NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 28 2017
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

nAB1727254031

☒ Initial Report ☐ Final Report

Name of Company EOG Y Resources, Inc. 25575	Contact Chase Settle
Address 104 S. 4th Street Artesia NM 88210	Telephone No. 575-748-1471
Facility Name Kleeman PD & Platt PA Battery	Facility Type Battery

Surface Owner Private	Mineral Owner Private	API No. 30-015-00253

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	26	18S	26E	1950	South	990	West	Eddy

Latitude 32.71563 **Longitude** -104.35731 NAD83

NATURE OF RELEASE

Type of Release Crude Oil/Produced Water	Volume of Release 27 B/O, 110 B/PW	Volume Recovered 1 B/O, 0 B/PW
Source of Release Tank	Date and Hour of Occurrence 9/12/2017; 7:42 AM	Date and Hour of Discovery 9/12/2017; 7:42 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver	
By Whom? Robert Asher	Date and Hour September 12, 2017, 1:40 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
The cause of the release was determined to be from a hole in the bottom of the production tank.

Describe Area Affected and Cleanup Action Taken.*
The release occurred within the battery berm the exact area impacted will be reported when the characterization plan is submitted to NMOCD. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 10) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: >50 -99' (58', Section 26, T18S, R26E, per NMOSE & USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.**

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:	OIL CONSERVATION DIVISION
Printed Name: Chase Settle	Signed By Mike Bratcher Approved by Environmental Specialist:
Title: Rep Safety & Environmental II	Approval Date: 9/29/17 Expiration Date: N/A
E-mail Address: chase_settle@eogresources.com	Conditions of Approval: See attached Attached ☐
Date: September 28, 2017 Phone:575-748-4171	2RP-4422

* Attach Additional Sheets If Necessary

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	nAB1727254031
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr

Signature: Chase Settle Date: 08/17/2023

email: Chase_Settle@eogresources.com Telephone: 575-703-6537

OCD Only

Received by: OCD Date: 8/17/2023

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: 8/18/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

VERTEX

July 28, 2023 Vertex Project #: 22E-00123-13

Spill Closure Report: Kleeman PB Battery
Unit L, Section 26, Township 18 South, Range 26 East
API: 30-015-00253
County: Eddy
Incident ID: nAB1727254031
Incident Report: 2RP-4422

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

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

EOG Resources, Inc. (EOG) retained Vertex Resource Services Inc. (Vertex) to conduct a spill assessment and remediation for an oil release that occurred on September 12, 2017, at Kleeman PB Battery, API 30-015-00253 (hereafter referred to as "Kleeman"). EOG submitted an initial C-141 Release Notification (Attachment 1) to New Mexico Oil Conservation Division (NMOCD) District 2 on September 12, 2017. Incident ID number nAB1727254031 was assigned to this incident.

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

Incident Description

On September 12, 2017, a release at EOG's Kleeman site occurred when a hole in the bottom of the production tank caused fluid to dump out. The fluid was released from the tank to the area inside the earthen containment. The production tank breach resulted in the release of 27 barrels of oil and 110 barrels of produced water into the containment. The volume of the recovered fluids was estimated to be 1 barrel of oil. No fluids were released into any waterways.

Site Characterization

The release at Kleeman occurred on private land at 32.71563° N, 104.35731° W, approximately 9.12 miles southeast of Artesia, New Mexico. The legal description for the site is Unit L, Section 26, Township 18 South, Range 26 East in Eddy County, New Mexico. This location is within the Permian Basin in southeast New Mexico and has historically been used for oil and gas exploration and production, and rangeland.

Kleeman is typical of oil and gas exploration and production sites on the northwest portion of the Permian Basin and is currently used for oil and gas production and storage. The following sections specifically describe the release area on the southern section of the constructed pad where the earthen containment is located, directly northwest of the lease road (Attachment 2 – Figure 1).

The surrounding landscape is associated with ridges, fans, fan remnants, and alluvial fans with elevations ranging between 1,100 and 5,300 feet. The climate is semiarid with average annual precipitation ranging between 7 and 15 inches. Using information from the United States Department of Agriculture, the dominant vegetation was determined to be principally tobosa, burro grass, and other short-perennial grasses. Grasses with mixed shrub communities dominate the historic plant community (United States Department of Agriculture, Natural Resources Conservation Service, 2021). Limited to no vegetation is observed growing on the compacted production pad, right-of-way, and access road.

The Geological Map of New Mexico indicates the surface geology at Kleeman is comprised primarily of Qp – Piedmont alluvial deposits from Holocene to upper Pleistocene ages (The New Mexico Bureau of Geology and Mineral Resources, 2022) The United States Department of Agriculture Web Soil Survey characterizes the soil at the site as Reagan Loam Soils. The soil is well-drained with low runoff and moderately high to high moisture levels in the profile. The karst geology potential for Kleeman is medium (United States Department of the Interior, Bureau of Land Management, 2022).

There is no surface water located at Kleeman. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is the Pecos River located approximately 3.14 miles east of the site (United States Fish and Wildlife Service, 2022). At Kleeman, there is no near continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

The nearest groundwater data to Kleeman is a water well located approximately 0.46 miles northwest of the site (New Mexico Office of the State Engineer, 2023). Data from 2022 shows the USGS well had a depth to groundwater of 75 feet below ground surface (bgs). Information pertaining to the depth to groundwater determination is included in Attachment 4.

Closure Criteria Determination

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

Based on the data included in the closure criteria determination worksheet, the release at Kleeman is not subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 NMAC. The nearest groundwater data is younger than 25 years and located closer than 0.5 miles from the release site; therefore, the depth to groundwater can accurately be determined. The closure criteria for the site is determined to be associated with the following constituent concentration

limits (Table 1). The depth to groundwater was determined by drilling a borehole on site. The borehole was advanced to 55 feet bgs. The borehole was left to recharge as per the NMOSE requirements. It was determined that no water was present after the 72-hour recharge period. The borehole was plugged and abandoned. The bore logs that documented this information are included in Attachment 4.

Table 1. Closure Criteria for Soils to Remediation & Reclamation Standards

	Constituent	Limit
0-4 feet bgs (19.15.29.13)	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
DTGW 51-100 feet (19.15.29.12)	Chloride	10,000 mg/kg
	TPH (GRO+DRO+MRO)	2,500 mg/kg
	GRO+DRO	1,000 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

On December 15, 2022, EOG contracted Vertex to complete release remediation at Kleeman through field screening procedures, oversight of the excavation, and final confirmatory sampling. The daily field reports with final excavation documentation are included in Attachment 5

Remediation began on December 15, 2022, and was halted on January 12, 2023, due to production equipment obstructing a portion of the remediation area on the west side, deeming it unsafe to excavate with machinery. Excavation and confirmation sampling continued on July 24, 2023, after the production equipment had been moved by the current operator to allow for safe excavation. Vertex had a representative on-site during both events to conduct field screening procedures and collected a total of 34 five-point composite confirmatory samples from the base and sidewalls of the excavation, at depths ranging between 4 feet and 14 feet bgs. The top four feet of the excavation was remediated to NMOCD's strictest closure criteria to horizontally delineate the release. Notifications that confirmatory samples were being collected were provided to NMOCD before every sampling event and are included in Attachment 6, as required by Subparagraph (a) of Paragraph (1) of Subsection D 19.15.29.12 NMAC.

Each composite sample was representative of no more than 200 square feet per the alternate sampling method outlined in Subparagraph (c) of Paragraph (1) of Subsection D 19.15.29.12 NMAC, which does not require prior NMOCD approval. The composite samples were placed into laboratory-provided containers, preserved on ice, and submitted to a National Environmental Laboratory Accreditation Program-approved laboratory for chemical analysis.

Laboratory analyses included Method 300.0 for chlorides, Method 8021B for volatile organics, including BTEX, and EPA Method 8015 for TPH, including MRO, DRO, and GRO. Confirmatory sample analytical data are summarized in Table 2 (Attachment 3). Laboratory data reports and chain of custody forms are included in Attachment 7.

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

Closure Request

Vertex recommends no additional remediation action to address the release at Kleeman. Laboratory analyses of confirmation samples collected at Kleeman show final confirmatory values below NMOCD closure criteria for areas where depth to groundwater is between 51-100 feet bgs with the top four feet meeting the reclamation requirements of 19.15.29.13 NMAC. There are no anticipated risks to human, ecological, or hydrological receptors at the release site.

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

Vertex requests that this incident (nAB1727254031) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. EOG certifies that all information in this report and the attachments is correct and that they have complied with all applicable closure requirements and conditions specified in Division rules and directives to meet NMOCD requirements to obtain closure on the September 12, 2017, release at Kleeman.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 575.988.1472 or cdixon@vertex.ca.

Fernando Rodriguez

Fernando Rodriguez B.Sc.
INTERMEDIATE BIOLOGIST, REPORTING

8/17/2023
Date

Chance Dixon

Chance Dixon B.Sc.
PROJECT MANAGER, REPORT REVIEW

8/17/2023
Date

Attachments

References

Google Inc. (2022). *Google Earth Pro (Version 7.3.3)* [Software]. Retrieved from https://earth.google.com

New Mexico Bureau of Geology and Mineral Resources. (2019). *Interactive Geologic Map*. Retrieved from http://geoinfo.nmt.edu

New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2019). *Well Log/Meter Information Report*. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/meterReport.html

New Mexico Water Rights Reporting System. (2019a). Water Column/Average Depth to Water Report. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html

New Mexico Water Rights Reporting System. (2019b). Point of Diversion Location Report. Retrieved from http://nmwrrs.ose.state.nm.us/nmwrrs/wellSurfaceDiversion.html

United States Department of Agriculture, Soil Conservation Service in Cooperation with New Mexico Agricultural Experiment Station. (1971). Soil Survey, New Mexico. Retrieved from http://www.wipp.energy.gov/library/Information_Repository_A/Supplemental_Information/Chugg%20et%20al%201971%20w-map.pdf

United States Department of Homeland Security, FEMA Flood Map Service Center. (2010). *Flood Map Number 35015C1875D.* Retrieved from https://msc.fema.gov/portal/search?AddressQuery=malaga%20new%20mexico#searchresultsanchor

United States Department of the Interior, Bureau of Land Management. (2019) *New Mexico Cave/Karsts.* Retrieved from https://www.blm.gov/programs/recreation/recreation-programs/caves/new-mexico

United State Fish and Wildlife Service. (2019). *National Wetland Inventory Surface Waters and Wetland*. Retrieved from https://www.fws.gov/wetlands/data/mapper.html

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. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

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

ATTACHMENT 1

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 28 2017
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

nAB1727254031

☒ Initial Report ☐ Final Report

Name of Company EOG Y Resources, Inc. 25575	Contact Chase Settle
Address 104 S. 4th Street Artesia NM 88210	Telephone No. 575-748-1471
Facility Name Kleeman PD & Platt PA Battery	Facility Type Battery

Surface Owner Private	Mineral Owner Private	API No. 30-015-00253

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	26	18S	26E	1950	South	990	West	Eddy

Latitude 32.71563 **Longitude** -104.35731 NAD83

NATURE OF RELEASE

Type of Release Crude Oil/Produced Water	Volume of Release 27 B/O, 110 B/PW	Volume Recovered 1 B/O, 0 B/PW
Source of Release Tank	Date and Hour of Occurrence 9/12/2017; 7:42 AM	Date and Hour of Discovery 9/12/2017; 7:42 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Mike Bratcher and Crystal Weaver	
By Whom? Robert Asher	Date and Hour September 12, 2017, 1:40 PM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
The cause of the release was determined to be from a hole in the bottom of the production tank.

Describe Area Affected and Cleanup Action Taken.*
The release occurred within the battery berm the exact area impacted will be reported when the characterization plan is submitted to NMOCD. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX (chlorides for documentation). If initial analytical results for TPH & BTEX are under RRAL's (site ranking is 10) a Final Report, C-141 will be submitted to the OCD requesting closure. If the analytical results are above the RRAL's a work plan will be submitted to the OCD. **Depth to Ground Water: >50 -99' (58', Section 26, T18S, R26E, per NMOSE & USGS), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.**

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:	OIL CONSERVATION DIVISION
Printed Name: Chase Settle	Signed By Mike Bratcher Approved by Environmental Specialist:
Title: Rep Safety & Environmental II	Approval Date: 9/29/17 Expiration Date: N/A
E-mail Address: chase_settle@eogresources.com	Conditions of Approval: See attached Attached ☐ 2RP-4422
Date: September 28, 2017 Phone:575-748-4171	

* Attach Additional Sheets If Necessary

State of New Mexico
Oil Conservation Division

Incident ID	nAB1727254031
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Chase Settle Title: Rep Safety & Environmental Sr

Signature: Chase Settle Date: 08/17/2023

email: Chase_Settle@eogresources.com Telephone: 575-703-6537

OCD Only

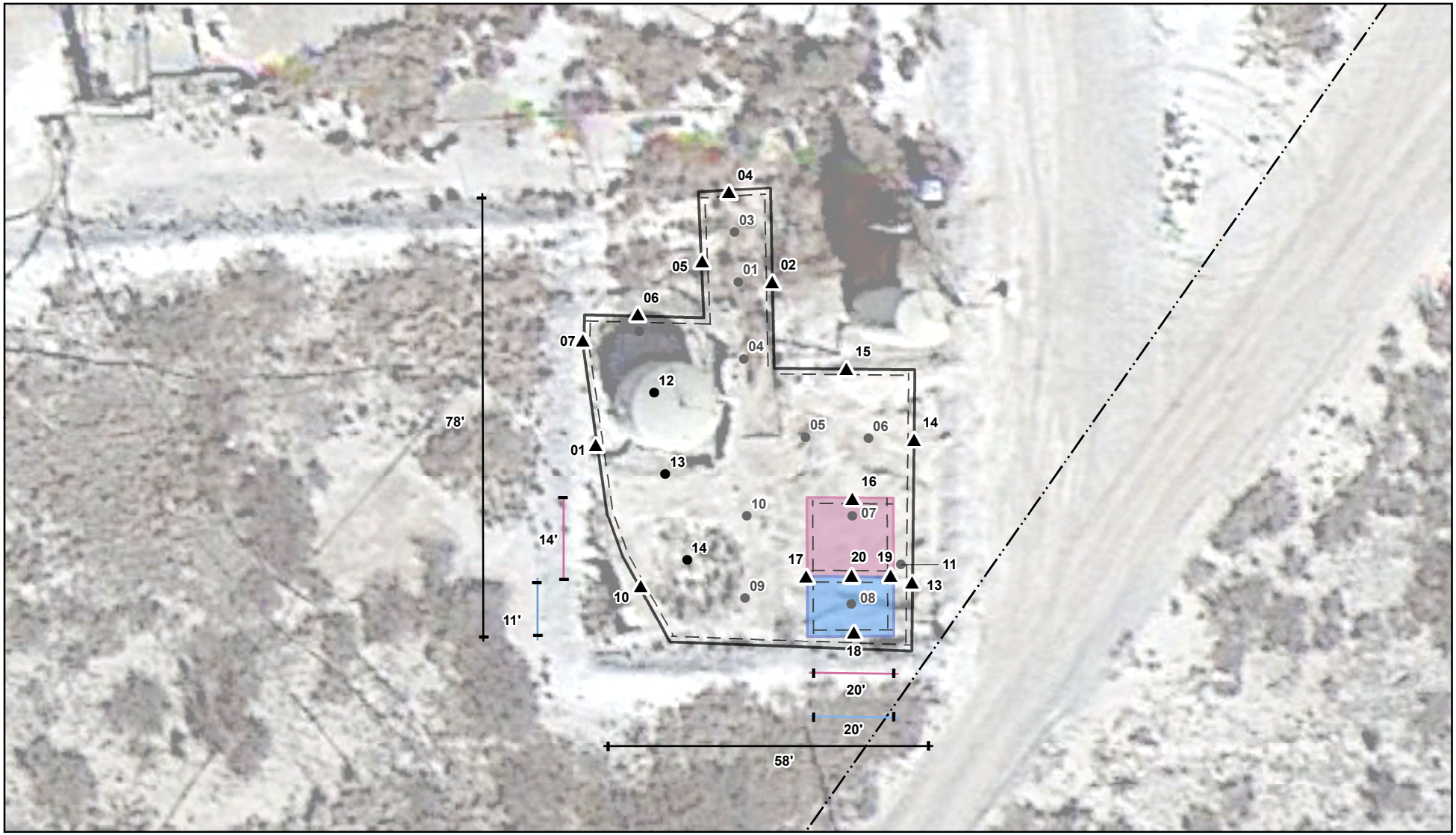
Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

ATTACHMENT 2



● Base Samples (Prefixed by "BS23-")
▲ Wall Sample (Prefixed by "WS22-")
Excavation to 4-6' bgs (~3,081 sq.ft.)
Excavation to 14' bgs (~156 sq.ft.)
● Base Sample (Prefixed by "BS22-")
Pipeline (Underground)
Excavation to 10' bgs (~207 sq.ft.)

VERTEX

0 5 10 20 ft

Map Center:
Lat/Long: 32.715243, -104.357349

NAD 1983 UTM Zone 13N
Date: Aug 16/23

N

Confirmatory Schematic
Kleeman PB Battery

FIGURE:
2

eog resources

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: Image from Google Earth Pro, 2022, georeferenced by Vertex Professional Services Ltd. (Vertex), 2023. Features from GPS by Vertex, 2022 & 2023.

VERSATILITY. EXPERTISE.

Document Path: G:\1-Projects_US PROJECTS\EOG Resources Inc\22E-00123\013 - Kleeman PB Battery\Figure 2 Confirmatory Schematic (22E-00123).mxd

ATTACHMENT 3

Client Name: EOG Resources, Inc.
Site Name: Kleeman PB Battery
NMOCD Tracking #: nAB1727254031
Project #: 22E-00123-13
Lab Reports: 2212A72, 2212B88, 2212D98, 2212F02, 2301269, 2308195, 2308378

Table 3. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater 51-100 Feet BGS (Reclamation)

Sample Description			Field Screening			Petroleum Hydrocarbons							Inorganic
						Volatile		Extractable					
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
BES22-01	4	12/22/2022	ND	50	2,639	ND	ND	ND	ND	ND	ND	ND	840
BES22-02	4	12/16/2022	-	105	940	ND	ND	ND	150	150	150	300	ND
BES22-03	4	12/16/2022	-	513	875	ND	ND	ND	510	1000	510	1510	ND
BES22-04	4	12/16/2022	-	420	783	ND	ND	ND	240	390	240	630	ND
BES22-05	4	12/16/2022	-	332	753	ND	ND	ND	290	600	290	890	ND
BES22-06	4	12/16/2022	-	375	1,013	ND	ND	ND	270	690	270	960	ND
BES22-07	10	12/21/2022	28	430	630	ND	ND	ND	32	ND	32	32	120
BES22-08	14	12/21/2022	15	310	620	ND	ND	ND	75	ND	75	75	160
BES22-09	4	12/28/2022		711	617	ND	ND	ND	96	480	96	576	700
BES22-10	4	12/28/2022		941	1,488	ND	ND	ND	330	1000	330	1330	1600
BES22-11	4	1/11/2023	-	87	1,495	ND	ND	ND	ND	ND	ND	ND	1300
BES23-12	6	8/1/2023	5	610	1,093	ND	ND	ND	41	50	41	91	700
BES23-13	6	8/1/2023	3	748	1,275	ND	ND	ND	41	55	41	96	490
BES23-14	6	8/4/2023	0	46	1,800	ND	ND	ND	ND	ND	ND	ND	200
WES22-01	0-4	8/4/2023	0	31	430	ND	ND	ND	12	ND	12	12	150
WES22-01	4-6	8/4/2023	0	51	1,038	ND	ND	ND	ND	ND	ND	ND	750
WES22-02	0-4	12/19/2022	10	245	305	ND	ND	ND	ND	ND	ND	ND	ND
WES22-02	4-6	12/15/2022	ND	87	530	ND	ND	ND	ND	71	ND	71	ND
WES22-04	0-4	12/19/2022	-	122	575	ND	ND	ND	22	ND	22	22	ND
WES22-05	0-4	12/22/2022	-	25	525	ND	ND	ND	ND	ND	ND	ND	ND
WES22-06	0-4	12/22/2022	-	26	588	ND	ND	ND	ND	ND	ND	ND	ND
WES22-07	0-4	12/22/2022	-	24	485	ND	ND	ND	ND	ND	ND	ND	ND
WES22-10	0-4	12/28/2022		139	278	ND	ND	ND	ND	58	ND	58	ND
WES22-10	4-6	8/4/2023	0	51	1038	ND	ND	ND	22	ND	22	22	770
WES22-13	0-4	1/11/2023	-	55	438	ND	ND	ND	ND	ND	ND	ND	ND
WES22-14	0-4	1/11/2023	-	22	539	ND	ND	ND	ND	ND	ND	ND	ND
WES22-15	0-4	1/5/2023	-	13	578	ND	ND	ND	ND	78	ND	78	300
WES22-16	4-10	12/16/2022	-	134	5,509	ND	ND	ND	41	ND	41	41	3200
WES22-17	4-10	12/16/2022	-	1,073	1,674	ND	ND	ND	250	130	250	380	630
WES22-18	4-10	12/16/2022	-	17	1,717	ND	ND	ND	ND	ND	ND	ND	590
WES22-19	4-10	12/21/2022	-	20	1,915	ND	ND	ND	ND	ND	ND	ND	130
WES22-20	10-14	12/21/2022	-	98	4,862	ND	ND	ND	36	ND	36	36	2900

"ND" Not Detected at the Reporting Limit
"-" indicates not analyzed/assessed

ATTACHMENT 4

Closure Criteria Worksheet			
Site Name: Kleeman PB Battery/Platt PA Battery			
Spill Coordinates:		X: 32.715484	Y: -104.357324
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	**75**	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	16,271	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	40,874	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	1,888	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**	2,623	feet
	ii) Within 1000 feet of any fresh water well or spring	2,623	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	7,996	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)	Medium	Critical High Medium Low
10	Within a 100-year Floodplain	500	year
11	Soil Type	Reagan loam 0-1 slopes and 1 to 3 slopes	
12	Ecological Classification	Loamy	
13	Geology	Qp	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	51-100'	<50' 51-100' >100'

BORING LOG

Project No.: 700438.242.01 | **Weather: Clear, Temp.: 75°F** | **Driller: D. Londagin**

Site Name: Kleeman PB Battery | **Logger: D. Adkins** | **Rig Type: Reich Drill**

Location: Eddy County, New Mexico | **Field Instrument: NA** | **Bit Size: 5-7/8”**

Date: 5/18/2021 | **Latitude: 32.71559 N** | **Drilling Method: Air Rotary**

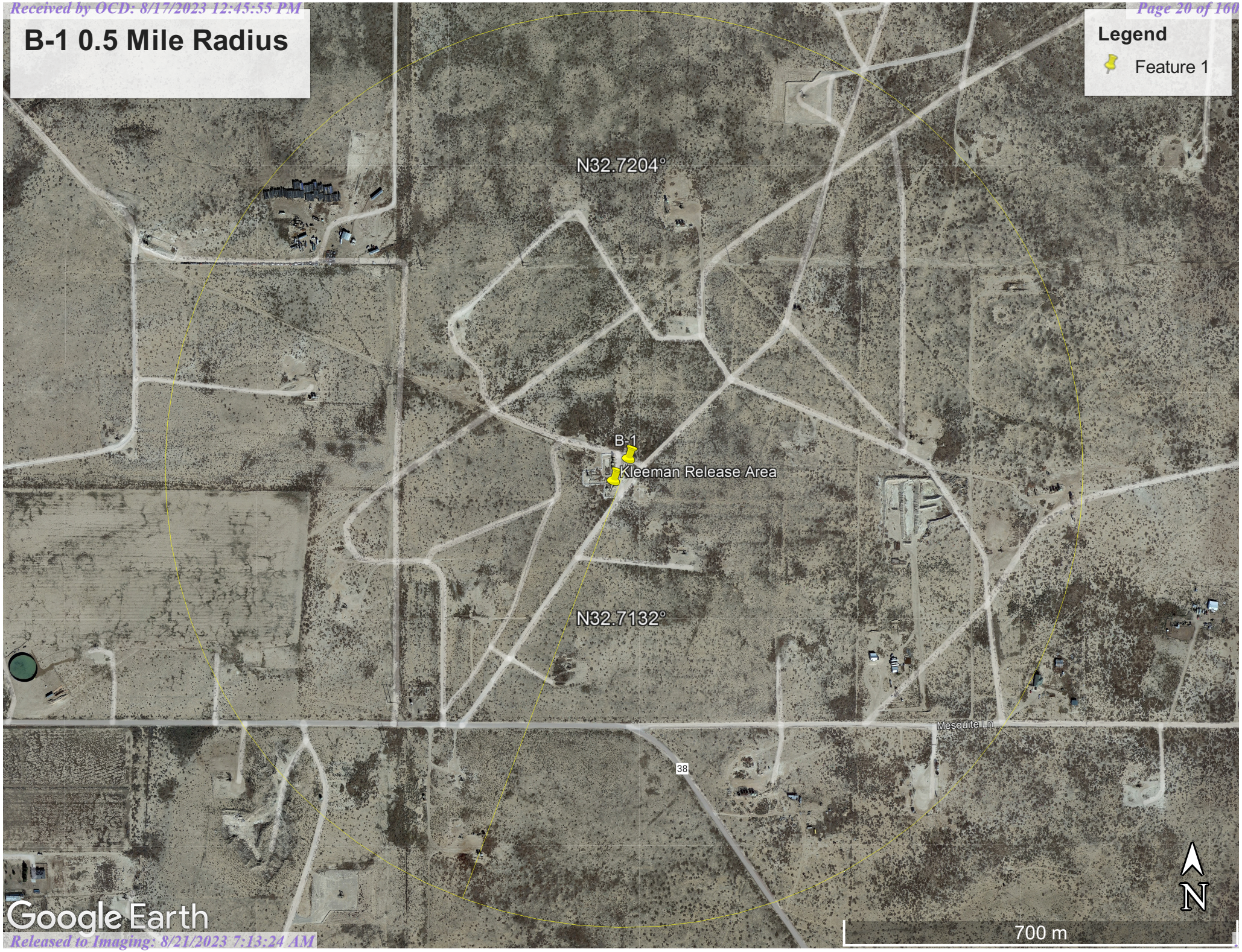
Boring Number: B-1 | **Longitude: -104.35707 W** | **Sample Retrieval Method: Drill Cuttings**

Time	Lab Sample Collected	Sample Interval (ft)	Sample Recovery (ft)	USCS	Composition (%)	Sample Material/Comments Include composition, color, grain size, moisture, hardness, plasticity, density	Hydrocarbon Odor	PID (ppm)
	☐	0-10’				Light red/brown sandy Loam	**None** Slight Mod. Strong	
	☐	10-15’				Light brown clayey fine Sand (SC) and caliche	**None** Slight Mod. Strong	
	☐	15-35’				Gray to light gray sandy Clay (CL) with varying amounts of caliche.	**None** Slight Mod. Strong	
	☐	35-55’				Light olive/gray to light red/brown fine Sand (SP)	**None** Slight Mod. Strong	
	☐					__ TD 55’ __	None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	
	☐						None Slight Mod. Strong	

Surface Elevation: _____

Notes: Groundwater Not Encountered @ 55’ BGS – 72 hr. **Logger Initials**: DJA

B-1 0.5 Mile Radius




B-1 Distance
0.03 Miles (153 Feet)
Legend
Feature 1
B-1
Kleeman Release Area
Google Earth
40 m
N

U.S. Fish and Wildlife Service
National Wetlands Inventory

Kleeman/Platt Battery

November 15, 2021

Wetlands

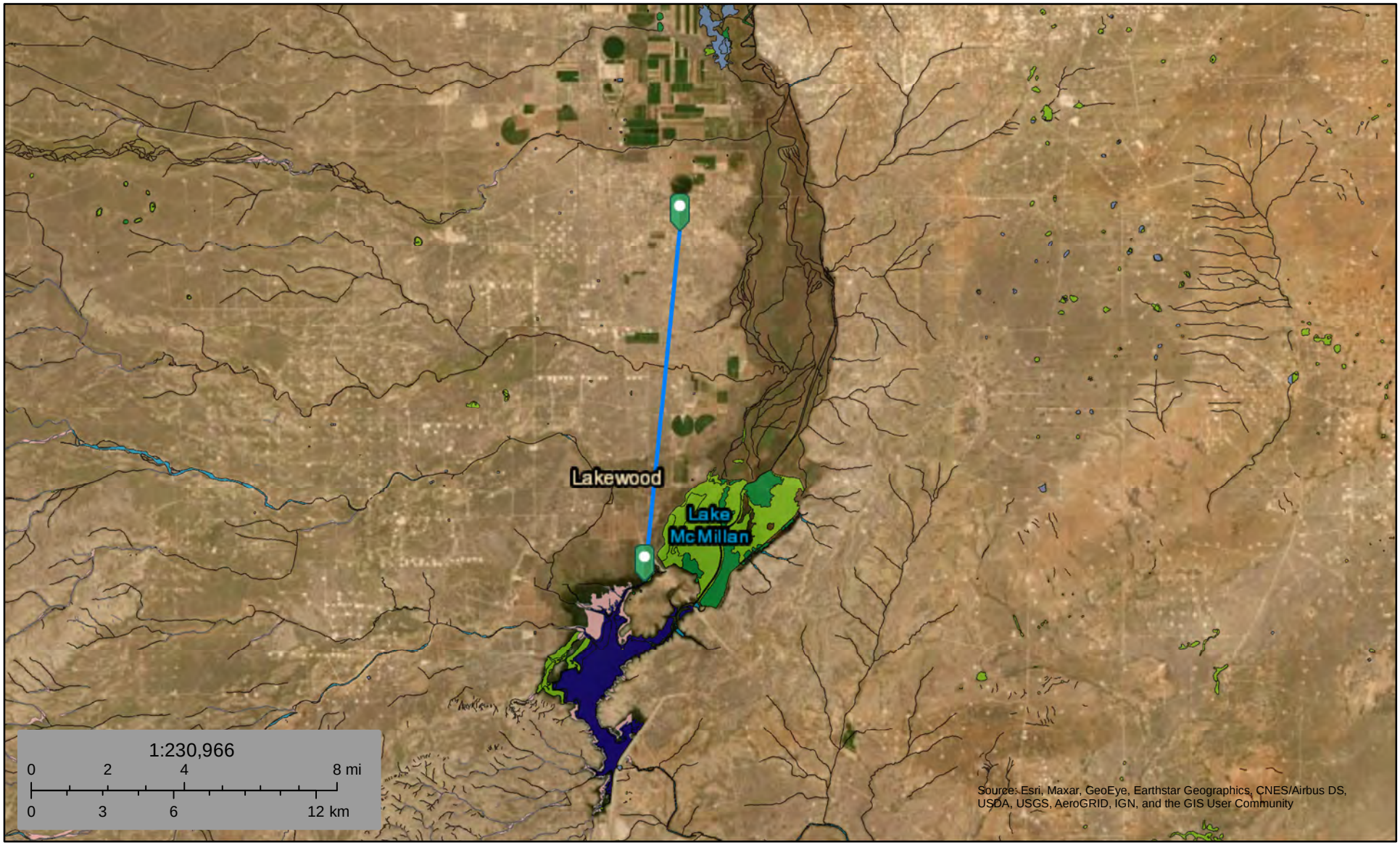
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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

U.S. Fish and Wildlife Service

National Wetlands Inventory

Kleeman/Platt Battery



November 15, 2021

Wetlands

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

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

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

Kleeman/Platt Battery

Nearest Residence: 0.36 miles (1,888 feet)

Kleeman/Platt Battery

11/15/2021, 4:10:58 PM

GIS WATERS PODs

- Active
- Pending
- OSE District Boundary
- SiteBoundaries

1:4,514

0 0.04 0.09 0.17 mi

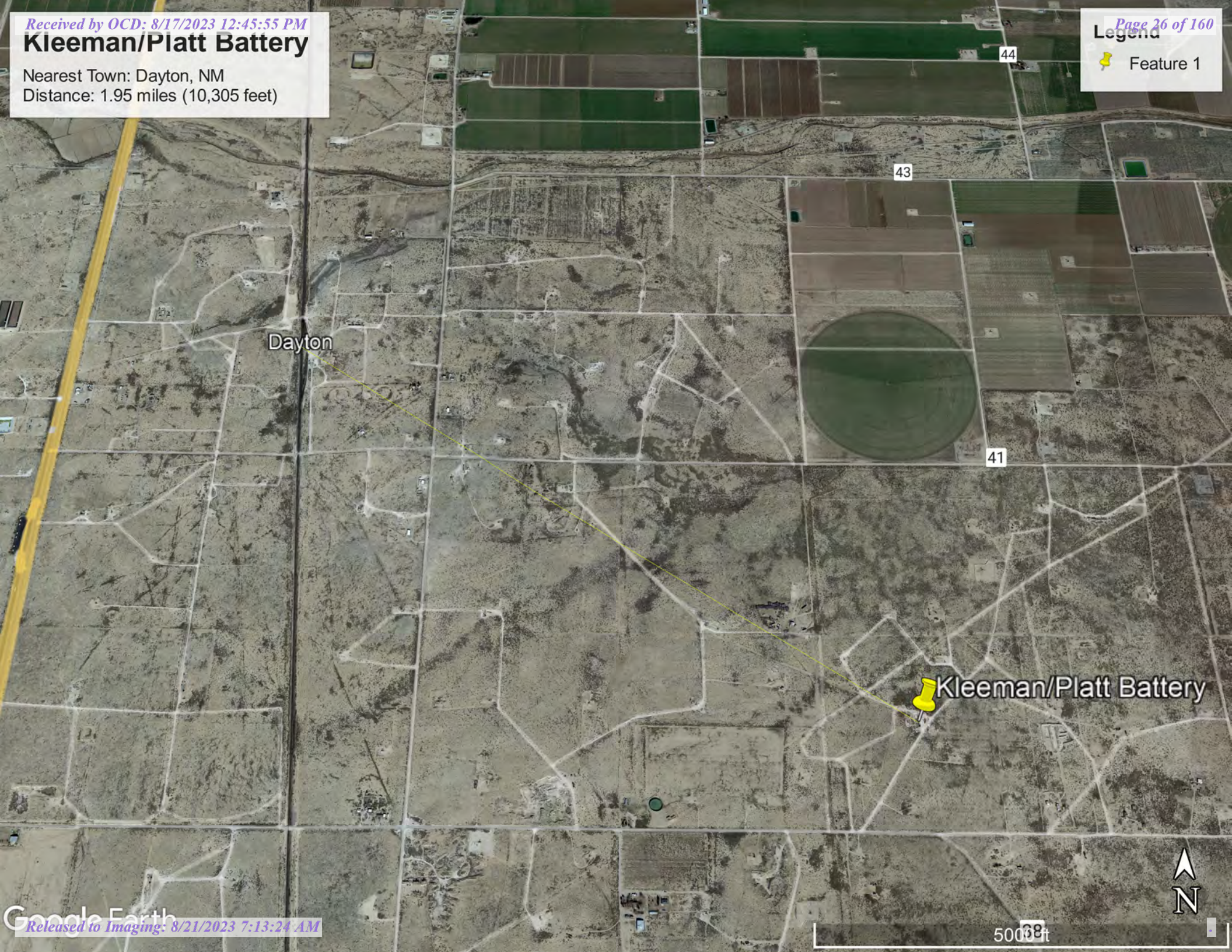
0 0.05 0.1 0.2 km

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

Printed from Public Web Map
Unofficial Map from OSE POD Locations Web Application

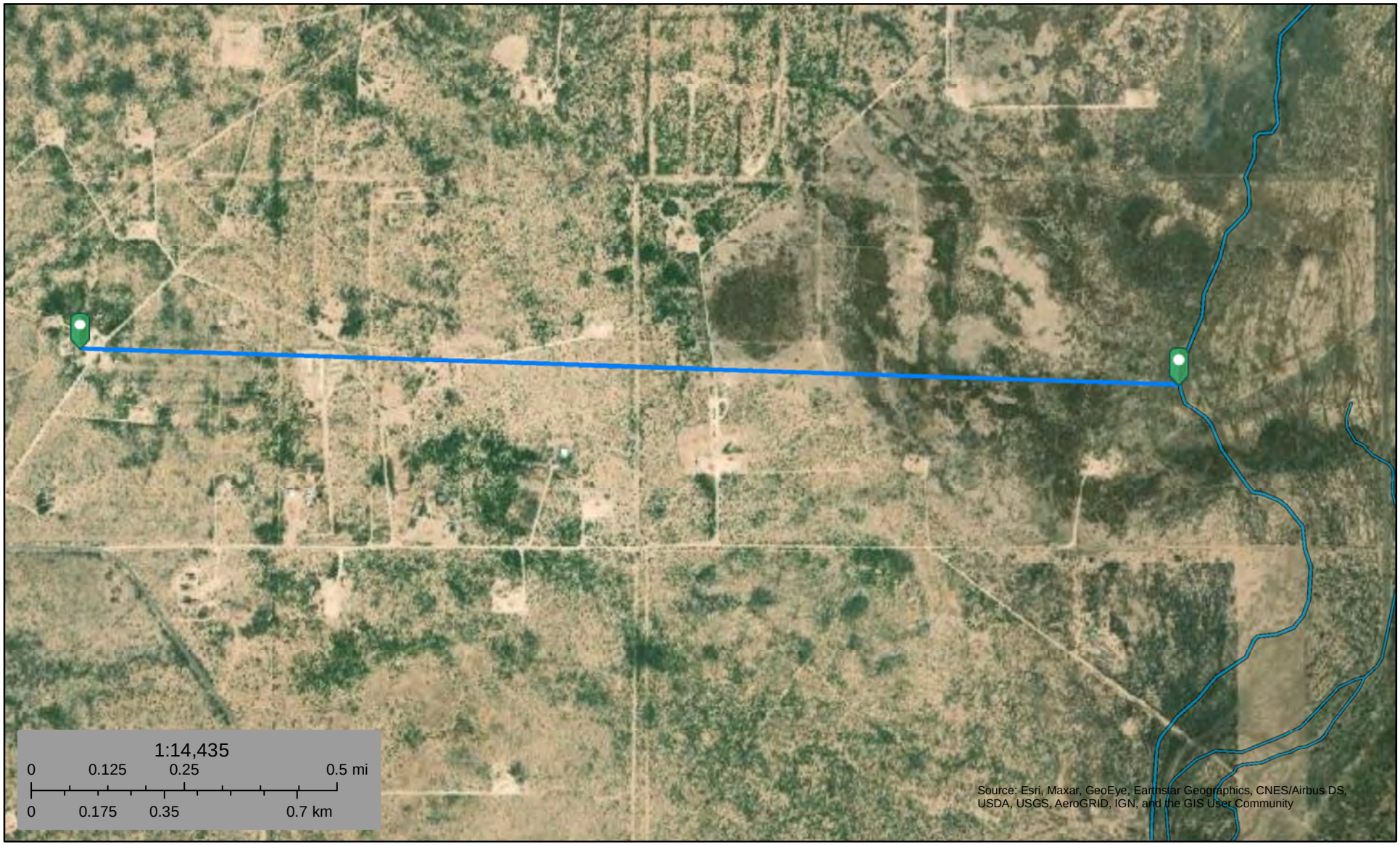
Kleeman/Platt Battery

Nearest Town: Dayton, NM
Distance: 1.95 miles (10,305 feet)



U.S. Fish and Wildlife Service
National Wetlands Inventory

Kleeman/Platt Battery



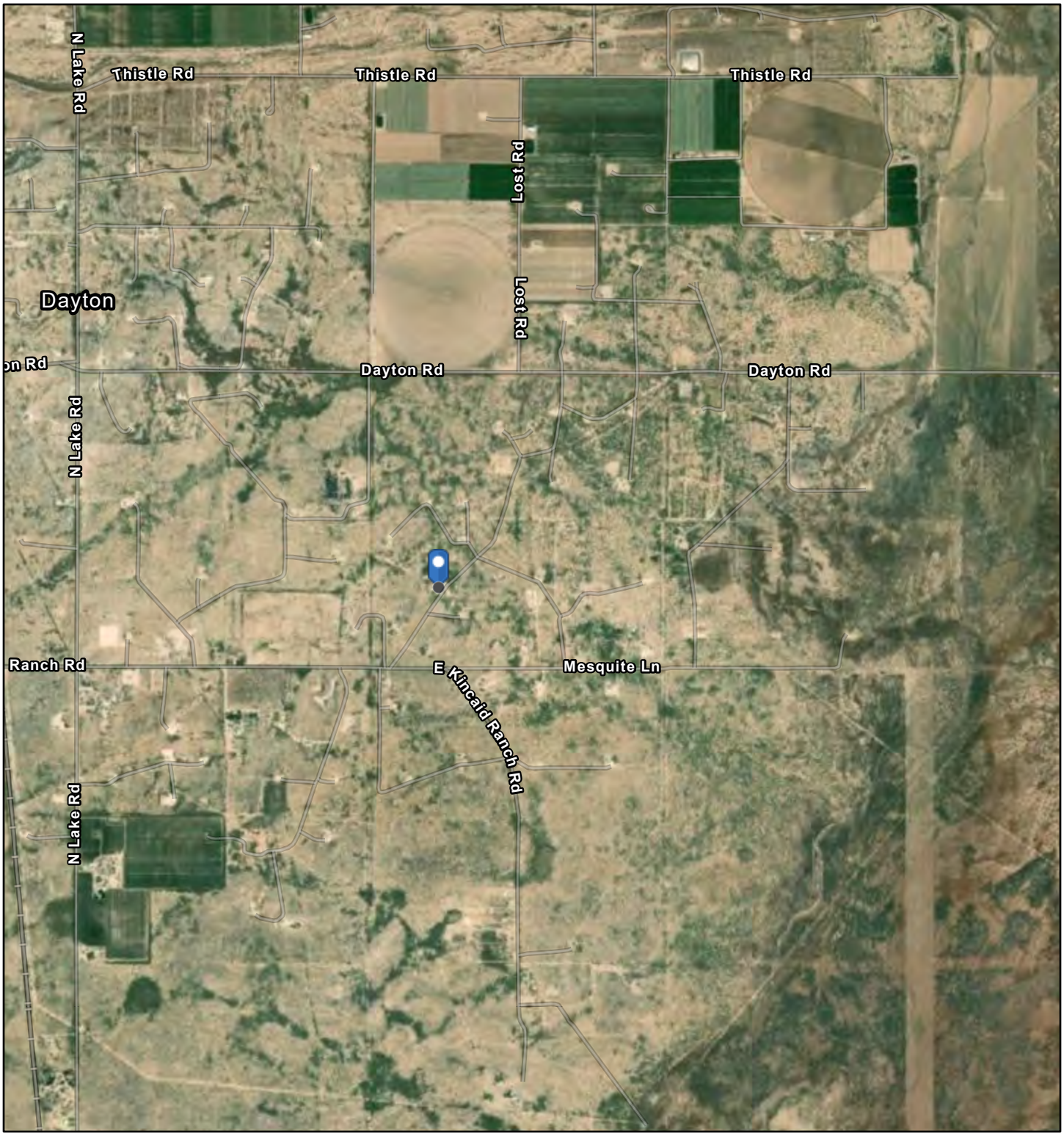
November 15, 2021

Wetlands

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

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

Kleeman/Platt Battery



11/15/2021, 4:13:18 PM

1:36,112

0 0.25 0.5 1 mi

0 0.4 0.8 1.6 km

Maxar, New Mexico State University, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

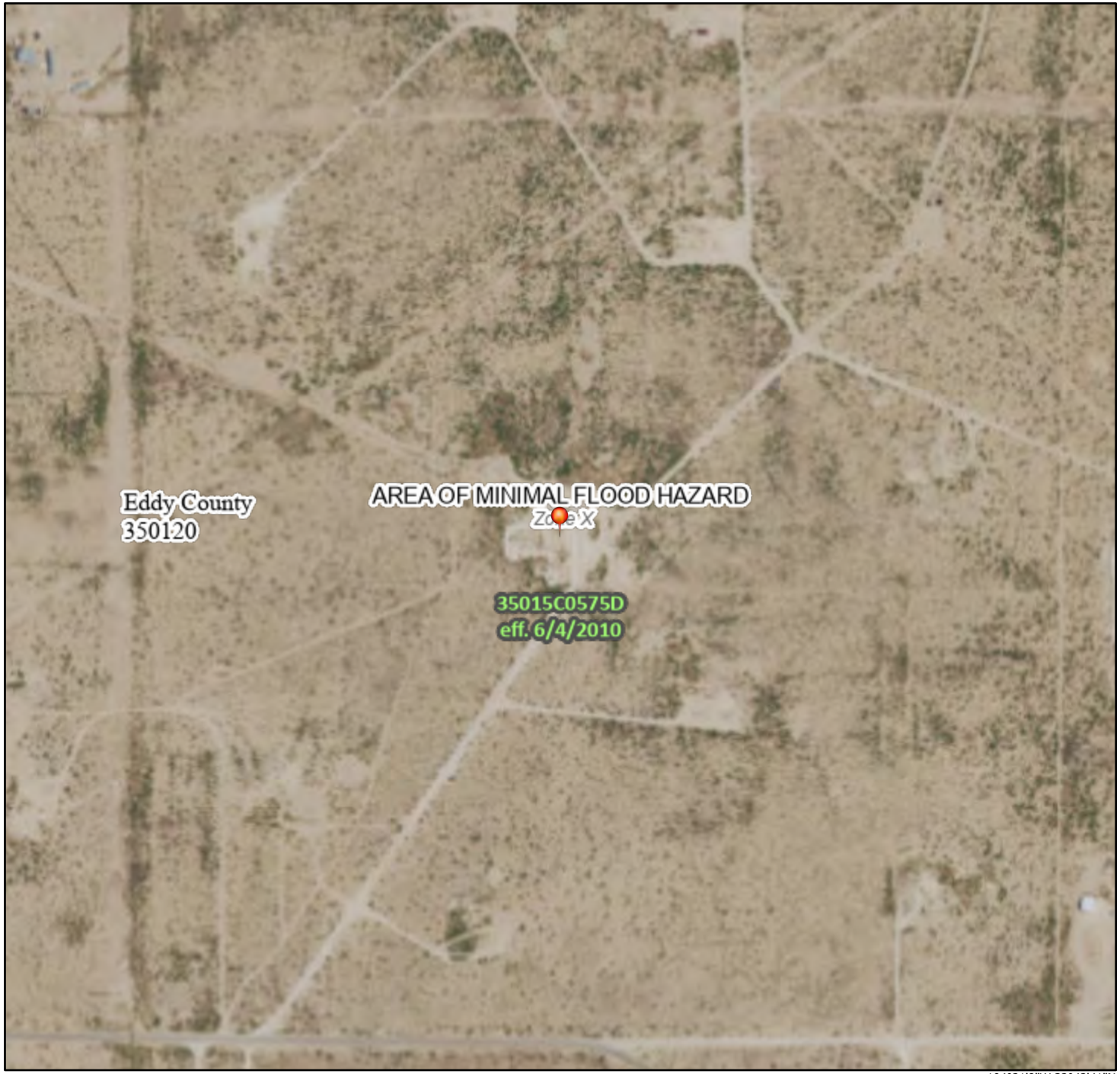
EMNRD MMD GIS Coordinator

Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappbuilder/index.html?id=7ebfa3c432db42978d66c99a9cc8311a)

National Flood Hazard Layer FIRMette

FEMA

104°21'45"W 32°43'11"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°21'8"W 32°42'41"N

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

Legend

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

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/15/2021 at 5:43 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Soil Map—Eddy Area, New Mexico

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

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

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

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Rc	Reagan loam, 0 to 1 percent slopes	4.1	92.2%
Rd	Reagan loam, 1 to 3 percent slopes	0.3	7.8%
Totals for Area of Interest		**4.4**	**100.0%**

Eddy Area, New Mexico

Rc—Reagan loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 1w5l
Elevation: 1,100 to 5,300 feet
Mean annual precipitation: 7 to 15 inches
Mean annual air temperature: 57 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Reagan and similar soils: 97 percent
Minor components: 3 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 82 inches: loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: B

Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Minor Components

Reeves
Percent of map unit: 1 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Reagan
Percent of map unit: 1 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Upton
Percent of map unit: 1 percent
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Data Source Information

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

Eddy Area, New Mexico

Rd—Reagan loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1w5m
Elevation: 1,100 to 4,400 feet
Mean annual precipitation: 7 to 15 inches
Mean annual air temperature: 60 to 70 degrees F
Frost-free period: 200 to 240 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Reagan and similar soils: 98 percent
Minor components: 2 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 82 inches: loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B

Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Minor Components

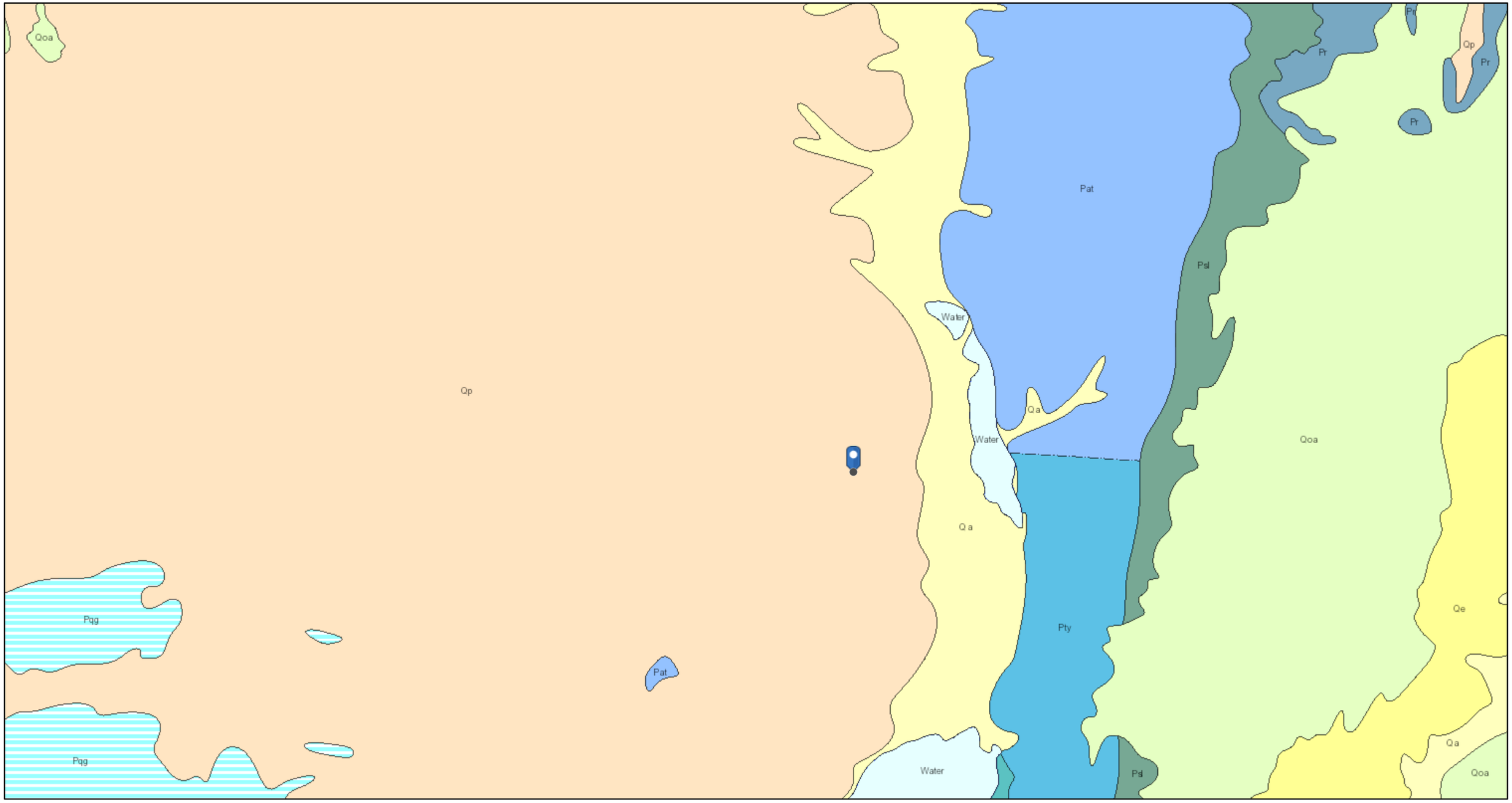
Reagan
Percent of map unit: 1 percent
Ecological site: R042XC007NM - Loamy
Hydric soil rating: No

Upton
Percent of map unit: 1 percent
Ecological site: R042XC025NM - Shallow
Hydric soil rating: No

Data Source Information

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

Kleeman/Platt Battery



11/15/2021, 3:37:55 PM

1:144,448

0 1.5 3 6 mi

0 2.25 4.5 9 km

Lithologic Contacts

- Contact, Exposed
- Contact, Gradational
- Nomenclature change

- Map Boundary

Faults

- Fault, Exposed
- Fault, Intermittent

- Fault, Concealed
- Shere Zone

Dikes

- <all other values>

- Dike
- Dike intruding fault
- Volcanic Vents

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

ArcGIS Web AppBuilder

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

ATTACHMENT 5

Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/11/2023
Site Location Name:	Kleeman PB Battery	Report Run Date:	1/11/2023 11:36 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	1/11/2023 7:52 AM
Departed Site	1/11/2023 3:48 PM

Field Notes

8:32 Arrived on site and filled out safety paperwork. Met with Standard Safety contractor and discussed work plan for the day.

8:34 Progress from earlier: Hydrovac arrived and potholed additional holes. Started excavation at the East wall near the lease road. Will continue to step out by foot increments.

9:50 Collected first set of wall samples and tested them for chlorides using the EC probe. Will continue to step out and recollect wall samples.

9:52 Currently waiting on water truck to minimize dust blown by high winds.

15:00 Continued to collect wall samples. Managed to gather some clean samples from the East wall. Both tested clean for chlorides and TPH. Also, gathered a base sample for the new excavated base. Will also send this sample for laboratory analysis. Placed soil samples into glass jar and started DSS.

15:11 Done for the day, will come back to finish excavation after west tank is removed. Done writing DSS.

Next Steps & Recommendations

1 Wait for lab analysis report.

Daily Site Visit Report

Site Photos

Viewing Direction: Southwest	**Viewing Direction**: North
	
Hydrovac utility locate	East wall
Viewing Direction: West	**Viewing Direction**: North
	
Gas pipe located	Gas pipe locate

Daily Site Visit Report

Viewing Direction: South	**Viewing Direction**: Southwest
	
West wall progress	Excavation overview
Viewing Direction: South	**Viewing Direction**: Southeast
	
East wall	Excavation overview

Daily Site Visit Report

Viewing Direction: North	**Viewing Direction**: North
	
Excavation overview	Excavation overview

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Fernando Rodriguez

Signature: 
Signature

Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	8/4/2023
Site Location Name:	Kleeman PB Battery	Report Run Date:	8/4/2023 11:01 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	8/4/2023 8:01 AM
Departed Site	8/4/2023 5:01 PM

Field Notes

9:05 Arrived at location and filled out safety paperwork. Met with Standard Safety, held safety meeting, and discussed the work plan for the day. Will continue pushing out the west wall by foot increments.

16:25 Collected WS23-01 @ 0-4ft and 4-6ft. Both were under criteria for chlorides and TPH. Also collected WS23-10 @ 4-6ft and an a additional base sample labeled: BS23-14 @ 6ft. Both also tested under criteria. Placed soil samples into glass jars and will send in for laboratory analysis.

16:26 Done for the day, contractor will bring in dump trucks to haul materials to disposal. Added sample points to Field Maps and DSS.

Next Steps & Recommendations

1

Daily Site Visit Report

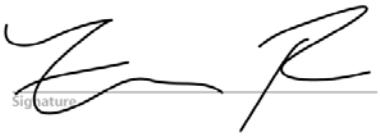
Site Photos

Viewing Direction: Southwest	**Viewing Direction**: Southeast
	
Overview of excavation	Overview of excavation
Viewing Direction: North	**Viewing Direction**: Northwest
	
Overview of excavation	Overview of excavation

Daily Site Visit Report

Daily Site Visit Signature

Inspector: Fernando Rodriguez

Signature: 

ATTACHMENT 6

From: Tina Huerta
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation; Artesia Regulatory
Subject: Kleeman PB Battery (NAB1727254031 & 2RP-4422) Sampling Notification
Date: December 12, 2022 10:47:55 AM
Attachments: image001.png

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031 & 2RP-4422

Sampling will begin at 10:45 a.m. on Wednesday, December 14, 2022 and continue through Saturday, December 17, 2022.

Thank you,

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

Artesia Division

From: Tina Huerta
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation; Artesia Regulatory
Subject: Kleeman PB Battery (NAB1727254031 & 2RP-4422) Sampling Notification
Date: December 15, 2022 8:28:45 AM
Attachments: image001.png

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031 & 2RP-4422

Sampling will begin at 8:000 a.m. on Monday, December 19, 2022 and continue through Friday, December 23, 2022.

Thank you,

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

Artesia Division

From: Amber Griffin
To: Chance Dixon
Subject: FW: [EXTERNAL] Kleeman PB Battery (NAB1727254031 & 2RP-4422) Sampling Notification
Date: January 17, 2023 10:56:27 AM
Attachments: image002.jpg
image003.png

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, December 22, 2022 8:46 AM
To: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: FW: [EXTERNAL] Kleeman PB Battery (NAB1727254031 & 2RP-4422) Sampling Notification

FYI

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, December 22, 2022 8:43 AM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Billings, Bradford, EMNRD <Bradford.Billings@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Kleeman PB Battery (NAB1727254031 & 2RP-4422) Sampling Notification

Good morning Tina,

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

Have a happy holiday,
Jocelyn Harimon

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, December 22, 2022 5:20 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: [EXTERNAL] Kleeman PB Battery (NAB1727254031 & 2RP-4422) Sampling Notification

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

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031 & 2RP-4422

Sampling will begin at 8:00 a.m. on Tuesday, December 27, 2022 and will continue through Saturday, December 31, 2022.

Thank you,

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

Artesia Division

From: Chase Settle
To: Chance Dixon; Michael Moffitt
Subject: FW: Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification
Date: December 30, 2022 12:02:27 PM
Attachments: image001.png

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, December 29, 2022 7:18 AM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031/2RP-4422

Sampling will begin at 8:00 a.m. on Tuesday, January 3, 2023 and will continue through Saturday, January 7, 2023.

Thank you,

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

Artesia Division

From: Tina Huerta
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation; Artesia Regulatory
Subject: Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification
Date: January 5, 2023 8:14:25 AM
Attachments: image001.png

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, January 9, 2023 and will continue through Sunday, January 15, 2023.

Thank you,

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

Artesia Division

From: Amber Griffin
To: Chance Dixon
Cc: Chase Settle
Subject: FW: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification
Date: January 12, 2023 10:55:40 AM
Attachments: image003.png

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, January 12, 2023 8:19 AM
To: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: FW: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

FYI

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, January 12, 2023 8:13 AM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

Tina,

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

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, January 12, 2023 5:12 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

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

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, January 16, 2023 and will continue through Sunday, January 22, 2023.

Thank you,

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

eog resources
Artesia Division

From: Tina Huerta
To: Artesia S&E Spill Remediation
Cc: Artesia Regulatory
Subject: FW: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification
Date: January 19, 2023 8:19:43 AM
Attachments: image002.jpg
image003.png

FYI

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, January 19, 2023 8:11 AM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Tina,

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

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, January 19, 2023 5:40 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

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

links or opening attachments.

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, January 23, 2023 and will continue through Saturday, January 28, 2023.

Thank you,

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

Artesia Division

From: Tina Huerta
To: Artesia S&E Spill Remediation
Cc: Artesia Regulatory
Subject: FW: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification
Date: January 19, 2023 8:19:43 AM
Attachments: image002.jpg
image003.png

FYI

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, January 19, 2023 8:11 AM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Tina,

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

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, January 19, 2023 5:40 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: [EXTERNAL] Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

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

links or opening attachments.

Good Morning,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, January 23, 2023 and will continue through Saturday, January 28, 2023.

Thank you,

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

Artesia Division

From:	Chase Settle
To:	Chance Dixon
Subject:	FW: Kleeman PB Battery (nAB1727254031/2RP-4422) Sampling Notification
Date:	July 19, 2023 2:05:58 PM
Attachments:	image001.png

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, July 19, 2023 1:52 PM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Subject: Kleeman PB Battery (nAB1727254031/2RP-4422) Sampling Notification

Good afternoon,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
nAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, July 24, 2023, and will continue through Saturday, July 29, 2023.

Thank you,

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

eog resources
Artesia Division

From: Chase Settle
To: Chance Dixon
Subject: FW: Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification
Date: July 31, 2023 8:28:09 AM

From: Miriam Morales <Miriam_Morales@eogresources.com>
Sent: Wednesday, July 26, 2023 3:43 PM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Subject: Kleeman PB Battery (NAB1727254031/2RP-4422) Sampling Notification

Good afternoon,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
NAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, July 31, 2023 and will continue through Friday, August 4, 2023.

Thank you,

Miriam Morales

From: Chase Settle
To: Chance Dixon
Subject: FW: Kleeman PB Battery (nAB1727254031/2RP-4422) Sampling Notification
Date: August 2, 2023 5:17:54 PM
Attachments: image001.png

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, August 2, 2023 5:13 PM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Kleeman PB Battery (nAB1727254031/2RP-4422) Sampling Notification

Good afternoon,

EOG Resources, Inc. respectfully submits notification (2) business days prior to conducting sampling on the following location.

Kleeman PB Battery
K-16-18S-26E
Eddy County, NM
nAB1727254031/2RP-4422

Sampling will begin at 8:30 a.m. on Monday, August 7, 2023, and will continue through Friday, August 11, 2023.

Thank you,

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

eog resources
Artesia Division

ATTACHMENT 7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 12, 2023

Chance Dixon

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

RE: Kleeman PB Battery OrderNo.: 2301269

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/7/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2301269**
Date Reported: **1/12/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-15 0-4ft
Project: Kleeman PB Battery **Collection Date:** 1/5/2023 12:00:00 PM
Lab ID: 2301269-001 **Matrix:** MEOH (SOIL) **Received Date:** 1/7/2023 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/10/2023 2:25:42 PM
Motor Oil Range Organics (MRO)	78	49		mg/Kg	1	1/10/2023 2:25:42 PM
Surr: DNOP	87.2	21-129		%Rec	1	1/10/2023 2:25:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	1/10/2023 1:17:00 PM
Surr: BFB	106	37.7-212		%Rec	1	1/10/2023 1:17:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.016		mg/Kg	1	1/10/2023 1:17:00 PM
Toluene	ND	0.033		mg/Kg	1	1/10/2023 1:17:00 PM
Ethylbenzene	ND	0.033		mg/Kg	1	1/10/2023 1:17:00 PM
Xylenes, Total	ND	0.066		mg/Kg	1	1/10/2023 1:17:00 PM
Surr: 4-Bromofluorobenzene	119	70-130		%Rec	1	1/10/2023 1:17:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	300	60		mg/Kg	20	1/10/2023 11:27:26 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301269**

12-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **MB-72544**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **72544**	RunNo: **93840**
Prep Date: **1/10/2023**	Analysis Date: **1/10/2023**	SeqNo: **3388410** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72544**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **72544**	RunNo: **93840**
Prep Date: **1/10/2023**	Analysis Date: **1/10/2023**	SeqNo: **3388411** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301269**

12-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **2301269-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS22-15 0-4ft**	Batch ID: **72538**	RunNo: **93847**
Prep Date: **1/10/2023**	Analysis Date: **1/10/2023**	SeqNo: **3387684** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	35	8.8	43.94	0	78.9	36.1	154			
Surr: DNOP	4.8		4.394		109	21	129			

Sample ID: **LCS-72538**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72538**	RunNo: **93847**
Prep Date: **1/10/2023**	Analysis Date: **1/10/2023**	SeqNo: **3387687** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.8	64.4	127			
Surr: DNOP	5.3		5.000		106	21	129			

Sample ID: **MB-72538**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72538**	RunNo: **93847**
Prep Date: **1/10/2023**	Analysis Date: **1/10/2023**	SeqNo: **3387689** 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	8.8		10.00		88.2	21	129			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301269**

12-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387661** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.9	72.3	137			
Surr: BFB	2300		1000		227	37.7	212			S

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387662** 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		103	37.7	212			

Sample ID: **2301269-001a ms**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS22-15 0-4ft**	Batch ID: **R93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387664** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	16	3.3	16.44	0	95.9	70	130			
Surr: BFB	1500		657.5		221	37.7	212			S

Sample ID: **2301269-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS22-15 0-4ft**	Batch ID: **R93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387665** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	15	3.3	16.44	0	93.9	70	130	2.11	20	
Surr: BFB	1400		657.5		217	37.7	212	0	0	S

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301269**

12-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387667** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.2	0.050	1.000	0	117	80	120			
Ethylbenzene	1.2	0.050	1.000	0	119	80	120			
Xylenes, Total	3.6	0.10	3.000	0	119	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		127	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387668** 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	1.2		1.000		123	70	130			

Sample ID: **2301269-001a ms**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WS22-15 0-4ft**	Batch ID: **BS93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387670** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.73	0.016	0.6575	0	110	68.8	120			
Toluene	0.75	0.033	0.6575	0	114	73.6	124			
Ethylbenzene	0.75	0.033	0.6575	0	114	72.7	129			
Xylenes, Total	2.3	0.066	1.972	0	115	75.7	126			
Surr: 4-Bromofluorobenzene	0.80		0.6575		122	70	130			

Sample ID: **2301269-001A MSD**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WS22-15 0-4ft**	Batch ID: **BS93846**	RunNo: **93846**
Prep Date:	Analysis Date: **1/10/2023**	SeqNo: **3387671** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.70	0.016	0.6575	0	106	68.8	120	4.16	20	
Toluene	0.72	0.033	0.6575	0	109	73.6	124	4.20	20	
Ethylbenzene	0.72	0.033	0.6575	0	110	72.7	129	4.05	20	
Xylenes, Total	2.2	0.066	1.972	0	110	75.7	126	3.95	20	
Surr: 4-Bromofluorobenzene	0.79		0.6575		119	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental 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: **2301269** RcptNo: **1**

Received By: **Cheyenne Cason** **1/7/2023 8:30:00 AM** CMC

Completed By: **Cheyenne Cason** **1/7/2023 8:47:09 AM** CMC

Reviewed By: JM 1/9/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. 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 1/7/23

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	3.0	Good	Not Present	Yogi		

Chain-of-Custody Record

Client: ~~XTO~~ EOG Resources (Vertex)

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 24 HR

Project Name: Kleeman PB Battery

Project #: 22E-00123-13

Project Manager: Chance Dixon

Sampler: Fernando Rodriguez

On Ice: ☒ Yes ☐ No

# of Coolers: 1 Yogi

Cooler Temp(including CF): 3.0-0=3.0 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2301269	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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
01/05	12:00	Soil	WS2@-15 0-4ft	4oz Jar	Ice	001	✓	✓					✓			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/5/23	18:00				1/6/23	930
1/6/23	1900			Courier	1/7/23	0830

Remarks: CC: Chance Dixon & Fernando Rodriguez

Direct Bill to EOG

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 17, 2023

Chance Dixon

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

RE: Kleeman PB Battery OrderNo.: 2301521

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/13/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2301521**
Date Reported: **1/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-13 0-4ft
Project: Kleeman PB Battery **Collection Date:** 1/11/2023 12:00:00 PM
Lab ID: 2301521-001 **Matrix:** MEOH (SOIL) **Received Date:** 1/13/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	1/13/2023 4:54:41 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/13/2023 4:54:41 PM
Surr: DNOP	101	69-147		%Rec	1	1/13/2023 4:54:41 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	1/13/2023 9:59:00 AM
Surr: BFB	101	37.7-212		%Rec	1	1/13/2023 9:59:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.021		mg/Kg	1	1/13/2023 9:59:00 AM
Toluene	ND	0.042		mg/Kg	1	1/13/2023 9:59:00 AM
Ethylbenzene	ND	0.042		mg/Kg	1	1/13/2023 9:59:00 AM
Xylenes, Total	ND	0.084		mg/Kg	1	1/13/2023 9:59:00 AM
Surr: 4-Bromofluorobenzene	121	70-130		%Rec	1	1/13/2023 9:59:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	1/13/2023 7:59:36 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2301521**
Date Reported: **1/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-14 0-4ft
Project: Kleeman PB Battery **Collection Date:** 1/11/2023 12:05:00 PM
Lab ID: 2301521-002 **Matrix:** MEOH (SOIL) **Received Date:** 1/13/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	1/13/2023 5:26:32 PM
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/13/2023 5:26:32 PM
Surr: DNOP	102	69-147		%Rec	1	1/13/2023 5:26:32 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	1/13/2023 10:19:00 AM
Surr: BFB	104	37.7-212		%Rec	1	1/13/2023 10:19:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.021		mg/Kg	1	1/13/2023 10:19:00 AM
Toluene	ND	0.042		mg/Kg	1	1/13/2023 10:19:00 AM
Ethylbenzene	ND	0.042		mg/Kg	1	1/13/2023 10:19:00 AM
Xylenes, Total	ND	0.085		mg/Kg	1	1/13/2023 10:19:00 AM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/13/2023 10:19:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	1/13/2023 8:12:00 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2301521**
Date Reported: **1/17/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS22-11 4ft
Project: Kleeman PB Battery **Collection Date:** 1/11/2023 12:10:00 PM
Lab ID: 2301521-003 **Matrix:** MEOH (SOIL) **Received Date:** 1/13/2023 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/13/2023 6:08:33 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/13/2023 6:08:33 PM
Surr: DNOP	107	69-147		%Rec	1	1/13/2023 6:08:33 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	1/13/2023 10:38:00 AM
Surr: BFB	99.7	37.7-212		%Rec	1	1/13/2023 10:38:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**
Benzene	ND	0.020		mg/Kg	1	1/13/2023 10:38:00 AM
Toluene	ND	0.041		mg/Kg	1	1/13/2023 10:38:00 AM
Ethylbenzene	ND	0.041		mg/Kg	1	1/13/2023 10:38:00 AM
Xylenes, Total	ND	0.081		mg/Kg	1	1/13/2023 10:38:00 AM
Surr: 4-Bromofluorobenzene	123	70-130		%Rec	1	1/13/2023 10:38:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	1300	60		mg/Kg	20	1/13/2023 8:24:24 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301521**

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **MB-72624**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **72624**	RunNo: **93954**
Prep Date: **1/13/2023**	Analysis Date: **1/13/2023**	SeqNo: **3392199** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72624**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **72624**	RunNo: **93954**
Prep Date: **1/13/2023**	Analysis Date: **1/13/2023**	SeqNo: **3392200** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301521**

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **LCS-72610**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72610**	RunNo: **93948**
Prep Date: **1/13/2023**	Analysis Date: **1/13/2023**	SeqNo: **3392044** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.8	61.9	130			
Surr: DNOP	5.3		5.000		107	69	147			

Sample ID: **MB-72610**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72610**	RunNo: **93948**
Prep Date: **1/13/2023**	Analysis Date: **1/13/2023**	SeqNo: **3392046** 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		107	69	147			

Sample ID: **2301521-001AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS22-13 0-4ft**	Batch ID: **72610**	RunNo: **93948**
Prep Date: **1/13/2023**	Analysis Date: **1/13/2023**	SeqNo: **3392746** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	33	8.6	43.07	0	76.0	54.2	135			
Surr: DNOP	12		12.92		95.5	69	147			

Sample ID: **2301521-001AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS22-13 0-4ft**	Batch ID: **72610**	RunNo: **93948**
Prep Date: **1/13/2023**	Analysis Date: **1/13/2023**	SeqNo: **3392747** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	9.5	47.48	0	76.2	54.2	135	10.1	29.2	
Surr: DNOP	5.1		4.748		107	69	147	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301521**

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **lcs-72605**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **72605**	RunNo: **93931**
Prep Date: **1/12/2023**	Analysis Date: **1/13/2023**	SeqNo: **3391419** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	104	72.3	137			
Surr: BFB	2300		1000		228	37.7	212			S

Sample ID: **mb-72605**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **72605**	RunNo: **93931**
Prep Date: **1/12/2023**	Analysis Date: **1/13/2023**	SeqNo: **3391577** 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		103	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2301521**

17-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **lcs-72605**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **72605**	RunNo: **93931**
Prep Date: **1/12/2023**	Analysis Date: **1/13/2023**	SeqNo: **3391420** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.025	1.000	0	114	80	120			
Toluene	1.2	0.050	1.000	0	116	80	120			
Ethylbenzene	1.2	0.050	1.000	0	115	80	120			
Xylenes, Total	3.5	0.10	3.000	0	115	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		122	70	130			

Sample ID: **mb-72605**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **72605**	RunNo: **93931**
Prep Date: **1/12/2023**	Analysis Date: **1/13/2023**	SeqNo: **3391578** 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	1.2		1.000		122	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2301521

RcptNo: 1

Received By: Juan Rojas 1/13/2023 7:40:00 AM

Completed By: Sean Livingston 1/13/2023 7:59:14 AM

Reviewed By: CMC 1/13/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. 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: SL 1/13/23

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	0.3	Good	Not Present	YOGI		

Chain-of-Custody Record

Client: EOG Resources (Vertex)

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 24 Hr

Project Name: Keeman PB Battery

Project #: 22E-00123-13

Project Manager: Chance Dixon

Sampler: Fernando Rodriguez

On Ice: ☒ Yes ☐ No

# of Coolers: 1 Yeti

Cooler Temp(including CF): 0.3-0=0.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 230152	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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
01/11	12:00	Soil	WSS2-13 0-4ft	4oz jar	Ice	001	✓	✓					✓			
01/11	12:05	Soil	WSS2-14 0-4ft	4oz jar	Ice	002	✓	✓					✓			
01/11	12:10	Soil	BSS2-11 4ft	4oz jar	Ice	003	✓	✓					✓			

Analysis Request

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
01/11	17:30				1/12/23	845
1/12/23	1900				1/13/23	7:40

Remarks: cc: Chance Dixon & Fernando Rodriguez

Direct Bill to EOG

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 07, 2023

Chance Dixon

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

RE: Kleeman PB Battery OrderNo.: 2308195

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/3/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2308195**
Date Reported: **8/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS23-12 6ft
Project: Kleeman PB Battery **Collection Date:** 8/1/2023 12:00:00 PM
Lab ID: 2308195-001 **Matrix:** MEOH (SOIL) **Received Date:** 8/3/2023 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)	41	9.7		mg/Kg	1	8/4/2023 1:53:19 AM
Motor Oil Range Organics (MRO)	50	49		mg/Kg	1	8/4/2023 1:53:19 AM
Surr: DNOP	96.1	69-147		%Rec	1	8/4/2023 1:53:19 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	8/4/2023 5:27:00 AM
Surr: BFB	94.3	15-244		%Rec	1	8/4/2023 5:27:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.023		mg/Kg	1	8/4/2023 5:27:00 AM
Toluene	ND	0.046		mg/Kg	1	8/4/2023 5:27:00 AM
Ethylbenzene	ND	0.046		mg/Kg	1	8/4/2023 5:27:00 AM
Xylenes, Total	ND	0.092		mg/Kg	1	8/4/2023 5:27:00 AM
Surr: 4-Bromofluorobenzene	90.2	39.1-146		%Rec	1	8/4/2023 5:27:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	700	60		mg/Kg	20	8/3/2023 5:40:23 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2308195**
Date Reported: **8/7/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS23-13 6ft
Project: Kleeman PB Battery **Collection Date:** 8/1/2023 12:05:00 PM
Lab ID: 2308195-002 **Matrix:** MEOH (SOIL) **Received Date:** 8/3/2023 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)	41	9.7		mg/Kg	1	8/4/2023 2:18:03 AM
Motor Oil Range Organics (MRO)	55	48		mg/Kg	1	8/4/2023 2:18:03 AM
Surr: DNOP	96.4	69-147		%Rec	1	8/4/2023 2:18:03 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	5.1		mg/Kg	1	8/4/2023 5:49:00 AM
Surr: BFB	97.7	15-244		%Rec	1	8/4/2023 5:49:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.025		mg/Kg	1	8/4/2023 5:49:00 AM
Toluene	ND	0.051		mg/Kg	1	8/4/2023 5:49:00 AM
Ethylbenzene	ND	0.051		mg/Kg	1	8/4/2023 5:49:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/4/2023 5:49:00 AM
Surr: 4-Bromofluorobenzene	94.5	39.1-146		%Rec	1	8/4/2023 5:49:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **RBC**
Chloride	490	60		mg/Kg	20	8/3/2023 6:17:36 PM

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308195**

07-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **LCS-76659**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **76659**	RunNo: **98737**
Prep Date: **8/3/2023**	Analysis Date: **8/3/2023**	SeqNo: **3596542** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.7	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308195**

07-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **MB-76650**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **76650**	RunNo: **98707**
Prep Date: **8/3/2023**	Analysis Date: **8/3/2023**	SeqNo: **3595364** 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		89.3	69	147			

Sample ID: **LCS-76650**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76650**	RunNo: **98707**
Prep Date: **8/3/2023**	Analysis Date: **8/3/2023**	SeqNo: **3595365** 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	88.7	61.9	130			
Surr: DNOP	4.5		5.000		89.1	69	147			

Sample ID: **2308195-002AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BS23-13 6ft**	Batch ID: **76650**	RunNo: **98707**
Prep Date: **8/3/2023**	Analysis Date: **8/4/2023**	SeqNo: **3595656** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	79	9.8	49.07	41.18	77.9	54.2	135			
Surr: DNOP	4.5		4.907		91.2	69	147			

Sample ID: **2308195-002AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **BS23-13 6ft**	Batch ID: **76650**	RunNo: **98707**
Prep Date: **8/3/2023**	Analysis Date: **8/4/2023**	SeqNo: **3595657** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	97	9.6	48.12	41.18	116	54.2	135	20.0	29.2	
Surr: DNOP	4.6		4.812		94.9	69	147	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308195**

07-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **100ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3594928** 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	87.4	70	130			
Surr: BFB	2200		1000		215	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3594929** 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		105	15	244			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3596291** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.6	70	130			
Surr: BFB	2100		1000		207	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3596292** 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	15	244			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308195**

07-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3594931** 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	94.8	70	130			
Toluene	0.96	0.050	1.000	0	96.2	70	130			
Ethylbenzene	0.97	0.050	1.000	0	96.7	70	130			
Xylenes, Total	2.9	0.10	3.000	0	96.5	70	130			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.7	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3594932** 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	0.95		1.000		95.2	39.1	146			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3596324** 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	70	130			
Toluene	0.96	0.050	1.000	0	96.3	70	130			
Ethylbenzene	0.97	0.050	1.000	0	97.2	70	130			
Xylenes, Total	2.9	0.10	3.000	0	97.2	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		95.4	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R98690**	RunNo: **98690**
Prep Date:	Analysis Date: **8/3/2023**	SeqNo: **3596325** 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	0.95		1.000		95.2	39.1	146			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2308195 RcptNo: 1

Received By: Tracy Casarrubias 8/3/2023 7:20:00 AM

Completed By: Tracy Casarrubias 8/3/2023 8:27:05 AM

Reviewed By: TMC 8/3/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. 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: SCM 08/03/23

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: Mailing address,phone number and Email/Fax are missing on COC - TMC 8/3/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	10.1	Good	Yes	Yogi		

Chain-of-Custody Record

Client: Vertex Resources (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: 24 HOUR

☐ Standard ☒ Rush ~~48 HOUR~~

Project Name: Kleeman PB Battery

Project #: 22E-00123-13

Project Manager: Chance Dixon

Sampler: Fernando Rodriguez

On Ice: ☑ Yes ☒ No TMH 8/3/23 409

# of Coolers: 1

Cooler Temp(including CF): 9.9 + 0.2 = 10.1 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2308195	(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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/1	12:00	Soil	BS23-12 6ft	4oz Jar	Ice	001	✓	✓					✓			
8/1	12:05	Soil	BS23-13 6ft	4oz Jar	Ice	002	✓	✓					✓			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/1	16:00				8/2/23	815
8/2/23	1900				8/3/23	7:20

Remarks: CC: Chance Dixon & Fernando Rodriguez

RUSH 24 HOUR

Direct Bill to EOG

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

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

August 14, 2023

Chance Dixon

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

RE: Kleenman PB Battery OrderNo.: 2308378

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/8/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2308378**
Date Reported: **8/14/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS23-01 0-4ft
Project: Kleenman PB Battery **Collection Date:** 8/4/2023 12:00:00 PM
Lab ID: 2308378-001 **Matrix:** MEOH (SOIL) **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	12	9.6		mg/Kg	1	8/8/2023 12:46:39 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/8/2023 12:46:39 PM
Surr: DNOP	98.8	69-147		%Rec	1	8/8/2023 12:46:39 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/8/2023 11:03:00 AM
Surr: BFB	101	15-244		%Rec	1	8/8/2023 11:03:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.025		mg/Kg	1	8/8/2023 11:03:00 AM
Toluene	ND	0.050		mg/Kg	1	8/8/2023 11:03:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/8/2023 11:03:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/8/2023 11:03:00 AM
Surr: 4-Bromofluorobenzene	93.1	39.1-146		%Rec	1	8/8/2023 11:03:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	150	60		mg/Kg	20	8/8/2023 6:19:14 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2308378**
Date Reported: **8/14/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS23-01 4-6ft
Project: Kleenman PB Battery **Collection Date:** 8/4/2023 12:05:00 PM
Lab ID: 2308378-002 **Matrix:** MEOH (SOIL) **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	8/8/2023 1:06:53 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/8/2023 1:06:53 PM
Surr: DNOP	100	69-147		%Rec	1	8/8/2023 1:06:53 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/8/2023 11:25:00 AM
Surr: BFB	98.0	15-244		%Rec	1	8/8/2023 11:25:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.025		mg/Kg	1	8/8/2023 11:25:00 AM
Toluene	ND	0.050		mg/Kg	1	8/8/2023 11:25:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/8/2023 11:25:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/8/2023 11:25:00 AM
Surr: 4-Bromofluorobenzene	94.4	39.1-146		%Rec	1	8/8/2023 11:25:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	750	60		mg/Kg	20	8/8/2023 6:31:34 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2308378**
Date Reported: **8/14/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS23-14 6ft
Project: Kleenman PB Battery **Collection Date:** 8/4/2023 12:10:00 PM
Lab ID: 2308378-003 **Matrix:** MEOH (SOIL) **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/8/2023 1:26:27 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/8/2023 1:26:27 PM
Surr: DNOP	102	69-147		%Rec	1	8/8/2023 1:26:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/8/2023 11:47:00 AM
Surr: BFB	101	15-244		%Rec	1	8/8/2023 11:47:00 AM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.025		mg/Kg	1	8/8/2023 11:47:00 AM
Toluene	ND	0.050		mg/Kg	1	8/8/2023 11:47:00 AM
Ethylbenzene	ND	0.050		mg/Kg	1	8/8/2023 11:47:00 AM
Xylenes, Total	ND	0.10		mg/Kg	1	8/8/2023 11:47:00 AM
Surr: 4-Bromofluorobenzene	94.6	39.1-146		%Rec	1	8/8/2023 11:47:00 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	200	60		mg/Kg	20	8/8/2023 6:43:54 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.
B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix
E	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2308378**
Date Reported: **8/14/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS23-10 4-6ft
Project: Kleenman PB Battery **Collection Date:** 8/4/2023 12:15:00 PM
Lab ID: 2308378-004 **Matrix:** MEOH (SOIL) **Received Date:** 8/8/2023 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	22	9.4		mg/Kg	1	8/8/2023 1:45:16 PM
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/8/2023 1:45:16 PM
Surr: DNOP	104	69-147		%Rec	1	8/8/2023 1:45:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **KMN**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/8/2023 12:09:00 PM
Surr: BFB	104	15-244		%Rec	1	8/8/2023 12:09:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **KMN**
Benzene	ND	0.025		mg/Kg	1	8/8/2023 12:09:00 PM
Toluene	ND	0.050		mg/Kg	1	8/8/2023 12:09:00 PM
Ethylbenzene	ND	0.050		mg/Kg	1	8/8/2023 12:09:00 PM
Xylenes, Total	ND	0.10		mg/Kg	1	8/8/2023 12:09:00 PM
Surr: 4-Bromofluorobenzene	95.7	39.1-146		%Rec	1	8/8/2023 12:09:00 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	770	60		mg/Kg	20	8/8/2023 6:56:14 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308378**

14-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleenman PB Battery

Sample ID: **MB-76733**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **76733**	RunNo: **98815**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3600091** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-76733**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **76733**	RunNo: **98815**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3600092** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.3	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308378**

14-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleenman PB Battery

Sample ID: **MB-76724**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **76724**	RunNo: **98804**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599568** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.5		10.00		94.8	69	147			

Sample ID: **LCS-76724**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76724**	RunNo: **98804**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599569** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	67	10	50.00	0	134	61.9	130			S
Surr: DNOP	4.8		5.000		95.6	69	147			

Sample ID: **2308378-004AMS**	SampType: **MS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS23-10 4-6ft**	Batch ID: **76724**	RunNo: **98804**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599574** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	9.7	48.54	22.13	62.0	54.2	135			
Surr: DNOP	4.8		4.854		99.1	69	147			

Sample ID: **2308378-004AMSD**	SampType: **MSD**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS23-10 4-6ft**	Batch ID: **76724**	RunNo: **98804**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599575** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.3	46.60	22.13	68.6	54.2	135	3.94	29.2	
Surr: DNOP	4.8		4.660		104	69	147	0	0	

Sample ID: **MB-76708**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **76708**	RunNo: **98810**
Prep Date: **8/7/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599929** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.4		10.00		94.4	69	147			

Sample ID: **LCS-76708**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76708**	RunNo: **98810**
Prep Date: **8/7/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599930** Units: **%Rec**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308378**

14-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleenman PB Battery

Sample ID: **LCS-76708**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76708**	RunNo: **98810**
Prep Date: **8/7/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599930** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		113	69	147			

Sample ID: **LCS-76724**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **76724**	RunNo: **98810**
Prep Date: **8/8/2023**	Analysis Date: **8/8/2023**	SeqNo: **3599947** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.9	61.9	130			
Surr: DNOP	4.5		5.000		90.7	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308378**

14-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleenman PB Battery

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **A98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600198** 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	96.6	70	130			
Surr: BFB	2200		1000		223	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **A98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600199** 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		103	15	244			

Sample ID: **2308378-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS23-01 0-4ft**	Batch ID: **A98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600204** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.8	70	130			
Surr: BFB	2100		1000		209	15	244			

Sample ID: **2308378-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS23-01 0-4ft**	Batch ID: **A98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600205** 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	91.4	70	130	3.74	20	
Surr: BFB	2100		1000		209	15	244	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308378**

14-Aug-23

Client: Vertex Resources Services, Inc.

Project: Kleenman PB Battery

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600230** 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	90.2	70	130			
Toluene	0.90	0.050	1.000	0	90.0	70	130			
Ethylbenzene	0.93	0.050	1.000	0	92.9	70	130			
Xylenes, Total	2.8	0.10	3.000	0	93.3	70	130			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600231** 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	0.94		1.000		94.3	39.1	146			

Sample ID: **2308378-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WS23-01 4-6ft**	Batch ID: **R98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600236** 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	89.9	70	130			
Toluene	0.90	0.050	1.000	0	89.9	70	130			
Ethylbenzene	0.92	0.050	1.000	0	92.1	70	130			
Xylenes, Total	2.8	0.10	3.000	0	92.3	70	130			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.0	39.1	146			

Sample ID: **2308378-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WS23-01 4-6ft**	Batch ID: **R98817**	RunNo: **98817**
Prep Date:	Analysis Date: **8/8/2023**	SeqNo: **3600237** 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	87.8	70	130	2.44	20	
Toluene	0.88	0.050	1.000	0	88.0	70	130	2.18	20	
Ethylbenzene	0.90	0.050	1.000	0	90.3	70	130	1.93	20	
Xylenes, Total	2.7	0.10	3.000	0	90.8	70	130	1.65	20	
Surr: 4-Bromofluorobenzene	0.93		1.000		93.3	39.1	146	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental 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: 2308378

RcptNo: 1

Received By: Steve McQuiston 8/8/2023 7:20:00 AM

Completed By: Tracy Casarrubias 8/8/2023 8:08:45 AM

Reviewed By: JM 8/8/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. 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 ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted?
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SCM 08/08/23

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: Mailling address, phone number, and Email/Fax - TMC 8/8/23

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes	Morty		

Chain-of-Custody Record

Client: Vertex Resources (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: 24 hr

☐ Standard ☒ Rush

Project Name: Keenan PB Battery

Project #: 22E-00123-13

Project Manager: Chance Dixon

Sampler: Fernando Rodriguez

On Ice: ☒ Yes ☐ No

# of Coolers: 1 MORTV

Cooler Temp(Including CF): 3.0-0=3.0 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2308378	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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
8/4	12:00	Soil	WSZ3-01 0-4Ft	4oz Jar	ICE	001	✓	✓					✓			
8/4	12:05	Soil	WSZ3-01 4-6Ft	↓	↓	002	✓	✓					✓			
8/4	12:10	Soil	BSZ3-14 6Ft			003	✓	✓					✓			
8/4	12:15	Soil	WSZ3-10 4-6Ft			004	✓	✓					✓			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8/4	18:00				8/7/23	1015
8/7/23	1900		SCM	COURIER	8/8/23	0720

Remarks: CC: Chance Dixon & Fernando Rodriguez

Direct Bill to EOG

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

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

December 21, 2022

Chance Dixon

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

RE: Kleeman PB Battery OrderNo.: 2212A72

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/17/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212A72**
Date Reported: **12/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WES22-02 4'
Project: Kleeman PB Battery **Collection Date:** 12/15/2022 10:00:00 AM
Lab ID: 2212A72-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/19/2022 11:35:02 AM
Motor Oil Range Organics (MRO)	71	48		mg/Kg	1	12/19/2022 11:35:02 AM
Surr: DNOP	108	21-129		%Rec	1	12/19/2022 11:35:02 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	12/18/2022 9:05:12 AM
Surr: BFB	83.4	37.7-212		%Rec	1	12/18/2022 9:05:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.017		mg/Kg	1	12/18/2022 9:05:12 AM
Toluene	ND	0.035		mg/Kg	1	12/18/2022 9:05:12 AM
Ethylbenzene	ND	0.035		mg/Kg	1	12/18/2022 9:05:12 AM
Xylenes, Total	ND	0.070		mg/Kg	1	12/18/2022 9:05:12 AM
Surr: 4-Bromofluorobenzene	85.1	70-130		%Rec	1	12/18/2022 9:05:12 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	59		mg/Kg	20	12/19/2022 10:40:52 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A72**
Date Reported: **12/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WES22-02 2'
Project: Kleeman PB Battery **Collection Date:** 12/15/2022 10:05:00 AM
Lab ID: 2212A72-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/18/2022 2:32:27 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/18/2022 2:32:27 PM
Surr: DNOP	105	21-129		%Rec	1	12/18/2022 2:32:27 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.1		mg/Kg	1	12/18/2022 10:14:42 AM
Surr: BFB	84.3	37.7-212		%Rec	1	12/18/2022 10:14:42 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.016		mg/Kg	1	12/18/2022 10:14:42 AM
Toluene	ND	0.031		mg/Kg	1	12/18/2022 10:14:42 AM
Ethylbenzene	ND	0.031		mg/Kg	1	12/18/2022 10:14:42 AM
Xylenes, Total	ND	0.063		mg/Kg	1	12/18/2022 10:14:42 AM
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	12/18/2022 10:14:42 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	1500	60		mg/Kg	20	12/19/2022 10:53:17 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A72**
Date Reported: **12/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WES22-01 2'
Project: Kleeman PB Battery **Collection Date:** 12/15/2022 10:10:00 AM
Lab ID: 2212A72-003 **Matrix:** MEOH (SOIL) **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	570	290		mg/Kg	20	12/19/2022 12:27:42 PM
Motor Oil Range Organics (MRO)	2500	980		mg/Kg	20	12/19/2022 12:27:42 PM
Surr: DNOP	0	21-129	S	%Rec	20	12/19/2022 12:27:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	12/18/2022 11:24:13 AM
Surr: BFB	81.0	37.7-212		%Rec	1	12/18/2022 11:24:13 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.018		mg/Kg	1	12/18/2022 11:24:13 AM
Toluene	ND	0.036		mg/Kg	1	12/18/2022 11:24:13 AM
Ethylbenzene	ND	0.036		mg/Kg	1	12/18/2022 11:24:13 AM
Xylenes, Total	ND	0.071		mg/Kg	1	12/18/2022 11:24:13 AM
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	12/18/2022 11:24:13 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	130	60		mg/Kg	20	12/19/2022 11:05:41 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212A72**
Date Reported: **12/21/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WES22-01 4'
Project: Kleeman PB Battery **Collection Date:** 12/15/2022 10:15:00 AM
Lab ID: 2212A72-004 **Matrix:** MEOH (SOIL) **Received Date:** 12/17/2022 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	400	150		mg/Kg	10	12/19/2022 12:59:16 PM
Motor Oil Range Organics (MRO)	2100	500		mg/Kg	10	12/19/2022 12:59:16 PM
Surr: DNOP	0	21-129	S	%Rec	10	12/19/2022 12:59:16 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/18/2022 11:47:24 AM
Surr: BFB	82.6	37.7-212		%Rec	1	12/18/2022 11:47:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.019		mg/Kg	1	12/18/2022 11:47:24 AM
Toluene	ND	0.038		mg/Kg	1	12/18/2022 11:47:24 AM
Ethylbenzene	ND	0.038		mg/Kg	1	12/18/2022 11:47:24 AM
Xylenes, Total	ND	0.077		mg/Kg	1	12/18/2022 11:47:24 AM
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	1	12/18/2022 11:47:24 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	ND	60		mg/Kg	20	12/19/2022 11:18:05 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A72**

21-Dec-22

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **MB-72170**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **72170**	RunNo: **93390**							
Prep Date: **12/19/2022**	Analysis Date: **12/19/2022**	SeqNo: **3369283**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72170**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **72170**	RunNo: **93390**							
Prep Date: **12/19/2022**	Analysis Date: **12/19/2022**	SeqNo: **3369284**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.9	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A72**

21-Dec-22

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **LCS-72164**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72164**	RunNo: **93383**
Prep Date: **12/18/2022**	Analysis Date: **12/18/2022**	SeqNo: **3367600** 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	82.0	64.4	127			
Surr: DNOP	5.2		5.000		104	21	129			

Sample ID: **MB-72164**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72164**	RunNo: **93383**
Prep Date: **12/18/2022**	Analysis Date: **12/18/2022**	SeqNo: **3367602** 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	21	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A72**

21-Dec-22

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **A93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367045** 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		89.8	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **A93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367046** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.3	137			
Surr: BFB	1900		1000		185	37.7	212			

Sample ID: **2212a72-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WES22-02 4'**	Batch ID: **A93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367067** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.5	17.40	0	98.2	70	130			
Surr: BFB	1200		695.9		175	37.7	212			

Sample ID: **2212a72-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WES22-02 4'**	Batch ID: **A93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367068** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	17	3.5	17.40	0	97.5	70	130	0.736	20	
Surr: BFB	1200		695.9		179	37.7	212	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212A72**

21-Dec-22

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **C93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367082** 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		90.0	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **C93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367083** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.5	80	120			
Toluene	0.94	0.050	1.000	0	94.2	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.6	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		86.9	70	130			

Sample ID: **2212a72-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WES22-02 2'**	Batch ID: **C93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367104** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.59	0.016	0.6266	0	94.2	68.8	120			
Toluene	0.60	0.031	0.6266	0	95.1	73.6	124			
Ethylbenzene	0.59	0.031	0.6266	0	93.8	72.7	129			
Xylenes, Total	1.8	0.063	1.880	0.01165	92.5	75.7	126			
Surr: 4-Bromofluorobenzene	0.54		0.6266		86.8	70	130			

Sample ID: **2212a72-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WES22-02 2'**	Batch ID: **C93375**	RunNo: **93375**
Prep Date:	Analysis Date: **12/18/2022**	SeqNo: **3367105** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.60	0.016	0.6266	0	95.3	68.8	120	1.09	20	
Toluene	0.60	0.031	0.6266	0	95.8	73.6	124	0.660	20	
Ethylbenzene	0.60	0.031	0.6266	0	95.3	72.7	129	1.59	20	
Xylenes, Total	1.8	0.063	1.880	0.01165	94.6	75.7	126	2.24	20	
Surr: 4-Bromofluorobenzene	0.53		0.6266		85.2	70	130	0	0	

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental 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: 2212A72

RcptNo: 1

Received By: Desiree Dominguez 12/17/2022 10:00:00 AM DD

Completed By: Desiree Dominguez 12/17/2022 10:26:23 AM DD

Reviewed By: CMC 12/17/22

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° 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: DAD 12/17/22

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Chain-of-Custody Record

Client: EOG/Vertex

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: Same-Day
☐ Standard ☑ Rush

Project Name: Kleeman PB Battery

Project #: 22E-00123-013

Project Manager: Chance Dixon

Sampler: CD

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.5-0.1=0.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212 A72	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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/15/22	10:00	Soil	WESZZ-02 4'	4oz	Ice	-001	✓	✓					✓			
	10:05		WESZZ-02 2'			-002										
	10:10		WESZZ-01 2'			-003										
	10:15		WESZZ-01 4'			-004										

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
					12/16/22	1000
12/16/22	1900			courier	12/17/22	10:00

Remarks: Direct Bill EOG

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

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

December 30, 2022

Michael Moffit
EOG
105 South Fourth Street
Artesia, NM 88210
TEL: (575) 748-4195
FAX:

RE: Kleeman PB Battery OrderNo.: 2212B21

Dear Michael Moffit:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/20/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212B21**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** BS22-02 4ft
Project: Kleeman PB Battery **Collection Date:** 12/16/2022 12:00:00 PM
Lab ID: 2212B21-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/20/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	150	15		mg/Kg	1	12/27/2022 8:04:21 PM
Motor Oil Range Organics (MRO)	150	50		mg/Kg	1	12/27/2022 8:04:21 PM
Surr: DNOP	116	21-129		%Rec	1	12/27/2022 8:04:21 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	12/21/2022 1:18:15 AM
Surr: BFB	82.8	37.7-212		%Rec	5	12/21/2022 1:18:15 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.086		mg/Kg	5	12/21/2022 1:18:15 AM
Toluene	ND	0.17		mg/Kg	5	12/21/2022 1:18:15 AM
Ethylbenzene	ND	0.17		mg/Kg	5	12/21/2022 1:18:15 AM
Xylenes, Total	ND	0.35		mg/Kg	5	12/21/2022 1:18:15 AM
Surr: 4-Bromofluorobenzene	83.4	70-130		%Rec	5	12/21/2022 1:18:15 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/20/2022 10:00:31 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2212B21**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** BS22-03 4ft
Project: Kleeman PB Battery **Collection Date:** 12/16/2022 12:05:00 PM
Lab ID: 2212B21-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/20/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	510	300		mg/Kg	20	12/22/2022 4:48:56 AM
Motor Oil Range Organics (MRO)	1000	990		mg/Kg	20	12/22/2022 4:48:56 AM
Surr: DNOP	0	21-129	S	%Rec	20	12/22/2022 4:48:56 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	12/21/2022 2:27:53 AM
Surr: BFB	83.0	37.7-212		%Rec	5	12/21/2022 2:27:53 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.085		mg/Kg	5	12/21/2022 2:27:53 AM
Toluene	ND	0.17		mg/Kg	5	12/21/2022 2:27:53 AM
Ethylbenzene	ND	0.17		mg/Kg	5	12/21/2022 2:27:53 AM
Xylenes, Total	ND	0.34		mg/Kg	5	12/21/2022 2:27:53 AM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	5	12/21/2022 2:27:53 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/20/2022 10:12:56 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212B21**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** BS22-04 4ft
Project: Kleeman PB Battery **Collection Date:** 12/16/2022 12:10:00 PM
Lab ID: 2212B21-003 **Matrix:** MEOH (SOIL) **Received Date:** 12/20/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	240	14		mg/Kg	1	12/27/2022 8:36:07 PM
Motor Oil Range Organics (MRO)	390	48		mg/Kg	1	12/27/2022 8:36:07 PM
Surr: DNOP	119	21-129		%Rec	1	12/27/2022 8:36:07 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	14		mg/Kg	5	12/21/2022 3:37:27 AM
Surr: BFB	81.3	37.7-212		%Rec	5	12/21/2022 3:37:27 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.069		mg/Kg	5	12/21/2022 3:37:27 AM
Toluene	ND	0.14		mg/Kg	5	12/21/2022 3:37:27 AM
Ethylbenzene	ND	0.14		mg/Kg	5	12/21/2022 3:37:27 AM
Xylenes, Total	ND	0.28		mg/Kg	5	12/21/2022 3:37:27 AM
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	5	12/21/2022 3:37:27 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/20/2022 10:25:20 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2212B21**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** BS22-05 4ft
Project: Kleeman PB Battery **Collection Date:** 12/16/2022 12:15:00 PM
Lab ID: 2212B21-004 **Matrix:** MEOH (SOIL) **Received Date:** 12/20/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	290	14		mg/Kg	1	12/27/2022 9:07:55 PM
Motor Oil Range Organics (MRO)	600	48		mg/Kg	1	12/27/2022 9:07:55 PM
Surr: DNOP	126	21-129		%Rec	1	12/27/2022 9:07:55 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	12/21/2022 4:00:35 AM
Surr: BFB	82.8	37.7-212		%Rec	5	12/21/2022 4:00:35 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.084		mg/Kg	5	12/21/2022 4:00:35 AM
Toluene	ND	0.17		mg/Kg	5	12/21/2022 4:00:35 AM
Ethylbenzene	ND	0.17		mg/Kg	5	12/21/2022 4:00:35 AM
Xylenes, Total	ND	0.34		mg/Kg	5	12/21/2022 4:00:35 AM
Surr: 4-Bromofluorobenzene	84.1	70-130		%Rec	5	12/21/2022 4:00:35 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/20/2022 10:37:44 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212B21**
Date Reported: **12/30/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** BS22-06 4ft
Project: Kleeman PB Battery **Collection Date:** 12/16/2022 12:20:00 PM
Lab ID: 2212B21-005 **Matrix:** MEOH (SOIL) **Received Date:** 12/20/2022 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	270	14		mg/Kg	1	12/27/2022 9:39:43 PM
Motor Oil Range Organics (MRO)	690	48		mg/Kg	1	12/27/2022 9:39:43 PM
Surr: DNOP	115	21-129		%Rec	1	12/27/2022 9:39:43 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	12/21/2022 4:23:44 AM
Surr: BFB	82.2	37.7-212		%Rec	5	12/21/2022 4:23:44 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.083		mg/Kg	5	12/21/2022 4:23:44 AM
Toluene	ND	0.17		mg/Kg	5	12/21/2022 4:23:44 AM
Ethylbenzene	ND	0.17		mg/Kg	5	12/21/2022 4:23:44 AM
Xylenes, Total	ND	0.33		mg/Kg	5	12/21/2022 4:23:44 AM
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	5	12/21/2022 4:23:44 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/20/2022 10:50:09 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212B21**

30-Dec-22

Client: EOG

Project: Kleeman PB Battery

Sample ID:	**MB-72237**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**72237**	RunNo:	**93446**					
Prep Date:	**12/20/2022**	Analysis Date:	**12/20/2022**	SeqNo:	**3370463**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID:	**LCS-72237**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**72237**	RunNo:	**93446**					
Prep Date:	**12/20/2022**	Analysis Date:	**12/20/2022**	SeqNo:	**3370464**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.5	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212B21**

30-Dec-22

Client: EOG

Project: Kleeman PB Battery

Sample ID: **LCS-72228**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **72228**	RunNo: **93461**
Prep Date: **12/20/2022**	Analysis Date: **12/22/2022**	SeqNo: **3372867** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	15	50.00	0	92.5	64.4	127			
Surr: DNOP	6.2		5.000		125	21	129			

Sample ID: **MB-72228**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **72228**	RunNo: **93461**
Prep Date: **12/20/2022**	Analysis Date: **12/22/2022**	SeqNo: **3372868** 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	11		10.00		110	21	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212B21**

30-Dec-22

Client: EOG

Project: Kleeman PB Battery

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **G93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369863** 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	860		1000		86.3	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **G93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369864** 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	92.1	72.3	137			
Surr: BFB	1800		1000		180	37.7	212			

Sample ID: **2212b21-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BS22-02 4ft**	Batch ID: **G93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369871** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	79	17	86.44	0	91.1	70	130			
Surr: BFB	6200		3458		178	37.7	212			

Sample ID: **2212b21-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **BS22-02 4ft**	Batch ID: **G93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369872** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	76	17	86.44	0	88.4	70	130	3.03	20	
Surr: BFB	6100		3458		176	37.7	212	0	0	

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212B21**

30-Dec-22

Client: EOG

Project: Kleeman PB Battery

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369909** 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		87.0	70	130			

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **R93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369910** 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	91.5	80	120			
Toluene	0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.5	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.7	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	70	130			

Sample ID: **2212b21-002ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BS22-03 4ft**	Batch ID: **R93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369917** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.0	0.085	3.415	0	88.3	68.8	120			
Toluene	3.1	0.17	3.415	0	90.7	73.6	124			
Ethylbenzene	3.0	0.17	3.415	0	89.1	72.7	129			
Xylenes, Total	9.1	0.34	10.25	0	89.1	75.7	126			
Surr: 4-Bromofluorobenzene	2.9		3.415		85.8	70	130			

Sample ID: **2212b21-002amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BS22-03 4ft**	Batch ID: **R93433**	RunNo: **93433**
Prep Date:	Analysis Date: **12/21/2022**	SeqNo: **3369918** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	3.0	0.085	3.415	0	87.6	68.8	120	0.807	20	
Toluene	3.1	0.17	3.415	0	90.1	73.6	124	0.719	20	
Ethylbenzene	3.1	0.17	3.415	0	89.6	72.7	129	0.515	20	
Xylenes, Total	9.2	0.34	10.25	0	89.5	75.7	126	0.414	20	
Surr: 4-Bromofluorobenzene	3.0		3.415		87.6	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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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 Resources Work Order Number: 2212B21 RcptNo: 1

Received By: Sean Livingston 12/20/2022 7:50:00 AM S Livingston
Completed By: Sean Livingston 12/20/2022 8:36:04 AM S Livingston
Reviewed By: JN 12/20/22

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° 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: KPA 12.20.22

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.4	Good				

Chain-of-Custody Record

Client: EOG Resources (Vertex)

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 24 hr

Project Name: Keenan PB Battery

Project #: 22E-00123-13

Project Manager: Michael Moffitt

Sampler: Fernando Rodriguez

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 0.4 +0=0.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212321	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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/16	12:00	Soil	BSS2-02 4ft	4oz Jar	Ice	001	✓	✓					✓			
12/16	12:05	Soil	BSS2-03 4ft	4oz Jar	Ice	002	✓	✓					✓			
12/16	12:10	Soil	BSS2-04 4ft	4oz Jar	Ice	003	✓	✓					✓			
12/16	12:15	Soil	BSS2-05 4ft	4oz Jar	Ice	004	✓	✓					✓			
12/16	12:20	Soil	BSS2-06 4ft	4oz Jar	Ice	005	✓	✓					✓			

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
12/16	17:30				12/19/22	800
12/19/22	1900		Sea Courier		12/20/22	7:50

Remarks:
cc: Michael Moffitt
For: EOG Resources

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.

Analytical Report
Lab Order **2212B88**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-02 2ft
Project: Kleeman PB Battery **Collection Date:** 12/19/2022 10:30:00 AM
Lab ID: 2212B88-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/21/2022 11:34:34 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/21/2022 11:34:34 AM
Surr: DNOP	110	21-129		%Rec	1	12/21/2022 11:34:34 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/21/2022 12:24:04 PM
Surr: BFB	89.5	37.7-212		%Rec	1	12/21/2022 12:24:04 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/21/2022 12:24:04 PM
Toluene	ND	0.030		mg/Kg	1	12/21/2022 12:24:04 PM
Ethylbenzene	ND	0.030		mg/Kg	1	12/21/2022 12:24:04 PM
Xylenes, Total	ND	0.060		mg/Kg	1	12/21/2022 12:24:04 PM
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	12/21/2022 12:24:04 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	12/21/2022 10:43:42 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212B88**
Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-02 4ft
Project: Kleeman PB Battery **Collection Date:** 12/19/2022 10:35:00 AM
Lab ID: 2212B88-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/21/2022 7:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **JME**
Diesel Range Organics (DRO)	22	14		mg/Kg	1	12/21/2022 11:48:10 AM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/21/2022 11:48:10 AM
Surr: DNOP	106	21-129		%Rec	1	12/21/2022 11:48:10 AM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/21/2022 3:09:58 PM
Surr: BFB	91.3	37.7-212		%Rec	1	12/21/2022 3:09:58 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.019		mg/Kg	1	12/21/2022 3:09:58 PM
Toluene	ND	0.038		mg/Kg	1	12/21/2022 3:09:58 PM
Ethylbenzene	ND	0.038		mg/Kg	1	12/21/2022 3:09:58 PM
Xylenes, Total	ND	0.076		mg/Kg	1	12/21/2022 3:09:58 PM
Surr: 4-Bromofluorobenzene	88.1	70-130		%Rec	1	12/21/2022 3:09:58 PM
EPA METHOD 300.0: ANIONS						Analyst: **MRA**
Chloride	ND	60		mg/Kg	20	12/21/2022 10:56:07 PM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 03, 2023

Chance Dixon

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

RE: Kleeman PB OrderNo.: 2212D98

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 11 sample(s) on 12/28/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-05 0-4ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:00:00 PM
Lab ID: 2212D98-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/28/2022 2:58:34 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/28/2022 2:58:34 PM
Surr: DNOP	99.8	21-129		%Rec	1	12/28/2022 2:58:34 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.2		mg/Kg	1	12/28/2022 4:09:12 PM
Surr: BFB	93.8	37.7-212		%Rec	1	12/28/2022 4:09:12 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.016		mg/Kg	1	12/28/2022 4:09:12 PM
Toluene	ND	0.032		mg/Kg	1	12/28/2022 4:09:12 PM
Ethylbenzene	ND	0.032		mg/Kg	1	12/28/2022 4:09:12 PM
Xylenes, Total	ND	0.065		mg/Kg	1	12/28/2022 4:09:12 PM
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	12/28/2022 4:09:12 PM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	12/29/2022 12:40:35 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-06 0-4ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:05:00 PM
Lab ID: 2212D98-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	12/28/2022 3:30:43 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2022 3:30:43 PM
Surr: DNOP	101	21-129		%Rec	1	12/28/2022 3:30:43 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/28/2022 4:32:48 PM
Surr: BFB	93.7	37.7-212		%Rec	1	12/28/2022 4:32:48 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/28/2022 4:32:48 PM
Toluene	ND	0.030		mg/Kg	1	12/28/2022 4:32:48 PM
Ethylbenzene	ND	0.030		mg/Kg	1	12/28/2022 4:32:48 PM
Xylenes, Total	ND	0.061		mg/Kg	1	12/28/2022 4:32:48 PM
Surr: 4-Bromofluorobenzene	87.2	70-130		%Rec	1	12/28/2022 4:32:48 PM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	12/29/2022 1:17:48 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-07 0-4ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:10:00 PM
Lab ID: 2212D98-003 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/28/2022 3:41:23 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2022 3:41:23 PM
Surr: DNOP	102	21-129		%Rec	1	12/28/2022 3:41:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	12/28/2022 4:56:14 PM
Surr: BFB	95.3	37.7-212		%Rec	1	12/28/2022 4:56:14 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.015		mg/Kg	1	12/28/2022 4:56:14 PM
Toluene	ND	0.030		mg/Kg	1	12/28/2022 4:56:14 PM
Ethylbenzene	ND	0.030		mg/Kg	1	12/28/2022 4:56:14 PM
Xylenes, Total	ND	0.060		mg/Kg	1	12/28/2022 4:56:14 PM
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	12/28/2022 4:56:14 PM
EPA METHOD 300.0: ANIONS						Analyst: **JTT**
Chloride	ND	60		mg/Kg	20	12/29/2022 1:30:13 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-16 4-10ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:15:00 PM
Lab ID: 2212D98-004 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	41	14		mg/Kg	1	12/28/2022 3:52:04 PM
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/28/2022 3:52:04 PM
Surr: DNOP	103	21-129		%Rec	1	12/28/2022 3:52:04 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	23		mg/Kg	5	12/28/2022 5:19:38 PM
Surr: BFB	96.9	37.7-212		%Rec	5	12/28/2022 5:19:38 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.12		mg/Kg	5	12/28/2022 5:19:38 PM
Toluene	ND	0.23		mg/Kg	5	12/28/2022 5:19:38 PM
Ethylbenzene	ND	0.23		mg/Kg	5	12/28/2022 5:19:38 PM
Xylenes, Total	ND	0.46		mg/Kg	5	12/28/2022 5:19:38 PM
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	5	12/28/2022 5:19:38 PM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	3200	150		mg/Kg	50	12/29/2022 11:19:35 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-17 4-10ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:20:00 PM
Lab ID: 2212D98-005 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	250	14		mg/Kg	1	12/28/2022 4:02:42 PM
Motor Oil Range Organics (MRO)	130	46		mg/Kg	1	12/28/2022 4:02:42 PM
Surr: DNOP	107	21-129		%Rec	1	12/28/2022 4:02:42 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	12/28/2022 5:43:16 PM
Surr: BFB	93.8	37.7-212		%Rec	5	12/28/2022 5:43:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.12		mg/Kg	5	12/28/2022 5:43:16 PM
Toluene	ND	0.24		mg/Kg	5	12/28/2022 5:43:16 PM
Ethylbenzene	ND	0.24		mg/Kg	5	12/28/2022 5:43:16 PM
Xylenes, Total	ND	0.49		mg/Kg	5	12/28/2022 5:43:16 PM
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	5	12/28/2022 5:43:16 PM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	630	60		mg/Kg	20	12/28/2022 8:25:06 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-18 4-10ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:25:00 PM
Lab ID: 2212D98-006 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	12/28/2022 4:13:19 PM
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/28/2022 4:13:19 PM
Surr: DNOP	108	21-129		%Rec	1	12/28/2022 4:13:19 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	12/29/2022 1:09:53 AM
Surr: BFB	94.1	37.7-212		%Rec	1	12/29/2022 1:09:53 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.020		mg/Kg	1	12/29/2022 1:09:53 AM
Toluene	ND	0.041		mg/Kg	1	12/29/2022 1:09:53 AM
Ethylbenzene	ND	0.041		mg/Kg	1	12/29/2022 1:09:53 AM
Xylenes, Total	ND	0.081		mg/Kg	1	12/29/2022 1:09:53 AM
Surr: 4-Bromofluorobenzene	89.5	70-130		%Rec	1	12/29/2022 1:09:53 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	590	60		mg/Kg	20	12/28/2022 8:37:31 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	Above Quantitation Range/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 Quanitative Limit
RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-19 4-10ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:30:00 PM
Lab ID: 2212D98-007 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/28/2022 4:24:45 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/28/2022 4:24:45 PM
Surr: DNOP	107	21-129		%Rec	1	12/28/2022 4:24:45 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	12/29/2022 2:20:06 AM
Surr: BFB	91.8	37.7-212		%Rec	1	12/29/2022 2:20:06 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.021		mg/Kg	1	12/29/2022 2:20:06 AM
Toluene	ND	0.042		mg/Kg	1	12/29/2022 2:20:06 AM
Ethylbenzene	ND	0.042		mg/Kg	1	12/29/2022 2:20:06 AM
Xylenes, Total	ND	0.084		mg/Kg	1	12/29/2022 2:20:06 AM
Surr: 4-Bromofluorobenzene	87.5	70-130		%Rec	1	12/29/2022 2:20:06 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	130	59		mg/Kg	20	12/28/2022 8:49:56 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-20 10-14ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:35:00 PM
Lab ID: 2212D98-008 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	36	15		mg/Kg	1	12/28/2022 4:35:22 PM
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/28/2022 4:35:22 PM
Surr: DNOP	107	21-129		%Rec	1	12/28/2022 4:35:22 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	19		mg/Kg	5	12/29/2022 3:30:11 AM
Surr: BFB	91.9	37.7-212		%Rec	5	12/29/2022 3:30:11 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.094		mg/Kg	5	12/29/2022 3:30:11 AM
Toluene	ND	0.19		mg/Kg	5	12/29/2022 3:30:11 AM
Ethylbenzene	ND	0.19		mg/Kg	5	12/29/2022 3:30:11 AM
Xylenes, Total	ND	0.38		mg/Kg	5	12/29/2022 3:30:11 AM
Surr: 4-Bromofluorobenzene	87.6	70-130		%Rec	5	12/29/2022 3:30:11 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	2900	150		mg/Kg	50	12/29/2022 11:31:55 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS22-07 10ft
Project: Kleeman PB **Collection Date:** 12/21/2022 10:00:00 AM
Lab ID: 2212D98-009 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	32	15		mg/Kg	1	12/28/2022 4:46:00 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2022 4:46:00 PM
Surr: DNOP	107	21-129		%Rec	1	12/28/2022 4:46:00 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	17		mg/Kg	5	12/29/2022 3:53:31 AM
Surr: BFB	91.6	37.7-212		%Rec	5	12/29/2022 3:53:31 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.087		mg/Kg	5	12/29/2022 3:53:31 AM
Toluene	ND	0.17		mg/Kg	5	12/29/2022 3:53:31 AM
Ethylbenzene	ND	0.17		mg/Kg	5	12/29/2022 3:53:31 AM
Xylenes, Total	ND	0.35		mg/Kg	5	12/29/2022 3:53:31 AM
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	5	12/29/2022 3:53:31 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	120	60		mg/Kg	20	12/28/2022 9:14:45 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS22-08 14ft
Project: Kleeman PB **Collection Date:** 12/21/2022 10:05:00 AM
Lab ID: 2212D98-010 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	75	15		mg/Kg	1	12/28/2022 4:56:36 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/28/2022 4:56:36 PM
Surr: DNOP	107	21-129		%Rec	1	12/28/2022 4:56:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	20		mg/Kg	5	12/29/2022 4:16:49 AM
Surr: BFB	94.6	37.7-212		%Rec	5	12/29/2022 4:16:49 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.098		mg/Kg	5	12/29/2022 4:16:49 AM
Toluene	ND	0.20		mg/Kg	5	12/29/2022 4:16:49 AM
Ethylbenzene	ND	0.20		mg/Kg	5	12/29/2022 4:16:49 AM
Xylenes, Total	ND	0.39		mg/Kg	5	12/29/2022 4:16:49 AM
Surr: 4-Bromofluorobenzene	87.5	70-130		%Rec	5	12/29/2022 4:16:49 AM
EPA METHOD 300.0: ANIONS						Analyst: **NAI**
Chloride	160	60		mg/Kg	20	12/28/2022 9:27:09 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212D98**
Date Reported: **1/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS22-01 4ft
Project: Kleeman PB **Collection Date:** 12/22/2022 12:40:00 PM
Lab ID: 2212D98-011 **Matrix:** MEOH (SOIL) **Received Date:** 12/28/2022 6:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	12/28/2022 5:07:10 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/28/2022 5:07:10 PM
Surr: DNOP	107	21-129		%Rec	1	12/28/2022 5:07:10 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	12/29/2022 4:40:12 AM
Surr: BFB	90.7	37.7-212		%Rec	1	12/29/2022 4:40:12 AM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.021		mg/Kg	1	12/29/2022 4:40:12 AM
Toluene	ND	0.042		mg/Kg	1	12/29/2022 4:40:12 AM
Ethylbenzene	ND	0.042		mg/Kg	1	12/29/2022 4:40:12 AM
Xylenes, Total	ND	0.083		mg/Kg	1	12/29/2022 4:40:12 AM
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	12/29/2022 4:40:12 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	840	60		mg/Kg	20	12/30/2022 3:02:22 AM

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212D98**
03-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB

Sample ID: **MB-72355**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **72355**	RunNo: **93596**							
Prep Date: **12/28/2022**	Analysis Date: **12/28/2022**	SeqNo: **3378040**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72355**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **72355**	RunNo: **93596**							
Prep Date: **12/28/2022**	Analysis Date: **12/28/2022**	SeqNo: **3378041**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.8	90	110			

Sample ID: **MB-72348**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **72348**	RunNo: **93596**							
Prep Date: **12/28/2022**	Analysis Date: **12/28/2022**	SeqNo: **3378080**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72348**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **72348**	RunNo: **93596**							
Prep Date: **12/28/2022**	Analysis Date: **12/28/2022**	SeqNo: **3378081**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.6	90	110			

Sample ID: **MB-72363**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **PBS**	Batch ID: **72363**	RunNo: **93641**							
Prep Date: **12/28/2022**	Analysis Date: **12/29/2022**	SeqNo: **3379383**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72363**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**							
Client ID: **LCSS**	Batch ID: **72363**	RunNo: **93641**							
Prep Date: **12/28/2022**	Analysis Date: **12/30/2022**	SeqNo: **3379384**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212D98**
03-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB

Sample ID: **LCS-72338** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **72338** RunNo: **93583**
Prep Date: **12/28/2022** Analysis Date: **12/28/2022** SeqNo: **3376644** 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	90.0	64.4	127			
Surr: DNOP	4.6		5.000		92.9	21	129			

Sample ID: **MB-72338** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **72338** RunNo: **93583**
Prep Date: **12/28/2022** Analysis Date: **12/28/2022** SeqNo: **3376646** 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	8.6		10.00		86.4	21	129			

Sample ID: **2212D98-001AMS** SampType: **MS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS22-05 0-4ft** Batch ID: **72338** RunNo: **93583**
Prep Date: **12/28/2022** Analysis Date: **12/28/2022** SeqNo: **3378440** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	14	48.12	0	93.7	36.1	154			
Surr: DNOP	5.1		4.812		106	21	129			

Sample ID: **2212D98-001AMSD** SampType: **MSD** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **WS22-05 0-4ft** Batch ID: **72338** RunNo: **93583**
Prep Date: **12/28/2022** Analysis Date: **12/28/2022** SeqNo: **3378441** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	14	48.03	0	94.8	36.1	154	1.01	33.9	
Surr: DNOP	5.2		4.803		108	21	129	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212D98**
03-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB

Sample ID: **mb-72309**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **72309**	RunNo: **93580**							
Prep Date: **12/23/2022**	Analysis Date: **12/28/2022**	SeqNo: **3377237**	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		96.9	37.7	212			

Sample ID: **lcs-72309**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **72309**	RunNo: **93580**							
Prep Date: **12/23/2022**	Analysis Date: **12/28/2022**	SeqNo: **3377238**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	72.3	137			
Surr: BFB	1900		1000		194	37.7	212			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **PBS**	Batch ID: **R93580**	RunNo: **93580**							
Prep Date:	Analysis Date: **12/28/2022**	SeqNo: **3377272**	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		97.0	37.7	212			

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **LCSS**	Batch ID: **R93580**	RunNo: **93580**							
Prep Date:	Analysis Date: **12/28/2022**	SeqNo: **3377273**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	72.3	137			
Surr: BFB	2000		1000		195	37.7	212			

Sample ID: **2212d98-006ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **WS22-18 4-10ft**	Batch ID: **R93580**	RunNo: **93580**							
Prep Date:	Analysis Date: **12/29/2022**	SeqNo: **3377283**	Units: **mg/Kg**						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.1	20.28	0	92.0	70	130			
Surr: BFB	1500		811.0		184	37.7	212			

Sample ID: **2212d98-006amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**							
Client ID: **WS22-18 4-10ft**	Batch ID: **R93580**	RunNo: **93580**							
Prep Date:	Analysis Date: **12/29/2022**	SeqNo: **3377284**	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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212D98**
03-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB

Sample ID: **2212d98-006amsd** SampType: **MSD** TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS22-18 4-10ft** Batch ID: **R93580** RunNo: **93580**
Prep Date: Analysis Date: **12/29/2022** SeqNo: **3377284** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	18	4.1	20.28	0	90.2	70	130	1.93	20	
Surr: BFB	1500		811.0		185	37.7	212	0	0	

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212D98**
03-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB

Sample ID: **mb-72309** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **72309** RunNo: **93580**
Prep Date: **12/23/2022** Analysis Date: **12/28/2022** SeqNo: **3377289** 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-72309** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **72309** RunNo: **93580**
Prep Date: **12/23/2022** Analysis Date: **12/28/2022** SeqNo: **3377290** 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	83.8	80	120			
Toluene	0.87	0.050	1.000	0	86.7	80	120			
Ethylbenzene	0.87	0.050	1.000	0	86.7	80	120			
Xylenes, Total	2.6	0.10	3.000	0	87.0	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		93.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS** Batch ID: **R93580** RunNo: **93580**
Prep Date: Analysis Date: **12/28/2022** SeqNo: **3377313** 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	0.91		1.000		90.6	70	130			

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **R93580** RunNo: **93580**
Prep Date: Analysis Date: **12/28/2022** SeqNo: **3377314** 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	95.7	80	120			
Toluene	0.98	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.4	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.2	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212D98**
03-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB

Sample ID: **2212d98-007ams**	SampType: **MS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WS22-19 4-10ft**	Batch ID: **R93580**	RunNo: **93580**
Prep Date:	Analysis Date: **12/29/2022**	SeqNo: **3377328** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.021	0.8368	0	85.8	68.8	120			
Toluene	0.73	0.042	0.8368	0	87.3	73.6	124			
Ethylbenzene	0.73	0.042	0.8368	0	86.7	72.7	129			
Xylenes, Total	2.2	0.084	2.510	0	87.2	75.7	126			
Surr: 4-Bromofluorobenzene	0.73		0.8368		86.9	70	130			

Sample ID: **2212d98-007amsd**	SampType: **MSD**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **WS22-19 4-10ft**	Batch ID: **R93580**	RunNo: **93580**
Prep Date:	Analysis Date: **12/29/2022**	SeqNo: **3377329** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.72	0.021	0.8368	0	85.7	68.8	120	0.0817	20	
Toluene	0.72	0.042	0.8368	0	85.9	73.6	124	1.58	20	
Ethylbenzene	0.72	0.042	0.8368	0	86.6	72.7	129	0.115	20	
Xylenes, Total	2.2	0.084	2.510	0	86.7	75.7	126	0.625	20	
Surr: 4-Bromofluorobenzene	0.77		0.8368		91.9	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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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: 2212D98

RcptNo: 1

Received By: Isaiah Ortiz 12/28/2022 6:50:00 AM I-Ox

Completed By: Isaiah Ortiz 12/28/2022 7:06:04 AM I-Ox

Reviewed By: JK 12-28-22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	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: SC 12/28/22

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	3.3	Good	Yes			

Chain-of-Custody Record

Client: EOG Resources (Vertex)

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 24hr

Project Name: Kleeman PB

Project #: 12E-00123

Project Manager: Chance Dixon

Sampler: Fernando Rodriguez

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 3.3+0 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212D98	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, NO_3, NO_2, PO_4, SO_4)	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/22	12:00	Soil	WS22-05 0-4ft	4oz jar	Ice	001	✓	✓					✓			
	12:05		WS22-06 0-4ft			002										
	12:10		WS22-07 0-4ft			003										
	12:15		WS22-16 4-10ft			004										
	12:20		WS22-17 4-10ft			005										
	12:25		WS22-18 4-10ft			006										
	12:30		WS22-19 4-10ft			007										
	12:35		WS22-20 10-14ft			008										
12/21	10:00	Soil	BS22-07 10ft	4oz jar	Ice	009	✓	✓					✓			
12/21	10:05	Soil	BS22-08 14ft	4oz jar	Ice	010	✓	✓					✓			
12/22	12:40	Soil	BS22-01 4ft	4oz jar	Ice	011	✓	✓					✓			

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/22	17:30				12/27/22	1800
12/27/22	19:00				12/28/22	0650

Remarks: CC: Chance Dixon & Fernando Rodriguez

Direct Bill to EOG

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

January 05, 2023

Chance Dixon

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

RE: Kleeman PB Battery OrderNo.: 2212F02

Dear Chance Dixon:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/30/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2212F02**
Date Reported: **1/5/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** WS22-10 0-4ft
Project: Kleeman PB Battery **Collection Date:** 12/28/2022 12:00:00 PM
Lab ID: 2212F02-001 **Matrix:** MEOH (SOIL) **Received Date:** 12/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	1/3/2023 2:25:59 PM
Motor Oil Range Organics (MRO)	58	44		mg/Kg	1	1/3/2023 2:25:59 PM
Surr: DNOP	112	21-129		%Rec	1	1/3/2023 2:25:59 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	12/30/2022 9:22:21 AM
Surr: BFB	91.2	37.7-212		%Rec	1	12/30/2022 9:22:21 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.021		mg/Kg	1	12/30/2022 9:22:21 AM
Toluene	ND	0.042		mg/Kg	1	12/30/2022 9:22:21 AM
Ethylbenzene	ND	0.042		mg/Kg	1	12/30/2022 9:22:21 AM
Xylenes, Total	ND	0.085		mg/Kg	1	12/30/2022 9:22:21 AM
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	12/30/2022 9:22:21 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	ND	60		mg/Kg	20	12/30/2022 9:24:26 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212F02**
Date Reported: **1/5/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS22-09 4ft
Project: Kleeman PB Battery **Collection Date:** 12/28/2022 12:05:00 PM
Lab ID: 2212F02-002 **Matrix:** MEOH (SOIL) **Received Date:** 12/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	96	14		mg/Kg	1	1/3/2023 2:36:36 PM
Motor Oil Range Organics (MRO)	480	48		mg/Kg	1	1/3/2023 2:36:36 PM
Surr: DNOP	105	21-129		%Rec	1	1/3/2023 2:36:36 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	12/30/2022 9:45:56 AM
Surr: BFB	89.0	37.7-212		%Rec	1	12/30/2022 9:45:56 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.019		mg/Kg	1	12/30/2022 9:45:56 AM
Toluene	ND	0.038		mg/Kg	1	12/30/2022 9:45:56 AM
Ethylbenzene	ND	0.038		mg/Kg	1	12/30/2022 9:45:56 AM
Xylenes, Total	ND	0.075		mg/Kg	1	12/30/2022 9:45:56 AM
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	12/30/2022 9:45:56 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	700	60		mg/Kg	20	12/30/2022 9:36:51 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report
Lab Order **2212F02**
Date Reported: **1/5/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Vertex Resources Services, Inc. **Client Sample ID:** BS22-10 4ft
Project: Kleeman PB Battery **Collection Date:** 12/28/2022 12:15:00 PM
Lab ID: 2212F02-003 **Matrix:** MEOH (SOIL) **Received Date:** 12/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**
Diesel Range Organics (DRO)	330	300		mg/Kg	20	12/30/2022 1:03:23 PM
Motor Oil Range Organics (MRO)	1000	990		mg/Kg	20	12/30/2022 1:03:23 PM
Surr: DNOP	0	21-129	S	%Rec	20	12/30/2022 1:03:23 PM
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **RAA**
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	12/30/2022 10:09:30 AM
Surr: BFB	89.8	37.7-212		%Rec	1	12/30/2022 10:09:30 AM
EPA METHOD 8021B: VOLATILES						Analyst: **RAA**
Benzene	ND	0.020		mg/Kg	1	12/30/2022 10:09:30 AM
Toluene	ND	0.039		mg/Kg	1	12/30/2022 10:09:30 AM
Ethylbenzene	ND	0.039		mg/Kg	1	12/30/2022 10:09:30 AM
Xylenes, Total	ND	0.078		mg/Kg	1	12/30/2022 10:09:30 AM
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	12/30/2022 10:09:30 AM
EPA METHOD 300.0: ANIONS						Analyst: **JMT**
Chloride	1600	59		mg/Kg	20	12/30/2022 9:49:16 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	Above Quantitation Range/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 Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212F02**
05-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB Battery

Sample ID: **MB-72391** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS** Batch ID: **72391** RunNo: **93647**
Prep Date: **12/30/2022** Analysis Date: **12/30/2022** SeqNo: **3380712** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: **LCS-72391** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS** Batch ID: **72391** RunNo: **93647**
Prep Date: **12/30/2022** Analysis Date: **12/30/2022** SeqNo: **3380713** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	101	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212F02**

05-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **LCS-72383** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **72383** RunNo: **93644**
Prep Date: **12/29/2022** Analysis Date: **12/30/2022** SeqNo: **3379607** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	6.2		5.000		125	21	129			

Sample ID: **MB-72383** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **72383** RunNo: **93644**
Prep Date: **12/29/2022** Analysis Date: **12/30/2022** SeqNo: **3379608** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		121	21	129			

Sample ID: **MB-72389** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **72389** RunNo: **93644**
Prep Date: **12/30/2022** Analysis Date: **12/30/2022** SeqNo: **3379609** 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	11		10.00		110	21	129			

Sample ID: **LCS-72389** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **72389** RunNo: **93644**
Prep Date: **12/30/2022** Analysis Date: **12/30/2022** SeqNo: **3379941** 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	5.6		5.000		113	21	129			

Sample ID: **LCS-72405** SampType: **LCS** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS** Batch ID: **72405** RunNo: **93677**
Prep Date: **1/2/2023** Analysis Date: **1/3/2023** SeqNo: **3381146** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.6		5.000		111	21	129			

Sample ID: **MB-72405** SampType: **MBLK** TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS** Batch ID: **72405** RunNo: **93677**
Prep Date: **1/2/2023** Analysis Date: **1/3/2023** SeqNo: **3381148** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		99.2	21	129			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212F02**

05-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **R93665**	RunNo: **93665**
Prep Date:	Analysis Date: **12/30/2022**	SeqNo: **3380423** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	101	72.3	137			
Surr: BFB	1900		1000		189	37.7	212			

Sample ID: **2212f02-001ams**	SampType: **MS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS22-10 0-4ft**	Batch ID: **R93665**	RunNo: **93665**
Prep Date:	Analysis Date: **12/30/2022**	SeqNo: **3380469** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.2	21.20	0	104	70	130			
Surr: BFB	1600		848.2		191	37.7	212			

Sample ID: **2212f02-001amsd**	SampType: **MSD**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **WS22-10 0-4ft**	Batch ID: **R93665**	RunNo: **93665**
Prep Date:	Analysis Date: **12/30/2022**	SeqNo: **3380470** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.2	21.20	0	104	70	130	0.154	20	
Surr: BFB	1600		848.2		194	37.7	212	0	0	

Sample ID: **lcs-72379**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **72379**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/30/2022**	SeqNo: **3380473** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	2000		1000		198	37.7	212			

Sample ID: **lcs-72384**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **72384**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/31/2022**	SeqNo: **3380474** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1900		1000		194	37.7	212			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **R93665**	RunNo: **93665**
Prep Date:	Analysis Date: **12/30/2022**	SeqNo: **3380475** 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	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212F02**

05-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **mb-72379**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **72379**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/30/2022**	SeqNo: **3380476** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	920		1000		91.5	37.7	212			

Sample ID: **mb-72384**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **72384**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/31/2022**	SeqNo: **3380477** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.8	37.7	212			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212F02**
05-Jan-23

Client: Vertex Resources Services, Inc.
Project: Kleeman PB Battery

Sample ID: **100ng btex lcs** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **R93665** RunNo: **93665**
Prep Date: Analysis Date: **12/30/2022** SeqNo: **3380484** 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	85.2	80	120			
Toluene	0.89	0.050	1.000	0	88.5	80	120			
Ethylbenzene	0.89	0.050	1.000	0	89.4	80	120			
Xylenes, Total	2.7	0.10	3.000	0	89.7	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		86.7	70	130			

Sample ID: **2212f02-002ams** SampType: **MS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BS22-09 4ft** Batch ID: **R93665** RunNo: **93665**
Prep Date: Analysis Date: **12/30/2022** SeqNo: **3380531** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.66	0.019	0.7524	0	88.1	68.8	120			
Toluene	0.68	0.038	0.7524	0	89.8	73.6	124			
Ethylbenzene	0.68	0.038	0.7524	0	90.2	72.7	129			
Xylenes, Total	2.0	0.075	2.257	0	89.5	75.7	126			
Surr: 4-Bromofluorobenzene	0.65		0.7524		86.2	70	130			

Sample ID: **2212f02-002amsd** SampType: **MSD** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **BS22-09 4ft** Batch ID: **R93665** RunNo: **93665**
Prep Date: Analysis Date: **12/30/2022** SeqNo: **3380532** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.62	0.019	0.7524	0	83.1	68.8	120	5.88	20	
Toluene	0.65	0.038	0.7524	0	86.3	73.6	124	3.99	20	
Ethylbenzene	0.66	0.038	0.7524	0	87.3	72.7	129	3.28	20	
Xylenes, Total	2.0	0.075	2.257	0	87.7	75.7	126	2.05	20	
Surr: 4-Bromofluorobenzene	0.64		0.7524		85.5	70	130	0	0	

Sample ID: **LCS-72379** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **72379** RunNo: **93665**
Prep Date: **12/29/2022** Analysis Date: **12/30/2022** SeqNo: **3380534** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	70	130			

Sample ID: **LCS-72384** SampType: **LCS** TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS** Batch ID: **72384** RunNo: **93665**
Prep Date: **12/29/2022** Analysis Date: **12/31/2022** SeqNo: **3380535** Units: **%Rec**

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2212F02**

05-Jan-23

Client: Vertex Resources Services, Inc.

Project: Kleeman PB Battery

Sample ID: **LCS-72384**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **72384**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/31/2022**	SeqNo: **3380535** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.88		1.000		87.7	70	130			

Sample ID: **mb-72379**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **72379**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/30/2022**	SeqNo: **3380536** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.87		1.000		86.9	70	130			

Sample ID: **mb-72384**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **72384**	RunNo: **93665**
Prep Date: **12/29/2022**	Analysis Date: **12/31/2022**	SeqNo: **3380537** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.86		1.000		85.7	70	130			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **R93665**	RunNo: **93665**
Prep Date:	Analysis Date: **12/30/2022**	SeqNo: **3380538** 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		87.0	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 Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental 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: **2212F02** RcptNo: **1**

Received By: **Cheyenne Cason** **12/30/2022 7:30:00 AM** Chel

Completed By: **Cheyenne Cason** **12/30/2022 7:43:23 AM** Chel

Reviewed By: CMC 12/30/22

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	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: 12/30/22

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	3.4	Good	Not Present	Morty		

Chain-of-Custody Record

Client: EOG Resources (Vertex)

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 24 Hr

Project Name: Keenan PB Battery

Project #: 22E-00123-13

Project Manager: Chance Dixon

Sampler: Fernando Rodriguez

On Ice: ☑ Yes ☐ No

# of Coolers: 1 Metty

Cooler Temp(including CF): 3.5-0.1=3.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212F02	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, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)
12/28	12:00	Soil	BS22-10 0-4ft	4oz jar	Ice	001	✓	✓					✓			
12/28	12:05	Soil	BS22-09 4ft	4oz jar	Ice	002	✓	✓					✓			
12/28	12:10	Soil	BS22-10 4ft	4oz jar	Ice	003	✓	✓					✓			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12/28	12:10		ACummings		12/29/22	1030
12/28	1900	ACummings	Che Cerr		12/30/22	0730

Remarks:
cc: Chance Dixon & Fernando Rodriguez
Direct Bill to EOG

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 253322

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 253322
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	8/18/2023