10			018
	2:15		BH21-11			019
	2:25		BH21-11			020
						021

Cooler Temp (including CP):	Container Type and #	Preservative Type	HEAL No.
0.8-0 = 0.8 (°C)	402	ice	2110781
			013
			014
			015
			016
			017
			018
			019
			020
			021

[illegible]

Received by:	Via:	Date	Time
<i>[Signature]</i>		10/15/21	900
Received by:	Via:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this practice.



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks: CC: M. Puppin

Direct bill EOG



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

November 03, 2021

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

RE: Cooper AHH 1 Battery

OrderNo.: 2110781

Dear Dennis Williams:

Hall Environmental Analysis Laboratory received 21 sample(s) on 10/16/2021 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued October 26, 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 10:55:00 AM

Lab ID: 2110781-001

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	30	9.9		mg/Kg	1	10/20/2021 7:38:22 PM
Motor Oil Range Organics (MRO)	68	49		mg/Kg	1	10/20/2021 7:38:22 PM
Surr: DNOP	92.7	70-130		%Rec	1	10/20/2021 7:38:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 2:54:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 2:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 2:54:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 2:54:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 2:54:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/19/2021 2:54:00 PM
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	10/19/2021 2:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 8:38:37 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		

Analytical Report

Lab Order 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 11:00:00 AM

Lab ID: 2110781-002

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	31	9.4	H	mg/Kg	1	10/28/2021 4:09:01 PM
Motor Oil Range Organics (MRO)	61	47	H	mg/Kg	1	10/28/2021 4:09:01 PM
Surr: DNOP	103	70-130	H	%Rec	1	10/28/2021 4:09:01 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7	H	mg/Kg	1	10/29/2021 12:45:00 PM
Surr: BFB	97.3	70-130	H	%Rec	1	10/29/2021 12:45:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023	H	mg/Kg	1	10/29/2021 12:45:00 PM
Toluene	ND	0.047	H	mg/Kg	1	10/29/2021 12:45:00 PM
Ethylbenzene	ND	0.047	H	mg/Kg	1	10/29/2021 12:45:00 PM
Xylenes, Total	ND	0.094	H	mg/Kg	1	10/29/2021 12:45:00 PM
Surr: 4-Bromofluorobenzene	98.1	70-130	H	%Rec	1	10/29/2021 12:45:00 PM
EPA METHOD 300.0: ANIONS						Analyst: MRA
Chloride	ND	60		mg/Kg	20	10/28/2021 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-05 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 10:10:00 AM

Lab ID: 2110781-004

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2021 12:40:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2021 12:40:10 PM
Surr: DNOP	120	70-130		%Rec	1	10/19/2021 12:40:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/19/2021 3:14:00 PM
Surr: BFB	102	70-130		%Rec	1	10/19/2021 3:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.023		mg/Kg	1	10/19/2021 3:14:00 PM
Toluene	ND	0.046		mg/Kg	1	10/19/2021 3:14:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	10/19/2021 3:14:00 PM
Xylenes, Total	ND	0.091		mg/Kg	1	10/19/2021 3:14:00 PM
Surr: 4-Bromofluorobenzene	88.9	70-130		%Rec	1	10/19/2021 3:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 8:51:01 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-05 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 10:15:00 AM

Lab ID: 2110781-005

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 12:50:55 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 12:50:55 PM
Surr: DNOP	60.4	70-130	S	%Rec	1	10/19/2021 12:50:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 3:33:00 PM
Surr: BFB	106	70-130		%Rec	1	10/19/2021 3:33:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 3:33:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 3:33:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 3:33:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	10/19/2021 3:33:00 PM
Surr: 4-Bromofluorobenzene	88.0	70-130		%Rec	1	10/19/2021 3:33:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 9:03:26 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-06 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 9:00:00 AM

Lab ID: 2110781-007

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	43	9.5		mg/Kg	1	10/20/2021 7:49:03 PM
Motor Oil Range Organics (MRO)	170	48		mg/Kg	1	10/20/2021 7:49:03 PM
Surr: DNOP	102	70-130		%Rec	1	10/20/2021 7:49:03 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 4:32:00 PM
Surr: BFB	103	70-130		%Rec	1	10/19/2021 4:32:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 4:32:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 4:32:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 4:32:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 4:32:00 PM
Surr: 4-Bromofluorobenzene	87.5	70-130		%Rec	1	10/19/2021 4:32:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 9:15:51 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-06 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 9:15:00 AM

Lab ID: 2110781-008

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/19/2021 1:12:35 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 1:12:35 PM
Surr: DNOP	126	70-130		%Rec	1	10/19/2021 1:12:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 4:51:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 4:51:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 4:51:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 4:51:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 4:51:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	10/19/2021 4:51:00 PM
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	10/19/2021 4:51:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 9:53:06 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-07 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 12:00:00 PM

Lab ID: 2110781-010

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	270	49		mg/Kg	5	10/20/2021 5:34:27 PM
Motor Oil Range Organics (MRO)	540	250		mg/Kg	5	10/20/2021 5:34:27 PM
Surr: DNOP	96.2	70-130		%Rec	5	10/20/2021 5:34:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 5:11:00 PM
Surr: BFB	99.9	70-130		%Rec	1	10/19/2021 5:11:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 5:11:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 5:11:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 5:11:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	10/19/2021 5:11:00 PM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	10/19/2021 5:11:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	91	60		mg/Kg	20	10/22/2021 10:05:31 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-07 3'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 12:15:00 PM

Lab ID: 2110781-011

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 2:31:35 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 2:31:35 PM
Surr: DNOP	92.0	70-130		%Rec	1	10/19/2021 2:31:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 5:30:00 PM
Surr: BFB	102	70-130		%Rec	1	10/19/2021 5:30:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 5:30:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 5:30:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 5:30:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 5:30:00 PM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	10/19/2021 5:30:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	350	60		mg/Kg	20	10/22/2021 10:17:55 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-08 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:00:00 PM

Lab ID: 2110781-013

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2021 2:42:32 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2021 2:42:32 PM
Surr: DNOP	103	70-130		%Rec	1	10/19/2021 2:42:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 5:50:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 5:50:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/19/2021 5:50:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 5:50:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 5:50:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	10/19/2021 5:50:00 PM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	10/19/2021 5:50:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	380	61		mg/Kg	20	10/22/2021 10:30:20 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-08 1'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:05:00 PM

Lab ID: 2110781-014

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 2:53:24 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 2:53:24 PM
Surr: DNOP	108	70-130		%Rec	1	10/19/2021 2:53:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 6:10:00 PM
Surr: BFB	109	70-130		%Rec	1	10/19/2021 6:10:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 6:10:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 6:10:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 6:10:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 6:10:00 PM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	10/19/2021 6:10:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	340	60		mg/Kg	20	10/22/2021 10:42:45 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-08 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:10:00 PM

Lab ID: 2110781-015

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/19/2021 3:04:25 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/19/2021 3:04:25 PM
Surr: DNOP	131	70-130	S	%Rec	1	10/19/2021 3:04:25 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 6:29:00 PM
Surr: BFB	99.8	70-130		%Rec	1	10/19/2021 6:29:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 6:29:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 6:29:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 6:29:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	10/19/2021 6:29:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	10/19/2021 6:29:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	210	60		mg/Kg	20	10/22/2021 10:55:10 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-09 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:45:00 PM

Lab ID: 2110781-016

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/19/2021 3:15:21 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/19/2021 3:15:21 PM
Surr: DNOP	96.3	70-130		%Rec	1	10/19/2021 3:15:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/19/2021 6:49:00 PM
Surr: BFB	101	70-130		%Rec	1	10/19/2021 6:49:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/19/2021 6:49:00 PM
Toluene	ND	0.048		mg/Kg	1	10/19/2021 6:49:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	10/19/2021 6:49:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	10/19/2021 6:49:00 PM
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	10/19/2021 6:49:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	150	60		mg/Kg	20	10/22/2021 11:07:34 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-09 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 1:55:00 PM

Lab ID: 2110781-017

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	38	9.6		mg/Kg	1	10/20/2021 9:36:39 PM
Motor Oil Range Organics (MRO)	96	48		mg/Kg	1	10/20/2021 9:36:39 PM
Surr: DNOP	108	70-130		%Rec	1	10/20/2021 9:36:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/19/2021 7:08:00 PM
Surr: BFB	105	70-130		%Rec	1	10/19/2021 7:08:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/19/2021 7:08:00 PM
Toluene	ND	0.049		mg/Kg	1	10/19/2021 7:08:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/19/2021 7:08:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/19/2021 7:08:00 PM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	10/19/2021 7:08:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	130	60		mg/Kg	20	10/22/2021 11:19:59 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-10 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:00:00 PM

Lab ID: 2110781-018

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/19/2021 3:37:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/19/2021 3:37:13 PM
Surr: DNOP	87.3	70-130		%Rec	1	10/19/2021 3:37:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/19/2021 7:28:00 PM
Surr: BFB	103	70-130		%Rec	1	10/19/2021 7:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.023		mg/Kg	1	10/19/2021 7:28:00 PM
Toluene	ND	0.046		mg/Kg	1	10/19/2021 7:28:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	10/19/2021 7:28:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	10/19/2021 7:28:00 PM
Surr: 4-Bromofluorobenzene	83.9	70-130		%Rec	1	10/19/2021 7:28:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 11:32:25 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-10 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:10:00 PM

Lab ID: 2110781-019

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/21/2021 5:48:23 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2021 5:48:23 AM
Surr: DNOP	115	70-130		%Rec	1	10/21/2021 5:48:23 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/20/2021 8:11:00 PM
Surr: BFB	97.1	70-130		%Rec	1	10/20/2021 8:11:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/20/2021 8:11:00 PM
Toluene	ND	0.049		mg/Kg	1	10/20/2021 8:11:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	10/20/2021 8:11:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	10/20/2021 8:11:00 PM
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	10/20/2021 8:11:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 11:44:49 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-11 0'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:15:00 PM

Lab ID: 2110781-020

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	10/21/2021 5:58:59 AM
Motor Oil Range Organics (MRO)	51	49		mg/Kg	1	10/21/2021 5:58:59 AM
Surr: DNOP	106	70-130		%Rec	1	10/21/2021 5:58:59 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/20/2021 9:10:00 PM
Surr: BFB	105	70-130		%Rec	1	10/20/2021 9:10:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	10/20/2021 9:10:00 PM
Toluene	ND	0.047		mg/Kg	1	10/20/2021 9:10:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	10/20/2021 9:10:00 PM
Xylenes, Total	ND	0.094		mg/Kg	1	10/20/2021 9:10:00 PM
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	10/20/2021 9:10:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 12:22:03 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 2110781

Date Reported: 11/3/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-11 2'

Project: Cooper AHH 1 Battery

Collection Date: 10/8/2021 2:25:00 PM

Lab ID: 2110781-021

Matrix: SOIL

Received Date: 10/16/2021 7:50:00 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	10/21/2021 6:09:35 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/21/2021 6:09:35 AM
Surr: DNOP	85.5	70-130		%Rec	1	10/21/2021 6:09:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/20/2021 10:09:00 PM
Surr: BFB	100	70-130		%Rec	1	10/20/2021 10:09:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/20/2021 10:09:00 PM
Toluene	ND	0.050		mg/Kg	1	10/20/2021 10:09:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	10/20/2021 10:09:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	10/20/2021 10:09:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	10/20/2021 10:09:00 PM
EPA METHOD 300.0: ANIONS						Analyst: VP
Chloride	99	61		mg/Kg	20	10/22/2021 12:59:18 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: MB-63465	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 63465	RunNo: 82233								
Prep Date: 10/21/2021	Analysis Date: 10/22/2021	SeqNo: 2915810 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-63465	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 63465	RunNo: 82233								
Prep Date: 10/21/2021	Analysis Date: 10/22/2021	SeqNo: 2915811 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Sample ID: MB-63489	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 63489	RunNo: 82259								
Prep Date: 10/22/2021	Analysis Date: 10/22/2021	SeqNo: 2917878 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-63489	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 63489	RunNo: 82259								
Prep Date: 10/22/2021	Analysis Date: 10/22/2021	SeqNo: 2917879 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.4	90	110			

Sample ID: MB-63632	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 63632	RunNo: 82423								
Prep Date: 10/28/2021	Analysis Date: 10/28/2021	SeqNo: 2925056 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-63632	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 63632	RunNo: 82423								
Prep Date: 10/28/2021	Analysis Date: 10/28/2021	SeqNo: 2925057 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.5	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#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: MB-63366	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63366	RunNo: 82153								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2910930			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		109	70	130			

Sample ID: MB-63393	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63393	RunNo: 82185								
Prep Date: 10/19/2021	Analysis Date: 10/20/2021	SeqNo: 2914634			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		112	70	130			

Sample ID: LCS-63393	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63393	RunNo: 82185								
Prep Date: 10/19/2021	Analysis Date: 10/20/2021	SeqNo: 2914635			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	10	50.00	0	112	68.9	135			
Surr: DNOP	5.8		5.000		116	70	130			

Sample ID: LCS-63366	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63366	RunNo: 82184								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914776			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.9	68.9	135			
Surr: DNOP	5.0		5.000		100	70	130			

Sample ID: 2110781-002AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH21-04 3'	Batch ID: 63613	RunNo: 82434								
Prep Date: 10/27/2021	Analysis Date: 10/28/2021	SeqNo: 2924897			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	64	9.3	46.73	30.69	70.6	39.3	155			H
Surr: DNOP	4.3		4.673		92.8	70	130			H

Qualifiers:

* Value exceeds Maximum Contaminant 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#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: 2110781-002AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH21-04 3'	Batch ID: 63613	RunNo: 82434								
Prep Date: 10/27/2021	Analysis Date: 10/28/2021	SeqNo: 2924898 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	80	9.7	48.36	30.69	102	39.3	155	22.9	23.4	H
Surr: DNOP	5.2		4.836		108	70	130	0	0	H

Sample ID: LCS-63613	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63613	RunNo: 82434								
Prep Date: 10/27/2021	Analysis Date: 10/28/2021	SeqNo: 2924945 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	101	68.9	135			
Surr: DNOP	5.4		5.000		108	70	130			

Sample ID: MB-63613	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63613	RunNo: 82434								
Prep Date: 10/27/2021	Analysis Date: 10/28/2021	SeqNo: 2924947 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		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

Page 20 of 24

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

WO#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: mb-63356	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2910913 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		98.8	70	130			

Sample ID: lcs-63356	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2911927 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	118	78.6	131			
Surr: BFB	1200		1000		117	70	130			

Sample ID: mb-63360	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913955 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	70	130			

Sample ID: lcs-63360	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913957 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	5.0	25.00	0	120	78.6	131			
Surr: BFB	1200		1000		122	70	130			

Sample ID: 2110781-019ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH21-10 2'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913959 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	23.81	0	120	61.3	114			S
Surr: BFB	1200		952.4		121	70	130			

Sample ID: 2110781-019amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH21-10 2'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913961 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#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: 2110781-019amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: BH21-10 2'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2913961	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	23.99	0	120	61.3	114	0.765	20	S
Surr: BFB	1200		959.7		122	70	130	0	0	

Sample ID: lcs-63603	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63603	RunNo: 82466								
Prep Date: 10/27/2021	Analysis Date: 10/29/2021	SeqNo: 2926053	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	109	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Sample ID: mb-63603	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63603	RunNo: 82466								
Prep Date: 10/27/2021	Analysis Date: 10/29/2021	SeqNo: 2926054	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	950		1000		95.0	70	130			

Qualifiers:

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

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

Page 22 of 24

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

WO#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: mb-63356	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2910914			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		86.3	70	130			

Sample ID: lcs-63356	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63356	RunNo: 82158								
Prep Date: 10/18/2021	Analysis Date: 10/19/2021	SeqNo: 2911967			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	92.5	80	120			
Toluene	0.90	0.050	1.000	0	90.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.3	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.5	70	130			

Sample ID: mb-63360	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914003			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		85.8	70	130			

Sample ID: lcs-63360	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914005			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	92.1	80	120			
Toluene	0.92	0.050	1.000	0	91.8	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.1	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	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#: 2110781

03-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 1 Battery

Sample ID: 2110781-020ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH21-11 0'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914007	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9625	0	90.3	80	120			
Toluene	0.91	0.048	0.9625	0	95.0	80	120			
Ethylbenzene	0.94	0.048	0.9625	0	97.7	80	120			
Xylenes, Total	2.9	0.096	2.887	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.92		0.9625		95.7	70	130			

Sample ID: 2110781-020amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BH21-11 0'	Batch ID: 63360	RunNo: 82187								
Prep Date: 10/18/2021	Analysis Date: 10/20/2021	SeqNo: 2914009	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	0.9891	0	91.2	80	120	3.73	20	
Toluene	0.95	0.049	0.9891	0	95.9	80	120	3.65	20	
Ethylbenzene	0.98	0.049	0.9891	0	99.1	80	120	4.13	20	
Xylenes, Total	3.0	0.099	2.967	0	103	80	120	3.52	20	
Surr: 4-Bromofluorobenzene	0.94		0.9891		95.2	70	130	0	0	

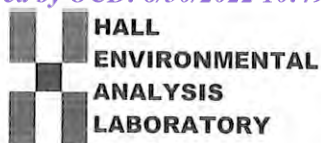
Sample ID: lcs-63603	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63603	RunNo: 82466								
Prep Date: 10/27/2021	Analysis Date: 10/29/2021	SeqNo: 2926074	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.8	80	120			
Toluene	0.96	0.050	1.000	0	96.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.3	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: mb-63603	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63603	RunNo: 82466								
Prep Date: 10/27/2021	Analysis Date: 10/29/2021	SeqNo: 2926075	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			

Qualifiers:

* Value exceeds Maximum Contaminant 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 Resources
Services, Inc.**

Work Order Number: 2110781

RcptNo: 1

Received By: Cheyenne Cason 10/16/2021 7:50:00 AM

Completed By: Cheyenne Cason 10/16/2021 8:39:49 AM

Reviewed By: IO 10/18/21

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 <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | NA <input type="checkbox"/> |
| 5. Sample(s) in proper container(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Sufficient sample volume for indicated test(s)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Are samples (except VOA and ONG) properly preserved? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Was preservative added to bottles? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | NA <input type="checkbox"/> |
| 9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| 10. Were any sample containers received broken? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| 11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Are matrices correctly identified on Chain of Custody? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 13. Is it clear what analyses were requested? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 14. Were all holding times able to be met?
(If no, notify customer for authorization.) | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
- # of preserved bottles checked for pH: 2

Adjusted? No

Checked by [Signature]

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good				
2	0.8	Good				

Chain-of-Custody Record

Client: EOG / Vertex

C Seville

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:

Cooper AHH #1 Battery

Project #:

01E-03278

Project Manager:

Dennis Williams

Sampler: MJP

On Ice: ☒ Yes ☐ No

of Coolers: 2 2.6-022.6

Cooler Temp (including CF): 0.8-020.8 (°C)

Container Type and #

402

Preservative Type

ice

HEAL No.

2110781

Date

10/8 10:55

Date

10/8 11:00

Date

10/8 11:05

Date

10/8 10:16

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10/8 10:15

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10/8 10:20

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Chain-of-Custody Record	Turn-Around Time:	5 Day
	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
	Project Name:	Cooper ANH #1 Battery
	Project #:	DIE-03278
	Phone #:	
Client:	EOG/Vortex	
Mailing Address:	C. Settle	

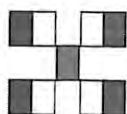
Turn-Around Time:	5 Day
<input checked="" type="checkbox"/> Standard	<input type="checkbox"/> Rush
Project Name:	Cooper ANH #1 Battery
Project #:	DIE-03278

email or Fax#:	Project Manager: <i>Dennis Williams</i>
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	
Accreditation: <input type="checkbox"/> Az Compliance	Sampler: <i>MJP</i>
<input type="checkbox"/> NELAC <input type="checkbox"/> Other _____	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type) _____	# of Coolers: <i>2</i>

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
10/8	1:00	Soil	BH21-08	402	ice	2110781
	1:05		BH21-08			013
	1:10		BH21-08			014
	1:45		BH21-09			015
	1:55		BH21-09			016
	2:00		BH21-10			017
	2:10		BH21-10			018
	2:15		BH21-11			019
	2:25		BH21-11			020
						021

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this practice.



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks: CC: M. Puppin

Direct bill EOG



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

November 30, 2021

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

RE: Cooper AAH 1 Row

OrderNo.: 2111923

Dear Dennis Williams:

Hall Environmental Analysis Laboratory received 20 sample(s) on 11/18/2021 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 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-01 0'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 8:45:00 AM

Lab ID: 2111923-001

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/23/2021 7:17:29 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/23/2021 7:17:29 PM
Surr: DNOP	88.7	70-130		%Rec	1	11/23/2021 7:17:29 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/19/2021 10:31:00 PM
Surr: BFB	95.4	70-130		%Rec	1	11/19/2021 10:31:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/19/2021 10:31:00 PM
Toluene	ND	0.049		mg/Kg	1	11/19/2021 10:31:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/19/2021 10:31:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	11/19/2021 10:31:00 PM
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	11/19/2021 10:31:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 5:08:34 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-01 1'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 8:50:00 AM

Lab ID: 2111923-002

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/23/2021 7:49:06 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2021 7:49:06 PM
Surr: DNOP	86.3	70-130		%Rec	1	11/23/2021 7:49:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/19/2021 11:30:00 PM
Surr: BFB	93.0	70-130		%Rec	1	11/19/2021 11:30:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/19/2021 11:30:00 PM
Toluene	ND	0.049		mg/Kg	1	11/19/2021 11:30:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	11/19/2021 11:30:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	11/19/2021 11:30:00 PM
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	11/19/2021 11:30:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	59		mg/Kg	20	11/23/2021 5:45:47 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-01 2'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 8:55:00 AM

Lab ID: 2111923-003

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 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	11/23/2021 7:59:41 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/23/2021 7:59:41 PM
Surr: DNOP	70.2	70-130		%Rec	1	11/23/2021 7:59:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2021 12:28:00 AM
Surr: BFB	96.1	70-130		%Rec	1	11/20/2021 12:28:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 12:28:00 AM
Toluene	ND	0.048		mg/Kg	1	11/20/2021 12:28:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/20/2021 12:28:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	11/20/2021 12:28:00 AM
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	11/20/2021 12:28:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 6:47:48 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-01 3'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:00:00 AM

Lab ID: 2111923-004

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/24/2021 1:56:40 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/24/2021 1:56:40 PM
Surr: DNOP	98.4	70-130		%Rec	1	11/24/2021 1:56:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2021 12:48:00 AM
Surr: BFB	93.6	70-130		%Rec	1	11/20/2021 12:48:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 12:48:00 AM
Toluene	ND	0.049		mg/Kg	1	11/20/2021 12:48:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2021 12:48:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	11/20/2021 12:48:00 AM
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	11/20/2021 12:48:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	120	60		mg/Kg	20	11/23/2021 7:00:12 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-01 4'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:05:00 AM

Lab ID: 2111923-005

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/23/2021 8:20:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/23/2021 8:20:51 PM
Surr: DNOP	71.3	70-130		%Rec	1	11/23/2021 8:20:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/20/2021 1:08:00 AM
Surr: BFB	95.6	70-130		%Rec	1	11/20/2021 1:08:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.023		mg/Kg	1	11/20/2021 1:08:00 AM
Toluene	ND	0.047		mg/Kg	1	11/20/2021 1:08:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	11/20/2021 1:08:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	11/20/2021 1:08:00 AM
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	11/20/2021 1:08:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	210	60		mg/Kg	20	11/23/2021 7:12:36 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 interference		

Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-02 0'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:10:00 AM

Lab ID: 2111923-006

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	11/23/2021 8:31:29 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/23/2021 8:31:29 PM
Surr: DNOP	79.1	70-130		%Rec	1	11/23/2021 8:31:29 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/20/2021 1:27:00 AM
Surr: BFB	92.2	70-130		%Rec	1	11/20/2021 1:27:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 1:27:00 AM
Toluene	ND	0.047		mg/Kg	1	11/20/2021 1:27:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	11/20/2021 1:27:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	11/20/2021 1:27:00 AM
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	11/20/2021 1:27:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 7:25:01 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-02 1'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:15:00 AM

Lab ID: 2111923-007

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	11/23/2021 8:42:06 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/23/2021 8:42:06 PM
Surr: DNOP	81.5	70-130		%Rec	1	11/23/2021 8:42:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/20/2021 1:47:00 AM
Surr: BFB	96.3	70-130		%Rec	1	11/20/2021 1:47:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 1:47:00 AM
Toluene	ND	0.047		mg/Kg	1	11/20/2021 1:47:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	11/20/2021 1:47:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	11/20/2021 1:47:00 AM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	11/20/2021 1:47:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 7:37:25 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-02 2'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:20:00 AM

Lab ID: 2111923-008

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	11/24/2021 2:20:30 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	11/24/2021 2:20:30 PM
Surr: DNOP	87.1	70-130		%Rec	1	11/24/2021 2:20:30 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2021 2:07:00 AM
Surr: BFB	98.2	70-130		%Rec	1	11/20/2021 2:07:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 2:07:00 AM
Toluene	ND	0.049		mg/Kg	1	11/20/2021 2:07:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2021 2:07:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	11/20/2021 2:07:00 AM
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	11/20/2021 2:07:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 7:49:49 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-02 3'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:25:00 AM

Lab ID: 2111923-009

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	11/24/2021 2:44:19 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	11/24/2021 2:44:19 PM
Surr: DNOP	88.4	70-130		%Rec	1	11/24/2021 2:44:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/20/2021 2:26:00 AM
Surr: BFB	95.4	70-130		%Rec	1	11/20/2021 2:26:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	11/20/2021 2:26:00 AM
Toluene	ND	0.050		mg/Kg	1	11/20/2021 2:26:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/20/2021 2:26:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/20/2021 2:26:00 AM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	11/20/2021 2:26:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	240	60		mg/Kg	20	11/23/2021 8:02:14 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-02 4'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:30:00 AM

Lab ID: 2111923-010

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/24/2021 3:08:06 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/24/2021 3:08:06 PM
Surr: DNOP	81.3	70-130		%Rec	1	11/24/2021 3:08:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2021 2:46:00 AM
Surr: BFB	94.0	70-130		%Rec	1	11/20/2021 2:46:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 2:46:00 AM
Toluene	ND	0.048		mg/Kg	1	11/20/2021 2:46:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/20/2021 2:46:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	11/20/2021 2:46:00 AM
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	11/20/2021 2:46:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	220	59		mg/Kg	20	11/23/2021 8:14:38 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 interference		

Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-03 0'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:35:00 AM

Lab ID: 2111923-011

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 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	11/23/2021 9:25:16 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/23/2021 9:25:16 PM
Surr: DNOP	88.1	70-130		%Rec	1	11/23/2021 9:25:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2021 3:45:00 AM
Surr: BFB	96.7	70-130		%Rec	1	11/20/2021 3:45:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 3:45:00 AM
Toluene	ND	0.048		mg/Kg	1	11/20/2021 3:45:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/20/2021 3:45:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	11/20/2021 3:45:00 AM
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	11/20/2021 3:45:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 8:27:03 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-03 1'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:40:00 AM

Lab ID: 2111923-012

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	11/23/2021 9:36:08 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2021 9:36:08 PM
Surr: DNOP	84.9	70-130		%Rec	1	11/23/2021 9:36:08 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2021 4:04:00 AM
Surr: BFB	95.6	70-130		%Rec	1	11/20/2021 4:04:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	11/20/2021 4:04:00 AM
Toluene	ND	0.049		mg/Kg	1	11/20/2021 4:04:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2021 4:04:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	11/20/2021 4:04:00 AM
Surr: 4-Bromofluorobenzene	89.5	70-130		%Rec	1	11/20/2021 4:04:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 8:39:27 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-03 2'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:45:00 AM

Lab ID: 2111923-013

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 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	11/23/2021 9:46:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	11/23/2021 9:46:59 PM
Surr: DNOP	89.7	70-130		%Rec	1	11/23/2021 9:46:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/20/2021 4:24:00 AM
Surr: BFB	94.1	70-130		%Rec	1	11/20/2021 4:24:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	11/20/2021 4:24:00 AM
Toluene	ND	0.050		mg/Kg	1	11/20/2021 4:24:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/20/2021 4:24:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/20/2021 4:24:00 AM
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	11/20/2021 4:24:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	140	59		mg/Kg	20	11/23/2021 9:16:39 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-03 3'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:50:00 AM

Lab ID: 2111923-014

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 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	11/23/2021 9:57:48 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	11/23/2021 9:57:48 PM
Surr: DNOP	83.7	70-130		%Rec	1	11/23/2021 9:57:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2021 4:43:00 AM
Surr: BFB	94.6	70-130		%Rec	1	11/20/2021 4:43:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 4:43:00 AM
Toluene	ND	0.049		mg/Kg	1	11/20/2021 4:43:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2021 4:43:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	11/20/2021 4:43:00 AM
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	11/20/2021 4:43:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	260	60		mg/Kg	20	11/23/2021 9:29:03 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	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 interference		

Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-03 4'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 9:55:00 AM

Lab ID: 2111923-015

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/23/2021 10:08:36 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/23/2021 10:08:36 PM
Surr: DNOP	78.6	70-130		%Rec	1	11/23/2021 10:08:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2021 5:03:00 AM
Surr: BFB	95.4	70-130		%Rec	1	11/20/2021 5:03:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 5:03:00 AM
Toluene	ND	0.049		mg/Kg	1	11/20/2021 5:03:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2021 5:03:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	11/20/2021 5:03:00 AM
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	11/20/2021 5:03:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	200	60		mg/Kg	20	11/23/2021 9:41:28 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 0'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 10:00:00 AM

Lab ID: 2111923-016

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	11/23/2021 10:19:22 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	11/23/2021 10:19:22 PM
Surr: DNOP	83.7	70-130		%Rec	1	11/23/2021 10:19:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/20/2021 5:22:00 AM
Surr: BFB	93.5	70-130		%Rec	1	11/20/2021 5:22:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	11/20/2021 5:22:00 AM
Toluene	ND	0.049		mg/Kg	1	11/20/2021 5:22:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	11/20/2021 5:22:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	11/20/2021 5:22:00 AM
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	11/20/2021 5:22:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 9:53:53 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 1'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 10:05:00 AM

Lab ID: 2111923-017

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/23/2021 10:30:09 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/23/2021 10:30:09 PM
Surr: DNOP	96.9	70-130		%Rec	1	11/23/2021 10:30:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/20/2021 5:42:00 AM
Surr: BFB	95.4	70-130		%Rec	1	11/20/2021 5:42:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.025		mg/Kg	1	11/20/2021 5:42:00 AM
Toluene	ND	0.050		mg/Kg	1	11/20/2021 5:42:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/20/2021 5:42:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	11/20/2021 5:42:00 AM
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	11/20/2021 5:42:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	ND	60		mg/Kg	20	11/23/2021 10:06:17 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 2'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 10:10:00 AM

Lab ID: 2111923-018

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/23/2021 10:40:54 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/23/2021 10:40:54 PM
Surr: DNOP	71.4	70-130		%Rec	1	11/23/2021 10:40:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2021 6:01:00 AM
Surr: BFB	97.4	70-130		%Rec	1	11/20/2021 6:01:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 6:01:00 AM
Toluene	ND	0.048		mg/Kg	1	11/20/2021 6:01:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/20/2021 6:01:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	11/20/2021 6:01:00 AM
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	11/20/2021 6:01:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	69	61		mg/Kg	20	11/23/2021 10:18:42 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 3'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 10:15:00 AM

Lab ID: 2111923-019

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	11/23/2021 10:51:38 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/23/2021 10:51:38 PM
Surr: DNOP	95.6	70-130		%Rec	1	11/23/2021 10:51:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/20/2021 6:21:00 AM
Surr: BFB	95.7	70-130		%Rec	1	11/20/2021 6:21:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.024		mg/Kg	1	11/20/2021 6:21:00 AM
Toluene	ND	0.048		mg/Kg	1	11/20/2021 6:21:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	11/20/2021 6:21:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	11/20/2021 6:21:00 AM
Surr: 4-Bromofluorobenzene	90.9	70-130		%Rec	1	11/20/2021 6:21:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	150	59		mg/Kg	20	11/23/2021 10:31:06 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 interference		

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Analytical Report

Lab Order 2111923

Date Reported: 11/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BH21-04 4'

Project: Cooper AAH 1 Row

Collection Date: 11/16/2021 10:20:00 AM

Lab ID: 2111923-020

Matrix: SOIL

Received Date: 11/18/2021 8:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	11/23/2021 11:02:20 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	11/23/2021 11:02:20 PM
Surr: DNOP	95.4	70-130		%Rec	1	11/23/2021 11:02:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/20/2021 6:40:00 AM
Surr: BFB	95.3	70-130		%Rec	1	11/20/2021 6:40:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: mb
Benzene	ND	0.023		mg/Kg	1	11/20/2021 6:40:00 AM
Toluene	ND	0.047		mg/Kg	1	11/20/2021 6:40:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	11/20/2021 6:40:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	11/20/2021 6:40:00 AM
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	11/20/2021 6:40:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JMT
Chloride	130	60		mg/Kg	20	11/23/2021 10:43:31 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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2111923

30-Nov-21

Client: Vertex Resources Services, Inc.
Project: Cooper AAH 1 Row

Sample ID: MB-64114		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 64114		RunNo: 83063						
Prep Date: 11/22/2021		Analysis Date: 11/23/2021		SeqNo: 2950447		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64114		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 64114		RunNo: 83063						
Prep Date: 11/22/2021		Analysis Date: 11/23/2021		SeqNo: 2950448		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	16	1.5	15.00	0	108	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 interference

B Analyte detected in 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#: 2111923

30-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AAH 1 Row

Sample ID: 2111923-001AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH21-01 0'	Batch ID: 64081	RunNo: 83061								
Prep Date: 11/22/2021	Analysis Date: 11/23/2021	SeqNo: 2951657 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	9.9	49.65	0	92.2	39.3	155			
Surr: DNOP	4.2		4.965		83.9	70	130			

Sample ID: 2111923-001AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BH21-01 0'	Batch ID: 64081	RunNo: 83061								
Prep Date: 11/22/2021	Analysis Date: 11/23/2021	SeqNo: 2951658 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	9.3	46.25	0	87.9	39.3	155	11.9	23.4	
Surr: DNOP	3.7		4.625		79.7	70	130	0	0	

Sample ID: LCS-64081	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64081	RunNo: 83061								
Prep Date: 11/22/2021	Analysis Date: 11/23/2021	SeqNo: 2951755 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	95.0	68.9	135			
Surr: DNOP	4.4		5.000		87.2	70	130			

Sample ID: MB-64081	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64081	RunNo: 83061								
Prep Date: 11/22/2021	Analysis Date: 11/23/2021	SeqNo: 2951760 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	9.2		10.00		92.1	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 interference

B Analyte detected in 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#: 2111923

30-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AAH 1 Row

Sample ID: mb-64025	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64025			RunNo: 83008						
Prep Date: 11/18/2021	Analysis Date: 11/19/2021			SeqNo: 2947749			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.2	70	130			

Sample ID: mb-64033	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64033			RunNo: 83008						
Prep Date: 11/18/2021	Analysis Date: 11/19/2021			SeqNo: 2947750			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		92.4	70	130			

Sample ID: lcs-64025	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64025			RunNo: 83008						
Prep Date: 11/18/2021	Analysis Date: 11/19/2021			SeqNo: 2947751			Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		112	70	130			

Sample ID: lcs-64033	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64033			RunNo: 83008						
Prep Date: 11/18/2021	Analysis Date: 11/19/2021			SeqNo: 2947752			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	98.3	78.6	131			
Surr: BFB	1100		1000		109	70	130			

Sample ID: 2111923-001ams	SampType: MS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH21-01 0'	Batch ID: 64033			RunNo: 83008						
Prep Date: 11/18/2021	Analysis Date: 11/19/2021			SeqNo: 2947754			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.41	0	136	61.3	114			S
Surr: BFB	1100		976.6		112	70	130			

Sample ID: 2111923-001amsd	SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: BH21-01 0'	Batch ID: 64033			RunNo: 83008						
Prep Date: 11/18/2021	Analysis Date: 11/19/2021			SeqNo: 2947756			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	33	4.9	24.49	0	133	61.3	114	2.02	20	S
Surr: BFB	1100		979.4		115	70	130	0	0	

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 interference		

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

WO#: 2111923

30-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AAH 1 Row

Sample ID: mb-64025	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 64025				RunNo: 83008					
Prep Date: 11/18/2021	Analysis Date: 11/19/2021				SeqNo: 2947797	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		94.0	70	130			

Sample ID: mb-64033	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 64033				RunNo: 83008					
Prep Date: 11/18/2021	Analysis Date: 11/19/2021				SeqNo: 2947798	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	0.90		1.000		89.7	70	130			

Sample ID: lcs-64025	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 64025				RunNo: 83008					
Prep Date: 11/18/2021	Analysis Date: 11/19/2021				SeqNo: 2947799	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.94		1.000		94.1	70	130			

Sample ID: lcs-64033	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 64033				RunNo: 83008					
Prep Date: 11/18/2021	Analysis Date: 11/19/2021				SeqNo: 2947800	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	91.6	80	120			
Toluene	0.93	0.050	1.000	0	92.7	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.9	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.5	70	130			

Sample ID: 2111923-002ams	SampType: MS				TestCode: EPA Method 8021B: Volatiles					
Client ID: BH21-01 1'	Batch ID: 64033				RunNo: 83008					
Prep Date: 11/18/2021	Analysis Date: 11/19/2021				SeqNo: 2947802	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.024	0.9737	0	113	80	120			
Toluene	1.1	0.049	0.9737	0	115	80	120			
Ethylbenzene	1.2	0.049	0.9737	0	118	80	120			
Xylenes, Total	3.4	0.097	2.921	0	117	80	120			

Qualifiers:

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

B Analyte detected in 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#: 2111923

30-Nov-21

Client: Vertex Resources Services, Inc.**Project:** Cooper AAH 1 Row

Sample ID: 2111923-002ams		SampType: MS		TestCode: EPA Method 8021B: Volatiles						
Client ID: BH21-01 1'		Batch ID: 64033		RunNo: 83008						
Prep Date: 11/18/2021		Analysis Date: 11/19/2021		SeqNo: 2947802		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		0.9737		90.9	70	130			

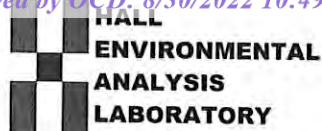
Sample ID: 2111923-002amsd		SampType: MSD		TestCode: EPA Method 8021B: Volatiles						
Client ID: BH21-01 1'		Batch ID: 64033		RunNo: 83008						
Prep Date: 11/18/2021		Analysis Date: 11/20/2021		SeqNo: 2947804		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.2	0.024	0.9699	0	123	80	120	7.49	20	S
Toluene	1.2	0.048	0.9699	0	124	80	120	7.41	20	S
Ethylbenzene	1.3	0.048	0.9699	0	130	80	120	9.02	20	S
Xylenes, Total	3.7	0.097	2.910	0	128	80	120	8.56	20	S
Surr: 4-Bromofluorobenzene	0.89		0.9699		91.7	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 interference

B Analyte detected in 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
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 Resources
Services, Inc.

Work Order Number: 2111923

RcptNo: 1

Received By: Cheyenne Cason 11/18/2021 8:45:00 AM

Completed By: Sean Livingston 11/18/2021 10:47:50 AM

Reviewed By: TME

11/18/21 15:04

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: TME WGA 11/18/21

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good				

Chain-of-Custody Record

Client: EOG / Vertex

C. Settle

Mailing Address:

Turn-Around Time:

5 Day

☒ Standard ☐ Rush

Project Name:

Cooper AAH #1 ROW

Project #:

21E-03278

Phone #:

email or Fax#:

QA/QC Package:

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

Project Manager:

Dennis Williams

Sampler: MJP

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CP): 0.9 + 0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

211923

001

002

003

004

005

006

007

008

009

010

011

012

013

014

015

016

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Chain-of-Custody Record

Client: EOH/Vortex

C. Sattler

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:

Cooper AAH #1 Row

Project #:

21E-03278

Project Manager:

Dennis Williams

Sampler: MJP

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 0.9 - 0.9 (°C)

Date Time Matrix Sample Name

11/16 9:45 S01 BH21-03 2'

9:50 BH21-03 3'

9:55 BH21-03 4'

10:00 BH21-04 0'

10:05 BH21-04 1'

10:16 BH21-04 2'

10:15 BH21-04 3'

10:20 BH21-04 4'

Container Type and #

402

Preservative Type

ICC

HEAL No.

013

014

015

016

017

018

019

020

Analysis Request

BTX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

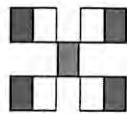
RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Remarks:

Direct bill EOG

Received by: Via: Date Time

11/16/21 1100

Received by: Via: Date Time

11/16/21 1900

CC: Mpeppin Final Report

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

December 07, 2021

Dennis Williams
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX

RE: Cooper AAH 1 Row

OrderNo.: 2111C03

Dear Dennis Williams:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/24/2021 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 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-01 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 11:40:00 AM

Lab ID: 2111C03-001

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	12/1/2021 4:10:19 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/1/2021 6:20:17 AM	64176
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/1/2021 6:20:17 AM	64176
Surr: DNOP	86.5	70-130		%Rec	1	12/1/2021 6:20:17 AM	64176
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/29/2021 7:34:15 PM	64166
Surr: BFB	100	70-130		%Rec	1	11/29/2021 7:34:15 PM	64166
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/29/2021 7:34:15 PM	64166
Toluene	ND	0.047		mg/Kg	1	11/29/2021 7:34:15 PM	64166
Ethylbenzene	ND	0.047		mg/Kg	1	11/29/2021 7:34:15 PM	64166
Xylenes, Total	ND	0.093		mg/Kg	1	11/29/2021 7:34:15 PM	64166
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	11/29/2021 7:34:15 PM	64166

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 interference		

Page 1 of 12

Analytical Report

Lab Order 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-02 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 11:50:00 AM

Lab ID: 2111C03-002

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	12/1/2021 4:22:40 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/2/2021 4:21:51 AM	64215
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/2/2021 4:21:51 AM	64215
Surr: DNOP	88.3	70-130		%Rec	1	12/2/2021 4:21:51 AM	64215
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/29/2021 7:57:49 PM	64166
Surr: BFB	100	70-130		%Rec	1	11/29/2021 7:57:49 PM	64166
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/29/2021 7:57:49 PM	64166
Toluene	ND	0.047		mg/Kg	1	11/29/2021 7:57:49 PM	64166
Ethylbenzene	ND	0.047		mg/Kg	1	11/29/2021 7:57:49 PM	64166
Xylenes, Total	ND	0.095		mg/Kg	1	11/29/2021 7:57:49 PM	64166
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	11/29/2021 7:57:49 PM	64166

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 interference		

Page 2 of 12

Analytical Report

Lab Order 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-03 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 12:00:00 PM

Lab ID: 2111C03-003

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	59		mg/Kg	20	12/1/2021 4:35:00 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/2/2021 4:32:20 AM	64215
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/2/2021 4:32:20 AM	64215
Surr: DNOP	101	70-130		%Rec	1	12/2/2021 4:32:20 AM	64215
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/29/2021 8:21:18 PM	64166
Surr: BFB	96.4	70-130		%Rec	1	11/29/2021 8:21:18 PM	64166
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/29/2021 8:21:18 PM	64166
Toluene	ND	0.048		mg/Kg	1	11/29/2021 8:21:18 PM	64166
Ethylbenzene	ND	0.048		mg/Kg	1	11/29/2021 8:21:18 PM	64166
Xylenes, Total	ND	0.096		mg/Kg	1	11/29/2021 8:21:18 PM	64166
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	11/29/2021 8:21:18 PM	64166

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 interference		

Analytical Report

Lab Order 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-01 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 11:00:00 AM

Lab ID: 2111C03-004

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	12/1/2021 4:47:21 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/2/2021 4:42:50 AM	64215
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/2/2021 4:42:50 AM	64215
Surr: DNOP	103	70-130		%Rec	1	12/2/2021 4:42:50 AM	64215
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	11/29/2021 8:44:33 PM	64166
Surr: BFB	101	70-130		%Rec	1	11/29/2021 8:44:33 PM	64166
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	11/29/2021 8:44:33 PM	64166
Toluene	ND	0.048		mg/Kg	1	11/29/2021 8:44:33 PM	64166
Ethylbenzene	ND	0.048		mg/Kg	1	11/29/2021 8:44:33 PM	64166
Xylenes, Total	ND	0.095		mg/Kg	1	11/29/2021 8:44:33 PM	64166
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/29/2021 8:44:33 PM	64166

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 interference		

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Analytical Report

Lab Order 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-02 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 11:10:00 AM

Lab ID: 2111C03-005

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	12/1/2021 4:59:41 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/2/2021 4:53:18 AM	64215
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/2/2021 4:53:18 AM	64215
Surr: DNOP	91.4	70-130		%Rec	1	12/2/2021 4:53:18 AM	64215
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/30/2021 4:15:00 PM	64196
Surr: BFB	98.1	70-130		%Rec	1	11/30/2021 4:15:00 PM	64196
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/30/2021 4:15:00 PM	64196
Toluene	ND	0.047		mg/Kg	1	11/30/2021 4:15:00 PM	64196
Ethylbenzene	ND	0.047		mg/Kg	1	11/30/2021 4:15:00 PM	64196
Xylenes, Total	ND	0.093		mg/Kg	1	11/30/2021 4:15:00 PM	64196
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	11/30/2021 4:15:00 PM	64196

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 interference		

Analytical Report

Lab Order 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-03 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 11:20:00 AM

Lab ID: 2111C03-006

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	12/1/2021 5:12:02 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/2/2021 5:03:47 AM	64215
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/2/2021 5:03:47 AM	64215
Surr: DNOP	83.9	70-130		%Rec	1	12/2/2021 5:03:47 AM	64215
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/30/2021 4:38:30 PM	64196
Surr: BFB	99.9	70-130		%Rec	1	11/30/2021 4:38:30 PM	64196
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/30/2021 4:38:30 PM	64196
Toluene	ND	0.046		mg/Kg	1	11/30/2021 4:38:30 PM	64196
Ethylbenzene	ND	0.046		mg/Kg	1	11/30/2021 4:38:30 PM	64196
Xylenes, Total	ND	0.092		mg/Kg	1	11/30/2021 4:38:30 PM	64196
Surr: 4-Bromofluorobenzene	99.2	70-130		%Rec	1	11/30/2021 4:38:30 PM	64196

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 interference		

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Analytical Report

Lab Order 2111C03

Date Reported: 12/7/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-04 0-4

Project: Cooper AAH 1 Row

Collection Date: 11/23/2021 11:30:00 AM

Lab ID: 2111C03-007

Matrix: SOIL

Received Date: 11/24/2021 7:43:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	12/1/2021 5:24:23 PM	64243
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/2/2021 5:14:15 AM	64215
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/2/2021 5:14:15 AM	64215
Surr: DNOP	92.2	70-130		%Rec	1	12/2/2021 5:14:15 AM	64215
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	11/30/2021 5:02:04 PM	64196
Surr: BFB	101	70-130		%Rec	1	11/30/2021 5:02:04 PM	64196
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	11/30/2021 5:02:04 PM	64196
Toluene	ND	0.046		mg/Kg	1	11/30/2021 5:02:04 PM	64196
Ethylbenzene	ND	0.046		mg/Kg	1	11/30/2021 5:02:04 PM	64196
Xylenes, Total	ND	0.093		mg/Kg	1	11/30/2021 5:02:04 PM	64196
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/30/2021 5:02:04 PM	64196

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 interference		

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

WO#: 2111C03

07-Dec-21

Client: EOG
Project: Cooper AAH 1 Row

Sample ID: MB-64243	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64243	RunNo: 83213								
Prep Date: 12/1/2021	Analysis Date: 12/1/2021	SeqNo: 2957107	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64243	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64243	RunNo: 83213								
Prep Date: 12/1/2021	Analysis Date: 12/1/2021	SeqNo: 2957108	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

Qualifiers:

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

B Analyte detected in 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#: 2111C03

07-Dec-21

Client: EOG
Project: Cooper AAH 1 Row

Sample ID: LCS-64176	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64176			RunNo: 83165						
Prep Date: 11/29/2021	Analysis Date: 12/1/2021			SeqNo: 2956172	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.9	68.9	135			
Surr: DNOP	4.1		5.000		81.8	70	130			

Sample ID: MB-64176	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64176			RunNo: 83165						
Prep Date: 11/29/2021	Analysis Date: 12/1/2021			SeqNo: 2956176	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		96.1	70	130			

Sample ID: LCS-64215	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64215			RunNo: 83211						
Prep Date: 11/30/2021	Analysis Date: 12/2/2021			SeqNo: 2956906	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	82.2	68.9	135			
Surr: DNOP	3.9		5.000		78.4	70	130			

Sample ID: LCS-64223	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64223			RunNo: 83211						
Prep Date: 11/30/2021	Analysis Date: 12/1/2021			SeqNo: 2956907	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.7	70	130			

Sample ID: LCS-64225	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64225			RunNo: 83211						
Prep Date: 11/30/2021	Analysis Date: 12/1/2021			SeqNo: 2956908	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.3	70	130			

Sample ID: LCS-64239	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64239			RunNo: 83211						
Prep Date: 12/1/2021	Analysis Date: 12/1/2021			SeqNo: 2956909	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		76.0	70	130			

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 interference		

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

WO#: 2111C03

07-Dec-21

Client: EOG
Project: Cooper AAH 1 Row

Sample ID: MB-64223	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64223			RunNo: 83211						
Prep Date: 11/30/2021	Analysis Date: 12/1/2021			SeqNo: 2956910	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: MB-64225	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64225			RunNo: 83211						
Prep Date: 11/30/2021	Analysis Date: 12/1/2021			SeqNo: 2956911	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		104	70	130			

Sample ID: MB-64239	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64239			RunNo: 83211						
Prep Date: 12/1/2021	Analysis Date: 12/1/2021			SeqNo: 2956912	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		113	70	130			

Sample ID: MB-64215	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64215			RunNo: 83242						
Prep Date: 11/30/2021	Analysis Date: 12/2/2021			SeqNo: 2957749	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		124	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 interference

B Analyte detected in 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#: 2111C03

07-Dec-21

Client: EOG
Project: Cooper AAH 1 Row

Sample ID: mb-64166	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64166	RunNo: 83144								
Prep Date: 11/24/2021	Analysis Date: 11/29/2021	SeqNo: 2953865		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		98.9	70	130			

Sample ID: lcs-64166	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64166	RunNo: 83144								
Prep Date: 11/24/2021	Analysis Date: 11/29/2021	SeqNo: 2953866		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	89.1	78.6	131			
Surr: BFB	1100		1000		111	70	130			

Sample ID: mb-64196	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64196	RunNo: 83185								
Prep Date: 11/29/2021	Analysis Date: 11/30/2021	SeqNo: 2955215		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		97.3	70	130			

Sample ID: lcs-64196	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64196	RunNo: 83185								
Prep Date: 11/29/2021	Analysis Date: 11/30/2021	SeqNo: 2955216		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	90.6	78.6	131			
Surr: BFB	1100		1000		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 interference

B Analyte detected in 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#: 2111C03

07-Dec-21

Client: EOG**Project:** Cooper AAH 1 Row

Sample ID: mb-64166	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64166	RunNo: 83144								
Prep Date: 11/24/2021	Analysis Date: 11/29/2021	SeqNo: 2953909 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-64166	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64166	RunNo: 83144								
Prep Date: 11/24/2021	Analysis Date: 11/29/2021	SeqNo: 2953910 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.0	80	120			
Toluene	0.94	0.050	1.000	0	94.2	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.8	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

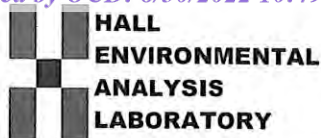
Sample ID: mb-64196	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64196	RunNo: 83185								
Prep Date: 11/29/2021	Analysis Date: 11/30/2021	SeqNo: 2955257 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		97.2	70	130			

Sample ID: LCS-64196	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64196	RunNo: 83185								
Prep Date: 11/29/2021	Analysis Date: 11/30/2021	SeqNo: 2955258 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	95.3	80	120			
Toluene	0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		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 interference

B Analyte detected in 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: EOG

Work Order Number: 2111C03

RcptNo: 1

Received By: Cheyenne Cason 11/24/2021 7:43:00 AM

Completed By: Isaiah Ortiz 11/24/2021 8:16:39 AM

Reviewed By: jnu/24/21

Chad
I-Ort

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: *cmc 11/24/21***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	3.1	Good	Not Present			
2	4.9	Good	Not Present			

Chain-of-Custody Record

Turn-Around Time: 5 Day

☒ Standard ☐ Rush

Project Name:

Project Name: Cooper AAH #1 Row

Mailing Address:

Project #:

21E-03278

Phone #:

email or Fax#:

Project Manager:

Dennis Williams

QA/QC Package:

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

Sampler: MJP

On Ice: ☒ Yes ☐ No

of Coolers: 2 3.1-02 3.1

Cooler Temp (including CF): 4.9-0 = 4.9 (°C)

Container Type and #

Preservative Type

HEAL No. 2111C03

Date

Time

Matrix

Sample Name

BS21-01 0-4

BS21-02 0-4

BS21-03 0-4

WS21-01 0-4

WS21-02 0-4

WS21-03 0-4

WS21-04 0-4

11/23/11:40

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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

December 22, 2021

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2112853

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 12 sample(s) on 12/14/2021 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 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-01 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 10:30:00 AM

Lab ID: 2112853-001

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 6:14:36 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/16/2021 12:54:34 PM	64526
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/16/2021 12:54:34 PM	64526
Surr: DNOP	81.2	70-130		%Rec	1	12/16/2021 12:54:34 PM	64526
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 4:54:00 PM	64500
Surr: BFB	84.1	70-130		%Rec	1	12/16/2021 4:54:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 4:54:00 PM	64500
Toluene	ND	0.049		mg/Kg	1	12/16/2021 4:54:00 PM	64500
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 4:54:00 PM	64500
Xylenes, Total	ND	0.098		mg/Kg	1	12/16/2021 4:54:00 PM	64500
Surr: 4-Bromofluorobenzene	78.3	70-130		%Rec	1	12/16/2021 4:54:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-02 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 10:40:00 AM

Lab ID: 2112853-002

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 6:27:01 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/16/2021 1:18:02 PM	64526
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/16/2021 1:18:02 PM	64526
Surr: DNOP	79.1	70-130		%Rec	1	12/16/2021 1:18:02 PM	64526
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 5:53:00 PM	64500
Surr: BFB	90.4	70-130		%Rec	1	12/16/2021 5:53:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 5:53:00 PM	64500
Toluene	ND	0.049		mg/Kg	1	12/16/2021 5:53:00 PM	64500
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 5:53:00 PM	64500
Xylenes, Total	ND	0.097		mg/Kg	1	12/16/2021 5:53:00 PM	64500
Surr: 4-Bromofluorobenzene	80.7	70-130		%Rec	1	12/16/2021 5:53:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-03 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 10:50:00 AM

Lab ID: 2112853-003

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 7:04:16 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/17/2021 9:39:37 AM	64568
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2021 9:39:37 AM	64568
Surr: DNOP	74.4	70-130		%Rec	1	12/17/2021 9:39:37 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 6:52:00 PM	64500
Surr: BFB	85.4	70-130		%Rec	1	12/16/2021 6:52:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 6:52:00 PM	64500
Toluene	ND	0.049		mg/Kg	1	12/16/2021 6:52:00 PM	64500
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 6:52:00 PM	64500
Xylenes, Total	ND	0.099		mg/Kg	1	12/16/2021 6:52:00 PM	64500
Surr: 4-Bromofluorobenzene	75.9	70-130		%Rec	1	12/16/2021 6:52:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-04 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 11:00:00 AM

Lab ID: 2112853-004

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	85	60		mg/Kg	20	12/20/2021 7:16:40 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/17/2021 11:17:35 AM	64568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/17/2021 11:17:35 AM	64568
Surr: DNOP	80.3	70-130		%Rec	1	12/17/2021 11:17:35 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 7:11:00 PM	64500
Surr: BFB	86.4	70-130		%Rec	1	12/16/2021 7:11:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 7:11:00 PM	64500
Toluene	ND	0.049		mg/Kg	1	12/16/2021 7:11:00 PM	64500
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 7:11:00 PM	64500
Xylenes, Total	ND	0.098		mg/Kg	1	12/16/2021 7:11:00 PM	64500
Surr: 4-Bromofluorobenzene	79.3	70-130		%Rec	1	12/16/2021 7:11:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-05 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 11:10:00 AM

Lab ID: 2112853-005

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	66	60		mg/Kg	20	12/20/2021 7:29:04 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/17/2021 11:40:57 AM	64568
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/17/2021 11:40:57 AM	64568
Surr: DNOP	87.4	70-130		%Rec	1	12/17/2021 11:40:57 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/16/2021 7:31:00 PM	64500
Surr: BFB	86.1	70-130		%Rec	1	12/16/2021 7:31:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 7:31:00 PM	64500
Toluene	ND	0.050		mg/Kg	1	12/16/2021 7:31:00 PM	64500
Ethylbenzene	ND	0.050		mg/Kg	1	12/16/2021 7:31:00 PM	64500
Xylenes, Total	ND	0.099		mg/Kg	1	12/16/2021 7:31:00 PM	64500
Surr: 4-Bromofluorobenzene	79.7	70-130		%Rec	1	12/16/2021 7:31:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-06 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 11:20:00 AM

Lab ID: 2112853-006

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 7:41:29 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/17/2021 12:51:37 PM	64568
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/17/2021 12:51:37 PM	64568
Surr: DNOP	102	70-130		%Rec	1	12/17/2021 12:51:37 PM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2021 7:51:00 PM	64500
Surr: BFB	90.1	70-130		%Rec	1	12/16/2021 7:51:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 7:51:00 PM	64500
Toluene	ND	0.047		mg/Kg	1	12/16/2021 7:51:00 PM	64500
Ethylbenzene	ND	0.047		mg/Kg	1	12/16/2021 7:51:00 PM	64500
Xylenes, Total	ND	0.095		mg/Kg	1	12/16/2021 7:51:00 PM	64500
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	1	12/16/2021 7:51:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-07 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 11:30:00 AM

Lab ID: 2112853-007

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	12/20/2021 7:53:53 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/17/2021 1:15:14 PM	64568
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/17/2021 1:15:14 PM	64568
Surr: DNOP	85.1	70-130		%Rec	1	12/17/2021 1:15:14 PM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 8:10:00 PM	64500
Surr: BFB	90.8	70-130		%Rec	1	12/16/2021 8:10:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 8:10:00 PM	64500
Toluene	ND	0.049		mg/Kg	1	12/16/2021 8:10:00 PM	64500
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 8:10:00 PM	64500
Xylenes, Total	ND	0.098		mg/Kg	1	12/16/2021 8:10:00 PM	64500
Surr: 4-Bromofluorobenzene	81.0	70-130		%Rec	1	12/16/2021 8:10:00 PM	64500

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 interference		

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Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-08 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 11:40:00 AM

Lab ID: 2112853-008

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 8:06:18 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/17/2021 1:38:54 PM	64568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/17/2021 1:38:54 PM	64568
Surr: DNOP	97.1	70-130		%Rec	1	12/17/2021 1:38:54 PM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2021 8:30:00 PM	64500
Surr: BFB	85.8	70-130		%Rec	1	12/16/2021 8:30:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 8:30:00 PM	64500
Toluene	ND	0.047		mg/Kg	1	12/16/2021 8:30:00 PM	64500
Ethylbenzene	ND	0.047		mg/Kg	1	12/16/2021 8:30:00 PM	64500
Xylenes, Total	ND	0.095		mg/Kg	1	12/16/2021 8:30:00 PM	64500
Surr: 4-Bromofluorobenzene	77.7	70-130		%Rec	1	12/16/2021 8:30:00 PM	64500

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 interference		

Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-09 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 11:50:00 AM

Lab ID: 2112853-009

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	12/20/2021 8:18:42 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/17/2021 2:02:37 PM	64568
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2021 2:02:37 PM	64568
Surr: DNOP	70.2	70-130		%Rec	1	12/17/2021 2:02:37 PM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/16/2021 8:50:00 PM	64500
Surr: BFB	90.7	70-130		%Rec	1	12/16/2021 8:50:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 8:50:00 PM	64500
Toluene	ND	0.048		mg/Kg	1	12/16/2021 8:50:00 PM	64500
Ethylbenzene	ND	0.048		mg/Kg	1	12/16/2021 8:50:00 PM	64500
Xylenes, Total	ND	0.096		mg/Kg	1	12/16/2021 8:50:00 PM	64500
Surr: 4-Bromofluorobenzene	80.2	70-130		%Rec	1	12/16/2021 8:50:00 PM	64500

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 interference		

Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-10 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 12:00:00 PM

Lab ID: 2112853-010

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	99	60		mg/Kg	20	12/20/2021 8:31:07 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/17/2021 2:26:22 PM	64568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/17/2021 2:26:22 PM	64568
Surr: DNOP	100	70-130		%Rec	1	12/17/2021 2:26:22 PM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/16/2021 9:09:00 PM	64500
Surr: BFB	87.4	70-130		%Rec	1	12/16/2021 9:09:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 9:09:00 PM	64500
Toluene	ND	0.050		mg/Kg	1	12/16/2021 9:09:00 PM	64500
Ethylbenzene	ND	0.050		mg/Kg	1	12/16/2021 9:09:00 PM	64500
Xylenes, Total	ND	0.099		mg/Kg	1	12/16/2021 9:09:00 PM	64500
Surr: 4-Bromofluorobenzene	79.3	70-130		%Rec	1	12/16/2021 9:09:00 PM	64500

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 interference		

Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-11 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 12:10:00 PM

Lab ID: 2112853-011

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 8:43:31 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/20/2021 7:52:36 AM	64568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/20/2021 7:52:36 AM	64568
Surr: DNOP	81.3	70-130		%Rec	1	12/20/2021 7:52:36 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2021 10:08:00 PM	64500
Surr: BFB	93.2	70-130		%Rec	1	12/16/2021 10:08:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 10:08:00 PM	64500
Toluene	ND	0.047		mg/Kg	1	12/16/2021 10:08:00 PM	64500
Ethylbenzene	ND	0.047		mg/Kg	1	12/16/2021 10:08:00 PM	64500
Xylenes, Total	ND	0.094		mg/Kg	1	12/16/2021 10:08:00 PM	64500
Surr: 4-Bromofluorobenzene	81.9	70-130		%Rec	1	12/16/2021 10:08:00 PM	64500

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 interference		

Analytical Report

Lab Order 2112853

Date Reported: 12/22/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-12 0-3

Project: Cooper AHH 1 Battery

Collection Date: 12/10/2021 12:20:00 PM

Lab ID: 2112853-012

Matrix: SOIL

Received Date: 12/14/2021 8:10:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	12/20/2021 8:55:56 PM	64644
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/17/2021 3:13:47 PM	64568
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/17/2021 3:13:47 PM	64568
Surr: DNOP	118	70-130		%Rec	1	12/17/2021 3:13:47 PM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/16/2021 10:28:00 PM	64500
Surr: BFB	90.2	70-130		%Rec	1	12/16/2021 10:28:00 PM	64500
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 10:28:00 PM	64500
Toluene	ND	0.048		mg/Kg	1	12/16/2021 10:28:00 PM	64500
Ethylbenzene	ND	0.048		mg/Kg	1	12/16/2021 10:28:00 PM	64500
Xylenes, Total	ND	0.095		mg/Kg	1	12/16/2021 10:28:00 PM	64500
Surr: 4-Bromofluorobenzene	79.6	70-130		%Rec	1	12/16/2021 10:28:00 PM	64500

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 interference		

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

WO#: 2112853

22-Dec-21

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: MB-64644	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64644	RunNo: 84672								
Prep Date: 12/20/2021	Analysis Date: 12/20/2021	SeqNo: 2977717	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64644	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64644	RunNo: 84672								
Prep Date: 12/20/2021	Analysis Date: 12/20/2021	SeqNo: 2977718	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	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 interference

B Analyte detected in 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#: 2112853

22-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-64526	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64526	RunNo: 84564								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2973590 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	9.2		10.00		91.6	70	130			

Sample ID: LCS-64526	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64526	RunNo: 84564								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2973591 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.7	68.9	135			
Surr: DNOP	4.4		5.000		87.6	70	130			

Sample ID: LCS-64568	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64568	RunNo: 84632								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975392 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	88.4	68.9	135			
Surr: DNOP	4.4		5.000		87.8	70	130			

Sample ID: MB-64568	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64568	RunNo: 84632								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975393 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		97.7	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 interference

B Analyte detected in 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#: 2112853

22-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64500	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2973977 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		90.8	70	130			

Sample ID: lcs-64500	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2973979 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	112	78.6	131			
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 interference

B Analyte detected in 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#: 2112853

22-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64500	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2974025	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	0.78		1.000		78.2	70	130			

Sample ID: lcs-64500	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2974027	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	89.8	80	120			
Toluene	0.87	0.050	1.000	0	87.3	80	120			
Ethylbenzene	0.87	0.050	1.000	0	86.8	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.4	80	120			
Surr: 4-Bromofluorobenzene	0.80		1.000		80.2	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 interference

B Analyte detected in 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
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: EOG

Work Order Number: 2112853

RcptNo: 1

Received By: Desiree Dominguez 12/14/2021 8:10:00 AM

Completed By: Desiree Dominguez 12/14/2021 9:58:18 AM

Reviewed By:

Handwritten signature
12/14/21

Handwritten signature

Handwritten signature

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:

Handwritten signature 12/14/21

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	2.5	Good				

Chain-of-Custody Record

Client: Eco/VortexMailing Address: Chase Settle

Phone #:

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Coper AHH #1 Battery

Project #:

21E-03278

Project Manager:

Monica PeppinSampler: MSPOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 2.5 + 0.0 = 2.5 (°C)

Container Type and #

Preservative Type

HEAL No.

2112853

-001

-002

-003

-004

-005

-006

-007

-008

-009

-010

-011

-012

Date:

Relinquished by:

Relinquished by:

Received by:

Via:

Date

Time

Remarks:

cc. M. Peppin Final ReportDirect Bill EOG

Analysis Request

8081 Pesticides/8082 PCB's

TPH:8015D(GRO / DRO / MRO)

MTBE / TMB's (8021)

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl⁻, F⁻, 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

December 27, 2021

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2112930

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 8 sample(s) on 12/15/2021 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 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-19 0-3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 9:30:00 AM

Lab ID: 2112930-001

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/21/2021 4:17:10 PM	64660
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/20/2021 2:29:14 PM	64569
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/20/2021 2:29:14 PM	64569
Surr: DNOP	105	70-130		%Rec	1	12/20/2021 2:29:14 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/16/2021 1:57:00 PM	64537
Surr: BFB	94.7	70-130		%Rec	1	12/16/2021 1:57:00 PM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 1:57:00 PM	64537
Toluene	ND	0.048		mg/Kg	1	12/16/2021 1:57:00 PM	64537
Ethylbenzene	ND	0.048		mg/Kg	1	12/16/2021 1:57:00 PM	64537
Xylenes, Total	ND	0.096		mg/Kg	1	12/16/2021 1:57:00 PM	64537
Surr: 4-Bromofluorobenzene	82.4	70-130		%Rec	1	12/16/2021 1:57:00 PM	64537

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 interference		

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Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-20 0-3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 9:40:00 AM

Lab ID: 2112930-002

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/21/2021 4:54:23 PM	64660
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/20/2021 2:39:58 PM	64569
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	12/20/2021 2:39:58 PM	64569
Surr: DNOP	110	70-130		%Rec	1	12/20/2021 2:39:58 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 2:16:00 PM	64537
Surr: BFB	89.2	70-130		%Rec	1	12/16/2021 2:16:00 PM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 2:16:00 PM	64537
Toluene	ND	0.049		mg/Kg	1	12/16/2021 2:16:00 PM	64537
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 2:16:00 PM	64537
Xylenes, Total	ND	0.097		mg/Kg	1	12/16/2021 2:16:00 PM	64537
Surr: 4-Bromofluorobenzene	81.0	70-130		%Rec	1	12/16/2021 2:16:00 PM	64537

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 interference		

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Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-21 0-3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 9:50:00 AM

Lab ID: 2112930-003

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	70	60		mg/Kg	20	12/21/2021 5:06:49 PM	64660
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/20/2021 2:50:41 PM	64569
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/20/2021 2:50:41 PM	64569
Surr: DNOP	79.6	70-130		%Rec	1	12/20/2021 2:50:41 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 2:36:00 PM	64537
Surr: BFB	87.7	70-130		%Rec	1	12/16/2021 2:36:00 PM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 2:36:00 PM	64537
Toluene	ND	0.049		mg/Kg	1	12/16/2021 2:36:00 PM	64537
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 2:36:00 PM	64537
Xylenes, Total	ND	0.098		mg/Kg	1	12/16/2021 2:36:00 PM	64537
Surr: 4-Bromofluorobenzene	79.4	70-130		%Rec	1	12/16/2021 2:36:00 PM	64537

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 interference		

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Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-01 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 2:00:00 PM

Lab ID: 2112930-004

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	120	60		mg/Kg	20	12/21/2021 5:19:14 PM	64660
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/20/2021 3:01:25 PM	64569
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/20/2021 3:01:25 PM	64569
Surr: DNOP	90.6	70-130		%Rec	1	12/20/2021 3:01:25 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 2:56:00 PM	64537
Surr: BFB	86.5	70-130		%Rec	1	12/16/2021 2:56:00 PM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 2:56:00 PM	64537
Toluene	ND	0.049		mg/Kg	1	12/16/2021 2:56:00 PM	64537
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 2:56:00 PM	64537
Xylenes, Total	ND	0.098		mg/Kg	1	12/16/2021 2:56:00 PM	64537
Surr: 4-Bromofluorobenzene	78.6	70-130		%Rec	1	12/16/2021 2:56:00 PM	64537

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 interference		

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Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-02 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 2:10:00 PM

Lab ID: 2112930-005

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	110	60		mg/Kg	20	12/21/2021 6:21:17 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/20/2021 3:12:06 PM	64569
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/20/2021 3:12:06 PM	64569
Surr: DNOP	122	70-130		%Rec	1	12/20/2021 3:12:06 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/17/2021 6:27:00 AM	64559
Surr: BFB	88.9	70-130		%Rec	1	12/17/2021 6:27:00 AM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	12/17/2021 6:27:00 AM	64559
Toluene	ND	0.047		mg/Kg	1	12/17/2021 6:27:00 AM	64559
Ethylbenzene	ND	0.047		mg/Kg	1	12/17/2021 6:27:00 AM	64559
Xylenes, Total	ND	0.094		mg/Kg	1	12/17/2021 6:27:00 AM	64559
Surr: 4-Bromofluorobenzene	79.7	70-130		%Rec	1	12/17/2021 6:27:00 AM	64559

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 interference		

Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-03 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 2:20:00 PM

Lab ID: 2112930-006

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/21/2021 6:33:42 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	12/20/2021 3:22:47 PM	64569
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/20/2021 3:22:47 PM	64569
Surr: DNOP	116	70-130		%Rec	1	12/20/2021 3:22:47 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/17/2021 7:26:00 AM	64559
Surr: BFB	101	70-130		%Rec	1	12/17/2021 7:26:00 AM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/17/2021 7:26:00 AM	64559
Toluene	ND	0.049		mg/Kg	1	12/17/2021 7:26:00 AM	64559
Ethylbenzene	ND	0.049		mg/Kg	1	12/17/2021 7:26:00 AM	64559
Xylenes, Total	ND	0.098		mg/Kg	1	12/17/2021 7:26:00 AM	64559
Surr: 4-Bromofluorobenzene	84.1	70-130		%Rec	1	12/17/2021 7:26:00 AM	64559

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 interference		

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Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-04 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 2:30:00 PM

Lab ID: 2112930-007

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	61		mg/Kg	20	12/21/2021 6:46:07 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/20/2021 3:33:29 PM	64569
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/20/2021 3:33:29 PM	64569
Surr: DNOP	99.7	70-130		%Rec	1	12/20/2021 3:33:29 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/17/2021 8:25:00 AM	64559
Surr: BFB	86.7	70-130		%Rec	1	12/17/2021 8:25:00 AM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 8:25:00 AM	64559
Toluene	ND	0.047		mg/Kg	1	12/17/2021 8:25:00 AM	64559
Ethylbenzene	ND	0.047		mg/Kg	1	12/17/2021 8:25:00 AM	64559
Xylenes, Total	ND	0.094		mg/Kg	1	12/17/2021 8:25:00 AM	64559
Surr: 4-Bromofluorobenzene	77.2	70-130		%Rec	1	12/17/2021 8:25:00 AM	64559

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 interference		

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Analytical Report

Lab Order 2112930

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-05 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/13/2021 2:40:00 PM

Lab ID: 2112930-008

Matrix: SOIL

Received Date: 12/15/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/21/2021 6:58:32 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/20/2021 3:44:09 PM	64569
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/20/2021 3:44:09 PM	64569
Surr: DNOP	121	70-130		%Rec	1	12/20/2021 3:44:09 PM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/17/2021 8:45:00 AM	64559
Surr: BFB	88.5	70-130		%Rec	1	12/17/2021 8:45:00 AM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 8:45:00 AM	64559
Toluene	ND	0.047		mg/Kg	1	12/17/2021 8:45:00 AM	64559
Ethylbenzene	ND	0.047		mg/Kg	1	12/17/2021 8:45:00 AM	64559
Xylenes, Total	ND	0.095		mg/Kg	1	12/17/2021 8:45:00 AM	64559
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	1	12/17/2021 8:45:00 AM	64559

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 interference		

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

WO#: 2112930

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-64660	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64660	RunNo: 84699								
Prep Date: 12/21/2021	Analysis Date: 12/21/2021	SeqNo: 2979707 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64660	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64660	RunNo: 84699								
Prep Date: 12/21/2021	Analysis Date: 12/21/2021	SeqNo: 2979708 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			

Sample ID: MB-64676	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64676	RunNo: 84699								
Prep Date: 12/21/2021	Analysis Date: 12/21/2021	SeqNo: 2979737 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64676	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64676	RunNo: 84699								
Prep Date: 12/21/2021	Analysis Date: 12/21/2021	SeqNo: 2979738 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

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 interference		

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

WO#: 2112930

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-64569	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64569	RunNo: 84661								
Prep Date: 12/16/2021	Analysis Date: 12/20/2021	SeqNo: 2976994 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	8.9		10.00		88.5	70	130			

Sample ID: LCS-64569	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64569	RunNo: 84661								
Prep Date: 12/16/2021	Analysis Date: 12/20/2021	SeqNo: 2976996 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.4	68.9	135			
Surr: DNOP	4.2		5.000		84.2	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 interference

B Analyte detected in 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#: 2112930

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64537	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64537			RunNo: 84604						
Prep Date: 12/15/2021	Analysis Date: 12/16/2021			SeqNo: 2973976		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		91.6	70	130			

Sample ID: lcs-64537	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64537			RunNo: 84604						
Prep Date: 12/15/2021	Analysis Date: 12/16/2021			SeqNo: 2973978		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	109	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Sample ID: mb-64559	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64559			RunNo: 84642						
Prep Date: 12/16/2021	Analysis Date: 12/17/2021			SeqNo: 2975677		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	900		1000		89.9	70	130			

Sample ID: lcs-64559	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64559			RunNo: 84642						
Prep Date: 12/16/2021	Analysis Date: 12/17/2021			SeqNo: 2975679		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	106	78.6	131			
Surr: BFB	1000		1000		99.6	70	130			

Sample ID: mb-64595	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64595			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975896		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.3	70	130			

Sample ID: mb-64596	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64596			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975897		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	860		1000		85.7	70	130			

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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2112930

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: Ics-64595	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 64595		RunNo: 84644							
Prep Date: 12/17/2021	Analysis Date: 12/18/2021		SeqNo: 2975898		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		119	70	130			

Sample ID: Ics-64596	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 64596		RunNo: 84644							
Prep Date: 12/17/2021	Analysis Date: 12/18/2021		SeqNo: 2975899		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		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 interference

B Analyte detected in 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#: 2112930

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64537	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64537	RunNo: 84604								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2974024 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	0.85		1.000		84.6	70	130			

Sample ID: lcs-64537	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64537	RunNo: 84604								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2974026 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	94.7	80	120			
Toluene	0.93	0.050	1.000	0	93.2	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.4	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.4	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.9	70	130			

Sample ID: mb-64559	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975725 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	0.79		1.000		79.4	70	130			

Sample ID: lcs-64559	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975727 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	90.7	80	120			
Toluene	0.89	0.050	1.000	0	88.9	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.2	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		85.0	70	130			

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 interference	

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

WO#: 2112930

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64595	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 64595			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975944		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		87.5	70	130			

Sample ID: mb-64596	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 64596			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975945		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.77		1.000		76.7	70	130			

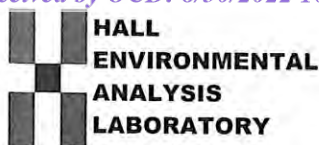
Sample ID: lcs-64595	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 64595			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975946		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.97		1.000		96.9	70	130			

Sample ID: lcs-64596	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 64596			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975947		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.79		1.000		79.2	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 interference

B Analyte detected in 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: EOG

Work Order Number: 2112930

RcptNo: 1

Received By: Desiree Dominguez 12/15/2021 8:00:00 AM

ID2

Completed By: Desiree Dominguez 12/15/2021 9:31:05 AM

ID2

Reviewed By: DAD 12/15/21

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: amc 12/15/21

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.2	Good				



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

December 27, 2021

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2112A21

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/16/2021 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 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-06 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 9:15:00 AM

Lab ID: 2112A21-001

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	65	60		mg/Kg	20	12/21/2021 8:50:15 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	12	9.9		mg/Kg	1	12/20/2021 4:37:15 PM	64570
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/20/2021 4:37:15 PM	64570
Surr: DNOP	110	70-130		%Rec	1	12/20/2021 4:37:15 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/17/2021 1:20:00 PM	64559
Surr: BFB	89.4	70-130		%Rec	1	12/17/2021 1:20:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 1:20:00 PM	64559
Toluene	ND	0.047		mg/Kg	1	12/17/2021 1:20:00 PM	64559
Ethylbenzene	ND	0.047		mg/Kg	1	12/17/2021 1:20:00 PM	64559
Xylenes, Total	ND	0.094		mg/Kg	1	12/17/2021 1:20:00 PM	64559
Surr: 4-Bromofluorobenzene	80.4	70-130		%Rec	1	12/17/2021 1:20:00 PM	64559

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 interference		

Analytical Report

Lab Order 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-07 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 9:30:00 AM

Lab ID: 2112A21-002

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/21/2021 9:02:39 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	16	9.8		mg/Kg	1	12/20/2021 4:47:54 PM	64570
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/20/2021 4:47:54 PM	64570
Surr: DNOP	99.3	70-130		%Rec	1	12/20/2021 4:47:54 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2021 1:40:00 PM	64559
Surr: BFB	89.7	70-130		%Rec	1	12/17/2021 1:40:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 1:40:00 PM	64559
Toluene	ND	0.048		mg/Kg	1	12/17/2021 1:40:00 PM	64559
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2021 1:40:00 PM	64559
Xylenes, Total	ND	0.096		mg/Kg	1	12/17/2021 1:40:00 PM	64559
Surr: 4-Bromofluorobenzene	79.9	70-130		%Rec	1	12/17/2021 1:40:00 PM	64559

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 interference		

Analytical Report

Lab Order 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-08 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 9:45:00 AM

Lab ID: 2112A21-003

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	61		mg/Kg	20	12/21/2021 9:15:05 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/20/2021 4:58:37 PM	64570
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/20/2021 4:58:37 PM	64570
Surr: DNOP	95.2	70-130		%Rec	1	12/20/2021 4:58:37 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2021 2:00:00 PM	64559
Surr: BFB	86.6	70-130		%Rec	1	12/17/2021 2:00:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 2:00:00 PM	64559
Toluene	ND	0.048		mg/Kg	1	12/17/2021 2:00:00 PM	64559
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2021 2:00:00 PM	64559
Xylenes, Total	ND	0.097		mg/Kg	1	12/17/2021 2:00:00 PM	64559
Surr: 4-Bromofluorobenzene	77.2	70-130		%Rec	1	12/17/2021 2:00:00 PM	64559

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 interference		

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Analytical Report

Lab Order 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-13 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 10:30:00 AM

Lab ID: 2112A21-004

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	68	60		mg/Kg	20	12/21/2021 9:27:30 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	16	9.6		mg/Kg	1	12/20/2021 5:09:17 PM	64570
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/20/2021 5:09:17 PM	64570
Surr: DNOP	85.7	70-130		%Rec	1	12/20/2021 5:09:17 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/17/2021 2:19:00 PM	64559
Surr: BFB	88.4	70-130		%Rec	1	12/17/2021 2:19:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/17/2021 2:19:00 PM	64559
Toluene	ND	0.050		mg/Kg	1	12/17/2021 2:19:00 PM	64559
Ethylbenzene	ND	0.050		mg/Kg	1	12/17/2021 2:19:00 PM	64559
Xylenes, Total	ND	0.10		mg/Kg	1	12/17/2021 2:19:00 PM	64559
Surr: 4-Bromofluorobenzene	78.0	70-130		%Rec	1	12/17/2021 2:19:00 PM	64559

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 interference		

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Analytical Report

Lab Order 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS21-12 3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 10:45:00 AM

Lab ID: 2112A21-005

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/21/2021 9:39:54 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/20/2021 5:19:58 PM	64570
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/20/2021 5:19:58 PM	64570
Surr: DNOP	97.3	70-130		%Rec	1	12/20/2021 5:19:58 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/17/2021 2:39:00 PM	64559
Surr: BFB	86.6	70-130		%Rec	1	12/17/2021 2:39:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/17/2021 2:39:00 PM	64559
Toluene	ND	0.050		mg/Kg	1	12/17/2021 2:39:00 PM	64559
Ethylbenzene	ND	0.050		mg/Kg	1	12/17/2021 2:39:00 PM	64559
Xylenes, Total	ND	0.10		mg/Kg	1	12/17/2021 2:39:00 PM	64559
Surr: 4-Bromofluorobenzene	78.7	70-130		%Rec	1	12/17/2021 2:39:00 PM	64559

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 interference		

Analytical Report

Lab Order 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-13 0-3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 2:00:00 PM

Lab ID: 2112A21-006

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	120	59		mg/Kg	20	12/21/2021 9:52:18 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/20/2021 5:30:42 PM	64570
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/20/2021 5:30:42 PM	64570
Surr: DNOP	103	70-130		%Rec	1	12/20/2021 5:30:42 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2021 2:59:00 PM	64559
Surr: BFB	85.3	70-130		%Rec	1	12/17/2021 2:59:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 2:59:00 PM	64559
Toluene	ND	0.048		mg/Kg	1	12/17/2021 2:59:00 PM	64559
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2021 2:59:00 PM	64559
Xylenes, Total	ND	0.096		mg/Kg	1	12/17/2021 2:59:00 PM	64559
Surr: 4-Bromofluorobenzene	76.3	70-130		%Rec	1	12/17/2021 2:59:00 PM	64559

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 interference		

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Analytical Report

Lab Order 2112A21

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WS21-14 0-3'

Project: Cooper AHH 1 Battery

Collection Date: 12/14/2021 2:15:00 PM

Lab ID: 2112A21-007

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	130	60		mg/Kg	20	12/21/2021 10:04:42 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/20/2021 5:41:26 PM	64570
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/20/2021 5:41:26 PM	64570
Surr: DNOP	108	70-130		%Rec	1	12/20/2021 5:41:26 PM	64570
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2021 3:18:00 PM	64559
Surr: BFB	85.7	70-130		%Rec	1	12/17/2021 3:18:00 PM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 3:18:00 PM	64559
Toluene	ND	0.048		mg/Kg	1	12/17/2021 3:18:00 PM	64559
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2021 3:18:00 PM	64559
Xylenes, Total	ND	0.095		mg/Kg	1	12/17/2021 3:18:00 PM	64559
Surr: 4-Bromofluorobenzene	77.4	70-130		%Rec	1	12/17/2021 3:18:00 PM	64559

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 interference		

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

WO#: 2112A21

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-64676		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 64676		RunNo: 84699						
Prep Date: 12/21/2021		Analysis Date: 12/21/2021		SeqNo: 2979737		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64676		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 64676		RunNo: 84699						
Prep Date: 12/21/2021		Analysis Date: 12/21/2021		SeqNo: 2979738		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	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 interference

B Analyte detected in 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#: 2112A21

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-64570	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64570	RunNo: 84661								
Prep Date: 12/17/2021	Analysis Date: 12/20/2021	SeqNo: 2976995 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	9.7		10.00		97.5	70	130			

Sample ID: LCS-64570	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64570	RunNo: 84661								
Prep Date: 12/17/2021	Analysis Date: 12/20/2021	SeqNo: 2976997 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.5	68.9	135			
Surr: DNOP	5.6		5.000		112	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 interference

B Analyte detected in 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#: 2112A21

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64559	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64559			RunNo: 84642						
Prep Date: 12/16/2021	Analysis Date: 12/17/2021			SeqNo: 2975677		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	900		1000		89.9	70	130			

Sample ID: lcs-64559	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64559			RunNo: 84642						
Prep Date: 12/16/2021	Analysis Date: 12/17/2021			SeqNo: 2975679		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	106	78.6	131			
Surr: BFB	1000		1000		99.6	70	130			

Sample ID: mb-64595	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64595			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975896		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	960		1000		96.3	70	130			

Sample ID: mb-64596	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 64596			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975897		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	860		1000		85.7	70	130			

Sample ID: lcs-64595	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64595			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975898		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1200		1000		119	70	130			

Sample ID: lcs-64596	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 64596			RunNo: 84644						
Prep Date: 12/17/2021	Analysis Date: 12/18/2021			SeqNo: 2975899		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	70	130			

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 interference		

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

WO#: 2112A21

27-Dec-21

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: mb-64559	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975725 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	0.79		1.000		79.4	70	130			

Sample ID: lcs-64559	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975727 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	90.7	80	120			
Toluene	0.89	0.050	1.000	0	88.9	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.2	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		85.0	70	130			

Sample ID: mb-64595	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64595	RunNo: 84644								
Prep Date: 12/17/2021	Analysis Date: 12/18/2021	SeqNo: 2975944 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		87.5	70	130			

Sample ID: mb-64596	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64596	RunNo: 84644								
Prep Date: 12/17/2021	Analysis Date: 12/18/2021	SeqNo: 2975945 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.77		1.000		76.7	70	130			

Sample ID: lcs-64595	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64595	RunNo: 84644								
Prep Date: 12/17/2021	Analysis Date: 12/18/2021	SeqNo: 2975946 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			

Qualifiers:

* Value exceeds Maximum Contaminant 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 interference

B Analyte detected in 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#: 2112A21

27-Dec-21

Client: EOG

Project: Cooper AHH 1 Battery

Sample ID: Ics-64596		SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS		Batch ID: 64596			RunNo: 84644						
Prep Date: 12/17/2021		Analysis Date: 12/18/2021			SeqNo: 2975947		Units: %Rec				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene		0.79		1.000		79.2	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

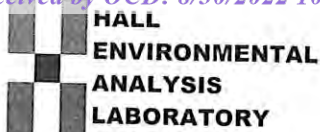
S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

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: EOG

Work Order Number: 2112A21

RcptNo: 1

Received By: Cheyenne Cason 12/16/2021 7:52:00 AM

Completed By: Desiree Dominguez 12/16/2021 8:59:56 AM

Reviewed By: 12/16/21 nrg

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: JN 12/16/21

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	1.7	Good				



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

June 22, 2022

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2206780

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/15/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-01 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:00:00 AM

Lab ID: 2206780-001

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	93	60		mg/Kg	20	6/18/2022 12:12:59 AM	68210
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/17/2022 3:26:00 PM	68180
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/17/2022 3:26:00 PM	68180
Surr: DNOP	90.5	51.1-141		%Rec	1	6/17/2022 3:26:00 PM	68180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/17/2022 12:51:34 AM	68153
Surr: BFB	94.7	37.7-212		%Rec	1	6/17/2022 12:51:34 AM	68153
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 12:51:34 AM	68153
Toluene	ND	0.048		mg/Kg	1	6/17/2022 12:51:34 AM	68153
Ethylbenzene	ND	0.048		mg/Kg	1	6/17/2022 12:51:34 AM	68153
Xylenes, Total	ND	0.096		mg/Kg	1	6/17/2022 12:51:34 AM	68153
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	6/17/2022 12:51:34 AM	68153

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-03 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:05:00 AM

Lab ID: 2206780-002

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	89	60		mg/Kg	20	6/18/2022 12:25:23 AM	68210
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/17/2022 3:36:59 PM	68180
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/17/2022 3:36:59 PM	68180
Surr: DNOP	82.3	51.1-141		%Rec	1	6/17/2022 3:36:59 PM	68180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/17/2022 1:15:12 AM	68153
Surr: BFB	96.7	37.7-212		%Rec	1	6/17/2022 1:15:12 AM	68153
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 1:15:12 AM	68153
Toluene	ND	0.048		mg/Kg	1	6/17/2022 1:15:12 AM	68153
Ethylbenzene	ND	0.048		mg/Kg	1	6/17/2022 1:15:12 AM	68153
Xylenes, Total	ND	0.096		mg/Kg	1	6/17/2022 1:15:12 AM	68153
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	6/17/2022 1:15:12 AM	68153

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-04 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:10:00 AM

Lab ID: 2206780-003

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/20/2022 12:59:05 PM	68210
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	6/17/2022 3:47:58 PM	68180
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	6/17/2022 3:47:58 PM	68180
Surr: DNOP	76.6	51.1-141		%Rec	1	6/17/2022 3:47:58 PM	68180
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/17/2022 1:38:49 AM	68153
Surr: BFB	95.7	37.7-212		%Rec	1	6/17/2022 1:38:49 AM	68153
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 1:38:49 AM	68153
Toluene	ND	0.047		mg/Kg	1	6/17/2022 1:38:49 AM	68153
Ethylbenzene	ND	0.047		mg/Kg	1	6/17/2022 1:38:49 AM	68153
Xylenes, Total	ND	0.095		mg/Kg	1	6/17/2022 1:38:49 AM	68153
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	6/17/2022 1:38:49 AM	68153

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-05 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:15:00 AM

Lab ID: 2206780-004

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	6/20/2022 7:07:51 PM	68240
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/20/2022 11:25:38 AM	68194
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/20/2022 11:25:38 AM	68194
Surr: DNOP	99.9	51.1-141		%Rec	1	6/20/2022 11:25:38 AM	68194
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/17/2022 12:19:00 PM	68178
Surr: BFB	92.7	37.7-212		%Rec	1	6/17/2022 12:19:00 PM	68178
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 12:19:00 PM	68178
Toluene	ND	0.049		mg/Kg	1	6/17/2022 12:19:00 PM	68178
Ethylbenzene	ND	0.049		mg/Kg	1	6/17/2022 12:19:00 PM	68178
Xylenes, Total	ND	0.098		mg/Kg	1	6/17/2022 12:19:00 PM	68178
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	6/17/2022 12:19:00 PM	68178

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-06 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:25:00 AM

Lab ID: 2206780-005

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	6/20/2022 7:20:15 PM	68240
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/20/2022 11:57:31 AM	68194
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2022 11:57:31 AM	68194
Surr: DNOP	81.3	51.1-141		%Rec	1	6/20/2022 11:57:31 AM	68194
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/17/2022 1:19:00 PM	68178
Surr: BFB	89.1	37.7-212		%Rec	1	6/17/2022 1:19:00 PM	68178
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 1:19:00 PM	68178
Toluene	ND	0.047		mg/Kg	1	6/17/2022 1:19:00 PM	68178
Ethylbenzene	ND	0.047		mg/Kg	1	6/17/2022 1:19:00 PM	68178
Xylenes, Total	ND	0.094		mg/Kg	1	6/17/2022 1:19:00 PM	68178
Surr: 4-Bromofluorobenzene	87.0	70-130		%Rec	1	6/17/2022 1:19:00 PM	68178

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-07 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:30:00 AM

Lab ID: 2206780-006

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	6/20/2022 7:57:30 PM	68240
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/20/2022 12:08:11 PM	68194
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/20/2022 12:08:11 PM	68194
Surr: DNOP	123	51.1-141		%Rec	1	6/20/2022 12:08:11 PM	68194
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/17/2022 2:18:00 PM	68178
Surr: BFB	85.1	37.7-212		%Rec	1	6/17/2022 2:18:00 PM	68178
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/17/2022 2:18:00 PM	68178
Toluene	ND	0.050		mg/Kg	1	6/17/2022 2:18:00 PM	68178
Ethylbenzene	ND	0.050		mg/Kg	1	6/17/2022 2:18:00 PM	68178
Xylenes, Total	ND	0.099		mg/Kg	1	6/17/2022 2:18:00 PM	68178
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	6/17/2022 2:18:00 PM	68178

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-08 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:40:00 AM

Lab ID: 2206780-007

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	6/20/2022 8:09:55 PM	68240
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/20/2022 12:18:51 PM	68194
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/20/2022 12:18:51 PM	68194
Surr: DNOP	95.1	51.1-141		%Rec	1	6/20/2022 12:18:51 PM	68194
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/17/2022 2:38:00 PM	68178
Surr: BFB	90.1	37.7-212		%Rec	1	6/17/2022 2:38:00 PM	68178
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 2:38:00 PM	68178
Toluene	ND	0.048		mg/Kg	1	6/17/2022 2:38:00 PM	68178
Ethylbenzene	ND	0.048		mg/Kg	1	6/17/2022 2:38:00 PM	68178
Xylenes, Total	ND	0.096		mg/Kg	1	6/17/2022 2:38:00 PM	68178
Surr: 4-Bromofluorobenzene	88.0	70-130		%Rec	1	6/17/2022 2:38:00 PM	68178

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206780

Date Reported: 6/22/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-09 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/13/2022 9:45:00 AM

Lab ID: 2206780-008

Matrix: SOIL

Received Date: 6/15/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	6/20/2022 8:22:19 PM	68240
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/20/2022 12:29:33 PM	68194
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/20/2022 12:29:33 PM	68194
Surr: DNOP	96.4	51.1-141		%Rec	1	6/20/2022 12:29:33 PM	68194
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/17/2022 2:58:00 PM	68178
Surr: BFB	87.5	37.7-212		%Rec	1	6/17/2022 2:58:00 PM	68178
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/17/2022 2:58:00 PM	68178
Toluene	ND	0.049		mg/Kg	1	6/17/2022 2:58:00 PM	68178
Ethylbenzene	ND	0.049		mg/Kg	1	6/17/2022 2:58:00 PM	68178
Xylenes, Total	ND	0.098		mg/Kg	1	6/17/2022 2:58:00 PM	68178
Surr: 4-Bromofluorobenzene	88.2	70-130		%Rec	1	6/17/2022 2:58:00 PM	68178

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	Estimated value
	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 interference		

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

WO#: 2206780

22-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: MB-68210	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68210		RunNo: 88864							
Prep Date: 6/17/2022	Analysis Date: 6/17/2022		SeqNo: 3155156		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68210	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68210		RunNo: 88864							
Prep Date: 6/17/2022	Analysis Date: 6/17/2022		SeqNo: 3155157		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-68240	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68240		RunNo: 88887							
Prep Date: 6/20/2022	Analysis Date: 6/20/2022		SeqNo: 3156162		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68240	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68240		RunNo: 88887							
Prep Date: 6/20/2022	Analysis Date: 6/20/2022		SeqNo: 3156163		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	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 interference

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

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

WO#: 2206780

22-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: LCS-68149	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68149			RunNo: 88796						
Prep Date: 6/15/2022	Analysis Date: 6/16/2022			SeqNo: 3154161	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.9		5.000		97.6	51.1	141			

Sample ID: MB-68149	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68149			RunNo: 88796						
Prep Date: 6/15/2022	Analysis Date: 6/16/2022			SeqNo: 3154162	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		119	51.1	141			

Sample ID: LCS-68138	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68138			RunNo: 88796						
Prep Date: 6/15/2022	Analysis Date: 6/17/2022			SeqNo: 3154204	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.9		5.000		119	51.1	141			

Sample ID: MB-68138	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68138			RunNo: 88796						
Prep Date: 6/15/2022	Analysis Date: 6/17/2022			SeqNo: 3154205	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.3		10.00		93.4	51.1	141			

Sample ID: LCS-68146	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68146			RunNo: 88796						
Prep Date: 6/15/2022	Analysis Date: 6/17/2022			SeqNo: 3154228	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.8		5.000		117	51.1	141			

Sample ID: MB-68146	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68146			RunNo: 88796						
Prep Date: 6/15/2022	Analysis Date: 6/17/2022			SeqNo: 3154229	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.7	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206780

22-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: LCS-68180	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68180	RunNo: 88796								
Prep Date: 6/16/2022	Analysis Date: 6/17/2022	SeqNo: 3154438 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	15	50.00	0	109	64.4	127			
Surr: DNOP	4.6		5.000		92.3	51.1	141			

Sample ID: MB-68180	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68180	RunNo: 88796								
Prep Date: 6/16/2022	Analysis Date: 6/17/2022	SeqNo: 3154439 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.7		10.00		77.0	51.1	141			

Sample ID: LCS-68148	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68148	RunNo: 88796								
Prep Date: 6/15/2022	Analysis Date: 6/17/2022	SeqNo: 3154576 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.5	51.1	141			

Sample ID: MB-68148	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68148	RunNo: 88796								
Prep Date: 6/15/2022	Analysis Date: 6/17/2022	SeqNo: 3154577 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		117	51.1	141			

Sample ID: LCS-68194	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68194	RunNo: 88879								
Prep Date: 6/17/2022	Analysis Date: 6/20/2022	SeqNo: 3155751 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	15	50.00	0	97.6	64.4	127			
Surr: DNOP	4.2		5.000		84.3	51.1	141			

Sample ID: MB-68194	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68194	RunNo: 88879								
Prep Date: 6/17/2022	Analysis Date: 6/20/2022	SeqNo: 3155753 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2206780
22-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-68194	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68194	RunNo: 88879								
Prep Date: 6/17/2022	Analysis Date: 6/20/2022	SeqNo: 3155753 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	8.5		10.00		84.7	51.1	141			

Qualifiers:

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

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

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

WO#: 2206780

22-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: ics-68140	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68140		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/16/2022		SeqNo: 3153136		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		196	37.7	212			

Sample ID: mb-68140	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68140		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/16/2022		SeqNo: 3153137		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.5	37.7	212			

Sample ID: ics-68153	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68153		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/17/2022		SeqNo: 3153160		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	87.5	72.3	137			
Surr: BFB	1900		1000		188	37.7	212			

Sample ID: mb-68153	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68153		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/17/2022		SeqNo: 3153161		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		96.7	37.7	212			

Sample ID: ics-68110	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68110		RunNo: 88814							
Prep Date: 6/14/2022	Analysis Date: 6/16/2022		SeqNo: 3153275		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2200		1000		217	37.7	212			S

Sample ID: mb-68110	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68110		RunNo: 88814							
Prep Date: 6/14/2022	Analysis Date: 6/16/2022		SeqNo: 3153276		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	990		1000		99.2	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206780

22-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: lcs-68178	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 68178			RunNo: 88850						
Prep Date: 6/16/2022	Analysis Date: 6/17/2022			SeqNo: 3154731		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	87.7	72.3	137			
Surr: BFB	1900		1000		194	37.7	212			

Sample ID: mb-68178	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 68178			RunNo: 88850						
Prep Date: 6/16/2022	Analysis Date: 6/17/2022			SeqNo: 3154732		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		91.2	37.7	212			

Qualifiers:

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

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

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

WO#: 2206780

22-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: ics-68140	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68140		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/16/2022		SeqNo: 3153182		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.2	70	130			

Sample ID: mb-68140	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68140		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/16/2022		SeqNo: 3153183		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	70	130			

Sample ID: ics-68153	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68153		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/17/2022		SeqNo: 3153206		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	86.2	80	120			
Toluene	0.88	0.050	1.000	0	87.7	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.3	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		91.7	70	130			

Sample ID: mb-68153	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68153		RunNo: 88813							
Prep Date: 6/15/2022	Analysis Date: 6/17/2022		SeqNo: 3153207		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	0.90		1.000		90.4	70	130			

Sample ID: LCS-68110	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68110		RunNo: 88814							
Prep Date: 6/14/2022	Analysis Date: 6/16/2022		SeqNo: 3153313		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Estimated value
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 interference	

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

WO#: 2206780

22-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: mb-68110	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 68110				RunNo: 88814					
Prep Date: 6/14/2022	Analysis Date: 6/16/2022				SeqNo: 3153314	Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.96		1.000		96.3	70	130			

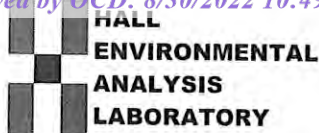
Sample ID: lcs-68178	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 68178				RunNo: 88850					
Prep Date: 6/16/2022	Analysis Date: 6/17/2022				SeqNo: 3154783	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.9	80	120			
Toluene	0.94	0.050	1.000	0	94.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.9	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.8	70	130			

Sample ID: mb-68178	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 68178				RunNo: 88850					
Prep Date: 6/16/2022	Analysis Date: 6/17/2022				SeqNo: 3154784	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		88.5	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 interference

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206780

RcptNo: 1

Received By: Juan Rojas

6/15/2022 7:00:00 AM

Juan Rojas

Completed By: Tracy Casarrubias

6/15/2022 8:10:40 AM

Reviewed By: *see c15122*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: *KPG 6.15.22*

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	Yes			

Chain-of-Custody Record

Client: EOGChase Settle

Mailing Address:

Turn-Around Time: 5- Day☒ Standard ☒ Rush

Project Name:

Cooper AUM #1 Battery

Project #:

Phone #:

22E-00123-04

email or Fax#:

Project Manager:

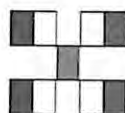
QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)Accreditation: ☐ Az Compliance☐ NELAC ☐ Other☐ EDD (Type)Sampler: M. WierOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 0.3-0.3 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
6/13	9:00	Soil	B522-01	17'	ice	001
	9:05		B522-03	17'		002
	9:10		B522-04	17'		003
	9:15		B522-05	17'		004
	9:25		B522-06	17'		005
	9:30		B522-07	17'		006
	9:40		B522-08	17'		007
	9:45		B522-09	17'		008

Date: 6/13/22 Time: 1000Relinquished by: M. WierReceived by: Monica Peppin

Via:

Date: 6/13/22 Time: 1000Date: 6/13/22 Time: 7:00Remarks: CC: M. PeppinDirect bill EOG

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



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

June 27, 2022

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2206940

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 7 sample(s) on 6/17/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-02 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 10:50:00 AM

Lab ID: 2206940-001

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	110	60		mg/Kg	20	6/22/2022 4:23:08 PM	68287
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/21/2022 3:54:15 PM	68231
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/21/2022 3:54:15 PM	68231
Surr: DNOP	88.7	51.1-141		%Rec	1	6/21/2022 3:54:15 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/20/2022 11:56:33 PM	68217
Surr: BFB	93.9	37.7-212		%Rec	1	6/20/2022 11:56:33 PM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/20/2022 11:56:33 PM	68217
Toluene	ND	0.050		mg/Kg	1	6/20/2022 11:56:33 PM	68217
Ethylbenzene	ND	0.050		mg/Kg	1	6/20/2022 11:56:33 PM	68217
Xylenes, Total	ND	0.10		mg/Kg	1	6/20/2022 11:56:33 PM	68217
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	6/20/2022 11:56:33 PM	68217

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-10 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 9:30:00 AM

Lab ID: 2206940-002

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	240	60		mg/Kg	20	6/22/2022 5:00:21 PM	68287
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/21/2022 4:08:32 PM	68231
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/21/2022 4:08:32 PM	68231
Surr: DNOP	81.7	51.1-141		%Rec	1	6/21/2022 4:08:32 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/21/2022 12:20:05 AM	68217
Surr: BFB	93.6	37.7-212		%Rec	1	6/21/2022 12:20:05 AM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	6/21/2022 12:20:05 AM	68217
Toluene	ND	0.049		mg/Kg	1	6/21/2022 12:20:05 AM	68217
Ethylbenzene	ND	0.049		mg/Kg	1	6/21/2022 12:20:05 AM	68217
Xylenes, Total	ND	0.098		mg/Kg	1	6/21/2022 12:20:05 AM	68217
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	6/21/2022 12:20:05 AM	68217

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-12 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 9:40:00 AM

Lab ID: 2206940-003

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	460	60		mg/Kg	20	6/22/2022 5:12:45 PM	68287
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/21/2022 4:23:03 PM	68231
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/21/2022 4:23:03 PM	68231
Surr: DNOP	95.5	51.1-141		%Rec	1	6/21/2022 4:23:03 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/21/2022 12:43:38 AM	68217
Surr: BFB	94.9	37.7-212		%Rec	1	6/21/2022 12:43:38 AM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/21/2022 12:43:38 AM	68217
Toluene	ND	0.049		mg/Kg	1	6/21/2022 12:43:38 AM	68217
Ethylbenzene	ND	0.049		mg/Kg	1	6/21/2022 12:43:38 AM	68217
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2022 12:43:38 AM	68217
Surr: 4-Bromofluorobenzene	89.5	70-130		%Rec	1	6/21/2022 12:43:38 AM	68217

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-13 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 9:45:00 AM

Lab ID: 2206940-004

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	110	60		mg/Kg	20	6/22/2022 9:03:57 PM	68297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/21/2022 4:37:34 PM	68231
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/21/2022 4:37:34 PM	68231
Surr: DNOP	88.2	51.1-141		%Rec	1	6/21/2022 4:37:34 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/21/2022 1:54:39 AM	68217
Surr: BFB	91.3	37.7-212		%Rec	1	6/21/2022 1:54:39 AM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/21/2022 1:54:39 AM	68217
Toluene	ND	0.049		mg/Kg	1	6/21/2022 1:54:39 AM	68217
Ethylbenzene	ND	0.049		mg/Kg	1	6/21/2022 1:54:39 AM	68217
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2022 1:54:39 AM	68217
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	6/21/2022 1:54:39 AM	68217

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-14 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 9:50:00 AM

Lab ID: 2206940-005

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	6/22/2022 5:25:10 PM	68287
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/21/2022 4:51:56 PM	68231
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/21/2022 4:51:56 PM	68231
Surr: DNOP	90.0	51.1-141		%Rec	1	6/21/2022 4:51:56 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/21/2022 2:18:19 AM	68217
Surr: BFB	92.1	37.7-212		%Rec	1	6/21/2022 2:18:19 AM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/21/2022 2:18:19 AM	68217
Toluene	ND	0.050		mg/Kg	1	6/21/2022 2:18:19 AM	68217
Ethylbenzene	ND	0.050		mg/Kg	1	6/21/2022 2:18:19 AM	68217
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2022 2:18:19 AM	68217
Surr: 4-Bromofluorobenzene	89.0	70-130		%Rec	1	6/21/2022 2:18:19 AM	68217

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-15 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 9:55:00 AM

Lab ID: 2206940-006

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	250	61		mg/Kg	20	6/22/2022 9:16:18 PM	68297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/21/2022 5:06:07 PM	68231
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/21/2022 5:06:07 PM	68231
Surr: DNOP	81.3	51.1-141		%Rec	1	6/21/2022 5:06:07 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/21/2022 2:41:53 AM	68217
Surr: BFB	97.4	37.7-212		%Rec	1	6/21/2022 2:41:53 AM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/21/2022 2:41:53 AM	68217
Toluene	ND	0.050		mg/Kg	1	6/21/2022 2:41:53 AM	68217
Ethylbenzene	ND	0.050		mg/Kg	1	6/21/2022 2:41:53 AM	68217
Xylenes, Total	ND	0.099		mg/Kg	1	6/21/2022 2:41:53 AM	68217
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	6/21/2022 2:41:53 AM	68217

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206940

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-19 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/14/2022 10:45:00 AM

Lab ID: 2206940-007

Matrix: SOIL

Received Date: 6/17/2022 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	78	60		mg/Kg	20	6/22/2022 9:28:38 PM	68297
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/21/2022 5:20:30 PM	68231
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/21/2022 5:20:30 PM	68231
Surr: DNOP	96.3	51.1-141		%Rec	1	6/21/2022 5:20:30 PM	68231
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/21/2022 3:05:32 AM	68217
Surr: BFB	92.2	37.7-212		%Rec	1	6/21/2022 3:05:32 AM	68217
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	6/21/2022 3:05:32 AM	68217
Toluene	ND	0.050		mg/Kg	1	6/21/2022 3:05:32 AM	68217
Ethylbenzene	ND	0.050		mg/Kg	1	6/21/2022 3:05:32 AM	68217
Xylenes, Total	ND	0.10		mg/Kg	1	6/21/2022 3:05:32 AM	68217
Surr: 4-Bromofluorobenzene	90.2	70-130		%Rec	1	6/21/2022 3:05:32 AM	68217

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	Estimated value
	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 interference		

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

WO#: 2206940

27-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-68297	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 68297	RunNo: 88965								
Prep Date: 6/22/2022	Analysis Date: 6/22/2022	SeqNo: 3159374 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68297	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 68297	RunNo: 88965								
Prep Date: 6/22/2022	Analysis Date: 6/22/2022	SeqNo: 3159375 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.6	90	110			

Sample ID: MB-68287	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 68287	RunNo: 88947								
Prep Date: 6/22/2022	Analysis Date: 6/22/2022	SeqNo: 3159736 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68287	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 68287	RunNo: 88947								
Prep Date: 6/22/2022	Analysis Date: 6/22/2022	SeqNo: 3159737 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Qualifiers:

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

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

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

WO#: 2206940

27-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-68231	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68231	RunNo: 88925								
Prep Date: 6/20/2022	Analysis Date: 6/21/2022	SeqNo: 3158629 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		90.7	51.1	141			

Sample ID: LCS-68231	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68231	RunNo: 88925								
Prep Date: 6/20/2022	Analysis Date: 6/21/2022	SeqNo: 3158631 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	15	50.00	0	86.5	64.4	127			
Surr: DNOP	4.3		5.000		86.2	51.1	141			

Sample ID: LCS-68282	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68282	RunNo: 88913								
Prep Date: 6/22/2022	Analysis Date: 6/22/2022	SeqNo: 3158877 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		5.000		61.2	51.1	141			

Sample ID: MB-68282	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68282	RunNo: 88913								
Prep Date: 6/22/2022	Analysis Date: 6/22/2022	SeqNo: 3158878 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.7	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206940

27-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: mb-68217	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68217		RunNo: 88881							
Prep Date: 6/19/2022	Analysis Date: 6/21/2022		SeqNo: 3155809		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	950		1000		94.8	37.7	212			

Sample ID: lcs-68217	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68217		RunNo: 88881							
Prep Date: 6/19/2022	Analysis Date: 6/20/2022		SeqNo: 3155810		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	113	72.3	137			
Surr: BFB	2100		1000		215	37.7	212			S

Qualifiers:

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

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

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

WO#: 2206940

27-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

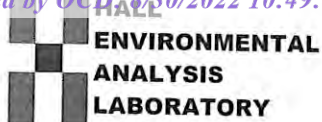
Sample ID: mb-68217	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 68217	RunNo: 88881								
Prep Date: 6/19/2022	Analysis Date: 6/21/2022	SeqNo: 3155844	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.92		1.000		91.7	70	130			

Sample ID: LCS-68217	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 68217	RunNo: 88881								
Prep Date: 6/19/2022	Analysis Date: 6/20/2022	SeqNo: 3155845	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.84	0.025	1.000	0	83.5	80	120			
Toluene	0.89	0.050	1.000	0	89.1	80	120			
Ethylbenzene	0.90	0.050	1.000	0	89.9	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.6	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.1	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 interference

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206940

RcptNo: 1

Received By: Juan Rojas

6/17/2022 7:00:00 AM

Completed By: Cheyenne Cason

6/17/2022 7:37:10 AM

Reviewed By:

on 6/17/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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: CMC 6/17/22

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	Yes			

Chain-of-Custody Record

Client:

EDG

Mailing Address:

Turn-Around Time:

5 day

☒ Standard ☐ Rush

Project Name:

Cooper AHH #1 Battery

Project #:

22E-00123-04

email or Fax#:

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Project Manager:

Monica Peppin

Sampler:

NW

On Ice:

☒ Yes ☐ No

of Coolers: (

Cooler Temp (including CF): 3.5-0-3.5 (°C)

Date

Time

Matrix

Sample Name

Container Type and #

Preservative Type

HEAL No.

2206940

Analysis Request

BTX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

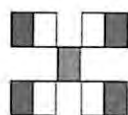
RCRA 8 Metals

Cl, F, Br, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Remarks:

Received by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Relinquished by:

Date

Time



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

June 27, 2022

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2206996

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/18/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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 2206996

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-11 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/16/2022 10:30:00 AM

Lab ID: 2206996-001

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	440	60		mg/Kg	20	6/23/2022 10:00:05 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/23/2022 4:33:39 AM	68272
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/23/2022 4:33:39 AM	68272
Surr: DNOP	72.8	51.1-141		%Rec	1	6/23/2022 4:33:39 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/22/2022 11:28:00 AM	68229
Surr: BFB	85.6	37.7-212		%Rec	1	6/22/2022 11:28:00 AM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/22/2022 11:28:00 AM	68229
Toluene	ND	0.048		mg/Kg	1	6/22/2022 11:28:00 AM	68229
Ethylbenzene	ND	0.048		mg/Kg	1	6/22/2022 11:28:00 AM	68229
Xylenes, Total	ND	0.096		mg/Kg	1	6/22/2022 11:28:00 AM	68229
Surr: 4-Bromofluorobenzene	85.6	70-130		%Rec	1	6/22/2022 11:28:00 AM	68229

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206996

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-20 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/16/2022

Lab ID: 2206996-002

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	460	60		mg/Kg	20	6/23/2022 10:12:29 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 4:44:30 AM	68272
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/23/2022 4:44:30 AM	68272
Surr: DNOP	80.8	51.1-141		%Rec	1	6/23/2022 4:44:30 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2022 11:48:00 AM	68229
Surr: BFB	87.7	37.7-212		%Rec	1	6/22/2022 11:48:00 AM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/22/2022 11:48:00 AM	68229
Toluene	ND	0.049		mg/Kg	1	6/22/2022 11:48:00 AM	68229
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2022 11:48:00 AM	68229
Xylenes, Total	ND	0.098		mg/Kg	1	6/22/2022 11:48:00 AM	68229
Surr: 4-Bromofluorobenzene	85.1	70-130		%Rec	1	6/22/2022 11:48:00 AM	68229

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206996

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-21 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/16/2022

Lab ID: 2206996-003

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	300	61		mg/Kg	20	6/23/2022 10:24:53 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 4:55:17 AM	68272
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/23/2022 4:55:17 AM	68272
Surr: DNOP	76.2	51.1-141		%Rec	1	6/23/2022 4:55:17 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/22/2022 12:07:00 PM	68229
Surr: BFB	86.0	37.7-212		%Rec	1	6/22/2022 12:07:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/22/2022 12:07:00 PM	68229
Toluene	ND	0.047		mg/Kg	1	6/22/2022 12:07:00 PM	68229
Ethylbenzene	ND	0.047		mg/Kg	1	6/22/2022 12:07:00 PM	68229
Xylenes, Total	ND	0.095		mg/Kg	1	6/22/2022 12:07:00 PM	68229
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	6/22/2022 12:07:00 PM	68229

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206996

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-22 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/16/2022

Lab ID: 2206996-004

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	240	61		mg/Kg	20	6/23/2022 10:37:18 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 5:06:02 AM	68272
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	6/23/2022 5:06:02 AM	68272
Surr: DNOP	84.2	51.1-141		%Rec	1	6/23/2022 5:06:02 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/22/2022 12:27:00 PM	68229
Surr: BFB	86.1	37.7-212		%Rec	1	6/22/2022 12:27:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/22/2022 12:27:00 PM	68229
Toluene	ND	0.048		mg/Kg	1	6/22/2022 12:27:00 PM	68229
Ethylbenzene	ND	0.048		mg/Kg	1	6/22/2022 12:27:00 PM	68229
Xylenes, Total	ND	0.096		mg/Kg	1	6/22/2022 12:27:00 PM	68229
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	6/22/2022 12:27:00 PM	68229

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206996

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-23 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/16/2022

Lab ID: 2206996-005

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	6/23/2022 10:49:42 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 5:16:44 AM	68272
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/23/2022 5:16:44 AM	68272
Surr: DNOP	80.7	51.1-141		%Rec	1	6/23/2022 5:16:44 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/22/2022 12:47:00 PM	68229
Surr: BFB	88.5	37.7-212		%Rec	1	6/22/2022 12:47:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/22/2022 12:47:00 PM	68229
Toluene	ND	0.046		mg/Kg	1	6/22/2022 12:47:00 PM	68229
Ethylbenzene	ND	0.046		mg/Kg	1	6/22/2022 12:47:00 PM	68229
Xylenes, Total	ND	0.092		mg/Kg	1	6/22/2022 12:47:00 PM	68229
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	6/22/2022 12:47:00 PM	68229

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	Estimated value
	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 interference		

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206996

27-Jun-22

Client: EOG

Project: Cooper AHH 1 Battery

Sample ID: MB-68321	SampType: mbk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 68321	RunNo: 89005								
Prep Date: 6/23/2022	Analysis Date: 6/23/2022	SeqNo: 3160895	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68321	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 68321	RunNo: 89005								
Prep Date: 6/23/2022	Analysis Date: 6/23/2022	SeqNo: 3160896	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206996

27-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: LCS-68211	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68211		RunNo: 88913							
Prep Date: 6/17/2022	Analysis Date: 6/21/2022		SeqNo: 3158544		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		75.8	51.1	141			

Sample ID: MB-68211	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68211		RunNo: 88913							
Prep Date: 6/17/2022	Analysis Date: 6/21/2022		SeqNo: 3158547		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		99.0	51.1	141			

Sample ID: LCS-68282	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68282		RunNo: 88913							
Prep Date: 6/22/2022	Analysis Date: 6/22/2022		SeqNo: 3158877		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.1		5.000		61.2	51.1	141			

Sample ID: MB-68282	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68282		RunNo: 88913							
Prep Date: 6/22/2022	Analysis Date: 6/22/2022		SeqNo: 3158878		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.1		10.00		90.7	51.1	141			

Sample ID: LCS-68272	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68272		RunNo: 88913							
Prep Date: 6/21/2022	Analysis Date: 6/23/2022		SeqNo: 3159355		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	50.00	0	100	64.4	127			
Surr: DNOP	3.7		5.000		73.7	51.1	141			

Sample ID: MB-68272	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68272		RunNo: 88913							
Prep Date: 6/21/2022	Analysis Date: 6/23/2022		SeqNo: 3159357		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.8		10.00		68.3	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206996

27-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: lcs-68229	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 68229	RunNo: 88959								
Prep Date: 6/20/2022	Analysis Date: 6/22/2022	SeqNo: 3158989 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	96.5	72.3	137			
Surr: BFB	1900		1000		189	37.7	212			

Sample ID: mb-68229	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 68229	RunNo: 88959								
Prep Date: 6/20/2022	Analysis Date: 6/22/2022	SeqNo: 3158990 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	880		1000		87.9	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206996

27-Jun-22

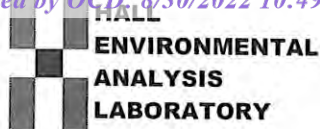
Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: lcs-68229	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 68229			RunNo: 88959						
Prep Date: 6/20/2022	Analysis Date: 6/22/2022			SeqNo: 3159043		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	88.4	80	120			
Toluene	0.89	0.050	1.000	0	88.8	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.1	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.9	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		85.3	70	130			

Sample ID: mb-68229	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 68229			RunNo: 88959						
Prep Date: 6/20/2022	Analysis Date: 6/22/2022			SeqNo: 3159044		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	0.85		1.000		85.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206996

RcptNo: 1

Received By: Isaiah Ortiz

6/18/2022 9:50:00 AM

I-OK

Completed By: Isaiah Ortiz

6/18/2022 11:11:36 AM

I-OK

Reviewed By:

Q 06/18/2022

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: _____

IO
6/18/22

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	5.8	Good	Not Present			

Chain-of-Custody Record

Client: EOG
 Mailing Address: Chase Seattle
 Project Name: Cooper AHH #1
 Project #: Battery

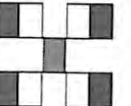
Turn-Around Time: 5-Day
☒ Standard ☐ Rush
 Project Manager: M. Peppin

Phone #: 22E-00123-04
 email or Fax#:
 QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)
 Accreditation: ☐ Az Compliance ☐ Other
☐ NELAC ☐ Other
☐ EDD (Type)

Sampler: M. Wier
 On Ice: ☒ Yes ☐ No
 # of Coolers: 1
 Cooler Temp (including CF): 5.810 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	HEAL No. (°C)
6-16	10:30	50.1	BS22-11	402	Ice	2206996	001
	10:35		BS22-20				002
	10:40		BS22-21				003
	10:45		BS22-22				004
	10:50		BS22-23				005

Relinquished by: M. Wier
 Relinquished by: M. Wier
 Received by: M. Wier
 Received by: M. Wier
 Date: 6/17/22
 Date: 6/17/22
 Time: 800
 Time: 800



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

- ☒ 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)

Remarks:

CC: Monica Peppin

Direct Bill EOG



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

June 27, 2022

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2206997

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 8 sample(s) on 6/18/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-16 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 9:30:00 AM

Lab ID: 2206997-001

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	130	61		mg/Kg	20	6/23/2022 11:26:55 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 5:27:24 AM	68272
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/23/2022 5:27:24 AM	68272
Surr: DNOP	84.1	51.1-141		%Rec	1	6/23/2022 5:27:24 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/22/2022 1:07:00 PM	68229
Surr: BFB	87.8	37.7-212		%Rec	1	6/22/2022 1:07:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/22/2022 1:07:00 PM	68229
Toluene	ND	0.050		mg/Kg	1	6/22/2022 1:07:00 PM	68229
Ethylbenzene	ND	0.050		mg/Kg	1	6/22/2022 1:07:00 PM	68229
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2022 1:07:00 PM	68229
Surr: 4-Bromofluorobenzene	87.7	70-130		%Rec	1	6/22/2022 1:07:00 PM	68229

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-17 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 9:35:00 AM

Lab ID: 2206997-002

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	6/23/2022 11:39:19 PM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 5:38:06 AM	68272
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/23/2022 5:38:06 AM	68272
Surr: DNOP	84.6	51.1-141		%Rec	1	6/23/2022 5:38:06 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2022 1:27:00 PM	68229
Surr: BFB	86.0	37.7-212		%Rec	1	6/22/2022 1:27:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/22/2022 1:27:00 PM	68229
Toluene	ND	0.049		mg/Kg	1	6/22/2022 1:27:00 PM	68229
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2022 1:27:00 PM	68229
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2022 1:27:00 PM	68229
Surr: 4-Bromofluorobenzene	86.9	70-130		%Rec	1	6/22/2022 1:27:00 PM	68229

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-18 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 9:40:00 AM

Lab ID: 2206997-003

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	150	60		mg/Kg	20	6/24/2022 12:41:21 AM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 5:48:46 AM	68272
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/23/2022 5:48:46 AM	68272
Surr: DNOP	58.8	51.1-141		%Rec	1	6/23/2022 5:48:46 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/22/2022 1:46:00 PM	68229
Surr: BFB	83.5	37.7-212		%Rec	1	6/22/2022 1:46:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/22/2022 1:46:00 PM	68229
Toluene	ND	0.048		mg/Kg	1	6/22/2022 1:46:00 PM	68229
Ethylbenzene	ND	0.048		mg/Kg	1	6/22/2022 1:46:00 PM	68229
Xylenes, Total	ND	0.096		mg/Kg	1	6/22/2022 1:46:00 PM	68229
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	6/22/2022 1:46:00 PM	68229

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-24 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 10:00:00 AM

Lab ID: 2206997-004

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	600	60		mg/Kg	20	6/24/2022 12:53:45 AM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/23/2022 5:59:27 AM	68272
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/23/2022 5:59:27 AM	68272
Surr: DNOP	64.3	51.1-141		%Rec	1	6/23/2022 5:59:27 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/22/2022 2:26:00 PM	68229
Surr: BFB	85.8	37.7-212		%Rec	1	6/22/2022 2:26:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/22/2022 2:26:00 PM	68229
Toluene	ND	0.048		mg/Kg	1	6/22/2022 2:26:00 PM	68229
Ethylbenzene	ND	0.048		mg/Kg	1	6/22/2022 2:26:00 PM	68229
Xylenes, Total	ND	0.096		mg/Kg	1	6/22/2022 2:26:00 PM	68229
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	6/22/2022 2:26:00 PM	68229

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-25 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 10:05:00 AM

Lab ID: 2206997-005

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	370	60		mg/Kg	20	6/24/2022 1:06:09 AM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/23/2022 6:10:07 AM	68272
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/23/2022 6:10:07 AM	68272
Surr: DNOP	77.1	51.1-141		%Rec	1	6/23/2022 6:10:07 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2022 2:45:00 PM	68229
Surr: BFB	85.3	37.7-212		%Rec	1	6/22/2022 2:45:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/22/2022 2:45:00 PM	68229
Toluene	ND	0.049		mg/Kg	1	6/22/2022 2:45:00 PM	68229
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2022 2:45:00 PM	68229
Xylenes, Total	ND	0.098		mg/Kg	1	6/22/2022 2:45:00 PM	68229
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	6/22/2022 2:45:00 PM	68229

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-26 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 10:10:00 AM

Lab ID: 2206997-006

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	6/24/2022 1:18:34 AM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 6:20:50 AM	68272
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/23/2022 6:20:50 AM	68272
Surr: DNOP	78.1	51.1-141		%Rec	1	6/23/2022 6:20:50 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/22/2022 3:05:00 PM	68229
Surr: BFB	87.5	37.7-212		%Rec	1	6/22/2022 3:05:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/22/2022 3:05:00 PM	68229
Toluene	ND	0.048		mg/Kg	1	6/22/2022 3:05:00 PM	68229
Ethylbenzene	ND	0.048		mg/Kg	1	6/22/2022 3:05:00 PM	68229
Xylenes, Total	ND	0.096		mg/Kg	1	6/22/2022 3:05:00 PM	68229
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	6/22/2022 3:05:00 PM	68229

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-27 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 10:15:00 AM

Lab ID: 2206997-007

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	6/24/2022 1:30:59 AM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 6:31:34 AM	68272
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/23/2022 6:31:34 AM	68272
Surr: DNOP	62.6	51.1-141		%Rec	1	6/23/2022 6:31:34 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/22/2022 3:25:00 PM	68229
Surr: BFB	87.2	37.7-212		%Rec	1	6/22/2022 3:25:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/22/2022 3:25:00 PM	68229
Toluene	ND	0.049		mg/Kg	1	6/22/2022 3:25:00 PM	68229
Ethylbenzene	ND	0.049		mg/Kg	1	6/22/2022 3:25:00 PM	68229
Xylenes, Total	ND	0.099		mg/Kg	1	6/22/2022 3:25:00 PM	68229
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	1	6/22/2022 3:25:00 PM	68229

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206997

Date Reported: 6/27/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-28 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/15/2022 10:20:00 AM

Lab ID: 2206997-008

Matrix: SOIL

Received Date: 6/18/2022 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	59		mg/Kg	20	6/24/2022 1:43:23 AM	68321
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/23/2022 6:42:18 AM	68272
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/23/2022 6:42:18 AM	68272
Surr: DNOP	84.0	51.1-141		%Rec	1	6/23/2022 6:42:18 AM	68272
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/22/2022 3:44:00 PM	68229
Surr: BFB	86.2	37.7-212		%Rec	1	6/22/2022 3:44:00 PM	68229
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/22/2022 3:44:00 PM	68229
Toluene	ND	0.047		mg/Kg	1	6/22/2022 3:44:00 PM	68229
Ethylbenzene	ND	0.047		mg/Kg	1	6/22/2022 3:44:00 PM	68229
Xylenes, Total	ND	0.093		mg/Kg	1	6/22/2022 3:44:00 PM	68229
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	6/22/2022 3:44:00 PM	68229

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	Estimated value
	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 interference		

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

WO#: 2206997

27-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-68321	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 68321	RunNo: 89005								
Prep Date: 6/23/2022	Analysis Date: 6/23/2022	SeqNo: 3160895	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68321	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 68321	RunNo: 89005								
Prep Date: 6/23/2022	Analysis Date: 6/23/2022	SeqNo: 3160896	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206997

27-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: LCS-68211	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68211		RunNo: 88913							
Prep Date: 6/17/2022	Analysis Date: 6/21/2022		SeqNo: 3158544		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		75.8	51.1	141			

Sample ID: MB-68211	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68211		RunNo: 88913							
Prep Date: 6/17/2022	Analysis Date: 6/21/2022		SeqNo: 3158547		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		99.0	51.1	141			

Sample ID: LCS-68272	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68272		RunNo: 88913							
Prep Date: 6/21/2022	Analysis Date: 6/23/2022		SeqNo: 3159355		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	50.00	0	100	64.4	127			
Surr: DNOP	3.7		5.000		73.7	51.1	141			

Sample ID: MB-68272	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68272		RunNo: 88913							
Prep Date: 6/21/2022	Analysis Date: 6/23/2022		SeqNo: 3159357		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	6.8		10.00		68.3	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206997

27-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: lcs-68229	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 68229				RunNo: 88959					
Prep Date: 6/20/2022	Analysis Date: 6/22/2022				SeqNo: 3158989	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	96.5	72.3	137			
Surr: BFB	1900		1000		189	37.7	212			

Sample ID: mb-68229	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 68229				RunNo: 88959					
Prep Date: 6/20/2022	Analysis Date: 6/22/2022				SeqNo: 3158990	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	880		1000		87.9	37.7	212			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206997

27-Jun-22

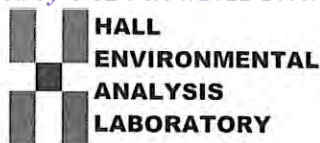
Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: lcs-68229	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 68229			RunNo: 88959						
Prep Date: 6/20/2022	Analysis Date: 6/22/2022			SeqNo: 3159043		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	88.4	80	120			
Toluene	0.89	0.050	1.000	0	88.8	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.1	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.9	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		85.3	70	130			

Sample ID: mb-68229	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 68229			RunNo: 88959						
Prep Date: 6/20/2022	Analysis Date: 6/22/2022			SeqNo: 3159044		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	0.85		1.000		85.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206997

RcptNo: 1

Received By: Isaiah Ortiz

6/18/2022 9:50:00 AM

I-OK

Completed By: Isaiah Ortiz

6/18/2022 11:56:25 AM

I-OK

Reviewed By:

KPA 6.20.22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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: jn 6/20/22

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	5.8	Good	Not Present			



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

June 30, 2022

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Cooper AHH 1 Battery

OrderNo.: 2206B32

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 18 sample(s) on 6/22/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-29 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:15:00 AM

Lab ID: 2206B32-001

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	190	60		mg/Kg	20	6/25/2022 4:18:43 AM	68356
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 1:04:04 PM	68331
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/24/2022 1:04:04 PM	68331
Surr: DNOP	87.4	51.1-141		%Rec	1	6/24/2022 1:04:04 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/24/2022 9:40:00 AM	68296
Surr: BFB	90.1	37.7-212		%Rec	1	6/24/2022 9:40:00 AM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/24/2022 9:40:00 AM	68296
Toluene	ND	0.050		mg/Kg	1	6/24/2022 9:40:00 AM	68296
Ethylbenzene	ND	0.050		mg/Kg	1	6/24/2022 9:40:00 AM	68296
Xylenes, Total	ND	0.099		mg/Kg	1	6/24/2022 9:40:00 AM	68296
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	6/24/2022 9:40:00 AM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-30 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:20:00 AM

Lab ID: 2206B32-002

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	620	60		mg/Kg	20	6/25/2022 4:31:04 AM	68356
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 1:36:01 PM	68331
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/24/2022 1:36:01 PM	68331
Surr: DNOP	96.4	51.1-141		%Rec	1	6/24/2022 1:36:01 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/24/2022 10:40:00 AM	68296
Surr: BFB	87.9	37.7-212		%Rec	1	6/24/2022 10:40:00 AM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/24/2022 10:40:00 AM	68296
Toluene	ND	0.047		mg/Kg	1	6/24/2022 10:40:00 AM	68296
Ethylbenzene	ND	0.047		mg/Kg	1	6/24/2022 10:40:00 AM	68296
Xylenes, Total	ND	0.094		mg/Kg	1	6/24/2022 10:40:00 AM	68296
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	6/24/2022 10:40:00 AM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-31 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:25:00 AM

Lab ID: 2206B32-003

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	730	60		mg/Kg	20	6/25/2022 4:43:25 AM	68356
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	6/24/2022 1:46:42 PM	68331
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/24/2022 1:46:42 PM	68331
Surr: DNOP	97.2	51.1-141		%Rec	1	6/24/2022 1:46:42 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 11:39:00 AM	68296
Surr: BFB	89.3	37.7-212		%Rec	1	6/24/2022 11:39:00 AM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 11:39:00 AM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 11:39:00 AM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 11:39:00 AM	68296
Xylenes, Total	ND	0.098		mg/Kg	1	6/24/2022 11:39:00 AM	68296
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	6/24/2022 11:39:00 AM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-32 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:30:00 AM

Lab ID: 2206B32-004

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	600	60		mg/Kg	20	6/25/2022 4:55:46 AM	68356
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/24/2022 3:26:28 PM	68331
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/24/2022 3:26:28 PM	68331
Surr: DNOP	101	51.1-141		%Rec	1	6/24/2022 3:26:28 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 11:58:00 AM	68296
Surr: BFB	88.8	37.7-212		%Rec	1	6/24/2022 11:58:00 AM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/24/2022 11:58:00 AM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 11:58:00 AM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 11:58:00 AM	68296
Xylenes, Total	ND	0.098		mg/Kg	1	6/24/2022 11:58:00 AM	68296
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	6/24/2022 11:58:00 AM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-33 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:35:00 AM

Lab ID: 2206B32-005

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	84	60		mg/Kg	20	6/25/2022 5:08:07 AM	68356
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 3:37:08 PM	68331
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/24/2022 3:37:08 PM	68331
Surr: DNOP	93.1	51.1-141		%Rec	1	6/24/2022 3:37:08 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 12:18:00 PM	68296
Surr: BFB	88.1	37.7-212		%Rec	1	6/24/2022 12:18:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 12:18:00 PM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 12:18:00 PM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 12:18:00 PM	68296
Xylenes, Total	ND	0.098		mg/Kg	1	6/24/2022 12:18:00 PM	68296
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	6/24/2022 12:18:00 PM	68296

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-34 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:40:00 AM

Lab ID: 2206B32-006

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	77	59		mg/Kg	20	6/25/2022 5:20:28 AM	68356
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	6/24/2022 3:47:54 PM	68331
Motor Oil Range Organics (MRO)	ND	42		mg/Kg	1	6/24/2022 3:47:54 PM	68331
Surr: DNOP	101	51.1-141		%Rec	1	6/24/2022 3:47:54 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 12:38:00 PM	68296
Surr: BFB	89.9	37.7-212		%Rec	1	6/24/2022 12:38:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/24/2022 12:38:00 PM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 12:38:00 PM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 12:38:00 PM	68296
Xylenes, Total	ND	0.098		mg/Kg	1	6/24/2022 12:38:00 PM	68296
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	6/24/2022 12:38:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-35 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:45:00 AM

Lab ID: 2206B32-007

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/27/2022 12:38:57 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	6/24/2022 3:58:42 PM	68331
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	6/24/2022 3:58:42 PM	68331
Surr: DNOP	114	51.1-141		%Rec	1	6/24/2022 3:58:42 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/24/2022 12:58:00 PM	68296
Surr: BFB	89.2	37.7-212		%Rec	1	6/24/2022 12:58:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 12:58:00 PM	68296
Toluene	ND	0.047		mg/Kg	1	6/24/2022 12:58:00 PM	68296
Ethylbenzene	ND	0.047		mg/Kg	1	6/24/2022 12:58:00 PM	68296
Xylenes, Total	ND	0.094		mg/Kg	1	6/24/2022 12:58:00 PM	68296
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	6/24/2022 12:58:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-36 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:50:00 AM

Lab ID: 2206B32-008

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	210	59		mg/Kg	20	6/27/2022 12:51:22 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 4:09:31 PM	68331
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	6/24/2022 4:09:31 PM	68331
Surr: DNOP	101	51.1-141		%Rec	1	6/24/2022 4:09:31 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/24/2022 1:18:00 PM	68296
Surr: BFB	90.8	37.7-212		%Rec	1	6/24/2022 1:18:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/24/2022 1:18:00 PM	68296
Toluene	ND	0.046		mg/Kg	1	6/24/2022 1:18:00 PM	68296
Ethylbenzene	ND	0.046		mg/Kg	1	6/24/2022 1:18:00 PM	68296
Xylenes, Total	ND	0.093		mg/Kg	1	6/24/2022 1:18:00 PM	68296
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	6/24/2022 1:18:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-37 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 9:55:00 AM

Lab ID: 2206B32-009

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	280	61		mg/Kg	20	6/27/2022 1:03:46 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/29/2022 2:48:37 PM	68331
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/29/2022 2:48:37 PM	68331
Surr: DNOP	133	51.1-141		%Rec	1	6/29/2022 2:48:37 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/24/2022 1:38:00 PM	68296
Surr: BFB	91.7	37.7-212		%Rec	1	6/24/2022 1:38:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 1:38:00 PM	68296
Toluene	ND	0.048		mg/Kg	1	6/24/2022 1:38:00 PM	68296
Ethylbenzene	ND	0.048		mg/Kg	1	6/24/2022 1:38:00 PM	68296
Xylenes, Total	ND	0.097		mg/Kg	1	6/24/2022 1:38:00 PM	68296
Surr: 4-Bromofluorobenzene	89.6	70-130		%Rec	1	6/24/2022 1:38:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-38 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:00:00 AM

Lab ID: 2206B32-010

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	110	60		mg/Kg	20	6/27/2022 1:16:11 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/24/2022 4:31:17 PM	68331
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/24/2022 4:31:17 PM	68331
Surr: DNOP	99.1	51.1-141		%Rec	1	6/24/2022 4:31:17 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/24/2022 1:57:00 PM	68296
Surr: BFB	87.4	37.7-212		%Rec	1	6/24/2022 1:57:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/24/2022 1:57:00 PM	68296
Toluene	ND	0.046		mg/Kg	1	6/24/2022 1:57:00 PM	68296
Ethylbenzene	ND	0.046		mg/Kg	1	6/24/2022 1:57:00 PM	68296
Xylenes, Total	ND	0.092		mg/Kg	1	6/24/2022 1:57:00 PM	68296
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	6/24/2022 1:57:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-39 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:05:00 AM

Lab ID: 2206B32-011

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/27/2022 1:53:24 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 4:42:14 PM	68331
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/24/2022 4:42:14 PM	68331
Surr: DNOP	99.0	51.1-141		%Rec	1	6/24/2022 4:42:14 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/24/2022 2:37:00 PM	68296
Surr: BFB	89.8	37.7-212		%Rec	1	6/24/2022 2:37:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 2:37:00 PM	68296
Toluene	ND	0.047		mg/Kg	1	6/24/2022 2:37:00 PM	68296
Ethylbenzene	ND	0.047		mg/Kg	1	6/24/2022 2:37:00 PM	68296
Xylenes, Total	ND	0.095		mg/Kg	1	6/24/2022 2:37:00 PM	68296
Surr: 4-Bromofluorobenzene	85.7	70-130		%Rec	1	6/24/2022 2:37:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-40 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:10:00 AM

Lab ID: 2206B32-012

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	230	60		mg/Kg	20	6/27/2022 2:05:48 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 4:53:10 PM	68331
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/24/2022 4:53:10 PM	68331
Surr: DNOP	94.0	51.1-141		%Rec	1	6/24/2022 4:53:10 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/24/2022 2:57:00 PM	68296
Surr: BFB	89.2	37.7-212		%Rec	1	6/24/2022 2:57:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 2:57:00 PM	68296
Toluene	ND	0.048		mg/Kg	1	6/24/2022 2:57:00 PM	68296
Ethylbenzene	ND	0.048		mg/Kg	1	6/24/2022 2:57:00 PM	68296
Xylenes, Total	ND	0.096		mg/Kg	1	6/24/2022 2:57:00 PM	68296
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	6/24/2022 2:57:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-41 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:15:00 AM

Lab ID: 2206B32-013

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	160	60		mg/Kg	20	6/27/2022 2:18:12 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/24/2022 5:04:09 PM	68331
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	6/24/2022 5:04:09 PM	68331
Surr: DNOP	98.4	51.1-141		%Rec	1	6/24/2022 5:04:09 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 3:17:00 PM	68296
Surr: BFB	87.6	37.7-212		%Rec	1	6/24/2022 3:17:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 3:17:00 PM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 3:17:00 PM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 3:17:00 PM	68296
Xylenes, Total	ND	0.097		mg/Kg	1	6/24/2022 3:17:00 PM	68296
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	6/24/2022 3:17:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-42 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:20:00 AM

Lab ID: 2206B32-014

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	160	61		mg/Kg	20	6/27/2022 2:30:37 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	6/24/2022 5:15:03 PM	68331
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/24/2022 5:15:03 PM	68331
Surr: DNOP	98.9	51.1-141		%Rec	1	6/24/2022 5:15:03 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 3:36:00 PM	68296
Surr: BFB	87.5	37.7-212		%Rec	1	6/24/2022 3:36:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/24/2022 3:36:00 PM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 3:36:00 PM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 3:36:00 PM	68296
Xylenes, Total	ND	0.098		mg/Kg	1	6/24/2022 3:36:00 PM	68296
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	6/24/2022 3:36:00 PM	68296

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-43 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:25:00 AM

Lab ID: 2206B32-015

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	71	60		mg/Kg	20	6/27/2022 2:43:01 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 5:25:56 PM	68331
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/24/2022 5:25:56 PM	68331
Surr: DNOP	93.7	51.1-141		%Rec	1	6/24/2022 5:25:56 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/24/2022 3:56:00 PM	68296
Surr: BFB	86.4	37.7-212		%Rec	1	6/24/2022 3:56:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 3:56:00 PM	68296
Toluene	ND	0.048		mg/Kg	1	6/24/2022 3:56:00 PM	68296
Ethylbenzene	ND	0.048		mg/Kg	1	6/24/2022 3:56:00 PM	68296
Xylenes, Total	ND	0.095		mg/Kg	1	6/24/2022 3:56:00 PM	68296
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	6/24/2022 3:56:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-45 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:30:00 AM

Lab ID: 2206B32-016

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	250	60		mg/Kg	20	6/27/2022 2:55:25 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	6/24/2022 5:36:49 PM	68331
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/24/2022 5:36:49 PM	68331
Surr: DNOP	94.1	51.1-141		%Rec	1	6/24/2022 5:36:49 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/24/2022 4:16:00 PM	68296
Surr: BFB	88.1	37.7-212		%Rec	1	6/24/2022 4:16:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 4:16:00 PM	68296
Toluene	ND	0.047		mg/Kg	1	6/24/2022 4:16:00 PM	68296
Ethylbenzene	ND	0.047		mg/Kg	1	6/24/2022 4:16:00 PM	68296
Xylenes, Total	ND	0.094		mg/Kg	1	6/24/2022 4:16:00 PM	68296
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	6/24/2022 4:16:00 PM	68296

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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-46 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:35:00 AM

Lab ID: 2206B32-017

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	120	60		mg/Kg	20	6/27/2022 3:07:49 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	6/24/2022 5:47:48 PM	68331
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	6/24/2022 5:47:48 PM	68331
Surr: DNOP	93.6	51.1-141		%Rec	1	6/24/2022 5:47:48 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	6/24/2022 4:36:00 PM	68296
Surr: BFB	86.9	37.7-212		%Rec	1	6/24/2022 4:36:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/24/2022 4:36:00 PM	68296
Toluene	ND	0.048		mg/Kg	1	6/24/2022 4:36:00 PM	68296
Ethylbenzene	ND	0.048		mg/Kg	1	6/24/2022 4:36:00 PM	68296
Xylenes, Total	ND	0.096		mg/Kg	1	6/24/2022 4:36:00 PM	68296
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	6/24/2022 4:36:00 PM	68296

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	Estimated value
	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 interference		

Analytical Report

Lab Order 2206B32

Date Reported: 6/30/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-47 17'

Project: Cooper AHH 1 Battery

Collection Date: 6/17/2022 10:40:00 AM

Lab ID: 2206B32-018

Matrix: SOIL

Received Date: 6/22/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	61		mg/Kg	20	6/27/2022 3:20:13 PM	68377
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/24/2022 5:58:49 PM	68331
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/24/2022 5:58:49 PM	68331
Surr: DNOP	92.9	51.1-141		%Rec	1	6/24/2022 5:58:49 PM	68331
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/24/2022 4:56:00 PM	68296
Surr: BFB	86.3	37.7-212		%Rec	1	6/24/2022 4:56:00 PM	68296
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/24/2022 4:56:00 PM	68296
Toluene	ND	0.049		mg/Kg	1	6/24/2022 4:56:00 PM	68296
Ethylbenzene	ND	0.049		mg/Kg	1	6/24/2022 4:56:00 PM	68296
Xylenes, Total	ND	0.099		mg/Kg	1	6/24/2022 4:56:00 PM	68296
Surr: 4-Bromofluorobenzene	85.7	70-130		%Rec	1	6/24/2022 4:56:00 PM	68296

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	Estimated value
	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 interference		

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

WO#: 2206B32

30-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: MB-68356	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68356		RunNo: 89033							
Prep Date: 6/24/2022	Analysis Date: 6/24/2022		SeqNo: 3162206		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68356	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68356		RunNo: 89033							
Prep Date: 6/24/2022	Analysis Date: 6/24/2022		SeqNo: 3162207		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-68377	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68377		RunNo: 89045							
Prep Date: 6/27/2022	Analysis Date: 6/27/2022		SeqNo: 3164356		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68377	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68377		RunNo: 89045							
Prep Date: 6/27/2022	Analysis Date: 6/27/2022		SeqNo: 3164357		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.3	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2206B32

30-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: LCS-68331	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68331		RunNo: 89016							
Prep Date: 6/23/2022	Analysis Date: 6/24/2022		SeqNo: 3161315		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	60	15	50.00	0	121	64.4	127			
Surr: DNOP	5.8		5.000		116	51.1	141			

Sample ID: MB-68331	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68331		RunNo: 89016							
Prep Date: 6/23/2022	Analysis Date: 6/24/2022		SeqNo: 3161317		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		97.3	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2206B32
30-Jun-22

Client: EOG
Project: Cooper AHH 1 Battery

Sample ID: lcs-68296	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 68296				RunNo: 89028					
Prep Date: 6/22/2022	Analysis Date: 6/24/2022				SeqNo: 3161636	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	99.4	72.3	137			
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: mb-68296	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 68296				RunNo: 89028					
Prep Date: 6/22/2022	Analysis Date: 6/24/2022				SeqNo: 3161637	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	870		1000		86.6	37.7	212			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

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

Analyte detected in the associated Method Blank
- E

Estimated value
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2206B32

30-Jun-22

Client: EOG**Project:** Cooper AHH 1 Battery

Sample ID: lcs-68296	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 68296			RunNo: 89028						
Prep Date: 6/22/2022	Analysis Date: 6/24/2022			SeqNo: 3161708		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	94.3	80	120			
Toluene	0.95	0.050	1.000	0	94.8	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	91.8	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		88.3	70	130			

Sample ID: mb-68296	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 68296			RunNo: 89028						
Prep Date: 6/22/2022	Analysis Date: 6/24/2022			SeqNo: 3161709		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		86.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206B32

RcptNo: 1

Received By: Cheyenne Cason 6/22/2022 7:20:00 AM

Completed By: Cheyenne Cason 6/22/2022 8:46:11 AM

Reviewed By: JN 6/22/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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: 6-22-22
(<2 or >12 unless noted)
Adjusted? 6-22-22
Checked by: JN

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	5.1	Good	Not Present			

Chain-of-Custody Record

Client: EOG
 Mailing Address: Chesapeake

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: Cooper AHH #1 Battery

Project #: 22E-00123-04

Project Manager: Monica Peppin

Sampler: M. Wier

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 50 + 0.1 = 5.1 (°C)

Container Type and # 40z Preservative Type ice HEAL No. 2206B32

Date	Time	Matrix	Sample Name	Depth
6-17	9:15	Soil	B522-29	17'
	9:20		B522-30	17'
	9:25		B522-31	17'
	9:30		B522-32	17'
	9:35		B522-33	17'
	9:40		B522-34	17'
	9:45		B522-35	17'
	9:50		B522-36	17'
	9:55		B522-37	17'
	10:00		B522-38	17'
	10:05		B522-39	17'
	10:10		B522-40	17'

Relinquished by: M. Wier

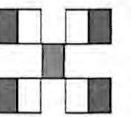
Relinquished by: M. Wier

Time: 11:00 AM

Received by: Monica Peppin

Received by: Monica Peppin

Time: 9:00



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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

Remarks: CC: Monica Peppin

Direct bill EOG



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

July 18, 2022

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: Cooper Excavation

OrderNo.: 2207184

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 45 sample(s) on 7/7/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-01 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 10:15:00 AM

Lab ID: 2207184-001

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/8/2022 6:00:47 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/8/2022 6:00:47 PM
Surr: DNOP	94.5	51.1-141		%Rec	1	7/8/2022 6:00:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/9/2022 1:26:00 AM
Surr: BFB	87.7	37.7-212		%Rec	1	7/9/2022 1:26:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	7/9/2022 1:26:00 AM
Toluene	ND	0.047		mg/Kg	1	7/9/2022 1:26:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/9/2022 1:26:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	7/9/2022 1:26:00 AM
Surr: 4-Bromofluorobenzene	82.7	70-130		%Rec	1	7/9/2022 1:26:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/12/2022 10:23:02 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-01 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 10:20:00 AM

Lab ID: 2207184-002

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/8/2022 6:15:24 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/8/2022 6:15:24 PM
Surr: DNOP	103	51.1-141		%Rec	1	7/8/2022 6:15:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/9/2022 1:46:00 AM
Surr: BFB	88.2	37.7-212		%Rec	1	7/9/2022 1:46:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	7/9/2022 1:46:00 AM
Toluene	ND	0.049		mg/Kg	1	7/9/2022 1:46:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/9/2022 1:46:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/9/2022 1:46:00 AM
Surr: 4-Bromofluorobenzene	82.4	70-130		%Rec	1	7/9/2022 1:46:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	73	60		mg/Kg	20	7/12/2022 10:35:27 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-01 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 10:25:00 AM

Lab ID: 2207184-003

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/8/2022 6:29:54 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/8/2022 6:29:54 PM
Surr: DNOP	85.5	51.1-141		%Rec	1	7/8/2022 6:29:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/9/2022 2:06:00 AM
Surr: BFB	90.4	37.7-212		%Rec	1	7/9/2022 2:06:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	7/9/2022 2:06:00 AM
Toluene	ND	0.048		mg/Kg	1	7/9/2022 2:06:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/9/2022 2:06:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	7/9/2022 2:06:00 AM
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	7/9/2022 2:06:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	72	60		mg/Kg	20	7/12/2022 10:47:51 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-01 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 10:30:00 AM

Lab ID: 2207184-004

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/8/2022 6:44:13 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/8/2022 6:44:13 PM
Surr: DNOP	108	51.1-141		%Rec	1	7/8/2022 6:44:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/9/2022 2:25:00 AM
Surr: BFB	92.2	37.7-212		%Rec	1	7/9/2022 2:25:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	7/9/2022 2:25:00 AM
Toluene	ND	0.048		mg/Kg	1	7/9/2022 2:25:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/9/2022 2:25:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/9/2022 2:25:00 AM
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	7/9/2022 2:25:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/12/2022 11:00:15 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-02 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 10:35:00 AM

Lab ID: 2207184-005

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/8/2022 6:58:26 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/8/2022 6:58:26 PM
Surr: DNOP	98.6	51.1-141		%Rec	1	7/8/2022 6:58:26 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/9/2022 2:45:00 AM
Surr: BFB	89.6	37.7-212		%Rec	1	7/9/2022 2:45:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	7/9/2022 2:45:00 AM
Toluene	ND	0.049		mg/Kg	1	7/9/2022 2:45:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/9/2022 2:45:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/9/2022 2:45:00 AM
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	7/9/2022 2:45:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/12/2022 11:12:40 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-02 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 10:40:00 AM

Lab ID: 2207184-006

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/11/2022 9:52:20 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/11/2022 9:52:20 PM
Surr: DNOP	81.9	51.1-141		%Rec	1	7/11/2022 9:52:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/9/2022 3:05:00 AM
Surr: BFB	92.6	37.7-212		%Rec	1	7/9/2022 3:05:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	7/9/2022 3:05:00 AM
Toluene	ND	0.048		mg/Kg	1	7/9/2022 3:05:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/9/2022 3:05:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	7/9/2022 3:05:00 AM
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	7/9/2022 3:05:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/12/2022 11:49:53 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-02 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 10:45:00 AM

Lab ID: 2207184-007

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/11/2022 10:39:02 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/11/2022 10:39:02 PM
Surr: DNOP	80.4	51.1-141		%Rec	1	7/11/2022 10:39:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 9:27:00 AM
Surr: BFB	83.3	37.7-212		%Rec	1	7/11/2022 9:27:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 9:27:00 AM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 9:27:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 9:27:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 9:27:00 AM
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	7/11/2022 9:27:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/13/2022 12:02:17 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-02 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 10:50:00 AM

Lab ID: 2207184-008

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/11/2022 10:54:18 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/11/2022 10:54:18 PM
Surr: DNOP	83.3	51.1-141		%Rec	1	7/11/2022 10:54:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 10:26:00 AM
Surr: BFB	86.1	37.7-212		%Rec	1	7/11/2022 10:26:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/11/2022 10:26:00 AM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 10:26:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 10:26:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/11/2022 10:26:00 AM
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	7/11/2022 10:26:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/13/2022 12:39:29 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-03 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 10:55:00 AM

Lab ID: 2207184-009

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/11/2022 11:10:04 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/11/2022 11:10:04 PM
Surr: DNOP	79.2	51.1-141		%Rec	1	7/11/2022 11:10:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 11:25:00 AM
Surr: BFB	80.6	37.7-212		%Rec	1	7/11/2022 11:25:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/11/2022 11:25:00 AM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 11:25:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 11:25:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 11:25:00 AM
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	7/11/2022 11:25:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	190	60		mg/Kg	20	7/13/2022 12:51:54 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-03 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 11:00:00 AM

Lab ID: 2207184-010

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/11/2022 11:25:31 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/11/2022 11:25:31 PM
Surr: DNOP	83.8	51.1-141		%Rec	1	7/11/2022 11:25:31 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 11:44:00 AM
Surr: BFB	82.1	37.7-212		%Rec	1	7/11/2022 11:44:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 11:44:00 AM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 11:44:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 11:44:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 11:44:00 AM
Surr: 4-Bromofluorobenzene	81.7	70-130		%Rec	1	7/11/2022 11:44:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	140	59		mg/Kg	20	7/12/2022 6:40:18 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-03 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 11:05:00 AM

Lab ID: 2207184-011

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/11/2022 11:40:43 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/11/2022 11:40:43 PM
Surr: DNOP	79.6	51.1-141		%Rec	1	7/11/2022 11:40:43 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 12:04:00 PM
Surr: BFB	83.9	37.7-212		%Rec	1	7/11/2022 12:04:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/11/2022 12:04:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 12:04:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 12:04:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/11/2022 12:04:00 PM
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	7/11/2022 12:04:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	140	60		mg/Kg	20	7/12/2022 7:17:32 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-03 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 11:10:00 AM

Lab ID: 2207184-012

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/11/2022 11:56:28 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/11/2022 11:56:28 PM
Surr: DNOP	73.9	51.1-141		%Rec	1	7/11/2022 11:56:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 12:24:00 PM
Surr: BFB	83.2	37.7-212		%Rec	1	7/11/2022 12:24:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 12:24:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 12:24:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 12:24:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 12:24:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	7/11/2022 12:24:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	120	59		mg/Kg	20	7/12/2022 7:29:56 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-04 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 11:15:00 AM

Lab ID: 2207184-013

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 12:11:54 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 12:11:54 AM
Surr: DNOP	71.5	51.1-141		%Rec	1	7/12/2022 12:11:54 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 12:44:00 PM
Surr: BFB	80.6	37.7-212		%Rec	1	7/11/2022 12:44:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 12:44:00 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 12:44:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 12:44:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/11/2022 12:44:00 PM
Surr: 4-Bromofluorobenzene	82.2	70-130		%Rec	1	7/11/2022 12:44:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 8:07:10 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-04 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 11:20:00 AM

Lab ID: 2207184-014

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 12:27:09 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 12:27:09 AM
Surr: DNOP	77.0	51.1-141		%Rec	1	7/12/2022 12:27:09 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/11/2022 1:04:00 PM
Surr: BFB	84.8	37.7-212		%Rec	1	7/11/2022 1:04:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/11/2022 1:04:00 PM
Toluene	ND	0.048		mg/Kg	1	7/11/2022 1:04:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/11/2022 1:04:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/11/2022 1:04:00 PM
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	7/11/2022 1:04:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 8:19:34 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-04 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 11:25:00 AM

Lab ID: 2207184-015

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 12:43:02 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 12:43:02 AM
Surr: DNOP	83.2	51.1-141		%Rec	1	7/12/2022 12:43:02 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 1:23:00 PM
Surr: BFB	84.3	37.7-212		%Rec	1	7/11/2022 1:23:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 1:23:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 1:23:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 1:23:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/11/2022 1:23:00 PM
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	7/11/2022 1:23:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 8:31:59 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-04 12-24

Project: Cooper Excavation

Collection Date: 7/5/2022 11:30:00 AM

Lab ID: 2207184-016

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 12:58:39 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 12:58:39 AM
Surr: DNOP	71.3	51.1-141		%Rec	1	7/12/2022 12:58:39 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 1:43:00 PM
Surr: BFB	84.7	37.7-212		%Rec	1	7/11/2022 1:43:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 1:43:00 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 1:43:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 1:43:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/11/2022 1:43:00 PM
Surr: 4-Bromofluorobenzene	84.1	70-130		%Rec	1	7/11/2022 1:43:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	61		mg/Kg	20	7/12/2022 8:44:23 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-05 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 11:35:00 AM

Lab ID: 2207184-017

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 1:14:14 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 1:14:14 AM
Surr: DNOP	77.1	51.1-141		%Rec	1	7/12/2022 1:14:14 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 2:23:00 PM
Surr: BFB	79.2	37.7-212		%Rec	1	7/11/2022 2:23:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 2:23:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 2:23:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 2:23:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 2:23:00 PM
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	7/11/2022 2:23:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 8:56:48 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-05 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 11:40:00 AM

Lab ID: 2207184-018

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 1:30:10 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 1:30:10 AM
Surr: DNOP	75.1	51.1-141		%Rec	1	7/12/2022 1:30:10 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/11/2022 2:43:00 PM
Surr: BFB	81.3	37.7-212		%Rec	1	7/11/2022 2:43:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/11/2022 2:43:00 PM
Toluene	ND	0.048		mg/Kg	1	7/11/2022 2:43:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/11/2022 2:43:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/11/2022 2:43:00 PM
Surr: 4-Bromofluorobenzene	82.1	70-130		%Rec	1	7/11/2022 2:43:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 9:09:13 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-05 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 11:45:00 AM

Lab ID: 2207184-019

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 1:45:55 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 1:45:55 AM
Surr: DNOP	71.3	51.1-141		%Rec	1	7/12/2022 1:45:55 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 3:03:00 PM
Surr: BFB	81.8	37.7-212		%Rec	1	7/11/2022 3:03:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 3:03:00 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 3:03:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 3:03:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/11/2022 3:03:00 PM
Surr: 4-Bromofluorobenzene	80.4	70-130		%Rec	1	7/11/2022 3:03:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	74		mg/Kg	20	7/12/2022 9:21:37 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-05 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 11:50:00 AM

Lab ID: 2207184-020

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 2:01:41 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/12/2022 2:01:41 AM
Surr: DNOP	72.3	51.1-141		%Rec	1	7/12/2022 2:01:41 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 3:23:00 PM
Surr: BFB	83.2	37.7-212		%Rec	1	7/11/2022 3:23:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 3:23:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 3:23:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 3:23:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 3:23:00 PM
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	7/11/2022 3:23:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 9:34:02 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-06 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 11:55:00 AM

Lab ID: 2207184-021

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 2:17:53 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 2:17:53 AM
Surr: DNOP	73.8	51.1-141		%Rec	1	7/12/2022 2:17:53 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 3:43:00 PM
Surr: BFB	80.6	37.7-212		%Rec	1	7/11/2022 3:43:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 3:43:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 3:43:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 3:43:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/11/2022 3:43:00 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	7/11/2022 3:43:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	130	60		mg/Kg	20	7/12/2022 9:46:27 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-06 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 12:00:00 PM

Lab ID: 2207184-022

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 2:33:44 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 2:33:44 AM
Surr: DNOP	79.7	51.1-141		%Rec	1	7/12/2022 2:33:44 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 4:03:00 PM
Surr: BFB	85.9	37.7-212		%Rec	1	7/11/2022 4:03:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 4:03:00 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 4:03:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 4:03:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/11/2022 4:03:00 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	7/11/2022 4:03:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	170	60		mg/Kg	20	7/12/2022 9:58:52 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-06 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 12:05:00 PM

Lab ID: 2207184-023

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 2:49:40 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/12/2022 2:49:40 AM
Surr: DNOP	75.8	51.1-141		%Rec	1	7/12/2022 2:49:40 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 4:23:00 PM
Surr: BFB	83.3	37.7-212		%Rec	1	7/11/2022 4:23:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 4:23:00 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 4:23:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 4:23:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/11/2022 4:23:00 PM
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	7/11/2022 4:23:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	170	61		mg/Kg	20	7/12/2022 10:36:06 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-06 12-24

Project: Cooper Excavation

Collection Date: 7/5/2022 12:10:00 PM

Lab ID: 2207184-024

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 3:05:15 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 3:05:15 AM
Surr: DNOP	78.8	51.1-141		%Rec	1	7/12/2022 3:05:15 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 4:43:00 PM
Surr: BFB	83.1	37.7-212		%Rec	1	7/11/2022 4:43:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 4:43:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 4:43:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 4:43:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 4:43:00 PM
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	7/11/2022 4:43:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	110	61		mg/Kg	20	7/12/2022 10:48:32 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-07 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 12:15:00 PM

Lab ID: 2207184-025

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 3:20:35 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 3:20:35 AM
Surr: DNOP	77.2	51.1-141		%Rec	1	7/12/2022 3:20:35 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 5:03:00 PM
Surr: BFB	82.5	37.7-212		%Rec	1	7/11/2022 5:03:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/11/2022 5:03:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 5:03:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 5:03:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/11/2022 5:03:00 PM
Surr: 4-Bromofluorobenzene	82.7	70-130		%Rec	1	7/11/2022 5:03:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 11:00:57 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-07 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 12:20:00 PM

Lab ID: 2207184-026

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: SB
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	7/11/2022 7:08:38 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	7/11/2022 7:08:38 PM
Surr: DNOP	106	51.1-141		%Rec	1	7/11/2022 7:08:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 5:23:00 PM
Surr: BFB	82.7	37.7-212		%Rec	1	7/11/2022 5:23:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/11/2022 5:23:00 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 5:23:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 5:23:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 5:23:00 PM
Surr: 4-Bromofluorobenzene	82.8	70-130		%Rec	1	7/11/2022 5:23:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 11:13:21 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-07 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 12:25:00 PM

Lab ID: 2207184-027

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 12:20:44 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 12:20:44 PM
Surr: DNOP	101	51.1-141		%Rec	1	7/12/2022 12:20:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/12/2022 2:39:00 AM
Surr: BFB	84.4	37.7-212		%Rec	1	7/12/2022 2:39:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/12/2022 2:39:00 AM
Toluene	ND	0.050		mg/Kg	1	7/12/2022 2:39:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/12/2022 2:39:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/12/2022 2:39:00 AM
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	7/12/2022 2:39:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 11:25:45 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-07 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 12:30:00 PM

Lab ID: 2207184-028

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 1:09:53 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 1:09:53 PM
Surr: DNOP	95.8	51.1-141		%Rec	1	7/12/2022 1:09:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 2:58:00 AM
Surr: BFB	79.9	37.7-212		%Rec	1	7/12/2022 2:58:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/12/2022 2:58:00 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 2:58:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 2:58:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/12/2022 2:58:00 AM
Surr: 4-Bromofluorobenzene	82.2	70-130		%Rec	1	7/12/2022 2:58:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/12/2022 11:38:09 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-08 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 12:35:00 PM

Lab ID: 2207184-029

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 1:26:03 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 1:26:03 PM
Surr: DNOP	99.6	51.1-141		%Rec	1	7/12/2022 1:26:03 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/12/2022 3:18:00 AM
Surr: BFB	82.6	37.7-212		%Rec	1	7/12/2022 3:18:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/12/2022 3:18:00 AM
Toluene	ND	0.050		mg/Kg	1	7/12/2022 3:18:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/12/2022 3:18:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/12/2022 3:18:00 AM
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	7/12/2022 3:18:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	320	60		mg/Kg	20	7/13/2022 10:11:25 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-08 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 12:40:00 PM

Lab ID: 2207184-030

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 1:43:15 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 1:43:15 PM
Surr: DNOP	81.8	51.1-141		%Rec	1	7/12/2022 1:43:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 9:07:48 PM
Surr: BFB	98.1	37.7-212		%Rec	1	7/11/2022 9:07:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/11/2022 9:07:48 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 9:07:48 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 9:07:48 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/11/2022 9:07:48 PM
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/11/2022 9:07:48 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	310	61		mg/Kg	20	7/13/2022 10:48:39 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-08 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 12:45:00 PM

Lab ID: 2207184-031

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 2:56:48 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 2:56:48 PM
Surr: DNOP	90.5	51.1-141		%Rec	1	7/12/2022 2:56:48 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 10:18:49 PM
Surr: BFB	96.5	37.7-212		%Rec	1	7/11/2022 10:18:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/11/2022 10:18:49 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 10:18:49 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 10:18:49 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 10:18:49 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/11/2022 10:18:49 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	330	60		mg/Kg	20	7/13/2022 11:01:04 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-08 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 12:50:00 PM

Lab ID: 2207184-032

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 3:21:11 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 3:21:11 PM
Surr: DNOP	80.9	51.1-141		%Rec	1	7/12/2022 3:21:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/11/2022 11:29:38 PM
Surr: BFB	93.6	37.7-212		%Rec	1	7/11/2022 11:29:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/11/2022 11:29:38 PM
Toluene	ND	0.050		mg/Kg	1	7/11/2022 11:29:38 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/11/2022 11:29:38 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/11/2022 11:29:38 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/11/2022 11:29:38 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	280	60		mg/Kg	20	7/13/2022 11:13:29 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-09 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 12:55:00 PM

Lab ID: 2207184-033

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 3:45:38 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 3:45:38 PM
Surr: DNOP	90.6	51.1-141		%Rec	1	7/12/2022 3:45:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/11/2022 11:53:12 PM
Surr: BFB	93.5	37.7-212		%Rec	1	7/11/2022 11:53:12 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/11/2022 11:53:12 PM
Toluene	ND	0.049		mg/Kg	1	7/11/2022 11:53:12 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/11/2022 11:53:12 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/11/2022 11:53:12 PM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	7/11/2022 11:53:12 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	300	60		mg/Kg	20	7/13/2022 11:25:54 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-09 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 1:00:00 PM

Lab ID: 2207184-034

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 4:10:06 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 4:10:06 PM
Surr: DNOP	89.2	51.1-141		%Rec	1	7/12/2022 4:10:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 12:16:50 AM
Surr: BFB	93.9	37.7-212		%Rec	1	7/12/2022 12:16:50 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 12:16:50 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 12:16:50 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 12:16:50 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/12/2022 12:16:50 AM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/12/2022 12:16:50 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	290	61		mg/Kg	20	7/13/2022 11:38:18 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-09 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 1:05:00 PM

Lab ID: 2207184-035

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 4:34:40 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 4:34:40 PM
Surr: DNOP	91.7	51.1-141		%Rec	1	7/12/2022 4:34:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 12:40:24 AM
Surr: BFB	93.2	37.7-212		%Rec	1	7/12/2022 12:40:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 12:40:24 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 12:40:24 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 12:40:24 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/12/2022 12:40:24 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	7/12/2022 12:40:24 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	310	60		mg/Kg	20	7/13/2022 12:15:31 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-09 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 1:10:00 PM

Lab ID: 2207184-036

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 5:23:44 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 5:23:44 PM
Surr: DNOP	85.5	51.1-141		%Rec	1	7/12/2022 5:23:44 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 1:03:58 AM
Surr: BFB	94.0	37.7-212		%Rec	1	7/12/2022 1:03:58 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 1:03:58 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 1:03:58 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 1:03:58 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/12/2022 1:03:58 AM
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	7/12/2022 1:03:58 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	280	60		mg/Kg	20	7/13/2022 12:27:56 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-10 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 1:15:00 PM

Lab ID: 2207184-037

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 5:48:18 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 5:48:18 PM
Surr: DNOP	91.9	51.1-141		%Rec	1	7/12/2022 5:48:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/12/2022 1:27:29 AM
Surr: BFB	95.4	37.7-212		%Rec	1	7/12/2022 1:27:29 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/12/2022 1:27:29 AM
Toluene	ND	0.048		mg/Kg	1	7/12/2022 1:27:29 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/12/2022 1:27:29 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/12/2022 1:27:29 AM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/12/2022 1:27:29 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	480	60		mg/Kg	20	7/13/2022 12:40:21 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-10 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 1:20:00 PM

Lab ID: 2207184-038

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 6:12:56 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 6:12:56 PM
Surr: DNOP	93.8	51.1-141		%Rec	1	7/12/2022 6:12:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 2:14:25 AM
Surr: BFB	94.5	37.7-212		%Rec	1	7/12/2022 2:14:25 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/12/2022 2:14:25 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 2:14:25 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 2:14:25 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/12/2022 2:14:25 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/12/2022 2:14:25 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	470	60		mg/Kg	20	7/13/2022 12:52:45 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-10 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 1:25:00 PM

Lab ID: 2207184-039

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 6:37:37 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/12/2022 6:37:37 PM
Surr: DNOP	89.4	51.1-141		%Rec	1	7/12/2022 6:37:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/12/2022 2:37:56 AM
Surr: BFB	92.3	37.7-212		%Rec	1	7/12/2022 2:37:56 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 2:37:56 AM
Toluene	ND	0.050		mg/Kg	1	7/12/2022 2:37:56 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/12/2022 2:37:56 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/12/2022 2:37:56 AM
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	7/12/2022 2:37:56 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	440	60		mg/Kg	20	7/13/2022 1:05:09 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-11 0-4

Project: Cooper Excavation

Collection Date: 7/5/2022 1:30:00 PM

Lab ID: 2207184-040

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 7:02:20 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 7:02:20 PM
Surr: DNOP	70.1	51.1-141		%Rec	1	7/12/2022 7:02:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/12/2022 3:01:25 AM
Surr: BFB	92.1	37.7-212		%Rec	1	7/12/2022 3:01:25 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 3:01:25 AM
Toluene	ND	0.050		mg/Kg	1	7/12/2022 3:01:25 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/12/2022 3:01:25 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/12/2022 3:01:25 AM
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	7/12/2022 3:01:25 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/13/2022 1:17:33 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-11 4-8

Project: Cooper Excavation

Collection Date: 7/5/2022 1:35:00 PM

Lab ID: 2207184-041

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 7:26:59 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 7:26:59 PM
Surr: DNOP	60.7	51.1-141		%Rec	1	7/12/2022 7:26:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 3:24:50 AM
Surr: BFB	92.9	37.7-212		%Rec	1	7/12/2022 3:24:50 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 3:24:50 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 3:24:50 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 3:24:50 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/12/2022 3:24:50 AM
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	7/12/2022 3:24:50 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	59		mg/Kg	20	7/13/2022 1:29:57 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-11 8-12

Project: Cooper Excavation

Collection Date: 7/5/2022 1:40:00 PM

Lab ID: 2207184-042

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 7:51:36 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 7:51:36 PM
Surr: DNOP	57.9	51.1-141		%Rec	1	7/12/2022 7:51:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/12/2022 3:48:21 AM
Surr: BFB	93.2	37.7-212		%Rec	1	7/12/2022 3:48:21 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/12/2022 3:48:21 AM
Toluene	ND	0.048		mg/Kg	1	7/12/2022 3:48:21 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/12/2022 3:48:21 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/12/2022 3:48:21 AM
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	7/12/2022 3:48:21 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/13/2022 1:42:22 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-11 12-16

Project: Cooper Excavation

Collection Date: 7/5/2022 1:45:00 PM

Lab ID: 2207184-043

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 8:16:07 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 8:16:07 PM
Surr: DNOP	66.2	51.1-141		%Rec	1	7/12/2022 8:16:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/12/2022 4:11:46 AM
Surr: BFB	93.8	37.7-212		%Rec	1	7/12/2022 4:11:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 4:11:46 AM
Toluene	ND	0.050		mg/Kg	1	7/12/2022 4:11:46 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/12/2022 4:11:46 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/12/2022 4:11:46 AM
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	7/12/2022 4:11:46 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	110	60		mg/Kg	20	7/13/2022 1:54:46 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-12

Project: Cooper Excavation

Collection Date: 7/5/2022 1:50:00 PM

Lab ID: 2207184-044

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/12/2022 8:40:40 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/12/2022 8:40:40 PM
Surr: DNOP	62.5	51.1-141		%Rec	1	7/12/2022 8:40:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 4:35:19 AM
Surr: BFB	92.2	37.7-212		%Rec	1	7/12/2022 4:35:19 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/12/2022 4:35:19 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 4:35:19 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 4:35:19 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/12/2022 4:35:19 AM
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	7/12/2022 4:35:19 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	64	60		mg/Kg	20	7/13/2022 2:07:10 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207184

Date Reported: 7/18/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-13

Project: Cooper Excavation

Collection Date: 7/5/2022 1:55:00 PM

Lab ID: 2207184-045

Matrix: SOIL

Received Date: 7/7/2022 7:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/12/2022 9:05:08 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/12/2022 9:05:08 PM
Surr: DNOP	69.9	51.1-141		%Rec	1	7/12/2022 9:05:08 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/12/2022 4:58:44 AM
Surr: BFB	93.4	37.7-212		%Rec	1	7/12/2022 4:58:44 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/12/2022 4:58:44 AM
Toluene	ND	0.049		mg/Kg	1	7/12/2022 4:58:44 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/12/2022 4:58:44 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/12/2022 4:58:44 AM
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	7/12/2022 4:58:44 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	300	60		mg/Kg	20	7/13/2022 2:44:24 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	Estimated value
	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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: MB-68724	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68724		RunNo: 89439							
Prep Date: 7/12/2022	Analysis Date: 7/12/2022		SeqNo: 3181876		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68724	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68724		RunNo: 89439							
Prep Date: 7/12/2022	Analysis Date: 7/12/2022		SeqNo: 3181877		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Sample ID: MB-68734	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68734		RunNo: 89440							
Prep Date: 7/12/2022	Analysis Date: 7/12/2022		SeqNo: 3181959		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68734	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68734		RunNo: 89440							
Prep Date: 7/12/2022	Analysis Date: 7/12/2022		SeqNo: 3181960		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.8	90	110			

Sample ID: MB-68732	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68732		RunNo: 89473							
Prep Date: 7/12/2022	Analysis Date: 7/13/2022		SeqNo: 3183568		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68732	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68732		RunNo: 89473							
Prep Date: 7/12/2022	Analysis Date: 7/13/2022		SeqNo: 3183569		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: MB-68651	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68651	RunNo: 89367								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3179032 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		104	51.1	141			

Sample ID: LCS-68651	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68651	RunNo: 89367								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3179034 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	15	50.00	0	101	64.4	127			
Surr: DNOP	5.6		5.000		112	51.1	141			

Sample ID: MB-68628	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68628	RunNo: 89385								
Prep Date: 7/7/2022	Analysis Date: 7/8/2022	SeqNo: 3179983 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		98.3	51.1	141			

Sample ID: LCS-68628	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68628	RunNo: 89385								
Prep Date: 7/7/2022	Analysis Date: 7/8/2022	SeqNo: 3179985 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	15	50.00	0	89.9	64.4	127			
Surr: DNOP	4.8		5.000		96.4	51.1	141			

Sample ID: MB-68643	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68643	RunNo: 89368								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3180233 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		84.2	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: LCS-68643	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68643	RunNo: 89368								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3180234 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	15	50.00	0	89.5	64.4	127			
Surr: DNOP	4.2		5.000		83.1	51.1	141			

Sample ID: 2207184-006AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-02 4-8	Batch ID: 68643	RunNo: 89368								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3180236 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	14	48.26	0	85.7	36.1	154			
Surr: DNOP	3.6		4.826		74.8	51.1	141			

Sample ID: 2207184-006AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-02 4-8	Batch ID: 68643	RunNo: 89368								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3180237 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	14	48.26	0	84.8	36.1	154	1.04	33.9	
Surr: DNOP	3.7		4.826		76.1	51.1	141	0	0	

Sample ID: 2207184-026AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-07 4-8	Batch ID: 68651	RunNo: 89367								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3180271 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	15	49.07	0	104	36.1	154	10.4	33.9	
Surr: DNOP	5.5		4.907		113	51.1	141	0	0	

Sample ID: 2207184-026AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-07 4-8	Batch ID: 68651	RunNo: 89367								
Prep Date: 7/8/2022	Analysis Date: 7/11/2022	SeqNo: 3180272 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	14	47.08	0	97.5	36.1	154			
Surr: DNOP	5.2		4.708		110	51.1	141			

Sample ID: MB-68672	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68672	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3180547 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: MB-68672	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68672	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3180547 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.1	51.1	141			

Sample ID: LCS-68672	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68672	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3180548 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	56	15	50.00	0	111	64.4	127			
Surr: DNOP	5.3		5.000		107	51.1	141			

Sample ID: 2207184-027AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-07 8-12	Batch ID: 68672	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3180550 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	15	48.88	0	95.5	36.1	154			
Surr: DNOP	4.6		4.888		93.8	51.1	141			

Sample ID: 2207184-027AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-07 8-12	Batch ID: 68672	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3180551 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	15	48.78	0	87.2	36.1	154	9.34	33.9	
Surr: DNOP	4.5		4.878		92.4	51.1	141	0	0	

Sample ID: MB-68693	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68693	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3180569 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.4		10.00		83.6	51.1	141			

Sample ID: LCS-68693	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68693	RunNo: 89397								
Prep Date: 7/11/2022	Analysis Date: 7/12/2022	SeqNo: 3181560 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: LCS-68693	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68693			RunNo: 89397						
Prep Date: 7/11/2022	Analysis Date: 7/12/2022			SeqNo: 3181560	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		81.0	51.1	141			

Sample ID: 2207184-030AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS22-08 4-8	Batch ID: 68674			RunNo: 89454						
Prep Date: 7/11/2022	Analysis Date: 7/12/2022			SeqNo: 3182447	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	14	47.13	0	79.1	36.1	154			
Surr: DNOP	3.5		4.713		73.4	51.1	141			

Sample ID: 2207184-030AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS22-08 4-8	Batch ID: 68674			RunNo: 89454						
Prep Date: 7/11/2022	Analysis Date: 7/12/2022			SeqNo: 3182448	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	15	49.16	0	82.1	36.1	154	7.96	33.9	
Surr: DNOP	3.8		4.916		77.0	51.1	141	0	0	

Sample ID: LCS-68674	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68674			RunNo: 89454						
Prep Date: 7/11/2022	Analysis Date: 7/12/2022			SeqNo: 3182462	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	15	50.00	0	81.2	64.4	127			
Surr: DNOP	4.2		5.000		84.5	51.1	141			

Sample ID: MB-68674	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68674			RunNo: 89454						
Prep Date: 7/11/2022	Analysis Date: 7/12/2022			SeqNo: 3182466	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.0	51.1	141			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: ics-68623	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68623		RunNo: 89348							
Prep Date: 7/7/2022	Analysis Date: 7/8/2022		SeqNo: 3178144		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	99.0	72.3	137			
Surr: BFB	2000		1000		199	37.7	212			

Sample ID: mb-68623	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68623		RunNo: 89348							
Prep Date: 7/7/2022	Analysis Date: 7/8/2022		SeqNo: 3178145		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		91.1	37.7	212			

Sample ID: mb-68664	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68664		RunNo: 89366							
Prep Date: 7/10/2022	Analysis Date: 7/11/2022		SeqNo: 3179379		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		99.7	37.7	212			

Sample ID: ics-68664	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68664		RunNo: 89366							
Prep Date: 7/10/2022	Analysis Date: 7/11/2022		SeqNo: 3179380		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	106	72.3	137			
Surr: BFB	2100		1000		207	37.7	212			

Sample ID: 2207184-030ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WS22-08 4-8	Batch ID: 68664		RunNo: 89366							
Prep Date: 7/10/2022	Analysis Date: 7/11/2022		SeqNo: 3179382		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	87.6	70	130			
Surr: BFB	1800		998.0		181	37.7	212			

Sample ID: 2207184-030amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WS22-08 4-8	Batch ID: 68664		RunNo: 89366							
Prep Date: 7/10/2022	Analysis Date: 7/11/2022		SeqNo: 3179383		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: 2207184-030amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-08 4-8	Batch ID: 68664	RunNo: 89366								
Prep Date: 7/10/2022	Analysis Date: 7/11/2022	SeqNo: 3179383 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	24.85	0	79.0	70	130	10.7	20	
Surr: BFB	1700		994.0		174	37.7	212	0	0	

Sample ID: lcs-68625	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 68625	RunNo: 89377								
Prep Date: 7/7/2022	Analysis Date: 7/11/2022	SeqNo: 3179545 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	98.2	72.3	137			
Surr: BFB	1800		1000		177	37.7	212			

Sample ID: mb-68625	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 68625	RunNo: 89377								
Prep Date: 7/7/2022	Analysis Date: 7/11/2022	SeqNo: 3179546 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	820		1000		81.8	37.7	212			

Sample ID: 2207184-007ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-02 8-12	Batch ID: 68625	RunNo: 89377								
Prep Date: 7/7/2022	Analysis Date: 7/11/2022	SeqNo: 3179548 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	24.93	0	91.5	70	130			
Surr: BFB	1800		997.0		184	37.7	212			

Sample ID: 2207184-007amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-02 8-12	Batch ID: 68625	RunNo: 89377								
Prep Date: 7/7/2022	Analysis Date: 7/11/2022	SeqNo: 3179549 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	95.4	70	130	4.49	20	
Surr: BFB	1900		1000		190	37.7	212	0	0	

Sample ID: lcs-68658	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 68658	RunNo: 89377								
Prep Date: 7/9/2022	Analysis Date: 7/11/2022	SeqNo: 3179571 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: ics-68658	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68658		RunNo: 89377							
Prep Date: 7/9/2022	Analysis Date: 7/11/2022		SeqNo: 3179571		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	88.4	72.3	137			
Surr: BFB	1800		1000		176	37.7	212			

Sample ID: mb-68658	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68658		RunNo: 89377							
Prep Date: 7/9/2022	Analysis Date: 7/11/2022		SeqNo: 3179572		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	810		1000		81.0	37.7	212			

Sample ID: mb	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: G89410		RunNo: 89410							
Prep Date:	Analysis Date: 7/12/2022		SeqNo: 3180613		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	37.7	212			

Sample ID: 2.5ug gro lcs	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: G89410		RunNo: 89410							
Prep Date:	Analysis Date: 7/12/2022		SeqNo: 3180614		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		194	37.7	212			

Qualifiers:

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

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

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: lcs-68623	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68623		RunNo: 89348							
Prep Date: 7/7/2022	Analysis Date: 7/8/2022		SeqNo: 3178205		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.0	80	120			
Toluene	0.88	0.050	1.000	0	88.3	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.0	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.9	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	70	130			

Sample ID: mb-68623	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68623		RunNo: 89348							
Prep Date: 7/7/2022	Analysis Date: 7/8/2022		SeqNo: 3178206		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: mb-68664	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68664		RunNo: 89366							
Prep Date: 7/10/2022	Analysis Date: 7/11/2022		SeqNo: 3179427		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-68664	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68664		RunNo: 89366							
Prep Date: 7/10/2022	Analysis Date: 7/11/2022		SeqNo: 3179428		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	92.2	80	120			
Toluene	0.99	0.050	1.000	0	98.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: 2207184-031ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: WS22-08 8-12	Batch ID: 68664	RunNo: 89366								
Prep Date: 7/10/2022	Analysis Date: 7/11/2022	SeqNo: 3179431	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.025	0.9823	0	84.5	68.8	120			
Toluene	0.90	0.049	0.9823	0	91.3	73.6	124			
Ethylbenzene	0.92	0.049	0.9823	0	93.3	72.7	129			
Xylenes, Total	2.8	0.098	2.947	0	94.1	75.7	126			
Surr: 4-Bromofluorobenzene	1.0		0.9823		103	70	130			

Sample ID: 2207184-031amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: WS22-08 8-12	Batch ID: 68664	RunNo: 89366								
Prep Date: 7/10/2022	Analysis Date: 7/11/2022	SeqNo: 3179432	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	0.9823	0	93.5	68.8	120	10.1	20	
Toluene	0.97	0.049	0.9823	0	98.8	73.6	124	7.91	20	
Ethylbenzene	0.98	0.049	0.9823	0	100	72.7	129	7.06	20	
Xylenes, Total	3.0	0.098	2.947	0	101	75.7	126	7.09	20	
Surr: 4-Bromofluorobenzene	1.0		0.9823		105	70	130	0	0	

Sample ID: lcs-68625	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 68625	RunNo: 89377								
Prep Date: 7/7/2022	Analysis Date: 7/11/2022	SeqNo: 3179595	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	0.92	0.050	1.000	0	92.0	80	120			
Ethylbenzene	0.92	0.050	1.000	0	91.7	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.2	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		84.7	70	130			

Sample ID: mb-68625	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 68625	RunNo: 89377								
Prep Date: 7/7/2022	Analysis Date: 7/11/2022	SeqNo: 3179596	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	0.84		1.000		83.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207184

18-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: 2207184-008ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-02 12-16	Batch ID: 68625		RunNo: 89377							
Prep Date: 7/7/2022	Analysis Date: 7/11/2022		SeqNo: 3179599		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	0.9911	0	86.4	68.8	120			
Toluene	0.89	0.050	0.9911	0	89.5	73.6	124			
Ethylbenzene	0.88	0.050	0.9911	0	89.0	72.7	129			
Xylenes, Total	2.6	0.099	2.973	0	88.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.82		0.9911		82.7	70	130			

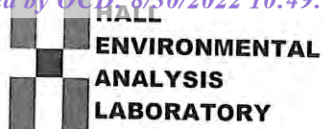
Sample ID: 2207184-008amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-02 12-16	Batch ID: 68625		RunNo: 89377							
Prep Date: 7/7/2022	Analysis Date: 7/11/2022		SeqNo: 3179600		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.83	0.024	0.9785	0	84.7	68.8	120	3.31	20	
Toluene	0.86	0.049	0.9785	0	88.0	73.6	124	3.04	20	
Ethylbenzene	0.86	0.049	0.9785	0	88.3	72.7	129	2.04	20	
Xylenes, Total	2.6	0.098	2.935	0	87.1	75.7	126	2.44	20	
Surr: 4-Bromofluorobenzene	0.80		0.9785		82.1	70	130	0	0	

Sample ID: lcs-68658	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68658		RunNo: 89377							
Prep Date: 7/9/2022	Analysis Date: 7/11/2022		SeqNo: 3179619		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.4	80	120			
Toluene	0.88	0.050	1.000	0	88.2	80	120			
Ethylbenzene	0.87	0.050	1.000	0	87.2	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.7	80	120			
Surr: 4-Bromofluorobenzene	0.82		1.000		81.7	70	130			

Sample ID: mb-68658	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68658		RunNo: 89377							
Prep Date: 7/9/2022	Analysis Date: 7/11/2022		SeqNo: 3179620		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	0.81		1.000		81.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		



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

Sample Log-In Check List

Client Name: **Vertex Resources Services, Inc.**

Work Order Number: **2207184**

RcptNo: 1

Received By: **Juan Rojas**

7/7/2022 7:45:00 AM

Completed By: **Cheyenne Cason**

7/7/2022 7:55:06 AM

Reviewed By: *[Signature]*

7-7-22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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: *ju 7/7/22*

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: _____

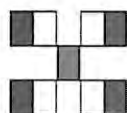
16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good	Not Present			

Chain-of-Custody Record													
Client: Vertex (EOG)		Turn-Around Time: <input checked="" type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush 5 Days		Project Name: Cooper Excavation									
Mailing Address: On file		Project #: NE-00123-04		Project Manager: Monica Reppin									
Phone #: _____		Project Manager: _____		Sampler: Fernando Rodriguez									
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other _____		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temp (including CFJ): 0.4-0.1 = 0.3 (°C)							
Date		Time		Matrix		Sample Name		Container Type and #		Preservative Type		HEAL No.	
7/5	10:15	Soil	WS22-01	O-4	4oz jar	Ice		2207154					
7/5	10:20	Soil	WS22-01	N-8	4oz jar	Ice		001					
7/5	10:25	Soil	WS22-01	8-12	4oz jar	Ice		002					
7/5	10:30	Soil	WS22-01	12-16	4oz jar	Ice		004					
7/5	10:35	Soil	WS22-02	O-4	4oz jar	Ice		003					
7/5	10:40	Soil	WS22-02	N-8	4oz jar	Ice		006					
7/5	10:45	Soil	WS22-02	8-12	4oz jar	Ice		007					
7/5	10:50	Soil	WS22-02	12-16	4oz jar	Ice		008					
7/5	10:55	Soil	WS22-03	O-4	4oz jar	Ice		009					
7/5	11:00	Soil	WS22-03	N-8	4oz jar	Ice		010					
7/5	11:05	Soil	WS22-03	8-12	4oz jar	Ice		011					
7/5	11:10	Soil	WS22-03	12-16	4oz jar	Ice		012					
Date: 7/5		Time: 6:17:30		Relinquished by: Fernando Rodriguez		Received by: _____		Date: 7/6/22		Time: 7:50			
Date: 7/6/22		Time: 1900		Relinquished by: _____		Received by: _____		Date: 7/7/22		Time: 7:45			

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

Project Manager:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC ☐ Other☐ EDD (Type)

□ LDD (type) -

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

0	0
2	2
4	4
6	6
8	8
10	10
12	12
14	14
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22	22
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28	28
30	30
32	32
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40	40
42	42
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46	46
48	48
50	50
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58	58
60	60
62	62
64	64
66	66
68	68
70	70
72	72
74	74
76	76
78	78
80	80
82	82
84	84
86	86
88	88
90	90
92	92
94	94
96	96
98	98
100	100

Container	Preservative	HEAL No.
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
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99	99	99
100	100	100

Type and #	Type
	2207184

Ice cream

	t	a
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402 jar	115	CO2
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4707.01.2019

1005	15	50700
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402 jar	Ice	ced
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1001	1001	1001
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402 jar	Ice

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16	17	18
19	20	21
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25	26	27
28	29	30
31	32	33
34	35	36
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364	365	366
367	368	369
370	37	

402 Jan	LC	8827
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407 jar	Ice	008
407 jar	Ice	008

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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100	100	100
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Year	Ice
2014	0.10

[illegible]

902 jar	10
10	

Ice 012

Received by:	Via:	Date	Time
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$$\frac{1}{L} \int_0^L \frac{1}{\sqrt{1 - \frac{1}{L^2} \left(\frac{d\phi}{dx} \right)^2}} dx$$

1000000	1000000
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Received by: _____ Via: _____ Date _____ Time _____

17

1 - 4 Courier + 17/11/22 1.5/3

contracted to other accredited laboratories. This serves as notice of this

Chain-of-Custody Record

Client: Vertex (Eog)

Mailing Address: on file

Phone #: 226-00123-04

email or Fax#:

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time: Standard ☒ Rush 5 days

Project Name: Cooper Excavation

Project #: 226-00123-04

Project Manager: Monica Peppin

Sampler: Fernando Rodriguez

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 04-01-03 (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Ch F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
7/5	11:15	Soil	WS22-04 0-4	402 jar	Ice	2207184	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:20	Soil	WS22-04 4-8	402 jar	Ice	013	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:25	Soil	WS22-04 8-12	402 jar	Ice	014	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:30	Soil	WS22-04 12-24	402 jar	Ice	00-015	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:35	Soil	WS22-05 0-4	402 jar	Ice	016	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:40	Soil	WS22-05 4-8	402 jar	Ice	017	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:45	Soil	WS22-05 8-12	402 jar	Ice	00-018	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:50	Soil	WS22-05 12-24	402 jar	Ice	019	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	11:55	Soil	WS22-06 0-4	402 jar	Ice	020	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	12:00	Soil	WS22-06 4-8	402 jar	Ice	021	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	12:05	Soil	WS22-06 8-12	402 jar	Ice	022	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	12:10	Soil	WS22-06 12-24	402 jar	Ice	023	✓	✓	✓	✓	✓	✓	✓	✓	✓
7/5	17:30	Relinquished by: Fernando Rodriguez			Ice	024	✓	✓	✓	✓	✓	✓	✓	✓	✓
Date: 7/5	Time: 17:30	Relinquished by: Fernando Rodriguez			Via: <u>Albuquerque</u>	Date: 7/5	Time: 17:30								
Date: 7/5	Time: 1900	Relinquished by: <u>Albuquerque</u>			Via: <u>Albuquerque</u>	Date: 7/5	Time: 1900								

Remarks:

Direct Soil Eog

Chain-of-Custody Record

Client: Verter (EOG)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☒ Standard ☒ Rush 5 days

Project Name:

Cooper Excavation

Project #:

ME-00123-04

Project Manager:

Monica PeppinSampler: Fernando RodriguezOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 0.1-0.1-0.1-0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

025

026

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035

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041

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043

044

045

046

047

048

049

050

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)

Remarks:

Direct Bill to EOG

Received by: Monica Peppin Date: 7/6/22 Time: 1750Relinquished by: Fernando RodriguezDate: 7/6/22 Time: 1900Relinquished by: amwDate: 7/6/22 Time: 1900

Chain-of-Custody Record

Client: Jertex (EOG)

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:

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

Project Manager:

Monica ReppinSampler: Fernando RodriguezOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 0.4-0.15-0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Turn-Around Time:

☒ Standard ☐ Rush 3000

Project Name:

COOPER EXCAVATION

Project #:

NE-06123-04

Project Manager:

Monica ReppinSampler: Fernando RodriguezOn Ice: ☒ Yes ☐ No# of Coolers: 1Cooler Temp (including CF): 0.4-0.15-0.3 (°C)

Container Type and #

Preservative Type

HEAL No.

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

Matrix

Sample Name

Date

Time

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)

Remarks:

Direct Bill to EOG

Received by:

Date

Time

Received by:

Date

Time

Relinquished by:

Date

Time

Relinquished by:

Date

Time



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

July 19, 2022

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: Cooper Excavation

OrderNo.: 2207417

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 14 sample(s) on 7/12/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-48 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 8:30:00 AM

Lab ID: 2207417-001

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 3:43:30 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/14/2022 3:43:30 PM
Surr: DNOP	78.4	51.1-141		%Rec	1	7/14/2022 3:43:30 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/15/2022 12:29:00 PM
Surr: BFB	86.0	37.7-212		%Rec	1	7/15/2022 12:29:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 12:29:00 PM
Toluene	ND	0.047		mg/Kg	1	7/15/2022 12:29:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	7/15/2022 12:29:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2022 12:29:00 PM
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	7/15/2022 12:29:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	500	59		mg/Kg	20	7/16/2022 8:18:34 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-49 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 8:40:00 AM

Lab ID: 2207417-002

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 3:57:24 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2022 3:57:24 PM
Surr: DNOP	80.3	51.1-141		%Rec	1	7/14/2022 3:57:24 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 1:28:00 PM
Surr: BFB	82.7	37.7-212		%Rec	1	7/15/2022 1:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 1:28:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 1:28:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 1:28:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2022 1:28:00 PM
Surr: 4-Bromofluorobenzene	81.8	70-130		%Rec	1	7/15/2022 1:28:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	100	60		mg/Kg	20	7/16/2022 8:55:36 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-50 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 8:50:00 AM

Lab ID: 2207417-003

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 4:11:37 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2022 4:11:37 PM
Surr: DNOP	77.6	51.1-141		%Rec	1	7/14/2022 4:11:37 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/15/2022 1:48:00 PM
Surr: BFB	83.2	37.7-212		%Rec	1	7/15/2022 1:48:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/15/2022 1:48:00 PM
Toluene	ND	0.046		mg/Kg	1	7/15/2022 1:48:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/15/2022 1:48:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	7/15/2022 1:48:00 PM
Surr: 4-Bromofluorobenzene	83.8	70-130		%Rec	1	7/15/2022 1:48:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	120	60		mg/Kg	20	7/16/2022 9:32:39 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-51 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 9:00:00 AM

Lab ID: 2207417-004

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 4:25:30 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2022 4:25:30 PM
Surr: DNOP	77.4	51.1-141		%Rec	1	7/14/2022 4:25:30 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/15/2022 2:08:00 PM
Surr: BFB	84.4	37.7-212		%Rec	1	7/15/2022 2:08:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 2:08:00 PM
Toluene	ND	0.047		mg/Kg	1	7/15/2022 2:08:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	7/15/2022 2:08:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2022 2:08:00 PM
Surr: 4-Bromofluorobenzene	83.8	70-130		%Rec	1	7/15/2022 2:08:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	120	60		mg/Kg	20	7/16/2022 9:45:00 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-52 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 9:10:00 AM

Lab ID: 2207417-005

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 4:39:32 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2022 4:39:32 PM
Surr: DNOP	64.1	51.1-141		%Rec	1	7/14/2022 4:39:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/15/2022 2:28:00 PM
Surr: BFB	82.7	37.7-212		%Rec	1	7/15/2022 2:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/15/2022 2:28:00 PM
Toluene	ND	0.046		mg/Kg	1	7/15/2022 2:28:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/15/2022 2:28:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	7/15/2022 2:28:00 PM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	7/15/2022 2:28:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	120	60		mg/Kg	20	7/16/2022 9:57:21 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-53 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 9:20:00 AM

Lab ID: 2207417-006

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 4:53:54 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2022 4:53:54 PM
Surr: DNOP	77.0	51.1-141		%Rec	1	7/14/2022 4:53:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 2:48:00 PM
Surr: BFB	84.7	37.7-212		%Rec	1	7/15/2022 2:48:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 2:48:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 2:48:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 2:48:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/15/2022 2:48:00 PM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	7/15/2022 2:48:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	120	60		mg/Kg	20	7/16/2022 10:09:42 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-54 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 9:30:00 AM

Lab ID: 2207417-007

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 5:36:45 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 5:36:45 PM
Surr: DNOP	75.3	51.1-141		%Rec	1	7/14/2022 5:36:45 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2022 3:08:00 PM
Surr: BFB	85.3	37.7-212		%Rec	1	7/15/2022 3:08:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 3:08:00 PM
Toluene	ND	0.049		mg/Kg	1	7/15/2022 3:08:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2022 3:08:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/15/2022 3:08:00 PM
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	7/15/2022 3:08:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	63	60		mg/Kg	20	7/16/2022 10:22:03 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-55 17'

Project: Cooper Excavation

Collection Date: 7/6/2022 9:40:00 AM

Lab ID: 2207417-008

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 5:50:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 5:50:51 PM
Surr: DNOP	74.3	51.1-141		%Rec	1	7/14/2022 5:50:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/15/2022 3:28:00 PM
Surr: BFB	83.9	37.7-212		%Rec	1	7/15/2022 3:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 3:28:00 PM
Toluene	ND	0.047		mg/Kg	1	7/15/2022 3:28:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	7/15/2022 3:28:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2022 3:28:00 PM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	7/15/2022 3:28:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	59		mg/Kg	20	7/16/2022 10:34:24 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-56 4'

Project: Cooper Excavation

Collection Date: 7/6/2022 9:50:00 AM

Lab ID: 2207417-009

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 6:05:16 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 6:05:16 PM
Surr: DNOP	79.2	51.1-141		%Rec	1	7/14/2022 6:05:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/15/2022 3:48:00 PM
Surr: BFB	86.9	37.7-212		%Rec	1	7/15/2022 3:48:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/15/2022 3:48:00 PM
Toluene	ND	0.050		mg/Kg	1	7/15/2022 3:48:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/15/2022 3:48:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/15/2022 3:48:00 PM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	7/15/2022 3:48:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	190	60		mg/Kg	20	7/16/2022 10:46:45 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-57 4'

Project: Cooper Excavation

Collection Date: 7/6/2022 10:00:00 AM

Lab ID: 2207417-010

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 6:19:31 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 6:19:31 PM
Surr: DNOP	74.8	51.1-141		%Rec	1	7/14/2022 6:19:31 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2022 4:28:00 PM
Surr: BFB	82.3	37.7-212		%Rec	1	7/15/2022 4:28:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/15/2022 4:28:00 PM
Toluene	ND	0.049		mg/Kg	1	7/15/2022 4:28:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2022 4:28:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2022 4:28:00 PM
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	1	7/15/2022 4:28:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	94	60		mg/Kg	20	7/16/2022 10:59:06 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-58 4'

Project: Cooper Excavation

Collection Date: 7/6/2022 10:10:00 AM

Lab ID: 2207417-011

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 6:33:56 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 6:33:56 PM
Surr: DNOP	73.1	51.1-141		%Rec	1	7/14/2022 6:33:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 4:48:00 PM
Surr: BFB	85.3	37.7-212		%Rec	1	7/15/2022 4:48:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 4:48:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 4:48:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 4:48:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/15/2022 4:48:00 PM
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	7/15/2022 4:48:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	60		mg/Kg	20	7/16/2022 11:11:27 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-59 4'

Project: Cooper Excavation

Collection Date: 7/6/2022 10:20:00 AM

Lab ID: 2207417-012

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 6:48:13 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 6:48:13 PM
Surr: DNOP	78.5	51.1-141		%Rec	1	7/14/2022 6:48:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 5:07:00 PM
Surr: BFB	85.6	37.7-212		%Rec	1	7/15/2022 5:07:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 5:07:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 5:07:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 5:07:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2022 5:07:00 PM
Surr: 4-Bromofluorobenzene	81.3	70-130		%Rec	1	7/15/2022 5:07:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	80	60		mg/Kg	20	7/16/2022 11:23:47 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-60 12'

Project: Cooper Excavation

Collection Date: 7/6/2022 10:30:00 AM

Lab ID: 2207417-013

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 7:02:36 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 7:02:36 PM
Surr: DNOP	72.3	51.1-141		%Rec	1	7/14/2022 7:02:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 5:27:00 PM
Surr: BFB	82.8	37.7-212		%Rec	1	7/15/2022 5:27:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 5:27:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 5:27:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 5:27:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/15/2022 5:27:00 PM
Surr: 4-Bromofluorobenzene	81.7	70-130		%Rec	1	7/15/2022 5:27:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	150	60		mg/Kg	20	7/17/2022 12:00:48 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207417

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-61 12'

Project: Cooper Excavation

Collection Date: 7/6/2022 10:40:00 AM

Lab ID: 2207417-014

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 7:16:56 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/14/2022 7:16:56 PM
Surr: DNOP	70.7	51.1-141		%Rec	1	7/14/2022 7:16:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/15/2022 5:47:00 PM
Surr: BFB	80.7	37.7-212		%Rec	1	7/15/2022 5:47:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/15/2022 5:47:00 PM
Toluene	ND	0.046		mg/Kg	1	7/15/2022 5:47:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/15/2022 5:47:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	7/15/2022 5:47:00 PM
Surr: 4-Bromofluorobenzene	81.4	70-130		%Rec	1	7/15/2022 5:47:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	110	60		mg/Kg	20	7/17/2022 12:13:09 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	Estimated value
	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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2207417

19-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: MB-68832	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 68832	RunNo: 89565								
Prep Date: 7/16/2022	Analysis Date: 7/16/2022	SeqNo: 3188094 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68832	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 68832	RunNo: 89565								
Prep Date: 7/16/2022	Analysis Date: 7/16/2022	SeqNo: 3188095 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			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207417

19-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: MB-68752	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68752	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186430 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		80.8	51.1	141			

Sample ID: LCS-68752	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68752	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186431 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	44	15	50.00	0	88.3	64.4	127			
Surr: DNOP	3.8		5.000		76.1	51.1	141			

Sample ID: 2207417-006AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS22-53 17'	Batch ID: 68752	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186439 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	41	15	49.55	0	82.6	36.1	154			
Surr: DNOP	3.3		4.955		67.5	51.1	141			

Sample ID: 2207417-006AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: BS22-53 17'	Batch ID: 68752	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186440 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Diesel Range Organics (DRO)	43	15	50.25	0	85.2	36.1	154	4.50	33.9	
Surr: DNOP	3.5		5.025		69.6	51.1	141	0	0	

Sample ID: MB-68751	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68751	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186456 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Surr: DNOP	8.3		10.00		83.3	51.1	141			
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Sample ID: LCS-68751	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68751	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186457 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2207417

19-Jul-22

Client: Vertex Resources Services, Inc.

Project: Cooper Excavation

Sample ID: LCS-68751	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68751	RunNo: 89486								
Prep Date: 7/13/2022	Analysis Date: 7/14/2022	SeqNo: 3186457		Units: %Rec						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		76.0	51.1	141			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

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

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2207417

19-Jul-22

Client: Vertex Resources Services, Inc.
Project: Cooper Excavation

Sample ID: mb-68728	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 68728	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186586		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	830		1000		83.0	37.7	212			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

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

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 18 of 19

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

WO#: 2207417

19-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper Excavation

Sample ID: mb-68728	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 68728	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186634 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	0.85		1.000		84.7	70	130			

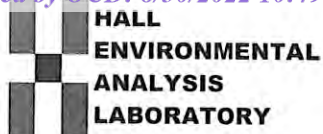
Sample ID: 2207417-001ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS22-48 17'	Batch ID: 68728	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186637 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.77	0.023	0.9320	0	82.5	68.8	120			
Toluene	0.78	0.047	0.9320	0	83.8	73.6	124			
Ethylbenzene	0.78	0.047	0.9320	0	84.0	72.7	129			
Xylenes, Total	2.3	0.093	2.796	0	83.4	75.7	126			
Surr: 4-Bromofluorobenzene	0.79		0.9320		84.3	70	130			

Sample ID: 2207417-001amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS22-48 17'	Batch ID: 68728	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186638 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.78	0.024	0.9425	0	82.7	68.8	120	1.36	20	
Toluene	0.80	0.047	0.9425	0	84.9	73.6	124	2.43	20	
Ethylbenzene	0.80	0.047	0.9425	0	85.0	72.7	129	2.28	20	
Xylenes, Total	2.4	0.094	2.828	0	84.1	75.7	126	1.96	20	
Surr: 4-Bromofluorobenzene	0.78		0.9425		83.3	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 interference

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



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

Sample Log-In Check List

Client Name: **Vertex Resources Services, Inc.**

Work Order Number: **2207417**

RcptNo: 1

Received By: **Cheyenne Cason**

7/12/2022 7:20:00 AM

Cason

Completed By: **Cheyenne Cason**

7/12/2022 9:13:31 AM

Cason

Reviewed By:

jr 7/12/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐

4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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.)

of preserved bottles checked for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *KPA 7-12-22*

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	0.6	Good	Not Present			
2	0.9	Good	Not Present			
3	2.5	Good	Not Present			

Chain-of-Custody Record

Client: Sextex (EOG)Mailing Address: On file

Phone #:

email or Fax#:

QA/QC Package:

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

Turn-Around Time:

☒ Standard ☒ Rush 5 days

Project Name:

Cooper Excavation

Project #:

NE-00123 - 01

Project Manager:

Monica ReppinSampler: Michael BarnesOn Ice: ☒ Yes ☐ No# of Coolers: 3Cooler Temp (including CF): 0.9-0.9 (°C)

Container Type and #

Preservative Type

HEAL No.

2.5-0-2.5

7207417

001

002

003

004

005

006

007

008

009

010

011

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

July 20, 2022

Monica Peppin

Vertex Resources Services, Inc.

3101 Boyd Drive

Carlsbad, NM 88220

TEL: (505) 506-0040

FAX:

RE: Cooper AHH 001

OrderNo.: 2207418

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 82 sample(s) on 7/12/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-62 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 7:55:00 AM

Lab ID: 2207418-001

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 7:31:12 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2022 7:31:12 PM
Surr: DNOP	79.1	51.1-141		%Rec	1	7/14/2022 7:31:12 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/15/2022 6:07:00 PM
Surr: BFB	83.1	37.7-212		%Rec	1	7/15/2022 6:07:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 6:07:00 PM
Toluene	ND	0.047		mg/Kg	1	7/15/2022 6:07:00 PM
Ethylbenzene	ND	0.047		mg/Kg	1	7/15/2022 6:07:00 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/15/2022 6:07:00 PM
Surr: 4-Bromofluorobenzene	82.0	70-130		%Rec	1	7/15/2022 6:07:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	82	60		mg/Kg	20	7/17/2022 12:50:10 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-63 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 7:55:00 AM

Lab ID: 2207418-002

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 7:45:35 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 7:45:35 PM
Surr: DNOP	96.0	51.1-141		%Rec	1	7/14/2022 7:45:35 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 6:27:00 PM
Surr: BFB	84.8	37.7-212		%Rec	1	7/15/2022 6:27:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 6:27:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 6:27:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 6:27:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/15/2022 6:27:00 PM
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	7/15/2022 6:27:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	74	60		mg/Kg	20	7/17/2022 1:27:12 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-64 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:00:00 AM

Lab ID: 2207418-003

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 7:59:58 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2022 7:59:58 PM
Surr: DNOP	101	51.1-141		%Rec	1	7/14/2022 7:59:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/15/2022 6:47:00 PM
Surr: BFB	81.3	37.7-212		%Rec	1	7/15/2022 6:47:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/15/2022 6:47:00 PM
Toluene	ND	0.046		mg/Kg	1	7/15/2022 6:47:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/15/2022 6:47:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	7/15/2022 6:47:00 PM
Surr: 4-Bromofluorobenzene	80.9	70-130		%Rec	1	7/15/2022 6:47:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	76	60		mg/Kg	20	7/17/2022 2:28:58 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-65 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:00:00 AM

Lab ID: 2207418-004

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 8:14:15 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 8:14:15 PM
Surr: DNOP	95.6	51.1-141		%Rec	1	7/14/2022 8:14:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/15/2022 7:08:00 PM
Surr: BFB	84.9	37.7-212		%Rec	1	7/15/2022 7:08:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/15/2022 7:08:00 PM
Toluene	ND	0.046		mg/Kg	1	7/15/2022 7:08:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/15/2022 7:08:00 PM
Xylenes, Total	ND	0.092		mg/Kg	1	7/15/2022 7:08:00 PM
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	7/15/2022 7:08:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	71	60		mg/Kg	20	7/17/2022 2:41:19 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-66 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:05:00 AM

Lab ID: 2207418-005

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 8:28:28 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2022 8:28:28 PM
Surr: DNOP	96.0	51.1-141		%Rec	1	7/14/2022 8:28:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 7:27:00 PM
Surr: BFB	78.8	37.7-212		%Rec	1	7/15/2022 7:27:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 7:27:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 7:27:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 7:27:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/15/2022 7:27:00 PM
Surr: 4-Bromofluorobenzene	80.6	70-130		%Rec	1	7/15/2022 7:27:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	69	60		mg/Kg	20	7/17/2022 2:53:39 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-67 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:05:00 AM

Lab ID: 2207418-006

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 12:25:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/14/2022 12:25:23 PM
Surr: DNOP	63.5	51.1-141		%Rec	1	7/14/2022 12:25:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/15/2022 9:27:00 PM
Surr: BFB	81.8	37.7-212		%Rec	1	7/15/2022 9:27:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/15/2022 9:27:00 PM
Toluene	ND	0.046		mg/Kg	1	7/15/2022 9:27:00 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/15/2022 9:27:00 PM
Xylenes, Total	ND	0.093		mg/Kg	1	7/15/2022 9:27:00 PM
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	7/15/2022 9:27:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	69	60		mg/Kg	20	7/17/2022 3:06:00 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-68 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:10:00 AM

Lab ID: 2207418-007

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 1:38:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 1:38:27 PM
Surr: DNOP	74.9	51.1-141		%Rec	1	7/14/2022 1:38:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 10:26:00 PM
Surr: BFB	81.6	37.7-212		%Rec	1	7/15/2022 10:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 10:26:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 10:26:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 10:26:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/15/2022 10:26:00 PM
Surr: 4-Bromofluorobenzene	81.5	70-130		%Rec	1	7/15/2022 10:26:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	68	60		mg/Kg	20	7/17/2022 3:18:21 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-69 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:10:00 AM

Lab ID: 2207418-008

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 2:02:54 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 2:02:54 PM
Surr: DNOP	59.4	51.1-141		%Rec	1	7/14/2022 2:02:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/15/2022 11:26:00 PM
Surr: BFB	80.2	37.7-212		%Rec	1	7/15/2022 11:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/15/2022 11:26:00 PM
Toluene	ND	0.049		mg/Kg	1	7/15/2022 11:26:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/15/2022 11:26:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/15/2022 11:26:00 PM
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	7/15/2022 11:26:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	65	60		mg/Kg	20	7/17/2022 3:30:41 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-70 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:15:00 AM

Lab ID: 2207418-009

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 2:27:18 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/14/2022 2:27:18 PM
Surr: DNOP	54.0	51.1-141		%Rec	1	7/14/2022 2:27:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/15/2022 11:45:00 PM
Surr: BFB	78.4	37.7-212		%Rec	1	7/15/2022 11:45:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/15/2022 11:45:00 PM
Toluene	ND	0.048		mg/Kg	1	7/15/2022 11:45:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/15/2022 11:45:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/15/2022 11:45:00 PM
Surr: 4-Bromofluorobenzene	79.5	70-130		%Rec	1	7/15/2022 11:45:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	ND	61		mg/Kg	20	7/17/2022 3:43:02 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-71 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:15:00 AM

Lab ID: 2207418-010

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	7/14/2022 2:51:49 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	7/14/2022 2:51:49 PM
Surr: DNOP	58.6	51.1-141		%Rec	1	7/14/2022 2:51:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 12:05:00 AM
Surr: BFB	83.5	37.7-212		%Rec	1	7/16/2022 12:05:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 12:05:00 AM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 12:05:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 12:05:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	7/16/2022 12:05:00 AM
Surr: 4-Bromofluorobenzene	83.1	70-130		%Rec	1	7/16/2022 12:05:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	64	60		mg/Kg	20	7/17/2022 3:55:23 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-72 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:20:00 AM

Lab ID: 2207418-011

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 3:16:30 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 3:16:30 PM
Surr: DNOP	56.2	51.1-141		%Rec	1	7/14/2022 3:16:30 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 12:25:00 AM
Surr: BFB	80.2	37.7-212		%Rec	1	7/16/2022 12:25:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/16/2022 12:25:00 AM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 12:25:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 12:25:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	7/16/2022 12:25:00 AM
Surr: 4-Bromofluorobenzene	80.1	70-130		%Rec	1	7/16/2022 12:25:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	65	60		mg/Kg	20	7/17/2022 4:07:43 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-73 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:20:00 AM

Lab ID: 2207418-012

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 3:41:00 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/14/2022 3:41:00 PM
Surr: DNOP	69.2	51.1-141		%Rec	1	7/14/2022 3:41:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/16/2022 12:45:00 AM
Surr: BFB	79.8	37.7-212		%Rec	1	7/16/2022 12:45:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/16/2022 12:45:00 AM
Toluene	ND	0.046		mg/Kg	1	7/16/2022 12:45:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	7/16/2022 12:45:00 AM
Xylenes, Total	ND	0.093		mg/Kg	1	7/16/2022 12:45:00 AM
Surr: 4-Bromofluorobenzene	80.6	70-130		%Rec	1	7/16/2022 12:45:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	64	60		mg/Kg	20	7/17/2022 4:20:04 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-74 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:25:00 AM

Lab ID: 2207418-013

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 4:05:32 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/14/2022 4:05:32 PM
Surr: DNOP	59.3	51.1-141		%Rec	1	7/14/2022 4:05:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 1:04:00 AM
Surr: BFB	80.9	37.7-212		%Rec	1	7/16/2022 1:04:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	7/16/2022 1:04:00 AM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 1:04:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 1:04:00 AM
Xylenes, Total	ND	0.094		mg/Kg	1	7/16/2022 1:04:00 AM
Surr: 4-Bromofluorobenzene	81.2	70-130		%Rec	1	7/16/2022 1:04:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	61	60		mg/Kg	20	7/17/2022 11:09:54 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-75 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:25:00 AM

Lab ID: 2207418-014

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/14/2022 4:30:16 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/14/2022 4:30:16 PM
Surr: DNOP	81.8	51.1-141		%Rec	1	7/14/2022 4:30:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 1:24:00 AM
Surr: BFB	84.1	37.7-212		%Rec	1	7/16/2022 1:24:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 1:24:00 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 1:24:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 1:24:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 1:24:00 AM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	7/16/2022 1:24:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	69	60		mg/Kg	20	7/17/2022 11:22:15 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-76 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:30:00 AM

Lab ID: 2207418-015

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/14/2022 4:54:43 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/14/2022 4:54:43 PM
Surr: DNOP	58.0	51.1-141		%Rec	1	7/14/2022 4:54:43 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 1:44:00 AM
Surr: BFB	85.4	37.7-212		%Rec	1	7/16/2022 1:44:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 1:44:00 AM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 1:44:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 1:44:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	7/16/2022 1:44:00 AM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	7/16/2022 1:44:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/17/2022 11:34:35 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-77 20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:30:00 AM

Lab ID: 2207418-016

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 3:33:57 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/15/2022 3:33:57 AM
Surr: DNOP	59.7	51.1-141		%Rec	1	7/15/2022 3:33:57 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 2:24:00 AM
Surr: BFB	81.6	37.7-212		%Rec	1	7/16/2022 2:24:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 2:24:00 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 2:24:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 2:24:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 2:24:00 AM
Surr: 4-Bromofluorobenzene	80.4	70-130		%Rec	1	7/16/2022 2:24:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	61		mg/Kg	20	7/17/2022 11:46:55 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-24 17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:45:00 AM

Lab ID: 2207418-017

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 3:58:25 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/15/2022 3:58:25 AM
Surr: DNOP	59.9	51.1-141		%Rec	1	7/15/2022 3:58:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 2:43:00 AM
Surr: BFB	84.3	37.7-212		%Rec	1	7/16/2022 2:43:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 2:43:00 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 2:43:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 2:43:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 2:43:00 AM
Surr: 4-Bromofluorobenzene	82.0	70-130		%Rec	1	7/16/2022 2:43:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/17/2022 11:59:16 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-30 17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:45:00 AM

Lab ID: 2207418-018

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 4:22:49 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/15/2022 4:22:49 AM
Surr: DNOP	68.3	51.1-141		%Rec	1	7/15/2022 4:22:49 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 3:03:00 AM
Surr: BFB	82.4	37.7-212		%Rec	1	7/16/2022 3:03:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 3:03:00 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 3:03:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 3:03:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 3:03:00 AM
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	1	7/16/2022 3:03:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	61	59		mg/Kg	20	7/17/2022 12:11:37 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-31 17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:50:00 AM

Lab ID: 2207418-019

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 4:47:07 AM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/15/2022 4:47:07 AM
Surr: DNOP	60.0	51.1-141		%Rec	1	7/15/2022 4:47:07 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 3:23:00 AM
Surr: BFB	80.8	37.7-212		%Rec	1	7/16/2022 3:23:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 3:23:00 AM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 3:23:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 3:23:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	7/16/2022 3:23:00 AM
Surr: 4-Bromofluorobenzene	80.9	70-130		%Rec	1	7/16/2022 3:23:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/17/2022 12:23:58 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-32 17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:50:00 AM

Lab ID: 2207418-020

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 5:11:38 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/15/2022 5:11:38 AM
Surr: DNOP	59.6	51.1-141		%Rec	1	7/15/2022 5:11:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 3:43:00 AM
Surr: BFB	83.5	37.7-212		%Rec	1	7/16/2022 3:43:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 3:43:00 AM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 3:43:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 3:43:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 3:43:00 AM
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	7/16/2022 3:43:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	61	60		mg/Kg	20	7/17/2022 12:36:19 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-44 17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:55:00 AM

Lab ID: 2207418-021

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 5:35:56 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/15/2022 5:35:56 AM
Surr: DNOP	57.2	51.1-141		%Rec	1	7/15/2022 5:35:56 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 4:02:00 AM
Surr: BFB	81.6	37.7-212		%Rec	1	7/16/2022 4:02:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 4:02:00 AM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 4:02:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 4:02:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 4:02:00 AM
Surr: 4-Bromofluorobenzene	79.9	70-130		%Rec	1	7/16/2022 4:02:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/17/2022 1:46:40 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-14 17-20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:35:00 AM

Lab ID: 2207418-022

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 6:00:24 AM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	7/15/2022 6:00:24 AM
Surr: DNOP	89.9	51.1-141		%Rec	1	7/15/2022 6:00:24 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 4:22:00 AM
Surr: BFB	81.1	37.7-212		%Rec	1	7/16/2022 4:22:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 4:22:00 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 4:22:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 4:22:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 4:22:00 AM
Surr: 4-Bromofluorobenzene	81.0	70-130		%Rec	1	7/16/2022 4:22:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	62	59		mg/Kg	20	7/17/2022 2:23:43 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-15 17-20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:35:00 AM

Lab ID: 2207418-023

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 6:24:44 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/15/2022 6:24:44 AM
Surr: DNOP	78.0	51.1-141		%Rec	1	7/15/2022 6:24:44 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 4:42:00 AM
Surr: BFB	81.5	37.7-212		%Rec	1	7/16/2022 4:42:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 4:42:00 AM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 4:42:00 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 4:42:00 AM
Xylenes, Total	ND	0.095		mg/Kg	1	7/16/2022 4:42:00 AM
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	7/16/2022 4:42:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	65	60		mg/Kg	20	7/17/2022 3:00:45 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-16 17-20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:40:00 AM

Lab ID: 2207418-024

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 6:49:07 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/15/2022 6:49:07 AM
Surr: DNOP	75.6	51.1-141		%Rec	1	7/15/2022 6:49:07 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 5:02:00 AM
Surr: BFB	81.6	37.7-212		%Rec	1	7/16/2022 5:02:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 5:02:00 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 5:02:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 5:02:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 5:02:00 AM
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	7/16/2022 5:02:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	70	60		mg/Kg	20	7/17/2022 3:13:06 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-17 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:50:00 AM

Lab ID: 2207418-025

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 7:13:25 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/15/2022 7:13:25 AM
Surr: DNOP	94.4	51.1-141		%Rec	1	7/15/2022 7:13:25 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 5:21:00 AM
Surr: BFB	82.2	37.7-212		%Rec	1	7/16/2022 5:21:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 5:21:00 AM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 5:21:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 5:21:00 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 5:21:00 AM
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	1	7/16/2022 5:21:00 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	62	60		mg/Kg	20	7/17/2022 3:25:26 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-17 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:50:00 AM

Lab ID: 2207418-026

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 9:33:18 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/15/2022 9:33:18 PM
Surr: DNOP	96.7	51.1-141		%Rec	1	7/15/2022 9:33:18 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 7:32:07 AM
Surr: BFB	100	37.7-212		%Rec	1	7/16/2022 7:32:07 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 7:32:07 AM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 7:32:07 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 7:32:07 AM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 7:32:07 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/16/2022 7:32:07 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	62	60		mg/Kg	20	7/17/2022 3:37:47 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-17 12-16'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:55:00 AM

Lab ID: 2207418-027

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 10:14:59 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/15/2022 10:14:59 PM
Surr: DNOP	104	51.1-141		%Rec	1	7/15/2022 10:14:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 8:43:15 AM
Surr: BFB	98.8	37.7-212		%Rec	1	7/16/2022 8:43:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 8:43:15 AM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 8:43:15 AM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 8:43:15 AM
Xylenes, Total	ND	0.095		mg/Kg	1	7/16/2022 8:43:15 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/16/2022 8:43:15 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	63	60		mg/Kg	20	7/17/2022 4:14:50 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-17 16-20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 8:55:00 AM

Lab ID: 2207418-028

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 10:29:02 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/15/2022 10:29:02 PM
Surr: DNOP	99.7	51.1-141		%Rec	1	7/15/2022 10:29:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 9:54:05 AM
Surr: BFB	100	37.7-212		%Rec	1	7/16/2022 9:54:05 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/16/2022 9:54:05 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 9:54:05 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 9:54:05 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 9:54:05 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/16/2022 9:54:05 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	67	60		mg/Kg	20	7/17/2022 4:27:11 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-18 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:00:00 AM

Lab ID: 2207418-029

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 10:42:53 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/15/2022 10:42:53 PM
Surr: DNOP	108	51.1-141		%Rec	1	7/15/2022 10:42:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 10:17:36 AM
Surr: BFB	98.7	37.7-212		%Rec	1	7/16/2022 10:17:36 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/16/2022 10:17:36 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 10:17:36 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 10:17:36 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 10:17:36 AM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/16/2022 10:17:36 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	70	60		mg/Kg	20	7/17/2022 4:39:32 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-18 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:00:00 AM

Lab ID: 2207418-030

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 10:56:47 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/15/2022 10:56:47 PM
Surr: DNOP	112	51.1-141		%Rec	1	7/15/2022 10:56:47 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/16/2022 11:28:26 AM
Surr: BFB	98.7	37.7-212		%Rec	1	7/16/2022 11:28:26 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/16/2022 11:28:26 AM
Toluene	ND	0.046		mg/Kg	1	7/16/2022 11:28:26 AM
Ethylbenzene	ND	0.046		mg/Kg	1	7/16/2022 11:28:26 AM
Xylenes, Total	ND	0.092		mg/Kg	1	7/16/2022 11:28:26 AM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	7/16/2022 11:28:26 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	87	60		mg/Kg	20	7/17/2022 4:51:52 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-18 12-16'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:05:00 AM

Lab ID: 2207418-031

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/15/2022 11:10:36 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/15/2022 11:10:36 PM
Surr: DNOP	107	51.1-141		%Rec	1	7/15/2022 11:10:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 11:52:06 AM
Surr: BFB	99.8	37.7-212		%Rec	1	7/16/2022 11:52:06 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/16/2022 11:52:06 AM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 11:52:06 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 11:52:06 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 11:52:06 AM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/16/2022 11:52:06 AM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	77	59		mg/Kg	20	7/17/2022 5:04:13 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-18 16-20'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:05:00 AM

Lab ID: 2207418-032

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 11:24:21 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/15/2022 11:24:21 PM
Surr: DNOP	111	51.1-141		%Rec	1	7/15/2022 11:24:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 12:15:48 PM
Surr: BFB	101	37.7-212		%Rec	1	7/16/2022 12:15:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 12:15:48 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 12:15:48 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 12:15:48 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/16/2022 12:15:48 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/16/2022 12:15:48 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	67	60		mg/Kg	20	7/17/2022 5:16:33 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-19 0-4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:10:00 AM

Lab ID: 2207418-033

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 11:38:15 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/15/2022 11:38:15 PM
Surr: DNOP	90.2	51.1-141		%Rec	1	7/15/2022 11:38:15 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 12:39:32 PM
Surr: BFB	101	37.7-212		%Rec	1	7/16/2022 12:39:32 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 12:39:32 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 12:39:32 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 12:39:32 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 12:39:32 PM
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/16/2022 12:39:32 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	77	61		mg/Kg	20	7/17/2022 5:28:55 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-19 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:10:00 AM

Lab ID: 2207418-034

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/15/2022 11:52:02 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/15/2022 11:52:02 PM
Surr: DNOP	97.3	51.1-141		%Rec	1	7/15/2022 11:52:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 1:03:14 PM
Surr: BFB	101	37.7-212		%Rec	1	7/16/2022 1:03:14 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/16/2022 1:03:14 PM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 1:03:14 PM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 1:03:14 PM
Xylenes, Total	ND	0.094		mg/Kg	1	7/16/2022 1:03:14 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/16/2022 1:03:14 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	76	60		mg/Kg	20	7/17/2022 5:41:16 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-19 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:15:00 AM

Lab ID: 2207418-035

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 12:05:51 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 12:05:51 AM
Surr: DNOP	79.2	51.1-141		%Rec	1	7/16/2022 12:05:51 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 1:26:57 PM
Surr: BFB	102	37.7-212		%Rec	1	7/16/2022 1:26:57 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	7/16/2022 1:26:57 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 1:26:57 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 1:26:57 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 1:26:57 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/16/2022 1:26:57 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	75	59		mg/Kg	20	7/17/2022 5:53:36 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-19 12-17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:15:00 AM

Lab ID: 2207418-036

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 12:19:33 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 12:19:33 AM
Surr: DNOP	92.4	51.1-141		%Rec	1	7/16/2022 12:19:33 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/16/2022 1:50:43 PM
Surr: BFB	104	37.7-212		%Rec	1	7/16/2022 1:50:43 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/16/2022 1:50:43 PM
Toluene	ND	0.046		mg/Kg	1	7/16/2022 1:50:43 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/16/2022 1:50:43 PM
Xylenes, Total	ND	0.091		mg/Kg	1	7/16/2022 1:50:43 PM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/16/2022 1:50:43 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	78	59		mg/Kg	20	7/17/2022 6:05:57 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-20 0-4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:20:00 AM

Lab ID: 2207418-037

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 12:33:21 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 12:33:21 AM
Surr: DNOP	98.1	51.1-141		%Rec	1	7/16/2022 12:33:21 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 2:14:33 PM
Surr: BFB	104	37.7-212		%Rec	1	7/16/2022 2:14:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 2:14:33 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 2:14:33 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 2:14:33 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 2:14:33 PM
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	7/16/2022 2:14:33 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	75	60		mg/Kg	20	7/17/2022 6:42:59 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-20 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:20:00 AM

Lab ID: 2207418-038

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 12:47:01 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 12:47:01 AM
Surr: DNOP	73.0	51.1-141		%Rec	1	7/16/2022 12:47:01 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/16/2022 2:38:21 PM
Surr: BFB	104	37.7-212		%Rec	1	7/16/2022 2:38:21 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/16/2022 2:38:21 PM
Toluene	ND	0.046		mg/Kg	1	7/16/2022 2:38:21 PM
Ethylbenzene	ND	0.046		mg/Kg	1	7/16/2022 2:38:21 PM
Xylenes, Total	ND	0.092		mg/Kg	1	7/16/2022 2:38:21 PM
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	7/16/2022 2:38:21 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	70	60		mg/Kg	20	7/17/2022 6:55:20 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-20 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:25:00 AM

Lab ID: 2207418-039

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/16/2022 1:00:38 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 1:00:38 AM
Surr: DNOP	106	51.1-141		%Rec	1	7/16/2022 1:00:38 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 3:02:11 PM
Surr: BFB	106	37.7-212		%Rec	1	7/16/2022 3:02:11 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 3:02:11 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 3:02:11 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 3:02:11 PM
Xylenes, Total	ND	0.095		mg/Kg	1	7/16/2022 3:02:11 PM
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	7/16/2022 3:02:11 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	73	60		mg/Kg	20	7/17/2022 7:07:40 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-20 12-17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:25:00 AM

Lab ID: 2207418-040

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 1:14:24 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 1:14:24 AM
Surr: DNOP	76.4	51.1-141		%Rec	1	7/16/2022 1:14:24 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 3:49:59 PM
Surr: BFB	105	37.7-212		%Rec	1	7/16/2022 3:49:59 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 3:49:59 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 3:49:59 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 3:49:59 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/16/2022 3:49:59 PM
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	7/16/2022 3:49:59 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	76	60		mg/Kg	20	7/17/2022 7:20:01 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-22 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:30:00 AM

Lab ID: 2207418-041

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 1:28:00 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 1:28:00 AM
Surr: DNOP	90.1	51.1-141		%Rec	1	7/16/2022 1:28:00 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 4:14:00 PM
Surr: BFB	105	37.7-212		%Rec	1	7/16/2022 4:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 4:14:00 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 4:14:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 4:14:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/16/2022 4:14:00 PM
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	7/16/2022 4:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	75	60		mg/Kg	20	7/18/2022 11:23:32 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-22 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:30:00 AM

Lab ID: 2207418-042

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/16/2022 1:41:42 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 1:41:42 AM
Surr: DNOP	95.8	51.1-141		%Rec	1	7/16/2022 1:41:42 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	7/16/2022 4:37:58 PM
Surr: BFB	104	37.7-212		%Rec	1	7/16/2022 4:37:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	7/16/2022 4:37:58 PM
Toluene	ND	0.047		mg/Kg	1	7/16/2022 4:37:58 PM
Ethylbenzene	ND	0.047		mg/Kg	1	7/16/2022 4:37:58 PM
Xylenes, Total	ND	0.094		mg/Kg	1	7/16/2022 4:37:58 PM
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/16/2022 4:37:58 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	69	60		mg/Kg	20	7/18/2022 11:35:57 AM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-22 12-15'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:35:00 AM

Lab ID: 2207418-043

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 1:55:15 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 1:55:15 AM
Surr: DNOP	106	51.1-141		%Rec	1	7/16/2022 1:55:15 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 5:02:00 PM
Surr: BFB	105	37.7-212		%Rec	1	7/16/2022 5:02:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 5:02:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 5:02:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 5:02:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 5:02:00 PM
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	7/16/2022 5:02:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	73	60		mg/Kg	20	7/18/2022 11:48:21 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-22 15-17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:35:00 AM

Lab ID: 2207418-044

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 2:08:55 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 2:08:55 AM
Surr: DNOP	114	51.1-141		%Rec	1	7/16/2022 2:08:55 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 5:26:00 PM
Surr: BFB	105	37.7-212		%Rec	1	7/16/2022 5:26:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 5:26:00 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 5:26:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 5:26:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/16/2022 5:26:00 PM
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	7/16/2022 5:26:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	68	60		mg/Kg	20	7/18/2022 12:00:46 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-23 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:40:00 AM

Lab ID: 2207418-045

Matrix: SOIL

Received Date: 7/12/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: ED
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 2:22:29 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 2:22:29 AM
Surr: DNOP	105	51.1-141		%Rec	1	7/16/2022 2:22:29 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 5:50:05 PM
Surr: BFB	106	37.7-212		%Rec	1	7/16/2022 5:50:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	7/16/2022 5:50:05 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 5:50:05 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 5:50:05 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 5:50:05 PM
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	7/16/2022 5:50:05 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 12:38:00 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-23 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:40:00 AM

Lab ID: 2207418-046

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 10:52:23 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 10:52:23 AM
Surr: DNOP	68.2	51.1-141		%Rec	1	7/16/2022 10:52:23 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 12:56:00 PM
Surr: BFB	85.4	37.7-212		%Rec	1	7/16/2022 12:56:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 12:56:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 12:56:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 12:56:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 12:56:00 PM
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	7/16/2022 12:56:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	81	60		mg/Kg	20	7/18/2022 1:15:15 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-23 12-15'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:45:00 AM

Lab ID: 2207418-047

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 11:16:15 AM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 11:16:15 AM
Surr: DNOP	65.9	51.1-141		%Rec	1	7/16/2022 11:16:15 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 1:55:00 PM
Surr: BFB	89.6	37.7-212		%Rec	1	7/16/2022 1:55:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 1:55:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 1:55:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 1:55:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 1:55:00 PM
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	7/16/2022 1:55:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	78	60		mg/Kg	20	7/18/2022 1:27:40 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-23 15-17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 9:45:00 AM

Lab ID: 2207418-048

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 11:40:11 AM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 11:40:11 AM
Surr: DNOP	63.3	51.1-141		%Rec	1	7/16/2022 11:40:11 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 2:55:00 PM
Surr: BFB	83.1	37.7-212		%Rec	1	7/16/2022 2:55:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 2:55:00 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 2:55:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 2:55:00 PM
Xylenes, Total	ND	0.096		mg/Kg	1	7/16/2022 2:55:00 PM
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	7/16/2022 2:55:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	69	60		mg/Kg	20	7/18/2022 1:40:05 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-21 14-17'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:15:00 AM

Lab ID: 2207418-049

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 12:04:11 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	7/16/2022 12:04:11 PM
Surr: DNOP	61.3	51.1-141		%Rec	1	7/16/2022 12:04:11 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 3:15:00 PM
Surr: BFB	88.3	37.7-212		%Rec	1	7/16/2022 3:15:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 3:15:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 3:15:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 3:15:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 3:15:00 PM
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	7/16/2022 3:15:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 1:52:30 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-93 14'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:15:00 AM

Lab ID: 2207418-050

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 12:29:51 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 12:29:51 PM
Surr: DNOP	67.9	51.1-141		%Rec	1	7/16/2022 12:29:51 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 3:35:00 PM
Surr: BFB	87.9	37.7-212		%Rec	1	7/16/2022 3:35:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 3:35:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 3:35:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 3:35:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/16/2022 3:35:00 PM
Surr: 4-Bromofluorobenzene	85.7	70-130		%Rec	1	7/16/2022 3:35:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 2:04:55 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-94 14'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:20:00 AM

Lab ID: 2207418-051

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 12:53:57 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 12:53:57 PM
Surr: DNOP	66.2	51.1-141		%Rec	1	7/16/2022 12:53:57 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 3:54:00 PM
Surr: BFB	84.5	37.7-212		%Rec	1	7/16/2022 3:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 3:54:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 3:54:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 3:54:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/16/2022 3:54:00 PM
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	7/16/2022 3:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 2:42:09 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-95 14'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:20:00 AM

Lab ID: 2207418-052

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 1:17:55 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 1:17:55 PM
Surr: DNOP	66.8	51.1-141		%Rec	1	7/16/2022 1:17:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 4:14:00 PM
Surr: BFB	86.3	37.7-212		%Rec	1	7/16/2022 4:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 4:14:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 4:14:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 4:14:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/16/2022 4:14:00 PM
Surr: 4-Bromofluorobenzene	84.5	70-130		%Rec	1	7/16/2022 4:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 2:54:35 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-96 14'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:25:00 AM

Lab ID: 2207418-053

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 1:41:54 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 1:41:54 PM
Surr: DNOP	74.1	51.1-141		%Rec	1	7/16/2022 1:41:54 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 4:34:00 PM
Surr: BFB	85.1	37.7-212		%Rec	1	7/16/2022 4:34:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 4:34:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 4:34:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 4:34:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 4:34:00 PM
Surr: 4-Bromofluorobenzene	85.6	70-130		%Rec	1	7/16/2022 4:34:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 3:07:00 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-97 14'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:25:00 AM

Lab ID: 2207418-054

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 2:05:56 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 2:05:56 PM
Surr: DNOP	67.1	51.1-141		%Rec	1	7/16/2022 2:05:56 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 4:55:00 PM
Surr: BFB	88.6	37.7-212		%Rec	1	7/16/2022 4:55:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 4:55:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 4:55:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 4:55:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/16/2022 4:55:00 PM
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	1	7/16/2022 4:55:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/18/2022 3:44:14 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-24 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:35:00 AM

Lab ID: 2207418-055

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 2:29:58 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 2:29:58 PM
Surr: DNOP	68.7	51.1-141		%Rec	1	7/16/2022 2:29:58 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 5:15:00 PM
Surr: BFB	89.4	37.7-212		%Rec	1	7/16/2022 5:15:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 5:15:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 5:15:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 5:15:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 5:15:00 PM
Surr: 4-Bromofluorobenzene	86.0	70-130		%Rec	1	7/16/2022 5:15:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	86	60		mg/Kg	20	7/18/2022 3:56:39 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	Estimated value
	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 interference		

Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-24 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:35:00 AM

Lab ID: 2207418-056

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 2:53:59 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 2:53:59 PM
Surr: DNOP	69.4	51.1-141		%Rec	1	7/16/2022 2:53:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 5:55:00 PM
Surr: BFB	84.9	37.7-212		%Rec	1	7/16/2022 5:55:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 5:55:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 5:55:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 5:55:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 5:55:00 PM
Surr: 4-Bromofluorobenzene	82.3	70-130		%Rec	1	7/16/2022 5:55:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	87	60		mg/Kg	20	7/18/2022 4:09:03 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-25 4-8'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:40:00 AM

Lab ID: 2207418-057

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 3:18:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 3:18:00 PM
Surr: DNOP	80.1	51.1-141		%Rec	1	7/16/2022 3:18:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 6:15:00 PM
Surr: BFB	84.8	37.7-212		%Rec	1	7/16/2022 6:15:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 6:15:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 6:15:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 6:15:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 6:15:00 PM
Surr: 4-Bromofluorobenzene	82.3	70-130		%Rec	1	7/16/2022 6:15:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	86	60		mg/Kg	20	7/18/2022 4:21:28 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-25 8-12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:40:00 AM

Lab ID: 2207418-058

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 3:41:59 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/16/2022 3:41:59 PM
Surr: DNOP	66.7	51.1-141		%Rec	1	7/16/2022 3:41:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 6:35:00 PM
Surr: BFB	83.8	37.7-212		%Rec	1	7/16/2022 6:35:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 6:35:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 6:35:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 6:35:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 6:35:00 PM
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	7/16/2022 6:35:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	90	60		mg/Kg	20	7/18/2022 4:33:53 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-98 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:45:00 AM

Lab ID: 2207418-059

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:06:02 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 4:06:02 PM
Surr: DNOP	68.1	51.1-141		%Rec	1	7/16/2022 4:06:02 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 6:54:00 PM
Surr: BFB	84.0	37.7-212		%Rec	1	7/16/2022 6:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 6:54:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 6:54:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 6:54:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 6:54:00 PM
Surr: 4-Bromofluorobenzene	82.5	70-130		%Rec	1	7/16/2022 6:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	80	60		mg/Kg	20	7/18/2022 4:46:17 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-99 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:45:00 AM

Lab ID: 2207418-060

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:30:06 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 4:30:06 PM
Surr: DNOP	67.4	51.1-141		%Rec	1	7/16/2022 4:30:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 7:14:00 PM
Surr: BFB	83.8	37.7-212		%Rec	1	7/16/2022 7:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 7:14:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 7:14:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 7:14:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 7:14:00 PM
Surr: 4-Bromofluorobenzene	81.4	70-130		%Rec	1	7/16/2022 7:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: NAI
Chloride	90	60		mg/Kg	20	7/18/2022 4:58:42 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-100 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:50:00 AM

Lab ID: 2207418-061

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:54:07 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 4:54:07 PM
Surr: DNOP	71.0	51.1-141		%Rec	1	7/16/2022 4:54:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 7:34:00 PM
Surr: BFB	83.3	37.7-212		%Rec	1	7/16/2022 7:34:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 7:34:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 7:34:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 7:34:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 7:34:00 PM
Surr: 4-Bromofluorobenzene	81.8	70-130		%Rec	1	7/16/2022 7:34:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	88	59		mg/Kg	20	7/18/2022 1:44:25 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-101 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:50:00 AM

Lab ID: 2207418-062

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 5:18:09 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 5:18:09 PM
Surr: DNOP	63.4	51.1-141		%Rec	1	7/16/2022 5:18:09 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 7:54:00 PM
Surr: BFB	83.7	37.7-212		%Rec	1	7/16/2022 7:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 7:54:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 7:54:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 7:54:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/16/2022 7:54:00 PM
Surr: 4-Bromofluorobenzene	82.4	70-130		%Rec	1	7/16/2022 7:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	87	60		mg/Kg	20	7/18/2022 1:56:47 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-102 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:55:00 AM

Lab ID: 2207418-063

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 5:42:08 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/16/2022 5:42:08 PM
Surr: DNOP	60.8	51.1-141		%Rec	1	7/16/2022 5:42:08 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 8:14:00 PM
Surr: BFB	84.4	37.7-212		%Rec	1	7/16/2022 8:14:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 8:14:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 8:14:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 8:14:00 PM
Xylenes, Total	ND	0.099		mg/Kg	1	7/16/2022 8:14:00 PM
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	1	7/16/2022 8:14:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	88	60		mg/Kg	20	7/18/2022 2:09:08 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-103 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 10:55:00 AM

Lab ID: 2207418-064

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 6:30:13 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 6:30:13 PM
Surr: DNOP	62.3	51.1-141		%Rec	1	7/16/2022 6:30:13 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/16/2022 8:34:00 PM
Surr: BFB	86.3	37.7-212		%Rec	1	7/16/2022 8:34:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 8:34:00 PM
Toluene	ND	0.050		mg/Kg	1	7/16/2022 8:34:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	7/16/2022 8:34:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	7/16/2022 8:34:00 PM
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	7/16/2022 8:34:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	76	60		mg/Kg	20	7/18/2022 2:21:29 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-104 12'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:00:00 AM

Lab ID: 2207418-065

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 6:54:19 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 6:54:19 PM
Surr: DNOP	62.6	51.1-141		%Rec	1	7/16/2022 6:54:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/16/2022 8:54:00 PM
Surr: BFB	81.9	37.7-212		%Rec	1	7/16/2022 8:54:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 8:54:00 PM
Toluene	ND	0.048		mg/Kg	1	7/16/2022 8:54:00 PM
Ethylbenzene	ND	0.048		mg/Kg	1	7/16/2022 8:54:00 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2022 8:54:00 PM
Surr: 4-Bromofluorobenzene	81.5	70-130		%Rec	1	7/16/2022 8:54:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	83	60		mg/Kg	20	7/18/2022 2:33:49 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-26 0-4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:10:00 AM

Lab ID: 2207418-066

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 2:19:38 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 2:19:38 PM
Surr: DNOP	82.8	51.1-141		%Rec	1	7/16/2022 2:19:38 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 10:53:00 PM
Surr: BFB	82.3	37.7-212		%Rec	1	7/16/2022 10:53:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/16/2022 10:53:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 10:53:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 10:53:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 10:53:00 PM
Surr: 4-Bromofluorobenzene	80.3	70-130		%Rec	1	7/16/2022 10:53:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	83	60		mg/Kg	20	7/18/2022 3:35:34 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: WS22-27 0-4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:10:00 AM

Lab ID: 2207418-067

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 2:33:59 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 2:33:59 PM
Surr: DNOP	88.1	51.1-141		%Rec	1	7/16/2022 2:33:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2022 11:52:00 PM
Surr: BFB	83.3	37.7-212		%Rec	1	7/16/2022 11:52:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/16/2022 11:52:00 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2022 11:52:00 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2022 11:52:00 PM
Xylenes, Total	ND	0.098		mg/Kg	1	7/16/2022 11:52:00 PM
Surr: 4-Bromofluorobenzene	83.9	70-130		%Rec	1	7/16/2022 11:52:00 PM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	65	60		mg/Kg	20	7/18/2022 3:47:55 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-82 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:15:00 AM

Lab ID: 2207418-068

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 2:48:21 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 2:48:21 PM
Surr: DNOP	70.4	51.1-141		%Rec	1	7/16/2022 2:48:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 12:51:00 AM
Surr: BFB	80.7	37.7-212		%Rec	1	7/17/2022 12:51:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 12:51:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 12:51:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 12:51:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 12:51:00 AM
Surr: 4-Bromofluorobenzene	81.2	70-130		%Rec	1	7/17/2022 12:51:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	73	59		mg/Kg	20	7/18/2022 4:00:16 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-83 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:15:00 AM

Lab ID: 2207418-069

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 3:02:40 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 3:02:40 PM
Surr: DNOP	62.1	51.1-141		%Rec	1	7/16/2022 3:02:40 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 1:11:00 AM
Surr: BFB	85.2	37.7-212		%Rec	1	7/17/2022 1:11:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/17/2022 1:11:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 1:11:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 1:11:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/17/2022 1:11:00 AM
Surr: 4-Bromofluorobenzene	83.1	70-130		%Rec	1	7/17/2022 1:11:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	65	60		mg/Kg	20	7/18/2022 4:12:37 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-84 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:20:00 AM

Lab ID: 2207418-070

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 3:16:53 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 3:16:53 PM
Surr: DNOP	63.9	51.1-141		%Rec	1	7/16/2022 3:16:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/17/2022 1:31:00 AM
Surr: BFB	84.5	37.7-212		%Rec	1	7/17/2022 1:31:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	7/17/2022 1:31:00 AM
Toluene	ND	0.048		mg/Kg	1	7/17/2022 1:31:00 AM
Ethylbenzene	ND	0.048		mg/Kg	1	7/17/2022 1:31:00 AM
Xylenes, Total	ND	0.096		mg/Kg	1	7/17/2022 1:31:00 AM
Surr: 4-Bromofluorobenzene	81.4	70-130		%Rec	1	7/17/2022 1:31:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	63	60		mg/Kg	20	7/18/2022 4:24:58 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-85 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:20:00 AM

Lab ID: 2207418-071

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 3:31:08 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/16/2022 3:31:08 PM
Surr: DNOP	72.2	51.1-141		%Rec	1	7/16/2022 3:31:08 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 1:51:00 AM
Surr: BFB	83.4	37.7-212		%Rec	1	7/17/2022 1:51:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 1:51:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 1:51:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 1:51:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 1:51:00 AM
Surr: 4-Bromofluorobenzene	82.9	70-130		%Rec	1	7/17/2022 1:51:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	69	60		mg/Kg	20	7/18/2022 4:37:18 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-86 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:25:00 AM

Lab ID: 2207418-072

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 3:45:33 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 3:45:33 PM
Surr: DNOP	70.5	51.1-141		%Rec	1	7/16/2022 3:45:33 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 2:10:00 AM
Surr: BFB	85.6	37.7-212		%Rec	1	7/17/2022 2:10:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 2:10:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 2:10:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 2:10:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 2:10:00 AM
Surr: 4-Bromofluorobenzene	83.8	70-130		%Rec	1	7/17/2022 2:10:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	68	59		mg/Kg	20	7/18/2022 4:49:39 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-78 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:45:00 AM

Lab ID: 2207418-073

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:00:06 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 4:00:06 PM
Surr: DNOP	65.2	51.1-141		%Rec	1	7/16/2022 4:00:06 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 2:30:00 AM
Surr: BFB	84.2	37.7-212		%Rec	1	7/17/2022 2:30:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 2:30:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 2:30:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 2:30:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 2:30:00 AM
Surr: 4-Bromofluorobenzene	83.1	70-130		%Rec	1	7/17/2022 2:30:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	67	60		mg/Kg	20	7/18/2022 5:02:00 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-79 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:45:00 AM

Lab ID: 2207418-074

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:14:32 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 4:14:32 PM
Surr: DNOP	67.8	51.1-141		%Rec	1	7/16/2022 4:14:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 2:50:00 AM
Surr: BFB	86.1	37.7-212		%Rec	1	7/17/2022 2:50:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 2:50:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 2:50:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 2:50:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/17/2022 2:50:00 AM
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	7/17/2022 2:50:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	70	60		mg/Kg	20	7/18/2022 5:14:20 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-80 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:50:00 AM

Lab ID: 2207418-075

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:28:49 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 4:28:49 PM
Surr: DNOP	72.0	51.1-141		%Rec	1	7/16/2022 4:28:49 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 3:10:00 AM
Surr: BFB	85.7	37.7-212		%Rec	1	7/17/2022 3:10:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 3:10:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 3:10:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 3:10:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 3:10:00 AM
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	1	7/17/2022 3:10:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	74	60		mg/Kg	20	7/18/2022 5:26:41 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-81 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:50:00 AM

Lab ID: 2207418-076

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 4:43:04 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/16/2022 4:43:04 PM
Surr: DNOP	69.7	51.1-141		%Rec	1	7/16/2022 4:43:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 3:49:00 AM
Surr: BFB	87.4	37.7-212		%Rec	1	7/17/2022 3:49:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 3:49:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 3:49:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 3:49:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 3:49:00 AM
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	7/17/2022 3:49:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	70	60		mg/Kg	20	7/18/2022 6:03:43 PM

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-87 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:25:00 AM

Lab ID: 2207418-077

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 4:57:28 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/16/2022 4:57:28 PM
Surr: DNOP	89.3	51.1-141		%Rec	1	7/16/2022 4:57:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 4:09:00 AM
Surr: BFB	86.2	37.7-212		%Rec	1	7/17/2022 4:09:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 4:09:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 4:09:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 4:09:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 4:09:00 AM
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	1	7/17/2022 4:09:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	72	60		mg/Kg	20	7/18/2022 6:16:03 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-88 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:30:00 AM

Lab ID: 2207418-078

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 5:12:05 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 5:12:05 PM
Surr: DNOP	68.2	51.1-141		%Rec	1	7/16/2022 5:12:05 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 4:29:00 AM
Surr: BFB	87.3	37.7-212		%Rec	1	7/17/2022 4:29:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 4:29:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 4:29:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 4:29:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 4:29:00 AM
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	7/17/2022 4:29:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	73	60		mg/Kg	20	7/18/2022 6:28:23 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-89 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:30:00 AM

Lab ID: 2207418-079

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 5:26:28 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 5:26:28 PM
Surr: DNOP	94.6	51.1-141		%Rec	1	7/16/2022 5:26:28 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 4:48:00 AM
Surr: BFB	83.9	37.7-212		%Rec	1	7/17/2022 4:48:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 4:48:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 4:48:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 4:48:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/17/2022 4:48:00 AM
Surr: 4-Bromofluorobenzene	83.8	70-130		%Rec	1	7/17/2022 4:48:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	67	60		mg/Kg	20	7/18/2022 7:05:26 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-90 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:35:00 AM

Lab ID: 2207418-080

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 5:40:36 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	7/16/2022 5:40:36 PM
Surr: DNOP	105	51.1-141		%Rec	1	7/16/2022 5:40:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 5:08:00 AM
Surr: BFB	87.8	37.7-212		%Rec	1	7/17/2022 5:08:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 5:08:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 5:08:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 5:08:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	7/17/2022 5:08:00 AM
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	7/17/2022 5:08:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	71	60		mg/Kg	20	7/18/2022 7:42:28 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-91 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:35:00 AM

Lab ID: 2207418-081

Matrix: SOIL

Received Date: 7/12/2022 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	15		mg/Kg	1	7/16/2022 5:54:53 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 5:54:53 PM
Surr: DNOP	104	51.1-141		%Rec	1	7/16/2022 5:54:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/17/2022 5:28:00 AM
Surr: BFB	84.3	37.7-212		%Rec	1	7/17/2022 5:28:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 5:28:00 AM
Toluene	ND	0.050		mg/Kg	1	7/17/2022 5:28:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	7/17/2022 5:28:00 AM
Xylenes, Total	ND	0.099		mg/Kg	1	7/17/2022 5:28:00 AM
Surr: 4-Bromofluorobenzene	83.1	70-130		%Rec	1	7/17/2022 5:28:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	79	60		mg/Kg	20	7/18/2022 7:54:49 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	Estimated value
	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 interference		

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Analytical Report

Lab Order 2207418

Date Reported: 7/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc.

Client Sample ID: BS22-92 4'

Project: Cooper AHH 001

Collection Date: 7/8/2022 11:40:00 AM

Lab ID: 2207418-082

Matrix: SOIL

Received Date: 7/12/2022 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	14		mg/Kg	1	7/16/2022 6:09:20 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 6:09:20 PM
Surr: DNOP	93.9	51.1-141		%Rec	1	7/16/2022 6:09:20 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/17/2022 5:48:00 AM
Surr: BFB	81.9	37.7-212		%Rec	1	7/17/2022 5:48:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	7/17/2022 5:48:00 AM
Toluene	ND	0.049		mg/Kg	1	7/17/2022 5:48:00 AM
Ethylbenzene	ND	0.049		mg/Kg	1	7/17/2022 5:48:00 AM
Xylenes, Total	ND	0.098		mg/Kg	1	7/17/2022 5:48:00 AM
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	7/17/2022 5:48:00 AM
EPA METHOD 300.0: ANIONS						Analyst: JTT
Chloride	80	61		mg/Kg	20	7/18/2022 8:31:51 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	Estimated value
	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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: LCS-68833	SampType: lcs				TestCode: EPA Method 300.0: Anions					
Client ID: LCSS	Batch ID: 68833				RunNo: 89565					
Prep Date: 7/16/2022	Analysis Date: 7/17/2022				SeqNo: 3188126	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID: MB-68833	SampType: mblk				TestCode: EPA Method 300.0: Anions					
Client ID: PBS	Batch ID: 68833				RunNo: 89565					
Prep Date: 7/16/2022	Analysis Date: 7/17/2022				SeqNo: 3188127	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: MB-68838	SampType: mblk				TestCode: EPA Method 300.0: Anions					
Client ID: PBS	Batch ID: 68838				RunNo: 89577					
Prep Date: 7/17/2022	Analysis Date: 7/17/2022				SeqNo: 3188622	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68838	SampType: lcs				TestCode: EPA Method 300.0: Anions					
Client ID: LCSS	Batch ID: 68838				RunNo: 89577					
Prep Date: 7/17/2022	Analysis Date: 7/17/2022				SeqNo: 3188623	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.3	90	110			

Sample ID: MB-68858	SampType: mblk				TestCode: EPA Method 300.0: Anions					
Client ID: PBS	Batch ID: 68858				RunNo: 89579					
Prep Date: 7/18/2022	Analysis Date: 7/18/2022				SeqNo: 3189299	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68858	SampType: lcs				TestCode: EPA Method 300.0: Anions					
Client ID: LCSS	Batch ID: 68858				RunNo: 89579					
Prep Date: 7/18/2022	Analysis Date: 7/18/2022				SeqNo: 3189300	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: MB-68862	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68862		RunNo: 89579							
Prep Date: 7/18/2022	Analysis Date: 7/18/2022		SeqNo: 3189329		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68862	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68862		RunNo: 89579							
Prep Date: 7/18/2022	Analysis Date: 7/18/2022		SeqNo: 3189330		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.1	90	110			

Sample ID: MB-68850	SampType: mblk		TestCode: EPA Method 300.0: Anions							
Client ID: PBS	Batch ID: 68850		RunNo: 89601							
Prep Date: 7/18/2022	Analysis Date: 7/18/2022		SeqNo: 3189774		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-68850	SampType: lcs		TestCode: EPA Method 300.0: Anions							
Client ID: LCSS	Batch ID: 68850		RunNo: 89601							
Prep Date: 7/18/2022	Analysis Date: 7/18/2022		SeqNo: 3189775		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.7	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: MB-68717	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68717			RunNo: 89483						
Prep Date: 7/12/2022	Analysis Date: 7/15/2022			SeqNo: 3184880	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.9		10.00		68.7	51.1	141			

Sample ID: LCS-68717	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68717			RunNo: 89483						
Prep Date: 7/12/2022	Analysis Date: 7/15/2022			SeqNo: 3184881	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	2.8		5.000		55.5	51.1	141			

Sample ID: MB-68752	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68752			RunNo: 89486						
Prep Date: 7/13/2022	Analysis Date: 7/14/2022			SeqNo: 3186430	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.1		10.00		80.8	51.1	141			

Sample ID: LCS-68752	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68752			RunNo: 89486						
Prep Date: 7/13/2022	Analysis Date: 7/14/2022			SeqNo: 3186431	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	15	50.00	0	88.3	64.4	127			
Surr: DNOP	3.8		5.000		76.1	51.1	141			

Sample ID: MB-68780	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68780			RunNo: 89483						
Prep Date: 7/14/2022	Analysis Date: 7/15/2022			SeqNo: 3186689	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.8	51.1	141			

Sample ID: LCS-68780	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68780			RunNo: 89483						
Prep Date: 7/14/2022	Analysis Date: 7/15/2022			SeqNo: 3186690	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: LCS-68780	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68780		RunNo: 89483							
Prep Date: 7/14/2022	Analysis Date: 7/15/2022		SeqNo: 3186690		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	50.00	0	96.1	64.4	127			
Surr: DNOP	4.7		5.000		94.8	51.1	141			

Sample ID: 2207418-046AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: WS22-23 8-12'	Batch ID: 68780		RunNo: 89483							
Prep Date: 7/14/2022	Analysis Date: 7/16/2022		SeqNo: 3187528		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	14	48.31	0	91.4	36.1	154			
Surr: DNOP	6.0		4.831		125	51.1	141			

Sample ID: 2207418-046AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: WS22-23 8-12'	Batch ID: 68780		RunNo: 89483							
Prep Date: 7/14/2022	Analysis Date: 7/16/2022		SeqNo: 3187529		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	49.65	0	97.3	36.1	154	8.98	33.9	
Surr: DNOP	6.1		4.965		122	51.1	141	0	0	

Sample ID: 2207418-006AMS	SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BS22-67 20'	Batch ID: 68764		RunNo: 89518							
Prep Date: 7/13/2022	Analysis Date: 7/14/2022		SeqNo: 3187739		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	15	48.78	0	89.0	36.1	154			
Surr: DNOP	2.5		4.878		50.5	51.1	141			S

Sample ID: 2207418-006AMSD	SampType: MSD		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: BS22-67 20'	Batch ID: 68764		RunNo: 89518							
Prep Date: 7/13/2022	Analysis Date: 7/14/2022		SeqNo: 3187740		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	15	49.21	0	85.7	36.1	154	2.91	33.9	
Surr: DNOP	2.2		4.921		44.7	51.1	141	0	0	S

Sample ID: LCS-68764	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68764		RunNo: 89518							
Prep Date: 7/13/2022	Analysis Date: 7/14/2022		SeqNo: 3187760		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 interference

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

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: LCS-68764	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68764		RunNo: 89518							
Prep Date: 7/13/2022	Analysis Date: 7/14/2022		SeqNo: 3187760		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	15	50.00	0	86.9	64.4	127			
Surr: DNOP	3.8		5.000		76.7	51.1	141			

Sample ID: MB-68764	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68764		RunNo: 89518							
Prep Date: 7/13/2022	Analysis Date: 7/14/2022		SeqNo: 3187761		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		86.9	51.1	141			

Sample ID: MB-68807	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68807		RunNo: 89556							
Prep Date: 7/15/2022	Analysis Date: 7/16/2022		SeqNo: 3187999		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.1		10.00		70.5	51.1	141			

Sample ID: LCS-68807	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68807		RunNo: 89556							
Prep Date: 7/15/2022	Analysis Date: 7/16/2022		SeqNo: 3188000		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	15	50.00	0	82.4	64.4	127			
Surr: DNOP	3.1		5.000		63.0	51.1	141			

Sample ID: MB-68805	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68805		RunNo: 89556							
Prep Date: 7/15/2022	Analysis Date: 7/16/2022		SeqNo: 3188001		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.1		10.00		61.5	51.1	141			

Qualifiers:

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

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

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: LCS-68805	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68805			RunNo: 89556						
Prep Date: 7/15/2022	Analysis Date: 7/16/2022			SeqNo: 3188002	Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.4		5.000		67.0	51.1	141			

Sample ID: 2207418-066AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS22-26 0-4'	Batch ID: 68807			RunNo: 89556						
Prep Date: 7/15/2022	Analysis Date: 7/16/2022			SeqNo: 3188036	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	15	48.69	0	98.3	36.1	154			
Surr: DNOP	4.8		4.869		97.8	51.1	141			

Sample ID: 2207418-066AMSD	SampType: MSD			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS22-26 0-4'	Batch ID: 68807			RunNo: 89556						
Prep Date: 7/15/2022	Analysis Date: 7/16/2022			SeqNo: 3188037	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	48.88	0	94.8	36.1	154	3.24	33.9	
Surr: DNOP	4.2		4.888		86.6	51.1	141	0	0	

Sample ID: MB-68779	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 68779			RunNo: 89525						
Prep Date: 7/14/2022	Analysis Date: 7/15/2022			SeqNo: 3188334	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.2		10.00		81.8	51.1	141			

Sample ID: LCS-68779	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 68779			RunNo: 89525						
Prep Date: 7/14/2022	Analysis Date: 7/15/2022			SeqNo: 3188335	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	15	50.00	0	72.9	64.4	127			
Surr: DNOP	3.7		5.000		75.0	51.1	141			

Sample ID: 2207418-026AMS	SampType: MS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: WS22-17 8-12'	Batch ID: 68779			RunNo: 89525						
Prep Date: 7/14/2022	Analysis Date: 7/15/2022			SeqNo: 3188337	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: 2207418-026AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-17 8-12'	Batch ID: 68779	RunNo: 89525								
Prep Date: 7/14/2022	Analysis Date: 7/15/2022	SeqNo: 3188337	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38	15	49.02	0	77.5	36.1	154			
Surr: DNOP	5.0		4.902		102	51.1	141			

Sample ID: 2207418-026AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: WS22-17 8-12'	Batch ID: 68779	RunNo: 89525								
Prep Date: 7/14/2022	Analysis Date: 7/15/2022	SeqNo: 3188338	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	14	48.26	0	77.4	36.1	154	1.64	33.9	
Surr: DNOP	5.0		4.826		105	51.1	141	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: mb-68728	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68728		RunNo: 89532							
Prep Date: 7/12/2022	Analysis Date: 7/15/2022		SeqNo: 3186586		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	830		1000		83.0	37.7	212			

Sample ID: mb-68733	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68733		RunNo: 89532							
Prep Date: 7/12/2022	Analysis Date: 7/15/2022		SeqNo: 3186610		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	800		1000		80.4	37.7	212			

Sample ID: 2207418-006ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BS22-67 20'	Batch ID: 68733		RunNo: 89532							
Prep Date: 7/12/2022	Analysis Date: 7/15/2022		SeqNo: 3186612		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.6	23.23	0	87.9	70	130			
Surr: BFB	1600		929.4		176	37.7	212			

Sample ID: 2207418-006amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: BS22-67 20'	Batch ID: 68733		RunNo: 89532							
Prep Date: 7/12/2022	Analysis Date: 7/15/2022		SeqNo: 3186613		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.6	23.17	0	85.0	70	130	3.61	20	
Surr: BFB	1600		926.8		175	37.7	212	0	0	

Sample ID: mb-68756	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187188		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	37.7	212			

Sample ID: lcs-68756	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187189		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: lcs-68756	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187189		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	72.3	137			
Surr: BFB	2000		1000		198	37.7	212			

Sample ID: 2207418-026ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WS22-17 8-12'	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187191		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.11	0	92.6	70	130			
Surr: BFB	1900		964.3		200	37.7	212			

Sample ID: 2207418-026amsd	SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WS22-17 8-12'	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187192		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.15	0	90.6	70	130	1.95	20	
Surr: BFB	1900		966.2		197	37.7	212	0	0	

Sample ID: LCS-68757	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187320		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	93.5	72.3	137			
Surr: BFB	1900		1000		189	37.7	212			

Sample ID: mb-68757	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187321		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		90.6	37.7	212			

Sample ID: 2207418-046ams	SampType: MS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: WS22-23 8-12'	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187323		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: 2207418-046ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-23 8-12'	Batch ID: 68757	RunNo: 89546								
Prep Date: 7/13/2022	Analysis Date: 7/16/2022	SeqNo: 3187323 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.9	24.68	0	80.2	70	130			
Surr: BFB	1700		987.2		176	37.7	212			

Sample ID: 2207418-046AMSD	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-23 8-12'	Batch ID: 68757	RunNo: 89546								
Prep Date: 7/13/2022	Analysis Date: 7/16/2022	SeqNo: 3187324 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.15	0	84.0	70	130	2.58	20	
Surr: BFB	1700		966.2		180	37.7	212	0	0	

Sample ID: LCS-68797	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 68797	RunNo: 89546								
Prep Date: 7/14/2022	Analysis Date: 7/16/2022	SeqNo: 3187344 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	89.9	72.3	137			
Surr: BFB	1900		1000		186	37.7	212			

Sample ID: mb-68797	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 68797	RunNo: 89546								
Prep Date: 7/14/2022	Analysis Date: 7/16/2022	SeqNo: 3187345 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	820		1000		81.6	37.7	212			

Sample ID: 2207418-066ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-26 0-4'	Batch ID: 68797	RunNo: 89546								
Prep Date: 7/14/2022	Analysis Date: 7/16/2022	SeqNo: 3187347 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	24.75	0	85.4	70	130			
Surr: BFB	1800		990.1		184	37.7	212			

Sample ID: 2207418-066amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: WS22-26 0-4'	Batch ID: 68797	RunNo: 89546								
Prep Date: 7/14/2022	Analysis Date: 7/16/2022	SeqNo: 3187348 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.

Project: Cooper AHH 001

Sample ID: 2207418-066amsd		SampType: MSD			TestCode: EPA Method 8015D: Gasoline Range					
Client ID: WS22-26 0-4'		Batch ID: 68797			RunNo: 89546					
Prep Date: 7/14/2022		Analysis Date: 7/16/2022			SeqNo: 3187348		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	24.78	0	86.3	70	130	1.17	20	
Surr: BFB	1800		991.1		184	37.7	212	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

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

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: mb-68728	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 68728	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186634 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	0.85		1.000		84.7	70	130			

Sample ID: mb-68733	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 68733	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186658 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	0.80		1.000		80.4	70	130			

Sample ID: 2207418-007ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS22-68 20'	Batch ID: 68733	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186661 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9524	0	86.4	68.8	120			
Toluene	0.83	0.048	0.9524	0	87.3	73.6	124			
Ethylbenzene	0.83	0.048	0.9524	0	87.3	72.7	129			
Xylenes, Total	2.5	0.095	2.857	0	86.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.78		0.9524		82.2	70	130			

Sample ID: 2207418-007amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: BS22-68 20'	Batch ID: 68733	RunNo: 89532								
Prep Date: 7/12/2022	Analysis Date: 7/15/2022	SeqNo: 3186662 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.024	0.9606	0	88.4	68.8	120	3.22	20	
Toluene	0.86	0.048	0.9606	0	89.3	73.6	124	3.16	20	
Ethylbenzene	0.86	0.048	0.9606	0	89.1	72.7	129	2.89	20	
Xylenes, Total	2.6	0.096	2.882	0	88.8	75.7	126	3.79	20	
Surr: 4-Bromofluorobenzene	0.79		0.9606		82.6	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: mb-68756	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187263		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-68756	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187264		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	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: 2207418-027ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-17 12-16'	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187267		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.024	0.9597	0	94.6	68.8	120			
Toluene	0.94	0.048	0.9597	0	97.7	73.6	124			
Ethylbenzene	0.95	0.048	0.9597	0	99.0	72.7	129			
Xylenes, Total	2.8	0.096	2.879	0	98.4	75.7	126			
Surr: 4-Bromofluorobenzene	1.0		0.9597		104	70	130			

Sample ID: 2207418-027amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-17 12-16'	Batch ID: 68756		RunNo: 89514							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187268		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.024	0.9488	0	96.9	68.8	120	1.28	20	
Toluene	0.95	0.047	0.9488	0	100	73.6	124	1.33	20	
Ethylbenzene	0.95	0.047	0.9488	0	100	72.7	129	0.210	20	
Xylenes, Total	2.8	0.095	2.846	0	99.2	75.7	126	0.238	20	
Surr: 4-Bromofluorobenzene	0.97		0.9488		102	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: LCS-68757	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187368		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	88.2	80	120			
Toluene	0.88	0.050	1.000	0	88.3	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.5	80	120			
Surr: 4-Bromofluorobenzene	0.84		1.000		84.4	70	130			

Sample ID: mb-68757	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187369		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		87.3	70	130			

Sample ID: 2207418-047ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-23 12-15'	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187372		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.81	0.025	0.9950	0	81.7	68.8	120			
Toluene	0.83	0.050	0.9950	0	83.0	73.6	124			
Ethylbenzene	0.83	0.050	0.9950	0	83.1	72.7	129			
Xylenes, Total	2.5	0.10	2.985	0	82.3	75.7	126			
Surr: 4-Bromofluorobenzene	0.84		0.9950		84.6	70	130			

Sample ID: 2207418-047amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-23 12-15'	Batch ID: 68757		RunNo: 89546							
Prep Date: 7/13/2022	Analysis Date: 7/16/2022		SeqNo: 3187373		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	0.9921	0	81.0	68.8	120	1.21	20	
Toluene	0.82	0.050	0.9921	0	82.4	73.6	124	1.01	20	
Ethylbenzene	0.82	0.050	0.9921	0	82.4	72.7	129	1.10	20	
Xylenes, Total	2.4	0.099	2.976	0	81.9	75.7	126	0.817	20	
Surr: 4-Bromofluorobenzene	0.83		0.9921		83.9	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

WO#: 2207418

20-Jul-22

Client: Vertex Resources Services, Inc.**Project:** Cooper AHH 001

Sample ID: LCS-68797	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68797		RunNo: 89546							
Prep Date: 7/14/2022	Analysis Date: 7/16/2022		SeqNo: 3187392		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	93.1	80	120			
Toluene	0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.6	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.6	80	120			
Surr: 4-Bromofluorobenzene	0.82		1.000		82.1	70	130			

Sample ID: mb-68797	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68797		RunNo: 89546							
Prep Date: 7/14/2022	Analysis Date: 7/16/2022		SeqNo: 3187393		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	0.81		1.000		80.8	70	130			

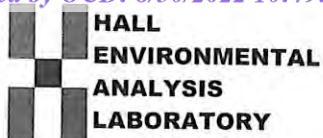
Sample ID: 2207418-067ams	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-27 0-4'	Batch ID: 68797		RunNo: 89546							
Prep Date: 7/14/2022	Analysis Date: 7/17/2022		SeqNo: 3187396		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9980	0	85.3	68.8	120			
Toluene	0.87	0.050	0.9980	0	86.7	73.6	124			
Ethylbenzene	0.86	0.050	0.9980	0	85.7	72.7	129			
Xylenes, Total	2.5	0.10	2.994	0	84.6	75.7	126			
Surr: 4-Bromofluorobenzene	0.84		0.9980		83.7	70	130			

Sample ID: 2207418-067amsd	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: WS22-27 0-4'	Batch ID: 68797		RunNo: 89546							
Prep Date: 7/14/2022	Analysis Date: 7/17/2022		SeqNo: 3187397		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	0.9940	0	94.1	68.8	120	9.35	20	
Toluene	0.95	0.050	0.9940	0	95.6	73.6	124	9.31	20	
Ethylbenzene	0.94	0.050	0.9940	0	95.0	72.7	129	9.88	20	
Xylenes, Total	2.8	0.099	2.982	0	94.1	75.7	126	10.2	20	
Surr: 4-Bromofluorobenzene	0.81		0.9940		81.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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 interference		

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

Sample Log-In Check List

Client Name: **Vertex Resources
Services, Inc.**

Work Order Number: **2207418**

RcptNo: 1

Received By: **Cheyenne Cason** 7/12/2022 7:20:00 AM

Completed By: **Cheyenne Cason** 7/12/2022 8:34:17 AM

Reviewed By: *ja 7/12/22*

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ 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: *KR 7.12.22*

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good				
2	0.9	Good				
3	2.5	Good				

Chain-of-Custody Record

Client: Verde ☒ Standard ☒ Rush 5 day

Project Name: COG Chase Settle

Mailing Address: Cooper AHH #001

Project #: 22E-00123-04

Phone #: _____

email or Fax#: _____

QA/QC Package: ☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance ☐ Other _____

☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Analysis Request

Project Manager: Monica Peppin

Sampler: L. Fullman

On Ice: ☒ Yes ☐ No

of Coolers: 3

Cooler Temp (including CF): See 1st page (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
7-8-22	08:25	Soil	BS22-74 20'	1 Jar		2207418
7-8-22	08:25	Soil	BS22-75 20'	1 Jar		013
7-8-22	08:30	Soil	BS22-76 20'	1 Jar		014
	08:30		BS22-77 20'			015
	09:45		BS22-24 17'			016
	09:45		BS22-30 17'			017
	09:50		BS22-31 17'			018
	09:50		BS22-32 17'			019
	09:55		BS22-44 17'			020
	08:35		WS22-14 17-20'			021
	08:35		WS22-15 17-20'			022
	08:40		WS22-16 17-20'			023
						024

Relinquished by: L. Fullman Date: 7-11-22 Time: 07:30

Relinquished by: Monica Date: 7/11/22 Time: 730

Received by: Monica Date: 7/11/22 Time: 730

Received by: Monica Date: 7/12/22 Time: 0720

Remarks:

Direct bill to COG, Chase Settle

CC. M. Peppin Final Report

Chain-of-Custody Record

Client: Vertex
(EOG, Chase Settlement)
 Mailing Address:

Phone #:
 email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☒ Rush 5 days

Project Name:

Cooper AHH #001

Project #:

225-00123-04

Project Manager:

Monica Peppin

Sampler: L. Pullman

On Ice: ☒ Yes ☐ No

of Coolers: 3

Cooler Temp (including CF): See 1st page (°C)

Container Type and #

Preservative Type

HEAL No.

1 Jar

049

1 Jar

050

1 Jar

051

1

052

1

053

1

054

1

055

1

056

1

057

1

058

1

059

1

060

Relinquished by:

L. Pullman

Date:

7-11-22 07:30

Relinquished by:

amw

Date:

7/11/22 1900

Received by:

amw

Date

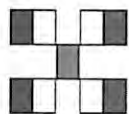
7/11/22 730

Received by:

One car 11/11/22 0730

Remarks:

Direct bill to EOG, Chase Settlement
CC. M. Peppin final Report



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

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) ☒

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 139395

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 139395
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	2/24/2023