



February 28, 2022

Vertex Project #: 22E-00123-012

Spill Closure Report: Allison CQ Federal #9
Unit D, Section 15, Township 19 South, Range 24 East
County: Eddy
API: 30-015-24133
Incident ID: nAPP2124535531

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 site assessment and remediation for historical impacts that were discovered on December 12, 2020, at Allison CQ Federal #9, API 30-015-24133, (hereafter referred to as “Allison”). EOG submitted an initial C-141 Release Notification (Attachment 1) to New Mexico Oil Conservation Division (NMOCD) District 2 on September 2, 2021. Incident number nAPP2124535531 was assigned to this incident.

This letter provides a description of the 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 closure of this remediation, with the understanding that restoration of the well site will occur immediately after approval. All oil and gas activities have been terminated and the site is being reclaimed per 19.15.29.13 NMAC.

Incident Description

The impacted area at Allison occurred on private land at 32.665845 N, -104.580505 W, approximately 12 miles southwest of Dayton, New Mexico. The legal description for the site is Unit D, Section 15, Township 19 South, Range 25 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.

The surrounding landscape is associated with ridges, fans, fan remnants, and alluvial fans ranging between 1,100 and 5,400 feet. The climate is semi-arid with average annual precipitation ranging between 6 and 15 inches. Using information from United States Department of Agriculture, the dominant vegetation was determined to principally tobosa, black grama, and blue grama (United States Department of Agriculture, Natural Resources Conservation Service, 2021).

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The Geological Map of New Mexico indicates the surface geology at Allison is comprised of QP-Piedmont alluvial deposits from the Holocene to lower Pleistocene ages (New Mexico Bureau of Geology and Mineral Resources, 2021). The United States Department of Agriculture Web Soil Survey characterizes the soil at the site as Reagan-Loam association. The karst geology potential for Allison is medium (United States Department of the Interior, Bureau of Land Management, 2018).

There is no surface water located at Allison. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is the Pecos River located approximately 14 miles southeast of the site. At Allison, there are no 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 active well to Allison is a water well located approximately 0.62 miles west of the site. The use of this well is unknown, but it provides a depth to groundwater reference. Data from 2000 show the well had a depth to groundwater of 25 feet below ground surface (bgs; New Mexico Office of the State Engineer, 2021). Information pertaining to the depth to groundwater determination is included in Attachment 3.

Closure Criteria Determination

Using site characterization information, a closure criteria determination worksheet (Attachment 3) was completed to determine if the remediation 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 remediation at Allison is not subject to the requirements of Paragraph (4) of Subsection C of 19.15.29.12 NMAC. The nearest groundwater well data is younger than 25 years, but it is located further than 0.5 miles from the site; therefore the depth to groundwater cannot be accurately determined and the closure criteria for the site is determined to be associated with the following constituent concentration limits (Table 1).

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

Table 1. Closure Criteria for Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS¹	Constituent	Limit
< 50 feet	Chloride	600 mg/kg
	TPH ² (GRO+DRO+MRO)	100 mg/kg
	BTEX ³	50 mg/kg
	Benzene	10 mg/kg

¹Total dissolved solids (TDS)²Total petroleum hydrocarbons (TPH) = gasoline range organics (GRO) + diesel range organics (DRO) + motor oil range organics (MRO)³Benzene, toluene, ethylbenzene and xylenes (BTEX)

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Remedial Actions

On December 11, 2020, Ranger Environmental Services, Inc. (Ranger) conducted initial site assessment activities utilizing field screening procedures. Characterization sample points from Ranger's delineation are included in Figure 1 (Attachment 2). Analytical laboratory data from Ranger's delineation are summarized in Attachment 6. Oversight of the remediation field work and confirmatory sampling was completed by Vertex.

Excavation of impacted soils was conducted between December 2, 2021, and January 26, 2022, with a Vertex representative on site to conduct field screen procedures to determine the final horizontal and vertical extents of the excavation area. Excavation into the pit was halted to preserve the structural integrity of the liner installed. The drilling pit side walls were then sloped to a 45-degree angle to allow for the Geosynthetic Clay Liner (GCL) to be installed to prevent migration to the remediated area from the historical pit. The slope will also assist with shedding of any excess water that accumulates on the GCL through natural precipitation events. The following sidewall samples, WES22-69 through WES22-75 and WES22-77 are above the strictest applicable criteria outlined in the NMAC 19.15.29 Table 1 and mark the boundary of the former drill pit. The Assessment and Reclamation Plan approved by both the surface landowner (Howell Revocable Trust) and mineral owner (Bureau of Land Management) addresses this action as part of the restoration of the site (Attachment 8). Installation of the GCL will take place prior to backfilling the location.

A confirmatory bottom sample, BES22-24 at 9 ft, was collected on January 21, 2022, and tested above criterium for chlorides. The excavation was deepened 0.5 ft around that sample point. Lab analytical results for BES22-24 at 9.5 ft came back on January 26, 2022, as below closure criterium, therefore completing the vertical remediation of the spill. On January 26, 2022, excavation was completed with approximately 4,900 total yards and was transported to Lea Land, LLC Landfill. Vertex collected an additional 19 confirmatory samples on January 28, 2022, to cover NMOCD's 200 square-foot rule. Final square footage of the excavation base is 12,050 square feet, while the final square footage calculated for the side walls came out to approximately 3,336 square feet. The overall combined total square footage for the excavation equals 15,386 square feet of surface area.

On November 24, 2021, prior to excavation activities, EOG provided a continuous 48-hour notification of confirmation sampling to NMOCD (Attachment 5), as required by subparagraph (a) of Paragraph (1) of Subsection D 19.15.29.12 NMAC. Between December 2, 2021, and January 28, 2022, Vertex collected a total of 77 five-point composite confirmatory samples from the base and side walls of the excavation, at depths ranging between ground surface and ten feet bgs. Each composite sample was representative of no more than 200 square feet per the alternate sampling method outlined in Subparagraph (c) of Paragraph (1) of Subsection D 19.15.29.12 NMAC, which does not require prior NMOCD approval. Vertex collected samples along the east, south, and southwest edges of the drilling mud pit directly north of the excavation to identify the definitive edge of it. The composite samples were placed into laboratory-provided containers, preserved on ice, and submitted to a National 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 Attachment 6. Laboratory data reports and chain of custody forms are included in Attachment 7.

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A GeoExplorer 7000 Series Trimble global positioning system (GPS) unit, or equivalent, was used to map the approximate center of each of the five-point composite samples. The confirmatory sample locations are presented on 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 remediation area at Allison. Laboratory analyses of confirmation samples collected at Warren show final confirmatory values below NMOCD closure criteria for areas where depth to groundwater is less than 50 feet bgs as presented in Table 1. There are no anticipated risks to human, ecological, or hydrological receptors at this release site.

Vertex requests that this incident (nAPP2124535531) be closed as all closure requirements set forth in Subsection E of 19.15.29.12 NMAC have been met. Revegetation activities were previously approved by the landowner and the BLM per the Reclamation Plan prior to the remediation of historical impacts at this site. 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 remediation area at Allison.

Should you have any questions or concerns, please do not hesitate to contact the undersigned at 575-988-2681 or mmoffitt@vertex.ca.



2/28/2022

Chance Dixon, B. Sc.
Environmental Technician, REPORTING

Date



2/28/2022

Michael Moffitt, B. Sc.
Project Manager, REPORT REVIEW

Date

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Attachments

- Attachment 1. NMOCD C-141 Report
- Attachment 2. Figures
- Attachment 3. Closure Criteria for Soils Impacted by a Release Research Determination Documentation
- Attachment 4. Daily Field Reports with Photographs
- Attachment 5. Required 48-hour Notification of Confirmatory Sampling to Regulatory Agencies
- Attachment 6. Summarized Laboratory Data Tables
- Attachment 7. Laboratory Data Reports and Chain of Custody Forms

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References

- New Mexico Bureau of Geology and Mineral Resources. (2021). *Interactive Geologic Map*. Retrieved from <http://geoinfo.nmt.edu>.
- New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division. (2021). *Registered Mines and Permits Search*. Retrieved from <https://wwwapps.emnrd.state.nm.us/MMD/MMDWebInfo/>.
- New Mexico Office of the State Engineer, New Mexico Water Rights Reporting System. (2021). *Water Column/Average Depth to Water Report*. Retrieved from <http://nmwrrs.ose.state.nm.us/nmwrrs/waterColumn.html>.
- New Mexico Oil Conservation Division. (2018). *New Mexico Administrative Code – Natural Resources and Wildlife Oil and Gas Releases*. Santa Fe, New Mexico.
- United States Department of Agriculture, Natural Resources Conservation Service. (2021). *Web Soil Survey*. Retrieved from <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- United States Department of the Interior, Bureau of Land Management. (2018). *New Mexico Cave/Karsts*.
- United States Department of the Interior, United States Geological Survey. (2021). *National Water Information System*. Retrieved from <https://waterdata.usgs.gov/nwis>
- United States Fish and Wildlife Service. (2021). *National Wetlands Inventory*. Retrieved from <https://www.fws.gov/wetlands/data/Mapper.html>.

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Limitations

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

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

ATTACHMENT 1

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2124535531
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Chase Settle	Contact Telephone 575-748-1471
Contact email Chase_Settle@eogresources.com	Incident # (assigned by OCD) nAPP2124535531
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.665845 Longitude -104.580505
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Allison CQ Federal #9	Site Type Well
Date Release Discovered 12/12/2020	API# 30-015-24133

Unit Letter	Section	Township	Range	County
D	15	19S	24E	Eddy

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

Nature and Volume of Release

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

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

Cause of Release Cause and date of release is unknown. This site has been plugged and abandoned. Initial samples were taken in 12/2020. A third-party environmental consultant has been secured to assist in the remediation and reclamation plan, as well as planning between the private surface owner and BLM. EOG has received permission to move forward with remediation and estimates the release area to be of a reportable size. Additional delineation is required, however the current plan approved by the surface owner is attached to this C-141.

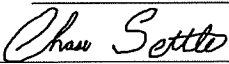
State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Chase Settle</u>	Title: <u>Rep Safety & Environmental Sr</u>
Signature: <u></u>	Date: <u>9/2/2021</u>
email: <u>Chase_Settle@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u> Received by: _____ Date: _____	

State of New Mexico
Oil Conservation Division

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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<50 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

Form C-141

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State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Chase SettleTitle: Rep Safety & Environmental SrSignature: Chase SettleDate: 01/31/2022email: Chase_Settle@eogresources.comTelephone: 575-748-1471**OCD Only**

Received by: _____

Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2124535531
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

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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: 01/31/2022
 email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

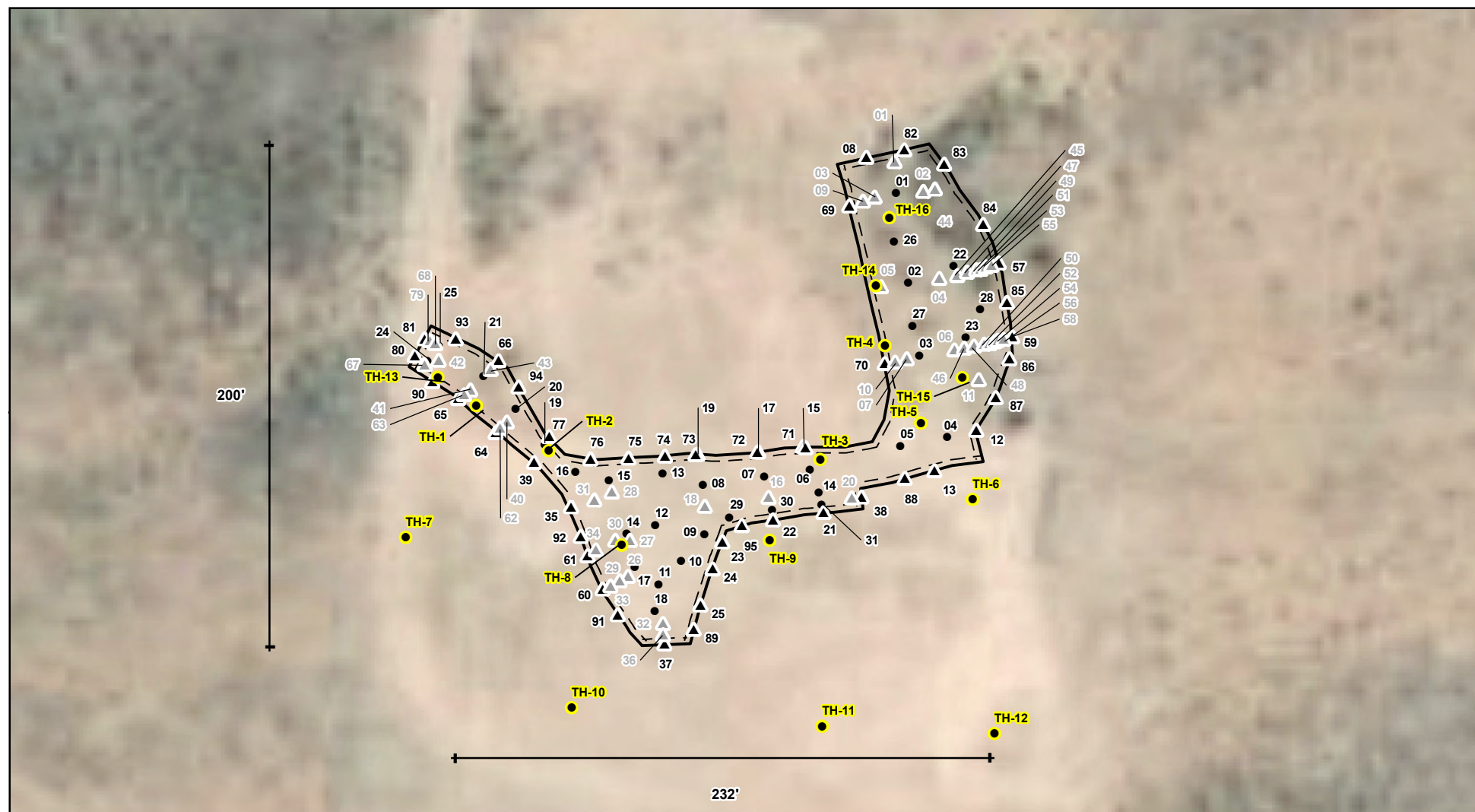
Received by: _____ Date: _____

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: Jennifer Nobui Date: 03/16/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

ATTACHMENT 2



- Ranger Sampling Locations
- Base Sample (Prefixed by "BES21-")
- ▲ Wall Sample (Prefixed by "WES21-")
- Approximate Excavation Extent (12,050 sq. ft.)



0 25 50 Feet
Map Center:
Lat/Long: 32.665982, -104.580547

NAD 1983 UTM Zone 13N
Date: Feb 28/22



Characterization Schematic Combined Vertex and Ranger Sampling Locations Allison CQ Federal #9

FIGURE:

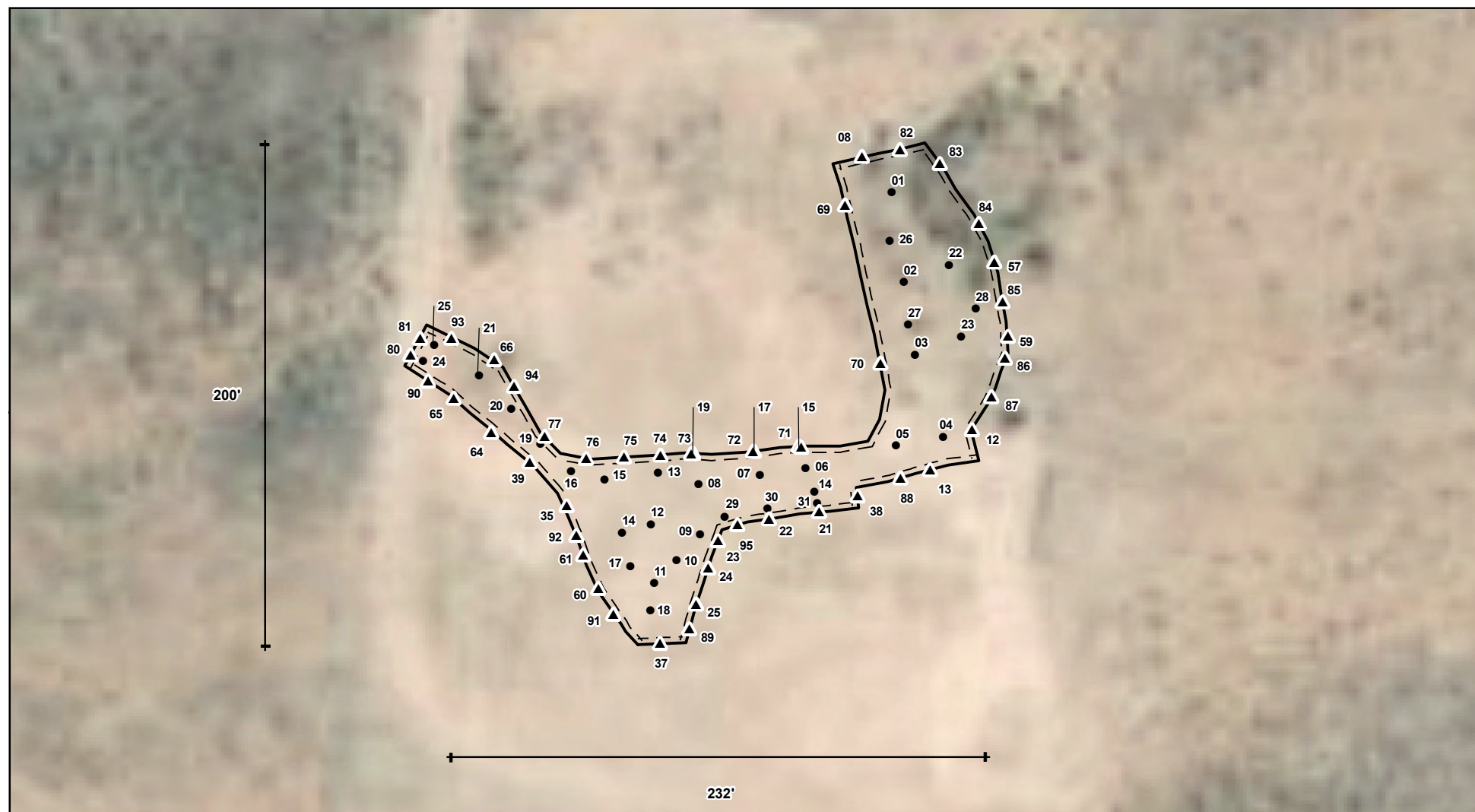
1




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

Note: Background imagery from Maxar, 2020. All features from GPS survey, Vertex Professional Services Ltd., 2021.

VERSATILITY. EXPERTISE.



- Base Sample (Prefixed by "BES21-")
- ▲ Wall Sample (Prefixed by "WES21-")
-  Approximate Excavation Extent (12,050 sq. ft.)



0 25 50 Feet
Map Center:
Lat/Long: 32.665981, -104.580541

NAD 1983 UTM Zone 13N
Date: Feb 28/22



Confirmatory Schematic Allison CQ Federal #9

FIGURE:

2



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

Note: Background imagery from Maxar, 2020. All features from GPS survey, Vertex Professional Services Ltd., 2021.

VERSATILITY. EXPERTISE.

ATTACHMENT 3



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)					(NAD83 UTM in meters)		
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	RA 09923		1	2	16	19S	24E	538334	3614419*
Driller License:	1400	Driller Company:			SOUTHEAST DRILLING COMPANY				
Driller Name:	RICK HAMMOND								
Drill Start Date:	08/25/2000	Drill Finish Date:			08/30/2000		Plug Date:		
Log File Date:	09/13/2000	PCW Rcv Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	30 GPM
Casing Size:	5.00	Depth Well:			118 feet		Depth Water:		25 feet
Water Bearing Stratifications:					Top	Bottom	Description		
					30	55	Shallow Alluvium/Basin Fill		
					105	117	Shallow Alluvium/Basin Fill		
Casing Perforations:					Top	Bottom			
					58	118			

*UTM location was derived from PLSS - see Help

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10/27/21 11:29 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

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

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
RA 09923	R	RA	CH	1	2	16	19S	24E		538334	3614419*	1005	118	25	93
RA 03960		RA	ED	2	2	10	19S	24E		540341	3616025*	1978	440	335	105
RA 05576		RA	ED	1	4	21	19S	24E		538353	3611992*	2527	320	307	13
RA 06436		RA	ED	3	1	4	12	19S	24E	543083	3615122*	3832		300	
RA 04727		RA	ED	1	2	26	19S	24E		541594	3611184*	3866	354	322	32
RA 05676		RA	ED	2	2	3	28	19S	24E	538058	3610471*	4056	600	558	42
RA 03959		RA	ED	2	4	12	19S	24E		543589	3615225*	4349	545	265	280
RA 06777		RA	ED	4	1	07	19S	24E		534686	3615577*	4815	800		

Average Depth to Water: **301 feet**

Minimum Depth: **25 feet**

Maximum Depth: **558 feet**

Record Count: 8

UTMNAD83 Radius Search (in meters):

Easting (X): 539334.67

Northing (Y): 3614321.2

Radius: 5000

*UTM location was derived from PLSS - see Help

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10/27/21 11:27 AM


WATER COLUMN/ AVERAGE DEPTH TO WATER


NMOSE Water Well

3,290 Feet (0.62 Miles)

Legend

 Feature 1

 NMOSE Water Well


 Allison CQ Federal #9




Allison CQ Federal #9

0.5 Mile Radius

Legend

 Allison CQ Federal #9

 Allison CQ Federal #9

Rocking R Red Rd

Google Earth


1 km




Allison CQ Federal #9

USGS Closest Water Well 6,858 Feet (1.30 Miles)

Legend

 Allison CQ Federal #9

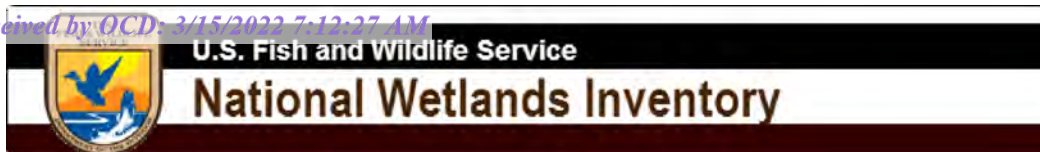
324058104341801

 Allison CQ Federal #9

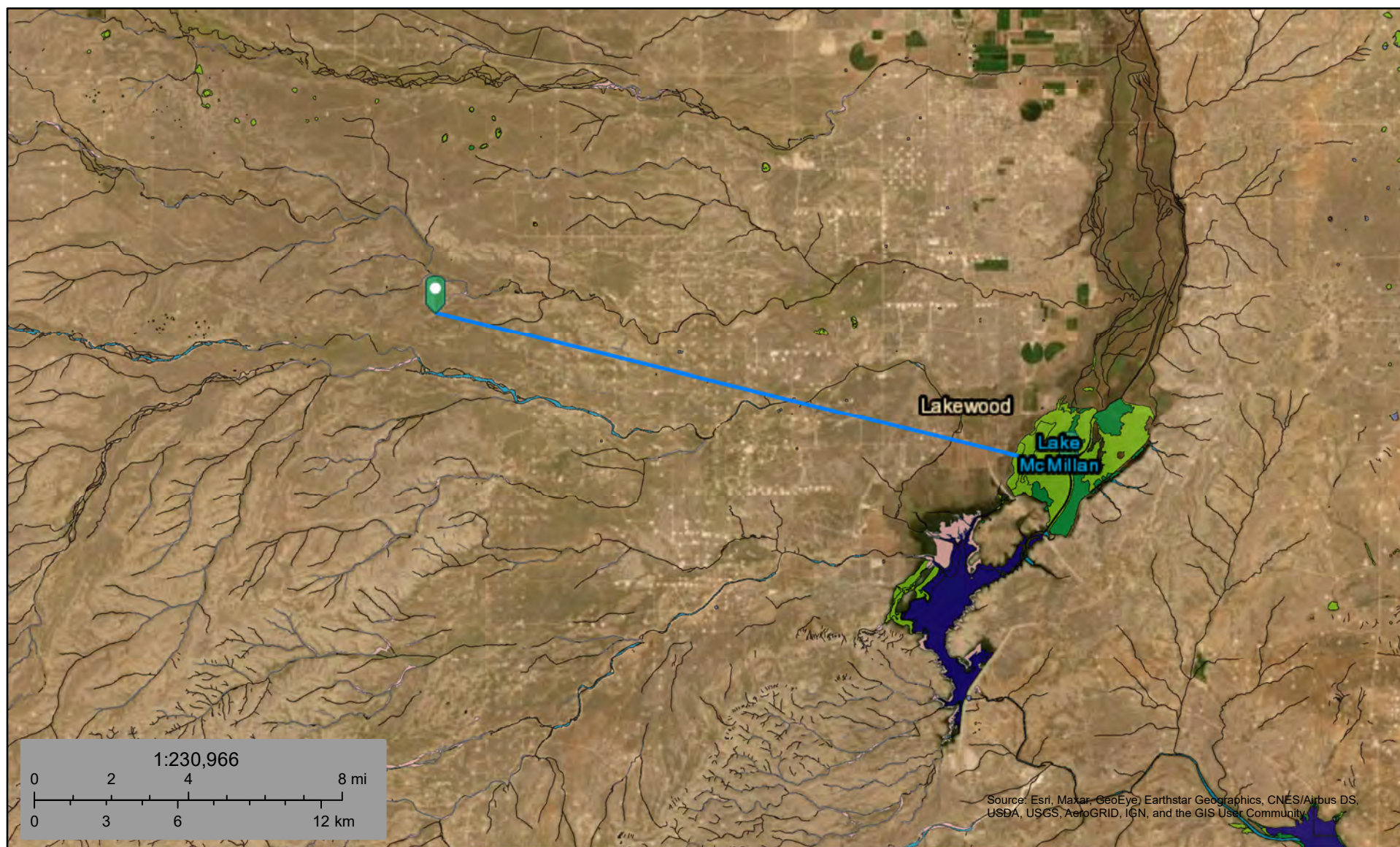
Google Earth



900 m



Pecos River 14.3 Miles (75,426 Feet)



October 27, 2021

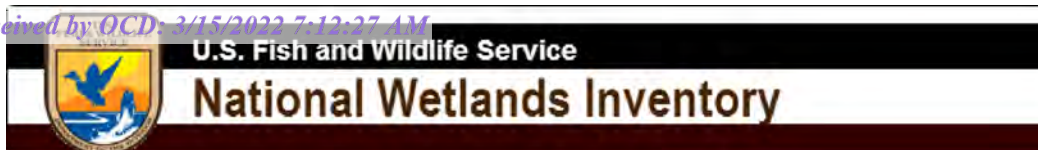
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

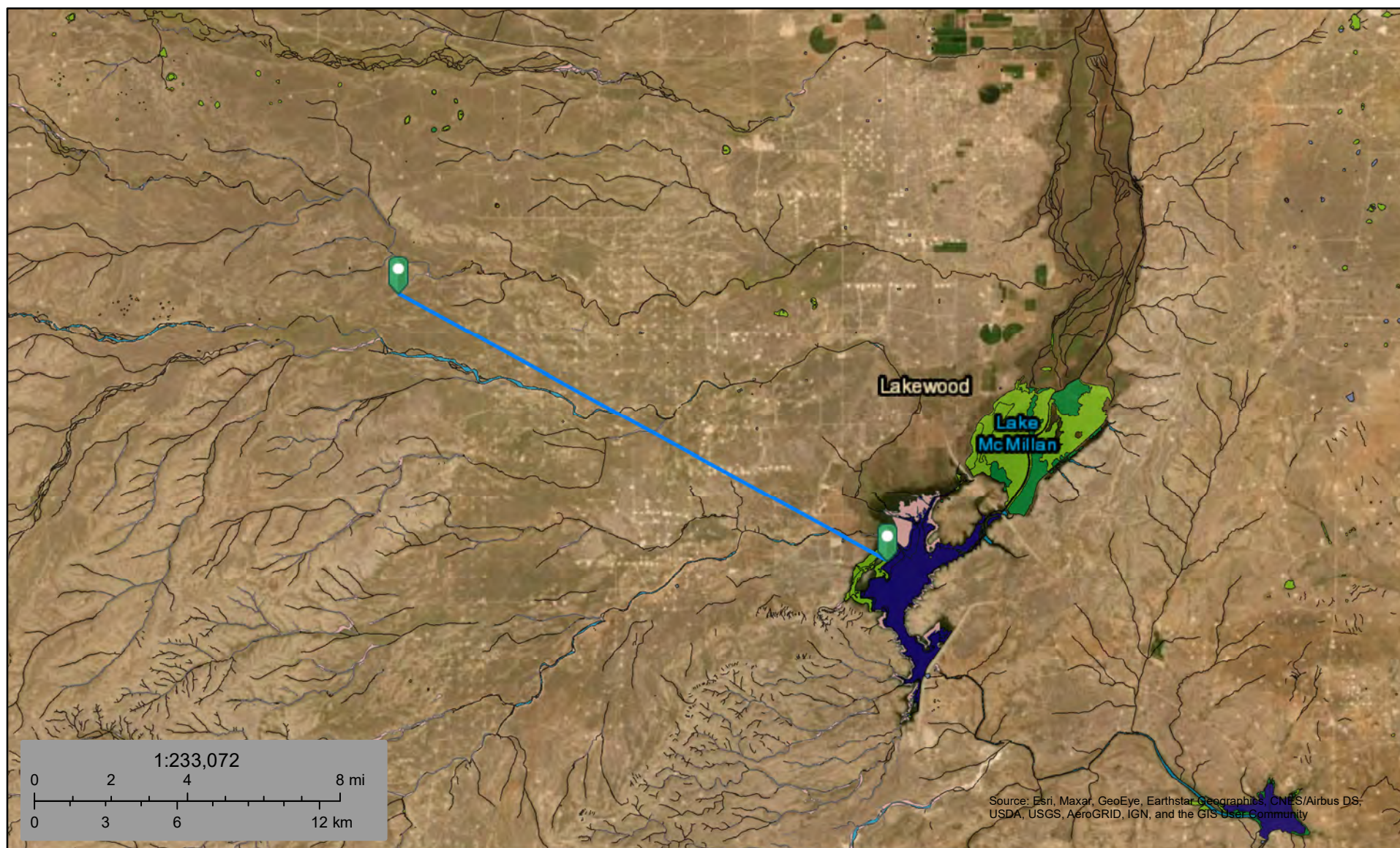
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- 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.



Brantley Lake 12.3 Miles (64,928 Feet)



October 27, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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


- Lake
- Other
- Riverine

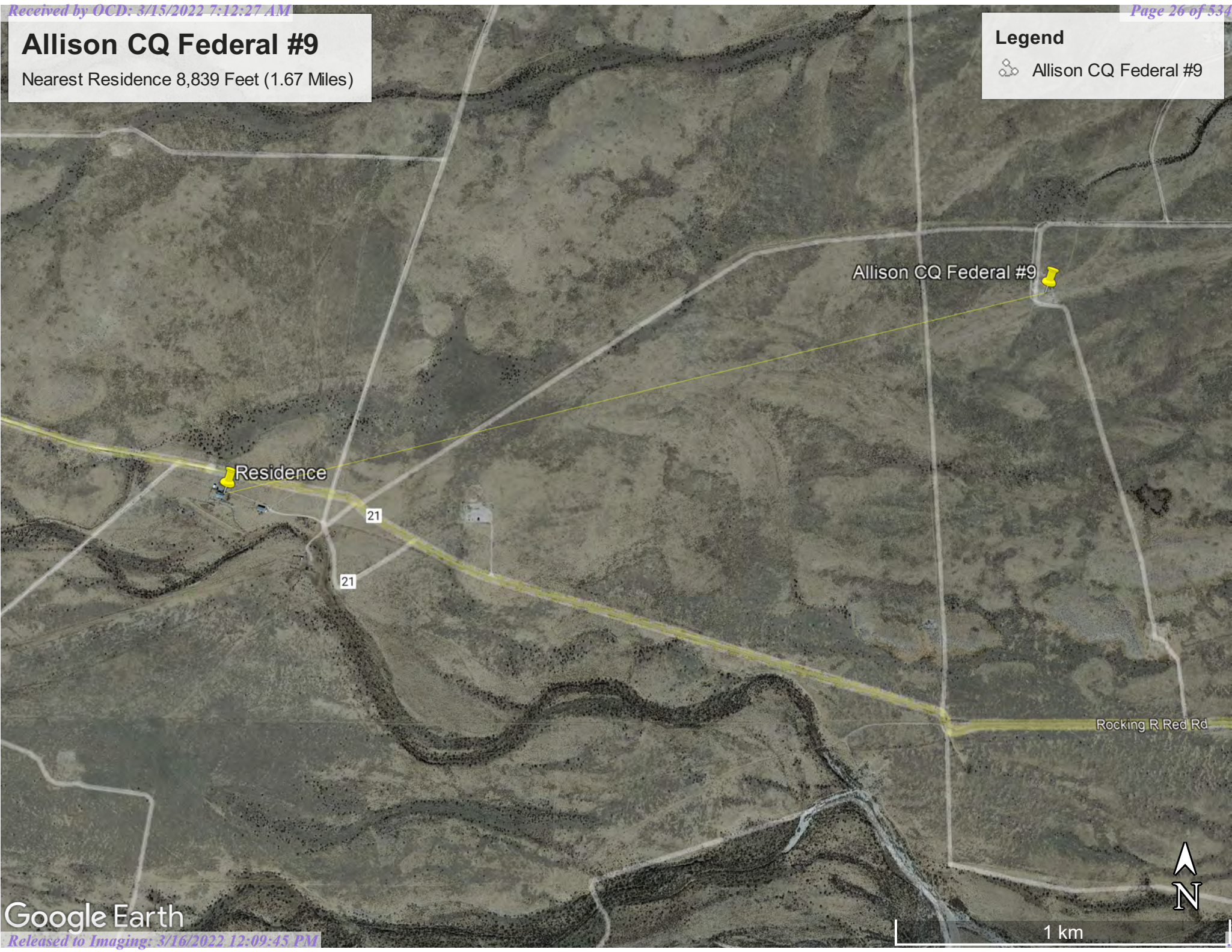
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Allison CQ Federal #9

Nearest Residence 8,839 Feet (1.67 Miles)

Legend

 Allison CQ Federal #9





New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
(with Ownership Information)

(acre ft per annum)							(R=POD has been replaced and no longer serves this file, C=the file is closed)			(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)					(NAD83 UTM in met		
WR File Nbr	Sub	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	q	q	q	X	Y			
	basin									Source	6416	4			Sec	Tws	Rng
RA 09923	RA	DOM	3	RODNEY A LEMAY	CH	RA 09923		R		Shallow	1	2	16	19S	24E	538334	3614419*

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 539334.67 Northing (Y): 3614321.2 Radius: 1610

Sorted by: Distance

*UTM location was derived from PLSS - see Help

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10/27/21 1:16 PM

ACTIVE & INACTIVE POINTS OF DI



New Mexico Office of the State Engineer
Active & Inactive Points of Diversion
(with Ownership Information)

(acre ft per annum)							(R=POD has been replaced and no longer serves this file, C=the file is closed)			(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)					(NAD83 UTM in met			
WR File Nbr	Sub	Use	Diversion	Owner	County	POD Number	Well Tag	Code	Grant	Source	q	q	q	X	Y			
	basin										Sec	Tws	Rng					
RA 09923	RA	DOM	3	RODNEY A LEMAY	CH	RA 09923		R		Shallow	6416	4	12	16	19S	24E	538334	3614419*

Record Count: 1

UTMNAD83 Radius Search (in meters):

Easting (X): 539334.67 Northing (Y): 3614321.2 Radius: 1610

Sorted by: Distance

*UTM location was derived from PLSS - see Help

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10/27/21 1:16 PM

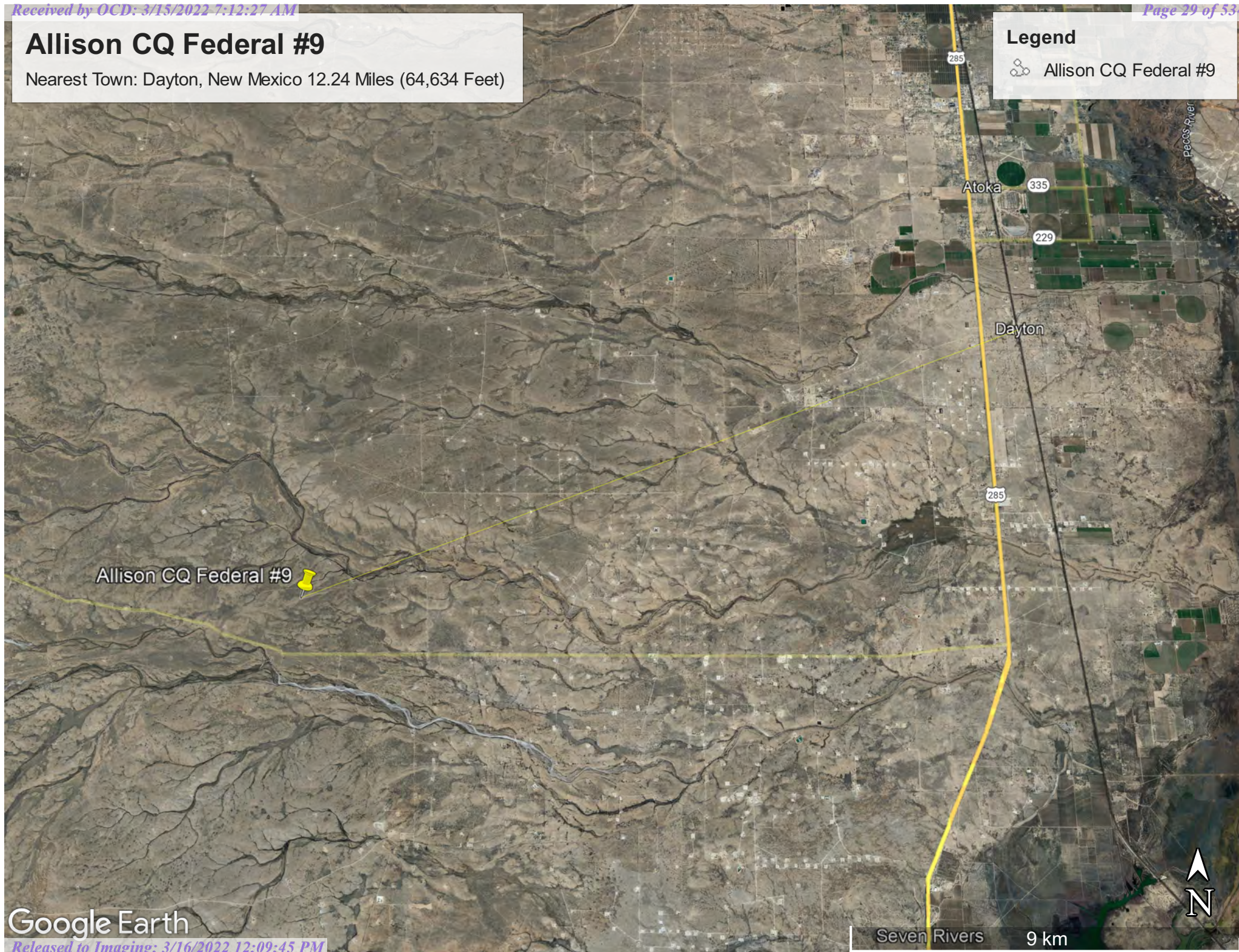
ACTIVE & INACTIVE POINTS OF DI

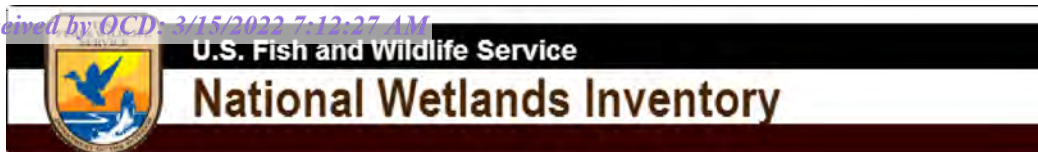
Allison CQ Federal #9

Nearest Town: Dayton, New Mexico 12.24 Miles (64,634 Feet)

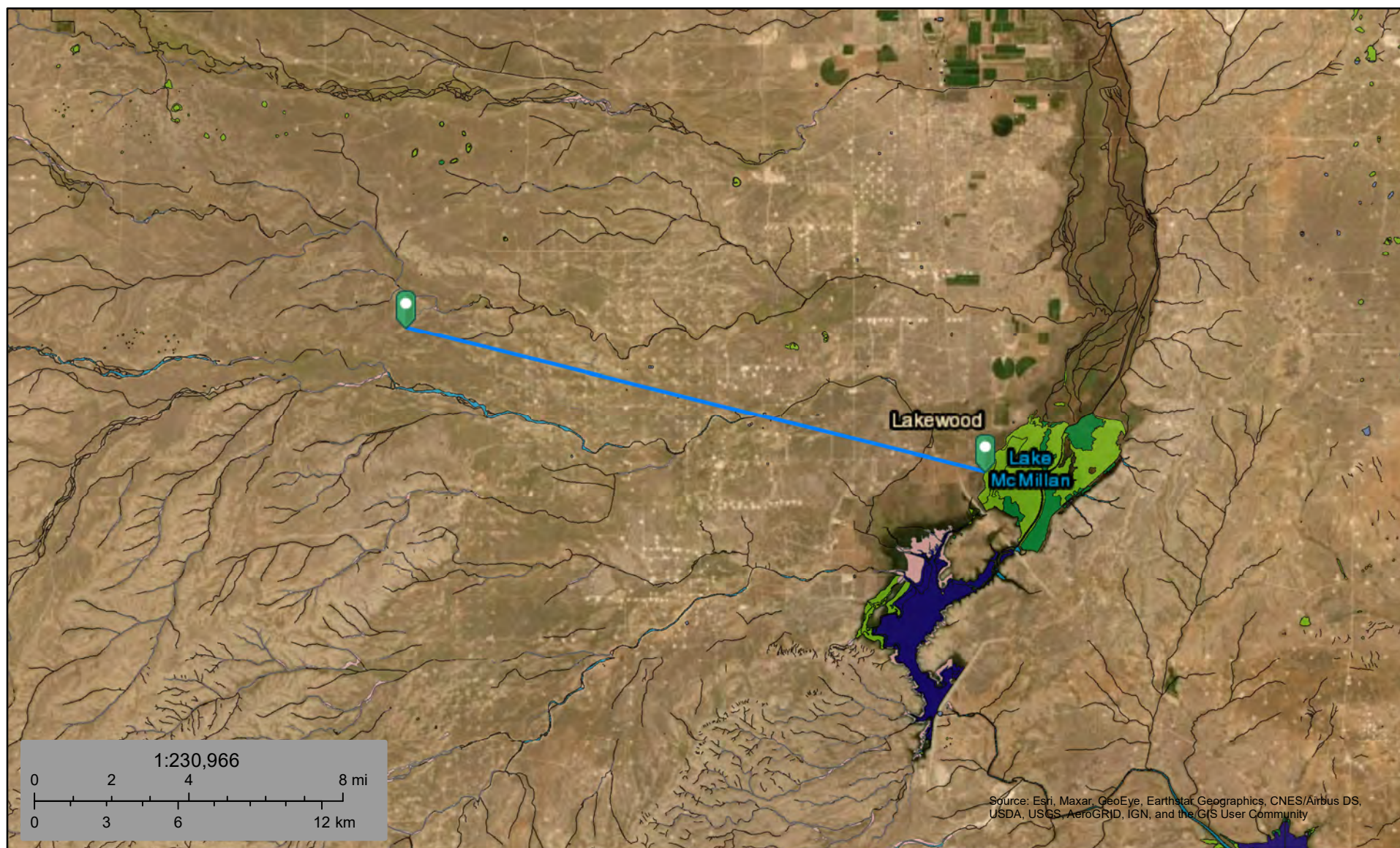
Legend

 Allison CQ Federal #9





Nearest Wetland 13.1 Miles (68,909 Feet)



October 27, 2021

Wetlands

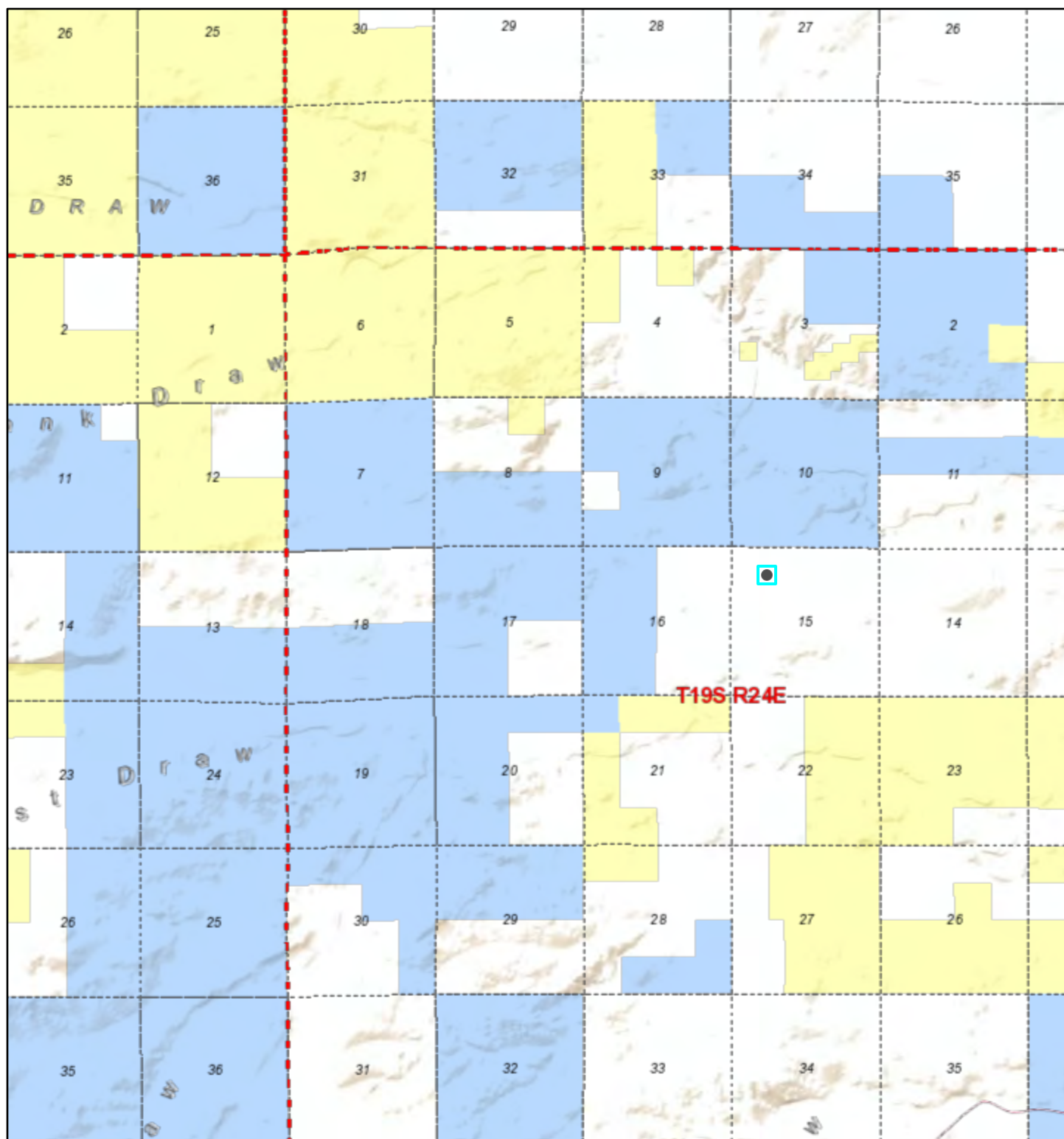
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

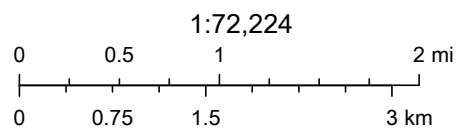
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Active Mines in New Mexico



10/27/2021, 1:52:13 PM

- . . . Township / Range
 - - - Sections
 Land Ownership
 Bureau of Land Management
 Bureau of Reclamation
 Department of Agriculture
 Department of Defense
 Department of Energy
 National Park Service
 Private Land
 State Game and Fish
 State Land
 State Parks
 Tribal



U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

National Flood Hazard Layer FIRMette



104°35'9"W 32°40'12"N



Legend

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

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



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 **10/27/2021 at 3:55 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.

Released to Imaging: 3/16/2022 12:09:45 PM

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



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for Eddy Area, New Mexico



October 27, 2021

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

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

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

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

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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 UR—Upton-Reagan complex, 0 to 9 percent slopes..... 14

References..... 17

How Soil Surveys Are Made

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

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

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

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

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

Custom Soil Resource Report

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

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

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

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

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

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

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

Custom Soil Resource Report

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

Soil Map


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

Custom Soil Resource Report
Soil Map

Custom Soil Resource Report

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.

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
RA	Reagan loam, 0 to 3 percent slopes	4.2	16.7%
UR	Upton-Reagan complex, 0 to 9 percent slopes	21.3	83.3%
Totals for Area of Interest		25.5	100.0%

Map Unit Descriptions

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

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

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Eddy Area, New Mexico**RA—Reagan loam, 0 to 3 percent slopes****Map Unit Setting***National map unit symbol:* 1w5c*Elevation:* 1,100 to 4,400 feet*Mean annual precipitation:* 7 to 14 inches*Mean annual air temperature:* 60 to 70 degrees F*Frost-free period:* 200 to 240 days*Farmland classification:* Farmland of statewide importance**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 60 inches:* loam**Properties and qualities***Slope:* 0 to 3 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Well drained*Runoff class:* Low*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high
(0.60 to 2.00 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Calcium carbonate, maximum content:* 40 percent*Maximum salinity:* Very slightly saline to 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****Upton***Percent of map unit:* 1 percent

Custom Soil Resource Report

Ecological site: R042XC025NM - Shallow

Hydric soil rating: No

Atoka

Percent of map unit: 1 percent

Ecological site: R042XC007NM - Loamy

Hydric soil rating: No

UR—Upton-Reagan complex, 0 to 9 percent slopes**Map Unit Setting**

National map unit symbol: 1w65

Elevation: 1,100 to 5,400 feet

Mean annual precipitation: 6 to 15 inches

Mean annual air temperature: 60 to 70 degrees F

Frost-free period: 180 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Upton and similar soils: 55 percent

Reagan and similar soils: 35 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Upton**Setting**

Landform: Ridges, fans

Landform position (three-dimensional): Side slope, rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam

H2 - 9 to 13 inches: gravelly loam

H3 - 13 to 21 inches: cemented

H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent

Depth to restrictive feature: 7 to 20 inches to petrocalcic

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high
(0.01 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 75 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Custom Soil Resource Report

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: R042XC025NM - Shallow

Hydric soil rating: No

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 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 40 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 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: 5 percent

Ecological site: R042XC007NM - Loamy

Hydric soil rating: No

Pima

Percent of map unit: 5 percent

Ecological site: R042XC017NM - Bottomland

Hydric soil rating: No

Custom Soil Resource Report

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Ecological site R042XC007NM Loamy

Accessed: 10/27/2021

General information



Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on uplands landforms, mainly on hill slopes, ridges, plains, terraces and some fan remnants. Slopes range from 1 to 5 percent and average about 3 percent. Average annual precipitation is about 8 to 14 inches. Elevations range from 2,842 to 5,000 feet.

Table 2. Representative physiographic features

Landforms	(1) Plain (2) Terrace (3) Fan piedmont
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–5,000 ft
Slope	0–5%
Aspect	E, S, W

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest in January through June rapidly drying out the soil during a critical time for cool season plant growth.

Climate data was obtained from <http://www.wrcc.sage.dri.edu/summary/climsmnm.html> web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced by wetland or streams.

Soil features

The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches.

Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam, silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam. Permeability is moderate to slow and the available water holding capacity is high to moderate. The Atoka, Reeves, Russler, Milner soils may have high amounts of CaCO₃, ranging as high as 40 percent in the subsoil. Rock fragments range from 5 to 50 percent in the subsoil. Reeves, Russler, Milner, Holloman soils will have 40 to 80 percent gypsum in the underlying material.

Maximum and minimum values listed below represent the characteristic soils for this site.

Characteristic Soils:

Atoka (petrocalcic)
Bigetty
Reagan
Reakor
Reeves (gypsum)
Russler (gypsum)
Largo
Russler (gypsum)
Largo
Berino
Tinney
Midessa
Ratliff

Holloman (gypsum)
Milner (gypsum)

Table 4. Representative soil features

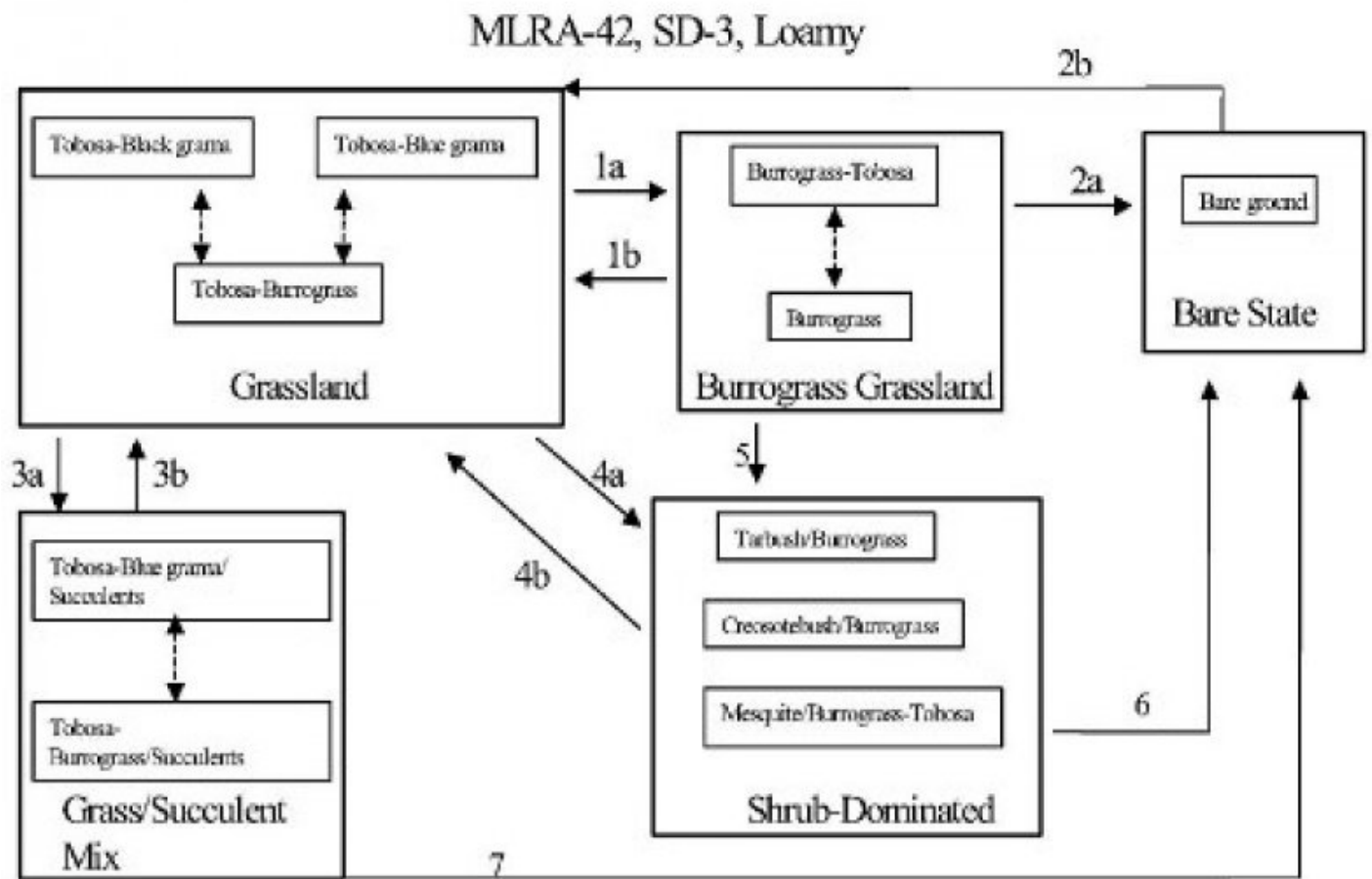
Surface texture	(1) Loam (2) Very fine sandy loam (3) Silt loam
Family particle size	(1) Loamy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to slow
Soil depth	30–72 in
Surface fragment cover <=3"	0–5%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–12 in
Calcium carbonate equivalent (0-40in)	0–10%
Electrical conductivity (0-40in)	0–8 mmhos/cm
Sodium adsorption ratio (0-40in)	0–6
Soil reaction (1:1 water) (0-40in)	6.6–8.4
Subsurface fragment volume <=3" (Depth not specified)	0–5%
Subsurface fragment volume >3" (Depth not specified)	0%

Ecological dynamics

Overview: The Loamy site is associated with the Gyp Upland ecological site with which it intergrades. There is a pronounced increase in alkali sacaton along this interface. The loamy site is also associated with the Gravelly and Shallow ecological sites from which it receives run-on water. The Draw site often dissects Loamy sites and is distinguished from the Loamy site by increased production or greater densities of woody species. The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Tobosa, black grama and blue grama are the dominant species. Retrogression within this state is characterized by a decrease in black and blue grama and an increase in burrograss. Continuous overgrazing and drought can initiate a transition to a Burrograss- Grassland state. Continued reduction in grass cover and resulting infiltration problems may eventually effect a change to a Bare State, with very little or no remaining grass cover. Alternatively, creosotebush, tarbush or mesquite may expand or invade. Transitions back to a Grassland State from a Bare or Shrub-Dominated state are costly and may not be economically feasible. Decreased fire frequency may play a part in the transition to the Grass/Succulent Mix state with increased amounts of cholla and prickly pear.

State and transition model

Plant Communities and Transitional Pathways (diagram)



1a. Soil drying, overgrazing, drought, soil surface sealing. 1b. Restore natural overland flow, increase infiltration, prescribed grazing.

2a. Severe reduction in cover, soil surface sealing, decreased infiltration, erosion. 2b. Restore hydrology, break up physical crust, range seeding, prescribed grazing.

3a. Lack of fire, overgrazing, hail storms or other physical disturbance, drought. 3b. Prescribed fire, brush control, prescribed grazing.

4a. Seed dispersal of shrubs, persistent loss of grass cover, competition by shrubs, lack of fire. 4b. Brush control, range seeding -dependent on amount of grass (seed bank) remaining.

5. Loss of grass cover, seed dispersal of shrubs, competition by shrubs.

6. & 7. Brush control with continued loss of grass cover, soil sealing, erosion.

Figure 4.

State 1 Historic Climax Plant Community

Community 1.1 Historic Climax Plant Community

State Containing Historic Climax Plant Community
Grassland:

The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Black grama, blue grama, and tobosa are the dominant grass species. There are a variety of

perennial forbs and their production varies widely by season and year. Globemallow, verbena, groundsels, croton and filaree are forbs commonly found on this site. Fourwing saltbush and winterfat are two of the more palatable shrubs. The Loamy ecological site encompasses a wide variety of soils, with surface textures ranging from sandy loams to clay loams. Soil depths range from shallow to very deep and can include sub surface features such as calcic, petrocalcic, and gypsic horizons. These variations cause differences in plant community composition and dynamics. Black grama is found at highest densities on coarser textured sandy loams, with blue grama preferring finer textured loam and silt loam, and tobosa favoring lower landscape positions and loam to clay loam surface textures. Burrograss may often be the dominant grass species on silty soils, perhaps in part due to the seedlings ability to auger into and establish on physically crusted soils. Gypsum influenced soils typically have greater amounts of tobosa, burrograss, and ephedra. There is greater representation of sideoats and vine mesquite within the tobosa-blue grama community. Retrogression under continuous heavy grazing results in a decrease of black grama, blue grama, sideoats grama, plains bristlegrass, bush muhly, cane bluestem, vine mesquite, winterfat, and fourwing saltbush. Species such as burrograss, threeawns, sand dropseed, sand muhly, and broom snakeweed increase under continuous heavy grazing or prolonged periods of drought. Under continued retrogression burrograss can completely dominate the site. Creosotebush, tarbush, and mesquite, can also dominate. Cholla and prickly pear can increase on areas that are disturbed or overgrazed.

Diagnosis: Tobosa, black grama, and blue grama are the dominant species. Grass cover is uniformly distributed with few large bare areas. Shrubs are sparse and evenly distributed. Slopes range from level to gently sloping and usually display limited evidence of active rills and gully formation if plant cover remains intact. Litter movement associated with overland flow is limited to smaller size class litter and short distances.

Other shrubs include: yucca, mesquite, tarbush, cholla and creosote bush.

Other forbs include: desert holly, scorpionweed, bladderpod, flax, nama, fleabane, Indianwheat, Indian blanket flower, groundcherry, deerstongue, and rayless goldenrod.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	585	833	1080
Forb	39	55	72
Shrub/Vine	26	37	48
Total	650	925	1200

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%
Grass/grasslike foliar cover	15-30%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	25-30%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	40-50%

Figure 6. Plant community growth curve (percent production by month).

NM2807, R042XC007NM Loamy HCPC. R042XC007NM Loamy HCPC Warm Season Plant Community..

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	5	10	10	25	30	15	5	0	0

State 2

Burrograss-Grassland

Community 2.1

Burrograss-Grassland

Burrograss-Grassland: Changes in hydrology resulting in decreased available soil moisture, reduces grass cover and increases bare ground. Burrograss is the dominant grass. Tobosa cover is variable and can range from sizeable areas to small patches occupying only depressions or the lowest and wettest positions within the site. Threeawns, ear muhly, sand muhly, and fluffgrass occur at increased densities compared to the grassland state. Shrub densities may increase especially mesquite, creosotebush or tarbush. Retrogression within this state is characterized by a further decrease in grass cover and increased bare ground. Further deterioration of this site can result in the transition to a bare state or becoming shrub dominated.

Diagnosis: Burrograss is the dominant species. Grass cover is no longer uniformly distributed, instead tending to be patchy with large areas of bare ground present. Physical crusts are present in bare areas reducing infiltration and suppressing seedling establishment by any grass species other than burrograss.

Transition to Burrograss-Grassland (1a): Transitions from grassland to a burrograss-grassland state may occur due to changes in hydrology. Gullies, roads or obstructions that alter natural water flow patterns may cause this transition. Changes in surface hydrology may also occur due to overgrazing or drought. The reduction in grass cover promotes increased soil physical crusts and reduces infiltration. 5

Key indicators of approach to transition:

- ? Diversion of overland flow resulting in decreased soil moisture.
- ? Increase in amount of burrograss cover
- ? Reduction in grass cover and increase in size and frequency of bare patches.
- ? Formation of physical crusts—indicating reduced infiltration.
- ? Evidence of litter movement—indicating loss or redistribution of organic matter.

Transition back to Grassland (1b) The natural hydrology of the site must be returned. Culverts, turnouts, or rerouting roads may help re-establish natural overland flow, if roads or trails have altered the hydrology. Erosion control structures or shaping and filling gullies may help regain natural flow patterns and establish vegetation if the flow has been channeled. Breaking up physical crusts by soil disturbance may promote infiltration and seedling emergence. Allow natural revegetation to take place. Prescribed grazing will help ensure proper forage utilization and reduce grass loss due to grazing.

State 3

Bare State

Community 3.1

Bare State

Bare State: Extremely low ground cover, soil degradation and erosion characterize this state. Very little vegetation remains. Burrograss is the dominant grass and cover is extremely patchy. Physical soil crusts are extensive. Erosion and resource depletion increase as site degrades.

Diagnosis: Very little cover remains. Erosion is evident by soil sealing, water flow patterns, pedestals or terracettes. Rills and gullies may be present and active.

Transition to Bare State (2a): Extended drought, continuous heavy grazing, or other disturbance that severely

depletes grass cover can effect this transition. As grass cover decreases, sheet flow and erosion increase, and physical soil crusts form, thereby further reducing infiltration.

Key indicators of approach to transition:

- ? Continued reduction in grass cover.
- ? Increased soil surface sealing.
- ? Increased erosion.
- ? Reduced aggregate stability in bare areas.

Transition back to Grassland (2b) Restore the hydrology, see (1a). With the extent of grass loss range seeding may be necessary. Utilizing livestock or mechanical means to break up the physical crusts may increase infiltration and aid seedling establishment. Prescribed grazing will help ensure adequate deferment period following seeding, and proper forage utilization once the grass stand is well established. The degree to which this site is capable of recovery depends on the restoration of hydrology, extent of degradation to soil resources, and adequate rainfall necessary to establish grasses.

State 4

Grass/Succulent Mix

Community 4.1

Grass/Succulent Mix

Grass / Succulent Mix: Increased representations of succulents characterize this site. Increased densities of cholla or pricklypear is recognized as a management concern, but their impact on grass production is unclear. Light to medium cholla or prickly pear infestation doesn't seem to greatly reduce grass production, however it limits access to palatable grasses and interferes with livestock movement and handling. Tobosa and blue grama are the dominant species on this site. Retrogression within this site is characterized by a decrease in blue grama and an increase in succulents, tobosa and burrograss.

Diagnosis: Cholla or prickly pear is found at increased densities. Grass cover is variable ranging from uniformly distributed to patchy with frequent areas of bare ground present. Tobosa or blue grama is the dominant grass species.

Transition to Grass/Succulent Mix (3a): If fire was historically a part of desert grassland ecosystem and played a role in suppressing seedlings of shrubs and succulents, then fire suppression may favor the increase of succulents.¹ Heavy grazing by livestock or other physical disturbances may help disseminate seed and increase the establishment of succulents. Areas historically overgrazed by sheep are sometimes associated with higher densities of Succulents. Intense hailstorms can spread pricklypear by breaking off joints causing new plants to take root.³ During severe drought perennial grass cover can decline significantly, leaving resources available for use by more drought tolerant succulents. Cholla and pricklypear are both adapted to and favored by drought due to the ability of their shallow, wide spreading root systems to absorb and store water.⁴

Key indicators of approach to transition:

- ? Decrease or change in distribution of grass cover.
- ? Increase in amount of succulent seedlings.
- ? Increased cover of succulents.

Transition back to Grassland (3b) Fire is an effective means of controlling cholla and prickly pear if adequate grass cover remains to carry fire.² Cholla greater than two feet tall or pricklypear with a large amount of pads (>15-20) are harder to kill. Chemical control is effective in controlling prickly pear and cholla; apply when growth starts in May. Hand grubbing is also effective if cholla or pricklypear is severed 2-4 inches below ground and care is taken not to let broken joints or pads take root. Stacking and burning piles and grubbing during winter or drought help keeps broken joints and pads from rooting. Prescribed grazing will help ensure proper forage utilization and sustain grass cover.

State 5

Shrub Dominated

Community 5.1

Shrub Dominated

Shrub Dominated: Increased shrub cover characterizes this state. Mesquite, creosotebush, and/or tarbush are the dominant shrub species. Burrograss or tobosa is the dominant grass species. Grass cover is decreased, typically patchy with large bare areas present; however, sometimes grass cover can remain relatively high for extended periods when associated with light to moderate infestations of mesquite. Variations in soil characteristics play a part in determining which shrub species increase. Mesquite is well adapted to a wide range of soil types, but increases more often on deep soils low in carbonates, that have a sandy surface overlying finer textured soils. Tarbush prefers finer textured, calcareous soils, usually in lower positions that receive some extra water. Creosotebush is less tolerant of fine textured soils, preferring sandy, calcareous soils that have some gravel. Creosotebush also does well on soils that are shallow over caliche. Retrogression within this state is characterized by a decrease in tobosa, and an increase in burrograss. As the site continues to degrade shrub cover continues to increase and grass cover is severely reduced.

Diagnosis: Mesquite, Creosotebush, and/or tarbush are the dominant shrubs. Blue grama and black grama cover is low or absent. Burrograss or tobosa are the dominant grasses. Typically grass cover is patchy with large interconnected bare areas present. Physical soil crusts are present, especially on silt loam surface soils.

Transition to Shrub Dominated (4a): Wildlife and livestock consume and disperse mesquite seeds. Flood events may wash creosote or tarbush seeds off adjacent gravelly sites onto the loamy site and supply adequate moisture for germination. Persistent loss of grass cover due to overgrazing or drought can cause large bare patches, providing competition free areas for shrub seedling establishment. As shrub cover increases, competition for soil resources, especially water, becomes a major factor in further reducing grass cover. Reduction of fire, due to either fire suppression policy or loss of adequate fine fuels may increase the probability of shrub encroachment. Increased soil surface physical crusts and associated decreased infiltration, may prevent the establishment of grass seedlings.

Transition to Shrub Dominated (5): The dispersal of creosotebush, tarbush or mesquite seed, combined with loss of grass cover and resource competition by shrubs may cause this transition.

Key indicators of approach to transition:

- ? Decreased grass and litter cover.
- ? Increased bare patch size.
- ? Increased physical soil crusts.
- ? Increased amount of mesquite, creosotebush, or tarbush seedlings.
- ? Increased shrub cover.

Transition back to Grassland (4b) Brush control will be necessary to remove shrubs and eliminate competition for resources necessary for grass establishment or reproduction. Seeding may be necessary on those sites where desired grass species are absent or very limited. Pitting and seeding may increase the chances of successful grass establishment. Prescribed grazing will help ensure adequate time is elapsed before grazing seeded area is allowed and proper forage utilization following seeding establishment.

Transition to Bare State (6): If grass cover on the shrub-dominated state is severely limited and shrubs are removed a bare state may result. This transition will depend on amount of grasses or seed remaining, whether site is seeded, or if seeding is successful.

Transition to Bare State (7): Removal of succulents and continued overgrazing or drought may cause loss of remaining grasses and erosion. Soil surface physical crusting may also be an important factor in inhibiting grass seedling establishment

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Cyperaceae					

Grass/Grasslike					
1	Warm Season			278–324	
	tobosagrass	PLMU3	<i>Pleuraphis mutica</i>	278–324	–
2	Warm Season			9–46	
	burrograss	SCBR2	<i>Scleropogon brevifolius</i>	9–46	–
3	Warm Season			231–278	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	231–278	–
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	231–278	–
4	Warm Season			28–46	
	sideoats grama	BOCU	<i>Bouteloua curtipendula</i>	28–46	–
5	Warm Season			46–93	
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	46–93	–
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	46–93	–
6	Warm Season			9–28	
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	9–28	–
7	Warm Season			46–93	
	threeawn	ARIST	<i>Aristida</i>	46–93	–
	muhly	MUHLE	<i>Muhlenbergia</i>	46–93	–
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	46–93	–
8	Warm Season			28–46	
	Graminoid (grass or grass-like)	2GRAM	<i>Graminoid (grass or grass-like)</i>	28–46	–
Shrub/Vine					
9	Shrub			9–28	
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	9–28	–
	jointfir	EPHED	<i>Ephedra</i>	9–28	–
	winterfat	KRLA2	<i>Krascheninnikovia lanata</i>	9–28	–
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	5–24	–
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	5–24	–
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	5–24	–
10	Shrub			9–28	
	javelina bush	COER5	<i>Condalia ericoides</i>	9–28	–
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	9–28	–
	Grass, annual	2GA	<i>Grass, annual</i>	5–15	–
11	Shrubs			9–28	
	Shrub (>.5m)	2SHRUB	<i>Shrub (>.5m)</i>	9–28	–
Forb					
12	Forb			9–46	
	threadleaf ragwort	SEFLF	<i>Senecio flaccidus var. flaccidus</i>	9–46	–
	globemallow	SPHAE	<i>Sphaeralcea</i>	9–46	–
	verbena	VEPO4	<i>Verbena polystachya</i>	9–46	–
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	5–15	–
	pricklypear	OPUNT	<i>Opuntia</i>	5–15	–
13	Forb			9–28	
	croton	CROTO	<i>Croton</i>	9–28	–

	woolly groundsel	PACA15	<i>Packera cana</i>	9–28	–
14	Forb			9–28	
	Goodding's tansyaster	MAPIG2	<i>Machaeranthera pinnatifida</i> ssp. <i>gooddingii</i> var. <i>gooddingii</i>	9–28	–
	woolly paperflower	PSTA	<i>Psilostrophe tagetina</i>	9–28	–
15	Forb			9–28	
	redstem stork's bill	ERCI6	<i>Erodium cicutarium</i>	9–28	–
	Texas stork's bill	ERTE13	<i>Erodium texanum</i>	9–28	–
16	Forb			9–28	
	Forb (herbaceous, not grass nor grass-like)	2FORB	<i>Forb (herbaceous, not grass nor grass-like)</i>	9–28	–

Animal community

This site provides habitats which support a resident animal community that is characterized by pronghorn antelope, black-tailed jackrabbit, black tailed prairie dog, yellow-faced pocket gopher, banner-tailed kangaroo rat, hispid cotton rat, swift fox, burrowing owl, horned lark, mockingbird, meadowlark, mourning dove, scaled quail, Great Plains toad, plains spadefoot toad, prairie rattlesnake and western coachwhip snake.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations
 Soil Series Hydrologic Group
 Atoka C
 Bigetty B
 Ratliff B
 Reyab B
 Holloman B
 Largo B
 Holloman B
 Bigetty B
 Berino B
 Reagan B
 Reakor B
 Reeves B
 Russler C

Recreational uses

This site offers limited potential for hiking, horseback riding, nature observation and photography. Game bird, antelope and predator hunting are also limited.

Wood products

This site has no potential for wood products

Other products

This site is suitable for grazing by all kinds and classes of livestock, during all seasons of the year. Under retrogression, such plants as black grama, blue grama, sideoats grama, bush muhly, plains bristlegrass, Arizona cottontop, fourwing saltbush and winterfat decrease and there is an increase in burrograss, threeawns, sand dropseed, muhlys, broom snakeweed and javilinabush. Under continued retrogression, burrograss can completely

dominate the site. Creosotebush, mesquite, and tarbush can also dominate. Grazing management alone will not improve the site in the above situation. This site is well suited to a system of management that rotates the season of use.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM

100 - 76 3.0 – 4.2

75 – 51 4.1 – 5.5

50 – 26 5.3 – 7.0

25 – 0 7.1 +

Inventory data references

Other References:

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County Lea County and Chavez County.

Other references

Literature References:

1. Brooks, M.L., AND D.A. Pyke. 2001. Invasive plants and fire in the deserts of North America. Pages 1–14 in K.E.M. Galley and T.P. Wilson (eds.). Proceedings of the Invasive Species Workshop: the Role of Fire in the Control and Spread of Invasive Species.
2. Bunting, S.C., H.A. Wright, and L.F. Neuenschwander. 1980. Long-term effects of fire on cactus in the Southern Mixed Prairie of Texas. J. Range. Manage. 33: 85-88.
3. Laycock, W.A. 1982. Hail as an ecological factor in the increase of prickly pear cactus. p. 359-361. In: J.A. Smith and V.W. Hays (eds.) Proc. XIV Int. Grassland Congr. Westview Press, Boulder, Colo.
4. Vallentine, J.F. 1989. Range Developments and Improvements. 3rd Edition. Academic Press. San Diego, California.
5. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheet. Rangeland Soil Quality—Physical and Biological Soil Crusts. Rangeland Sheet 6, [Online]. Available: <http://www.statlab.iastate.edu/survey/SQL/range.html>

Contributors

David Trujillo

Don Sylvester

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. **Number and extent of rills:**

2. **Presence of water flow patterns:**

3. **Number and height of erosional pedestals or terracettes:**

4. **Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):**

5. **Number of gullies and erosion associated with gullies:**

6. **Extent of wind scoured, blowouts and/or depositional areas:**

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

8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**

9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**

12. **Functional/Structural Groups** (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant:

Sub-dominant:

Other:

Additional:

13. **Amount of plant mortality and decadence** (include which functional groups are expected to show mortality or decadence):
-

14. **Average percent litter cover (%) and depth (in):**
-

15. **Expected annual annual-production** (this is TOTAL above-ground annual-production, not just forage annual-production):
-

16. **Potential invasive (including noxious) species (native and non-native).** List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:
-

17. **Perennial plant reproductive capability:**
-

Ecological site R042XC025NM Shallow

Accessed: 10/27/2021

General information

**Figure 1. Mapped extent**

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

Physiographic features

This site occurs on knolls, ridges, hillslopes alluvial fans and escarpments. Slopes range from 0 to 25 percent and average about 7 percent. Direction of slope varies and is usually not significant. Elevations range from 2,842 to 4,500 feet.

Table 2. Representative physiographic features

Landforms	(1) Hill (2) Ridge (3) Fan piedmont
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–4,500 ft
Slope	0–25%
Aspect	Aspect is not a significant factor

Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity – short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 180 to 220 days. The last killing frost is late March or early April, and the first killing frost is in late October or early November.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Because of the shallow soil depth, the vegetation on this site can take advantage of moisture almost anytime it falls. Strong winds that blow from the west and southwest blow from January through June, which accelerates soil drying at a critical time for cool season plant growth.

Climate data was obtained from <http://www.wrcc.sage.dri.edu/summary/climsmnm.html> web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

Table 3. Representative climatic features

Frost-free period (average)	220 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

Influencing water features

This site is not influenced from water from wetlands or streams.

Soil features

The soils of this site are shallow to very shallow. Soils are derived from mixed calcareous eolian deposits derived from sedimentary rock. Surface layers are very cobbly loam, very gravelly loam, gravelly loam, cobbly loam, gravelly fine sandy loam or gravelly sandy loam.

There is an indurated caliche layer or limestone bedrock that occurs within 20 inches and averages less than 10 inches. Limestone or caliche layer may be the restrictive layer.

Minimum and maximum values listed below represent the characteristic soils for this site.

Characteristic soils:

Lozier
Potter
Tencee
Upton
Ector
Kimbrough

Table 4. Representative soil features

Surface texture	(1) Gravelly loam (2) Extremely gravelly loam (3) Extremely cobbly loam
Family particle size	(1) Loamy
Drainage class	Well drained
Permeability class	Very slow to moderately slow
Soil depth	4–20 in
Surface fragment cover <=3"	15–40%
Available water capacity (0–40in)	1 in
Calcium carbonate equivalent (0–40in)	15–60%
Electrical conductivity (0–40in)	0–2 mmhos/cm
Sodium adsorption ratio (0–40in)	0–1
Soil reaction (1:1 water) (0–40in)	7.4–8.4
Subsurface fragment volume <=3" (Depth not specified)	13–42%
Subsurface fragment volume >3" (Depth not specified)	0–1%

Ecological dynamics

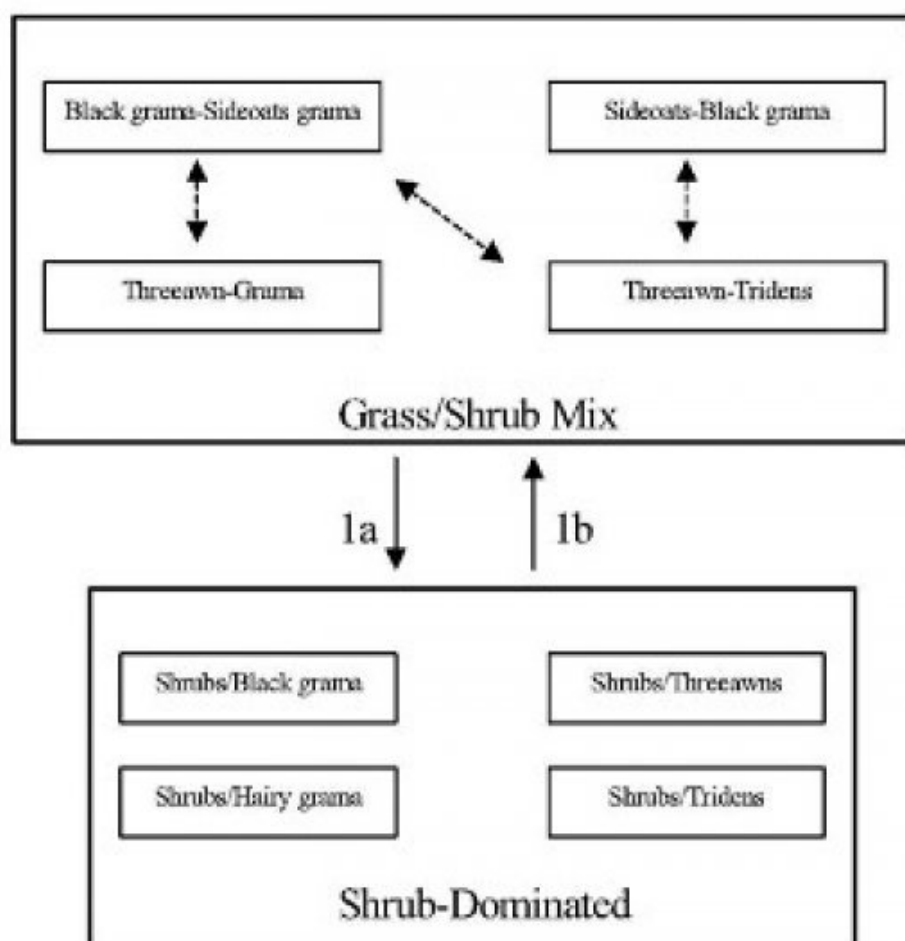
Overview:

The Shallow site is associated with and Limestone Hills, Loamy, and Shallow Sandy sites. When associated with Limestone Hills, the Shallow site occurs on the summits, foot slopes and toeslopes of hills. Loamy sites often occur as areas between low elongated hills with rounded crests (Shallow site). When the Shallow Sandy site and Shallow site occur in association, the Shallow Sandy soils occupy the tops of low ridges and the Shallow site soils occur on the steeper sideslopes of the ridge. The historic plant community of the Shallow site has the aspect of a grassland/shrub mix, dominated by grasses, but with shrubs common throughout the site. Black grama is the dominant grass species; creosotebush, mesquite, and catclaw mimosa are common shrubs. Overgrazing and or extended drought can reduce grass cover, effect a change in grass species dominance, and may result in a shrub-dominated state. 1

State and transition model

Plant Communities and Transitional Pathways (diagram)

MLRA-42, SD-3, Shallow



1a. Extended drought, overgrazing, no fire

1b. Brush control, Prescribed grazing

Figure 4.

State 1 Grass/Shrub Mix

Community 1.1 Grass/Shrub Mix

Grassland/Shrub Mix: The historic plant community is dominated by black grama with sideoats grama as the sub-dominant. Blue grama, hairy grama, bush muhly, and sand dropseed also occur in significant amounts. Sideoats grama can occur as the dominant grass with black grama as sub-dominant on the western side of the Land Resource Unit SD-3. This may be due to higher average elevation on the west side. Retrogression within this state due to extended drought or overgrazing will cause a decrease in species such as black grama, sideoats grama, blue grama, and bush muhly. Threeawns may become the dominant grass species due to a decline in more palatable grasses or because of its ability to quickly recover following drought. Continued loss of grass cover and associated increase in amount of bare ground may result in a shrub-dominated state. Decreased fire frequencies may also be

an important component in the cause of this transition.

Diagnosis: Grass cover is fairly uniform, however, surface gravel, cobble, and bare ground make up a large percent of total ground cover, and grass production during unfavorable years may only average 150-175 pounds per acre. Shrubs are common with canopy cover averaging five to ten percent. Evidence of erosion such as rills and gullies are rare, but may occur on slopes greater than eight percent.

Table 5. Annual production by plant type

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	168	352	536
Shrub/Vine	63	131	200
Forb	20	42	64
Total	251	525	800

Table 6. Ground cover

Tree foliar cover	0%
Shrub/vine/liana foliar cover	5-10%
Grass/grasslike foliar cover	10-15%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	5-8%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	40-60%

**Figure 6. Plant community growth curve (percent production by month).
NM2825, R042XC025NM Shallow HCPC. R042XC025NM Shallow HCPC Warm
Season Plant Community.**

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	3	5	10	10	25	30	12	5	0	0

State 2 Shrub-Dominated

Community 2.1 Shrub-Dominated

Shrub-Dominated: This state is characterized by an increase in shrubs and a decrease in grass cover relative to grassland/shrub mix. As grass cover decreases shrubs increase, especially creosotebush, catclaw mimosa, whitethorn acacia, and mesquite. Each of these shrub species may become dominant in localized areas or across the site, depending on the spatial variability in soil characteristics and landscape position. Black grama, threeawns, hairy grama, or hairy tridens may be the dominant grass species. Fluffgrass, burrograss and broom snakeweed increase in representation. The Shallow site is resistant to state change, due to the natural rock armor of the soil and a shallow impermeable layer. The amount of rock fragments on the soil surface assist in retarding erosion. On Shallow sites with low slope, the shallow depth to either a petrocalcic layer or limestone bedrock helps to keep water perched and available to shallow rooted grasses for extended periods. 2

Diagnosis: Shrubs are the dominant species, especially creosotebush, catclaw mimosa, whitethorn acacia, or mesquite. Grass cover is variable ranging from patchy with large connected bare areas present to sparse with only a limited amount in shrub inter-spaces.

Transition to Shrub-Dominated (1a) Overgrazing and or extended periods of drought, and suppression of natural fire regimes are thought to cause this transition. As grass cover is lost, soil fertility and available soil moisture decline, due to the reduction of organic matter and decreased infiltration.³ Shrubs have the ability to extract nutrients and water from a greater area of soil than grasses and are better able to utilize limited water. Competition by shrubs for water and nutrients limits grass recruitment and establishment. Fire historically may have played a part in suppressing shrub expansion; fire suppression may therefore facilitate shrub expansion.

Key indicators of approach to transition:

*Decrease or change in composition or distribution of grass cover.

*Increase in size and frequency of bare patches.

*Increase in amount of shrub seedlings.

Transition back to Grassland/Shrub Mix (1b) Brush control is necessary to re-establish grasses. Prescribed grazing will help to ensure proper forage utilization and sustain grass cover. Once the transition is reversed and grass cover is re-established, periodic use of prescribed fire may assist in maintaining the Grassland/Shrub state.

Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
Grass/Grasslike					
1				105–158	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	105–158	–
2				79–105	
	sideoats grama	BOCU	<i>Bouteloua curtipendula</i>	79–105	–
3				79–105	
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	79–105	–
	hairy grama	BOHI2	<i>Bouteloua hirsuta</i>	79–105	–
4				26–53	
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	26–53	–
5				16–26	
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	16–26	–
6				26–53	
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	26–53	–
7				16–26	
	hairy woollygrass	ERPI5	<i>Erioneuron pilosum</i>	16–26	–
8				5–16	
	ear muhly	MUAR	<i>Muhlenbergia arenacea</i>	5–16	–
9				5–16	
	New Mexico feathergrass	HENE5	<i>Hesperostipa neomexicana</i>	5–16	–
10				5–16	
	low woollygrass	DAPU7	<i>Dasyochloa pulchella</i>	5–16	–
11				16–26	
	Grass, perennial	2GP	<i>Grass, perennial</i>	16–26	–

Forb					
12				11–26	
	stemless four-nerve daisy	TEACE	<i>Tetraneuris acaulis</i> var. <i>epunctata</i>	11–26	–
13				5–16	
	woolly groundsel	PACA15	<i>Packera cana</i>	5–16	–
14				5–16	
	globemallow	SPHAE	<i>Sphaeralcea</i>	5–16	–
15				5–16	
	bladderpod	LESQU	<i>Lesquerella</i>	5–16	–
16				5–16	
	cassia	CASSI	<i>Cassia</i>	5–16	–
17				11–26	
	Forb (herbaceous, not grass nor grass-like)	2FORB	<i>Forb (herbaceous, not grass nor grass-like)</i>	11–26	–
Shrub/Vine					
18				5–16	
	littleleaf sumac	RHMI3	<i>Rhus microphylla</i>	5–16	–
19				5–16	
	creosote bush	LATR2	<i>Larrea tridentata</i>	5–16	–
20				5–16	
	littleleaf ratany	KRER	<i>Krameria erecta</i>	5–16	–
21				5–16	
	javelina bush	COER5	<i>Condalia ericoides</i>	5–16	–
22				5–16	
	American tarwort	FLCE	<i>Flourensia cernua</i>	5–16	–
23				5–16	
	crown of thorns	KOSP	<i>Koeberlinia spinosa</i>	5–16	–
24				11–26	
	honey mesquite	PRGL2	<i>Prosopis glandulosa</i>	11–26	–
	honey mesquite	PRGL2	<i>Prosopis glandulosa</i>	11–26	–
25				5–16	
	catclaw mimosa	MIACB	<i>Mimosa aculeaticarpa</i> var. <i>biuncifera</i>	5–16	–
26				5–16	
	pricklypear	OPUNT	<i>Opuntia</i>	5–16	–
27				11–26	
	mariola	PAIN2	<i>Parthenium incanum</i>	11–26	–
	mariola	PAIN2	<i>Parthenium incanum</i>	11–26	–
28				5–16	
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	5–16	–
29				16–26	
	Shrub (>.5m)	2SHRUB	<i>Shrub (>.5m)</i>	16–26	–

Animal community

This site provides habitats which support a resident animal community that is characterized by desert cottontail, spotted ground squirrel, Merriam's kangaroo rat, cactus mouse, white-throated woodrat, gray fox, spotted skunk, roadrunner, Swainson's hawk, white-necked raven, cactus wren, pyrrhuloxia, lark sparrow, mourning dove, scaled quail, leopard lizard, round-tailed horned lizard, prairie rattlesnake, marbled whiptail, and greater earless lizard. Where associated with limestone hills, mule deer utilize this site.

Where large woody shrubs occur, most resident birds and scissor-tailed flycatcher, morning dove, lark sparrow and Swainson's hawk nest.

Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations

Soil Series----- Hydrologic Group

Lozier----- D

Potter----- C

Tencee----- D

Upton----- C

Kimbrough----- D

Upton----- D

Ector----- D

Recreational uses

This site offers recreation potential for hiking, horseback riding, rock hunting, nature photography and bird hunting and birding. During years of abundant spring moisture, a colorful array of wild flowers is displayed during May and June. A few summer and fall flowers also occur.

Wood products

This site has no potential for wood production.

Other products

This site is suited for grazing by all kinds and classes of livestock during all seasons of the year. Missmanagement will cause a decrease in black grama, sideoats grama, and blue grama, bush muhly and New Mexico feathergrass. A corresponding increase in bare ground will occur. There will also be an increase in muhlys, fluffgrass, creosotebush, javalinabush, catclaw, and mesquite. This site will respond best to a system of management that rotates the season of use.

Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index----- Ac/AUM

100 - 76----- 3.7 – 4.5

75 – 51----- 4.3 – 5.5

50 – 26----- 5.3 – 10.0

25 – 0----- 10.1 +

Inventory data references

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of New Mexico (SD-3). This site has been mapped and

correlated with soils in the following soil surveys. Eddy County, Lea County, and Chaves County.

Other references

Literature Cited:

1. Humphrey, R.R. 1974. Fire in the deserts and desert grassland of North America. In: Kozlowski, T. T.; Ahlgren, C. E., eds. Fire and ecosystems. New York: Academic Press: 365-400.
2. Hennessy, J.T., R.P. Gibbens, J.M. Tromble, and M. Cardenas. 1983. Water properties of caliche. J. Range Manage. 36: 723-726.
3. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheets. Rangeland Soil Quality—Infiltration, Organic Matter, Rangeland Sheets 5,6. [Online]. Available: <http://www.statlab.iastate.edu/survey/SQL/range.html>

Contributors

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Don Sylvester

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. Number and extent of rills:

2. Presence of water flow patterns:

3. Number and height of erosional pedestals or terracettes:

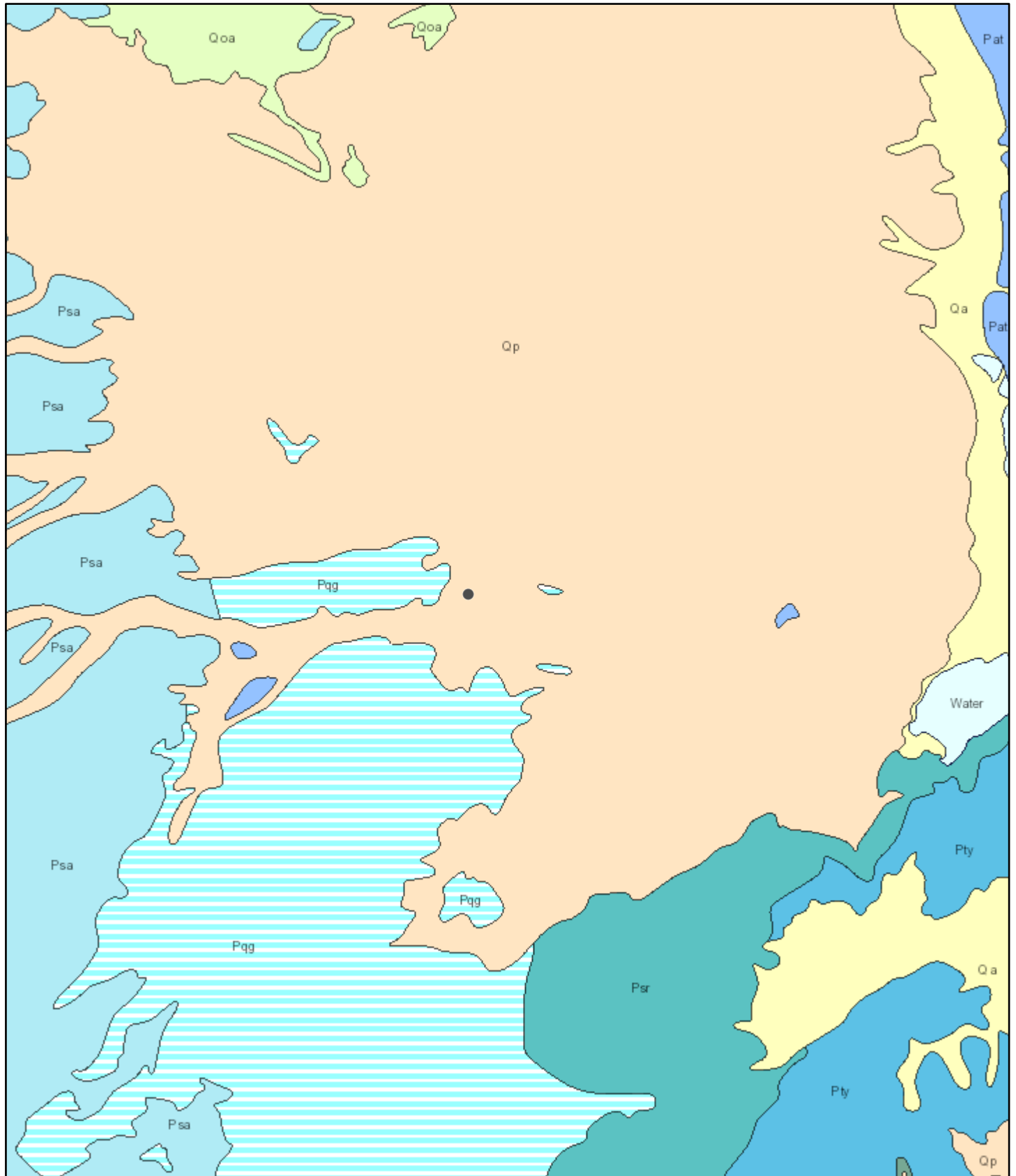
4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):

5. **Number of gullies and erosion associated with gullies:**
-
6. **Extent of wind scoured, blowouts and/or depositional areas:**
-
7. **Amount of litter movement (describe size and distance expected to travel):**
-
8. **Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**
-
9. **Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**
-
10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**
-
11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**
-
12. **Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):**
- Dominant:
- Sub-dominant:
- Other:
- Additional:
-
13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):**
-
14. **Average percent litter cover (%) and depth (in):**
-
15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):**
-
16. **Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if**

their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:

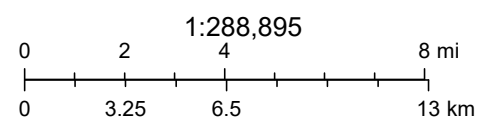
17. Perennial plant reproductive capability:

ArcGIS Web Map



10/27/2021, 2:26:14 PM

Lithologic Contacts	Faults	Dikes
Contact, Exposed	Fault, Exposed	<all other values>
Contact, Gradational	Fault, Intermittent	Dike
Nomenclature change	Fault, Concealed	Dike intruding fault
Map Boundary	Shore Zone	Volcanic Vents
		Published Reports



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 Road Data; Natural Earth Data; U.S.

ArcGIS Web AppBuilder

Closure Criteria Worksheet			
Site Name: Allison CQ Federal #9			
Spill Coordinates:		X: 32.665845	-104.580505
Site Specific Conditions		Value	Unit
1	Depth to Groundwater	<50	feet
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	75,426	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	64,928	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	8,839	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	3,297	feet
	ii) Within 1000 feet of any fresh water well or spring	No	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	68,909	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
9	Within an unstable area (Karst Map)		Critical High Medium Low
10	Within a 100-year Floodplain	>500	year
11	Soil Type	Reagon Loam, Upton-Reagan Complex	
12	Ecological Classification	Shallow, Loamy	
13	Geology	Qp	
NMAC 19.15.29.12 E (Table 1) Closure Criteria		<50'	<50' 51-100' >100'

ATTACHMENT 4



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/1/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/2/2021 12:07 AM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/1/2021 11:05 AM
Departed Site	12/1/2021 3:04 PM

Field Notes

11:55 Arrived on site to begin excavation for remediation.

15:03 Excavation won't begin until tomorrow. Fence is moved around polygon and northeast section of the polygon is white lined

Next Steps & Recommendations

1 Begin excavation tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: North



Fence is moved around polygon

Viewing Direction: South



Northeast section is white lined and ready for excavation

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

CD

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/2/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/2/2021 11:50 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/2/2021 8:10 AM
Departed Site	12/2/2021 3:30 PM

Field Notes

- 9:24** Arrived on site to begin excavation for remediation on the northeast corner of the pad.
- 13:27** BES21-01 and WES21-01-WES21-03 are hot on chlorides. Wall for WES21-01 is right up against the tall grass area. A piece of liner was found inside the excavation.
- 13:29** Ran BES21-02-BES21-03 and WES21-04-WES21-07. BES21-02, WES21-04, and WES21-06-WES21-07 are hot on chlorides. Need to be stepped out.
- 13:31** BF21-01 (background) was taken at 1-1.5ft approximately 15ft away from east side wall. Clean on titration for chlorides. Hit refusal at 1.5ft

Next Steps & Recommendations

- 1 Continue excavation tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: East



Excavation beginning down to 4ft on northeast corner

Viewing Direction: East



Sample area for BES21-01 and WES21-01-WES21-03

Viewing Direction: Northeast



Liner inside the excavation

Viewing Direction: East



Wall for WES21-01 is right up against tall grass area



Daily Site Visit Report

Viewing Direction: East



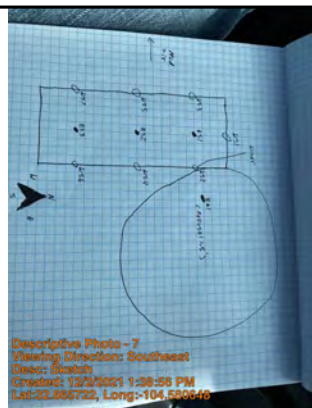
Sample area for BES21-02-BES21-03 and WES21-04-WES21-07.

Viewing Direction: East



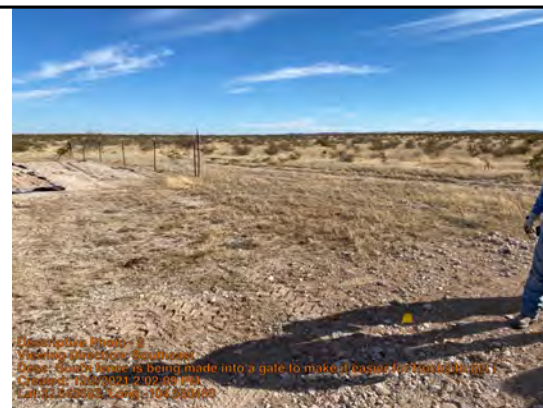
Soil lithology shows about 3ft aggregate and then caliche down to 4ft

Viewing Direction: Southeast



Sketch

Viewing Direction: Southeast



South fence is being made into a gate to make it easier for trucks to get in tomorrow

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature: 
Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/3/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/3/2021 11:09 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/3/2021 8:05 AM
Departed Site	12/3/2021 3:00 PM

Field Notes

- 8:12** Arrived on site to continue remediation.
- 8:50** Stepped out WES21-01 with WES21-08. All clean
- 12:13** Stepped out WES21-03 and WES21-07 with WES21-09 and WES21-10. Still dirty on chlorides. This wall is near the mud pit area. Gonna hold off on stepping it out and try to find the edge of the liner from the mud pit
- 12:13** BES21-01 and BES21-02 are still dirty on chlorides at 6'
- 14:42** East wall being put on hold to research the liner that is on the northeast corner

Next Steps & Recommendations

- 1 Continue remediation next week

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Sample area for WES21-08

Viewing Direction: Southwest



Taking BES21-01-BES21-02 down to 6'

Viewing Direction: South



Stepping out west wall

Viewing Direction: Northeast



Liner found on northeast corner



Daily Site Visit Report

Viewing Direction: Northwest



Excavation is now up to the pad where equipment used to be

Viewing Direction: West



Excavation will continue straight west from here. This area will be sampled on Monday.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature: 
Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/6/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/6/2021 8:28 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/6/2021 8:28 AM
Departed Site	12/6/2021 11:30 AM

Field Notes

9:19 Arrived on site to continue remediation.

10:39 Ran BES21-04-BES21-05 at 2' on EC, PID, and PetroFlag. BES21-05 is dirty on chlorides. Taking it down to 4'.

13:16 BES21-05 will be resembled at 4' tomorrow

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



Sample area for BES21-04-BES21-05 and
WES21-11-WES21-13

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature: 
Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/7/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/7/2021 11:20 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/7/2021 7:55 AM
Departed Site	12/7/2021 3:15 PM

Field Notes

9:18 Arrived on site to continue remediation.

9:25 Sample area for BES21-05 was excavated down to 4'

9:30 Currently trying to find edge of the liner for the mud pit to avoid excavating into it

Next Steps & Recommendations

1 Continue excavation tomorrow



Daily Site Visit Report

Site Photos

Viewing Direction: Northwest



Sample area for BES21-05

Viewing Direction: Northwest



Beginning to trench east-west across the pad away from the mud pit

Viewing Direction: North



Soil lithology appears to be about 1-1.5' of aggregate and then hard caliche down

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature: 
Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/7/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/7/2021 11:19 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 12/7/2021 8:28 AM

Departed Site 12/7/2021 3:15 PM

Field Notes

9:19 Arrived on site to continue remediation.

10:39 Ran BES21-04-BES21-05 at 2' on EC, PID, and PetroFlag. BES21-05 is dirty on chlorides. Taking it down to 4'.

13:16 BES21-05 will be resembled at 4' tomorrow

13:37 BES21-06-BES21-08 are clean on EC, PID, and PetroFlag. WES21-14-WES21-19 are all dirty

13:38 WES21-15, WES21-17, and WES21-19 run along the north wall and I am leaving them alone for now as they are near the mud pit area.
WES21-14, WES21-16, and WES21-18 run along the south wall and I am stepping that out now

13:40 Unclear where the mud pit begins on north edge of pad. Some liner is exposed on the west side but cannot tell where it begins or ends

13:50 5 trucks hauled today for 200 yards. Bringing the total to 540 for the remediation.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



Sample area for BES21-04-BES21-05 and WES21-11-WES21-13

Viewing Direction: East



Sample area for BES21-06-BES21-08 and WES21-14-WES21-19.

Viewing Direction: East



Unclear where the mud pit begins as it is flush with the pad

Viewing Direction: Northeast



Liner that is exposed on west side of mud pit

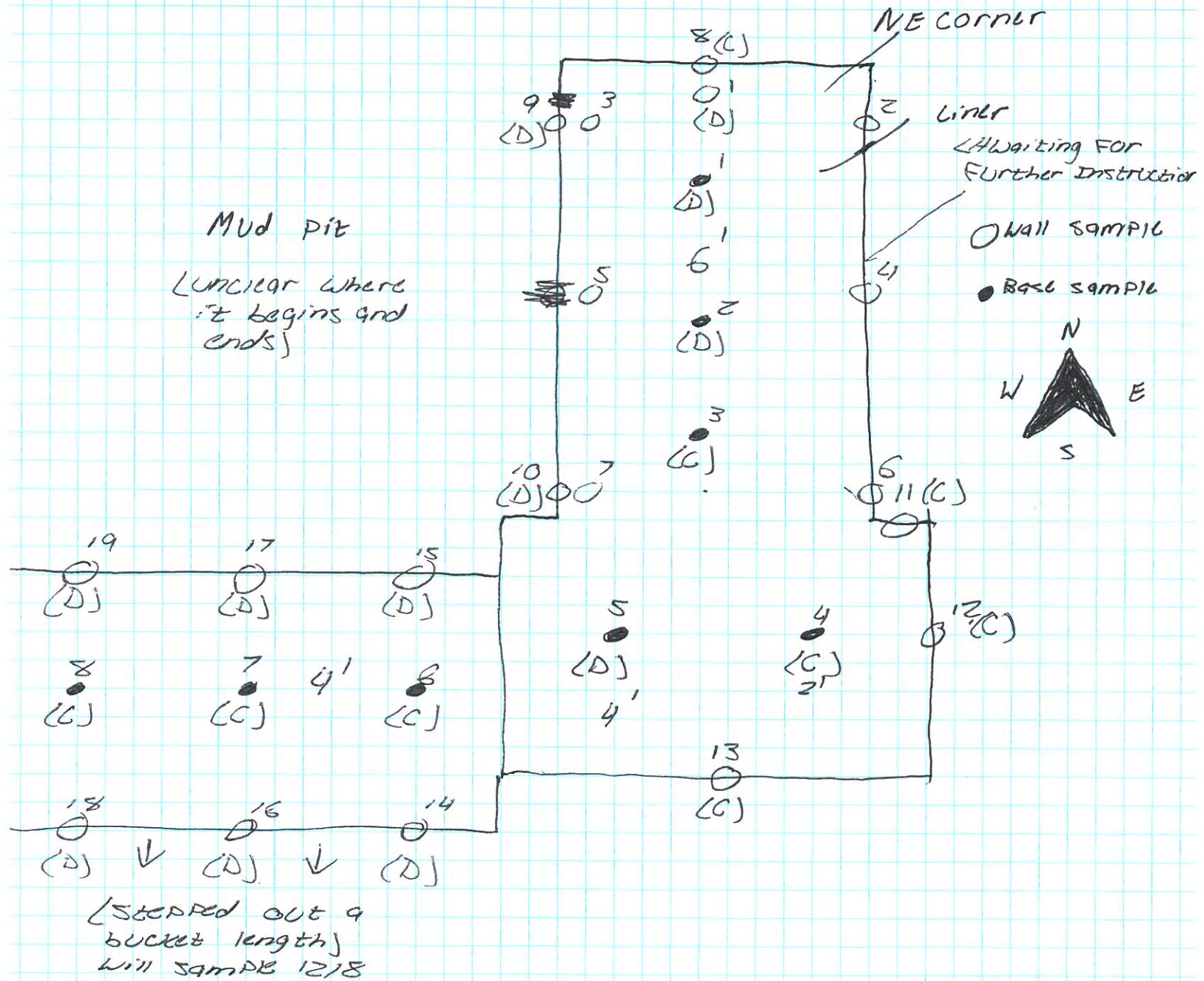
Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature: 
Signature





Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/8/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/8/2021 11:02 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 12/8/2021 8:17 AM

Departed Site 12/8/2021 3:15 PM

Field Notes

9:05 Arrived on site to continue remediation. Stepping out failed samples WES21-14, WES21-16, and WES21-18 from yesterday

9:07 Stepping out failed samples with WES21-20-WES21-23 and BES21-09. Excavation is starting to trend southward on the west side of the pad to match the proposed polygon

10:16 WES21-20-WES21-23 are clean on EC and PID. BES21-09 is clean on EC, PID, and PetroFlag

10:17 Stopping excavation for a little while to figure out a truck route on the pad.

13:42 7 trucks hauled off 140 yards today. Bringing the total to 680.

Next Steps & Recommendations

1 Continue remediation tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: East



Descriptive Photo - 1
Viewing Direction: East
Depth: Sample area for WES21-20, WES21-22 and BES21-09
Created: 12/8/2021 9:00:00 AM
Lat: 32.89804, Long: -104.88844

Sample area for WES21-20-WES21-23

Viewing Direction: Southeast



Descriptive Photo - 2
Viewing Direction: Southeast
Depth: Sample area for BES21-09
Created: 12/8/2021 9:04:05 AM
Lat: 32.89818, Long: -104.88844

Sample area for BES21-09

Viewing Direction: North



Descriptive Photo - 3
Viewing Direction: North
Depth: Excavating down 4' to the end of the dead spot SW of the well head
Created: 12/8/2021 11:04:27 AM
Lat: 32.89870, Long: -104.88844

Excavating down 4' to the end of the dead spot SW of the well head

Viewing Direction: Northeast



Descriptive Photo - 4
Viewing Direction: Northeast
Depth: Trucks being loaded on new circle route
Created: 12/8/2021 11:07:27 AM
Lat: 32.89854, Long: -104.88844

Trucks being loaded on new circle route



Daily Site Visit Report

Viewing Direction: Southeast



Current excavation

Viewing Direction: West



Current excavation

Viewing Direction: South



Current excavation

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' or similar initials, written above a horizontal line.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/9/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/10/2021 1:50 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/9/2021 8:38 AM
Departed Site	12/9/2021 3:15 PM

Field Notes

8:55 Arrived on site to continue remediation

12:31 Ran WES21-24-WES21-28 and BES21-10-BES21-15 at 4'. WES21-26-WES21-28 and BES21-13-BES21-15 are hot on chlorides. The others are clean on EC, PID, and PetroFlag. Those samples points are being excavated out

12:32 Ten trucks hauled out 200 yards today. Bringing the total to 880.

Next Steps & Recommendations

1 Continue remediation

Daily Site Visit Report



Site Photos

Viewing Direction: North



Soil lithology: 5-6" of topsoil, 1-1.5' of aggregate, and 2' of hard river rock

Viewing Direction: Northeast



Sample area for BES21-10-BES21-15 and WES21-24-WES21-28

Viewing Direction: Northeast



Hot base samples being excavated down to 6'

Viewing Direction: East



Stockpile



Daily Site Visit Report

Viewing Direction: North



Some staining near where mud pit begins on north edge of pad

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' with a stylized flourish.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/10/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/10/2021 6:47 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 12/10/2021 8:19 AM

Departed Site 12/10/2021 10:42 AM

Field Notes

9:03 Arrived on site to continue remediation and load trucks

9:54 Ran WES21-29-WES21-31. All three are hot on EC. Stepping them out

10:39 Winds have reached 30 mph so we are shutting down work for the day

Next Steps & Recommendations

1 Continue remediation next week

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Sample area for WES21-29-WES21-31

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' or similar initials, written above a horizontal line.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/13/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/13/2021 11:03 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/13/2021 8:00 AM
Departed Site	12/13/2021 3:00 PM

Field Notes

8:06 Arrived on site to continue remediation.

12:18 Ran WES21-32-WES21-35 and BES21-13-BES21-18 at 6'. All are clean on EC, PID, and PetroFlag except WES21-32 which is hot on TPH. Stepping it out 6'.

14:01 WES21-36 is still hot on chlorides.

14:02 Standard is currently having DEF issues with the trackhoe. Stopping digging for a moment.

14:54 Nine trucks hauled today. Only eight made two trips. 17 loads for 340 yards. Bringing the total to 1,760 for the dig.

Next Steps & Recommendations

1 Continue remediation tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Current excavation on west side of pad. Going to continue to step out this wall to the west.

Viewing Direction: Northwest



Sample area for WES21-33-WES21-35

Viewing Direction: Northeast



Sample area for BES21-13-BES21-18

Viewing Direction: Southeast



Sample area for WES21-32



Daily Site Visit Report

Viewing Direction: Southeast



WES21-32 being stepped out to WES21-36

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

CD

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/14/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/14/2021 11:05 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/14/2021 9:00 AM
Departed Site	12/14/2021 3:03 PM

Field Notes

- 9:11** Arrived on site to continue remediation. Stepping out WES21-36
- 12:58** WES21-37 is clean on EC, PID, and PetroFlag
- 13:00** Beginning to dig toward the west end near the road now. We currently only have the backhoe so this area probably won't be fully excavated to sample until tomorrow. A replacement for the trackhoe should be here this afternoon
- 13:23** Five trucks hauled out 200 yards today. Bringing the total to 1,960.
- 14:16** Liner is found at about 2' at west end. It is near mud pit area

Next Steps & Recommendations

- 1 Will continue excavation on west end tomorrow. There is a wall sample that came back hot on chlorides from lab. Will step that out tomorrow as well.

Daily Site Visit Report



Site Photos

Viewing Direction: East



WES21-36 being stepped out

Viewing Direction: Southeast



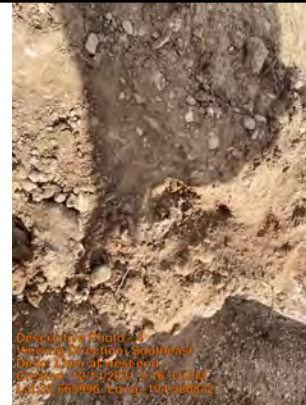
Sample area for WES21-37

Viewing Direction: Northwest



Beginning to dig toward the west end near the road

Viewing Direction: Southeast



Liner at west end



Daily Site Visit Report

Viewing Direction: East



Liner is close to where mud pit is. Could be the edge of the pit.

Viewing Direction: Northwest



Quite a bit of trash coming out at west end

Viewing Direction: North



Trash at west end

Viewing Direction: North



Trash plastic and stain on west end. Could be edge of the mud pit.

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD'.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/15/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/16/2021 4:07 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 12/15/2021 8:10 AM

Departed Site 12/15/2021 12:00 PM

Field Notes

9:27 Arrived on site to continue remediation.

9:28 High winds today. Getting up to 30-35 mph. Unable to dig at the moment because the wind will blow contaminated dust into the pasture.

9:29 Currently trying to wait out the wind. We will get trucks loaded up on their second trip around noon. We will see how the wind is then.

11:08 Two trucks hauled for 80 yards. Total - 2,040.

11:27 Shutting work down. Wind speeds are over 40 mph.

Next Steps & Recommendations

1 Continue remediation tomorrow.

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Trucks loaded

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' inside a loop.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/16/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/16/2021 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	12/16/2021 7:35 AM
Departed Site	12/16/2021 3:30 PM

Field Notes

7:36 Arrived on site to continue remediation.

8:16 Failed analytical WES21-20 is being stepped out 2' to WES21-38.

13:28 Ran BES21-19-BES21-21 and WES21-39-WES21-43 on EC. All were dirty except BES21-21 and WES21-39. This area is being left alone until we can come up with a plan to continue excavation as it is right up against the access road.

13:31 WES21-38-WES21-39 and BES21-21 at 6' are clean on EC, PID, and PetroFlag

13:31 Moving to delineate east wall of northeast corner

15:00 Ran WES21-44-WES21-46 on east wall of NE corner. WES21-45-WES21-46 are dirty on EC. WES21-44 is clean on EC, PID, and PetroFlag

15:13 Standard is moving fence to be able to step out the hot samples tomorrow

Next Steps & Recommendations

1 Continue remediation tomorrow



Daily Site Visit Report

Site Photos

Viewing Direction: East



Descriptive Photo - 1
Viewing Direction: East
Desc: Delineating WES21-20
Created: 12/16/2021 8:16:24 AM
Lat:32.555956, Long: -104.580456

Delineating WES21-20

Viewing Direction: Northeast



Descriptive Photo - 2
Viewing Direction: Northeast
Desc: Sample area for WES21-38
Created: 12/16/2021 8:17:57 AM
Lat:32.555956, Long: -104.580456

Sample area for WES21-38

Viewing Direction: Northwest



Descriptive Photo - 3
Viewing Direction: Northwest
Desc: Sample area for BES21-19-BES21-21 and WES21-39-WES21-43
Created: 12/16/2021 1:39:29 PM
Lat:32.555956, Long: -104.580456

Sample area for BES21-19-BES21-21 and WES21-39-WES21-43

Viewing Direction: North



Descriptive Photo - 4
Viewing Direction: North
Desc: I have flagged a line for where I think the mud pit starts on the west side
Created: 12/16/2021 1:30:13 PM
Lat:32.555956, Long: -104.580456

I have flagged a line for where I think the mud pit starts on the west side



Daily Site Visit Report

Viewing Direction: East



East wall of northeast corner being stepped out

Viewing Direction: North



Fence is being put around west end

Viewing Direction: Northeast



Staining and pieces of liner on wall at west end

Viewing Direction: Northeast



Sample area for WES21-44-WES21-46

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:


Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/17/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/17/2021 11:04 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/17/2021 8:25 AM
Departed Site	12/17/2021 3:00 PM

Field Notes

11:40 Arrived on site to continue remediation.

11:41 Stepped out WES21-45-WES21-46 twice now. WES21-47-WES21-50 are still hot on EC. Still try to delineate the wall.

14:28 Stepped out WES21-50-WES21-51 with WES21-52-WES21-53. All still dirty on EC

14:30 Ran BES21-22-BES21-23 at 6' on EC. BES21-23 is clean on EC, PID, and PetroFlag. Sending to lab

14:30 Failed wall samples will be stepped out next week

Next Steps & Recommendations

1 Continue remediation on Monday

Daily Site Visit Report



Site Photos

Viewing Direction: Southeast



Sample area for WES21-47-WES21-50

Viewing Direction: East



More pieces of liner were found at 2' in this area

Viewing Direction: North



Sample area for BES21-22-BES21-23

Viewing Direction: Northeast



Sample area for WES21-52-WES21-53

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature consisting of the letters 'C' and 'D' in a stylized, cursive-like font.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/20/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/20/2021 11:54 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/20/2021 9:58 AM
Departed Site	12/20/2021 4:05 PM

Field Notes

10:42 Arrived on site to continue remediation.

10:43 Continuing to step out sample areas WES21-04 and WES21-06 to WES21-53-WES21-54. Both are still high on chlorides.

12:24 Stepped out to WES21-55-WES21-56. Still hot on chlorides.

12:24 Eight trucks hauling today for 320 yards.

13:43 Fence line is having to be extended out again to have room for excavation on east wall

Next Steps & Recommendations

1 Continue remediation tomorrow.

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



Sample area for WES21-53-WES21-56

Viewing Direction: North



Fence being extended out

Viewing Direction: East



Building ramp so excavator and loader can scoop dirt inside excavation. Reason for this is pipelines on east side of the pad are in the way

Viewing Direction: Northwest



Excavating corners of the dirty east wall



Daily Site Visit Report

Viewing Direction: West



Stepping east wall out again. Will sample tomorrow

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' or similar initials.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/21/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/21/2021 11:43 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/21/2021 8:15 AM
Departed Site	12/21/2021 3:30 PM

Field Notes

8:38 Arrived on site to continue remediation.

10:15 Ran WES21-57-WES21-58. WES21-57 is clean on EC, PID, and PetroFlag. WES21-58 is dirty on EC. Still working to step it out.

11:15 WES21-59 is clean on EC, PID, and PetroFlag. East wall is now clean.

11:16 Taking the NE corner down to 8' to vertically delineate dirty sample points at 6'

11:44 Seven trucks hauling for 280 yards. 2,880 yards total

15:06 Samples at 8' will be field screened tomorrow

Next Steps & Recommendations

1 Continue remediation tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



Sample area for WES21-57-WES21-59

Viewing Direction: Northeast



Sample area for BES21-01-BES21-02 and BES21-22 being excavated down to 8'

Viewing Direction: East



Northeast corner excavated down to 8'

Viewing Direction: Southeast



Stockpile. About 1,200 yards

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:


Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/22/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/22/2021 11:19 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/22/2021 8:07 AM
Departed Site	12/22/2021 3:31 PM

Field Notes

8:37 Arrived on site to continue remediation.

8:38 Operator is still working to take NE corner down to 8'. Will grab sample points that were hot at 6'

11:48 BES21-01-BES21-02 and BES21-22 at 8' are all clean on EC, PID, and PetroFlag

13:52 Stepped out WES21-33-WES21-34 (analytical Sean hot on chlorides) out to WES21-60-WES21-61. All clean on EC, PID, and PetroFlag

14:10 Going back to the west end to step out WES21-40 and WES21-41. Leaving the wall by the road alone until the very end of the excavation.

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: North



Sample area for BES21-01, BES21-02, and BES21-22 (hot at 6')

Viewing Direction: East



NE corner down to 8'

Viewing Direction: Northwest



Sample area for WES21-60-WES21-61

Viewing Direction: East



Stepping out WES21-40-WES21-41

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature consisting of the letters 'C' and 'D' in a stylized, cursive-like font.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/23/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/23/2021 10:23 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/23/2021 8:14 AM
Departed Site	12/23/2021 1:00 PM

Field Notes

10:13 Arrived on site to continue remediation.

10:13 Stepped out WES21-40-WES21-41 with WES21-62-WES21-67. Still hot on chlorides and stepping it out another bucket length.

11:00 WES21-40-WES21-41 were stepped out to WES21-64 and WES21-65. They are now all clean on EC, PID, and PetroFlag. Moving to the north wall of the west end now.

Next Steps & Recommendations

1 Continue remediation next week

Daily Site Visit Report



Site Photos

Viewing Direction: South



Sample area for WES21-64-WES21-65

Viewing Direction: North



Beginning to step out north wall on west end.
Not going too far to east where mud pit is

Viewing Direction: North



Stepping out north wall on west end (WES21-42)

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

CD

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/29/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/29/2021 11:38 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/29/2021 8:15 AM
Departed Site	12/29/2021 3:40 PM

Field Notes

9:25 Arrived on site to continue remediation.

10:25 Stepped out WES21-43 with WES21-66. It is now all clean on EC, PID, and PetroFlag

11:32 Progress is slowed today due to a smaller trackhoe. The other trackhoe needed maintenance.

13:19 Sample areas for BES21-19-BES21-20 are currently being excavated down to 8'

14:46 Standard safety is still working to excavated BES21-19-BES21-20 down to 8'. Again it is a little slow due to a smaller trackhoe

15:24 BES21-19 at 8' is all clean on EC, PID, and PetrFlag. BES21-20 is hot on EC at about 2,000.

Next Steps & Recommendations

1 Continue remediation tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: North



Sample area for WES21-66

Viewing Direction: Northeast



Sample area for BES21-19-BES21-20 being excavated down to 8'

Viewing Direction: East



Sample area for BES21-19-BES21-20 at 8'

Viewing Direction: Northeast



Wall near BES21-20. Looks like soil could have collapsed there at some point

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' or similar initials, written above a horizontal line.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	12/30/2021
Site Location Name:	Allison CQ Federal #9	Report Run Date:	12/30/2021 9:55 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	12/30/2021 8:00 AM
Departed Site	12/30/2021 1:45 PM

Field Notes

8:22 Arrived on site to continue remediation.

11:02 Sample area for WES21-42 next to the road was stepped out to WES21-67-WES21-68. Both are still hot on chlorides. Putting the area on hold until we get approval from landowner to dig into the road.

12:23 Excavating BES21-20 down to 10'. Sample is clean on EC, PID, and PetroFlag.

Next Steps & Recommendations

1 Continue remediation next week

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Descriptive Photo - 2
Viewing Direction: Northwest
Desc: Sample area for BES21-20
Created: 12/30/2021 1:05:59 PM
Lat:32.688953, Long:-109.580961

Sample area for BES21-20

Viewing Direction: Northwest



Descriptive Photo - 2
Viewing Direction: Northwest
Desc: Sample area for WES21-67-WES21-68
Created: 12/30/2021 1:06:21 PM
Lat:32.688953, Long:-109.580961

Sample area for WES21-67-WES21-68

Viewing Direction: Northeast



Descriptive Photo - 3
Viewing Direction: Northeast
Desc: Sloping the step up from 8' to 4' in NE corner to provide safe access
Created: 12/30/2021 1:12:20 PM
Lat:32.688977, Long:-109.580961

Sloping the step up from 8' to 4' in NE corner to provide safe access

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, consisting of the letters 'C' and 'D' joined together.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/4/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/5/2022 10:50 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	1/4/2022 8:08 AM
Departed Site	1/4/2022 3:25 PM

Field Notes

8:09 Arrived on site to continue remediation.

10:00 Mike Moffitt on site to discuss how to address the mud pit. Discussed the sloping of the walls around the mud pit and how far to dig into it for the edges.

10:46 WES21-69-WES21-70 is still hot on chlorides. This area will be sloped depending on analyticals.

11:10 Now stepping out north wall against the mud pit 4-5' to have a more defined edge of the mud pit for a potential slope.

13:40 Still working to excavate north wall. Samples will be taken along it when completed

Next Steps & Recommendations

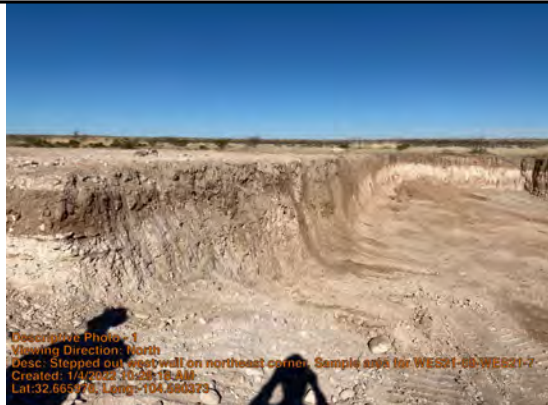
1 Continue remediation

Daily Site Visit Report



Site Photos

Viewing Direction: North



Stepped out west wall on northeast corner.
Sample area for WES21-69-WES21-70

Viewing Direction: West



Soil lithology on west side of NE corner. Mostly
aggregate soil. This is digging closer to the mud
pit.



Daily Site Visit Report

Viewing Direction: West



Soil lithology on NW wall of NE corner.
Aggregate down to about 3' and then some
caliche/aggregate

Viewing Direction: North



Area to be sloped

Viewing Direction: Northwest



North wall against the mud pit begins stepped
out 4-5'

Viewing Direction: Southeast



Excavating north wall



Daily Site Visit Report

Viewing Direction: Northeast



Excavating north wall against mud pit

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature in black ink, appearing to be 'CD' or similar initials, written above a horizontal line.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/5/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/5/2022 10:58 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	1/5/2022 8:05 AM
Departed Site	1/5/2022 2:45 PM

Field Notes

9:07 Arrived on site to continue remediation around the mud pit

9:08 Ran WES21-71-WES21-77 around the mud pit. All are still hot on EC.

10:32 Four trucks making a trip for 80 yards to be hauled off. Total-4,360 yards

15:33 The mud pit is sloped on east, west and south sides

Next Steps & Recommendations

1 Load trucks tomorrow to get rid of stockpile

Daily Site Visit Report



Site Photos

Viewing Direction: North



Sample area for WES21-77

Viewing Direction: East



Sloped around the mud pit

Viewing Direction: Northeast



Sample area for WES21-74-WES21-76

Viewing Direction: Northwest



Sample area for WES21-71-WES21-73



Daily Site Visit Report

Viewing Direction: North



Sloping around the mud pit

Viewing Direction: Northwest



Sloping around the mud pit

Viewing Direction: Northwest



Sloping around the mud pit

Viewing Direction: Northwest



Sloping around the mud pit



Daily Site Visit Report

Viewing Direction: East



Began back dragging the excavation

Viewing Direction: Northeast



Sloping around the mud pit

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature consisting of the letters 'C' and 'D' in a stylized, cursive-like font.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/6/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/7/2022 6:00 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site	1/6/2022 9:55 AM
Departed Site	1/6/2022 1:00 PM

Field Notes

11:07 Arrived on site to load trucks with contaminated soil and get rid of the existing stockpile
7:52 17 loads hauled out today=340 yards. 4,700 yards total.

Next Steps & Recommendations

1 Complete remediation next week.

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



Descriptive Photo: 1
Viewing Direction: Northeast
Date: Loading trucks
Created: 1/6/2022 11:22:51 AM
Lat: 32.855446, Long: -104.890546

Loading trucks

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

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

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/17/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/17/2022 11:39 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	1/17/2022 7:45 AM
Departed Site	1/17/2022 3:45 PM

Field Notes

- 8:30** Arrived on site to complete remediation and confirmation sampling.
- 8:31** Stepping out the west wall into the road out to WES22-78-WES22-79. Taking BES21-20 down to 11'. This sample point will show up as BES22-20 in the field screens
- 12:22** BES22-20 and BES22-24-BES22-25 are clean on EC, PID, and PetroFlag. WES22-78-WES22-79 are dirty on EC. Stepping them out a bucket length
- 13:52** WES22-78-WES22-79 were stepped out with WES22-80-WES22-81. Now clean on EC, PID, and PetroFlag
- 14:05** Confirmation is complete. We will spend the remainder of the day stockpiling the soil and cleaning up the travel path around the excavation.
- 14:03** We had to pull some shrubs from the side of the road to avoid vehicles getting a flat when we have to travel around the excavation in the road

Next Steps & Recommendations

- 1 Load trucks with the rest of the stockpile tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: North



Sample area for BES22-20

Viewing Direction: Northwest



Sample area for BES22-24-BES22-25 and WES22-78-WES22-79

Viewing Direction: West



Soil lithology in the middle of the road

Viewing Direction: Northwest



Sample area for WES22-80-WES22-81



Daily Site Visit Report

Viewing Direction: North



Southwest corner of west excavation came to the west edge of the road.

Viewing Direction: Northeast



Shrubs pulled out on the side of the road (Travel path)

Viewing Direction: East



Site sketch

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

CD

Signature



Daily Site Visit Report

Client:	<u>EOG Resources Inc.</u>	Inspection Date:	<u>1/18/2022</u>
Site Location Name:	<u>Allison CQ Federal #9</u>	Report Run Date:	<u>1/18/2022 9:43 PM</u>
Client Contact Name:	<u>Chase Settle</u>	API #:	<u></u>
Client Contact Phone #:	<u>575-703-6537</u>		
Unique Project ID	<u></u>	Project Owner:	<u></u>
Project Reference #	<u></u>	Project Manager:	<u></u>

Summary of Times

Arrived at Site 1/18/2022 8:10 AM

Departed Site 1/18/2022 1:15 PM

Field Notes

10:57 Arrived on site to haul off stockpile of contaminated soil

13:06 Four trucks hauling today. On truck broke down between loads. 140 yards hauled out. 4,840 yards total.

13:07 Still about 3-4 loads left on the stockpile. Will finish loading tomorrow

Next Steps & Recommendations

1 Finish loading material tomorrow

Daily Site Visit Report



Site Photos

Viewing Direction: Northeast



Truck loaded with material

Viewing Direction: East



Stockpile

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

A handwritten signature consisting of the letters 'C' and 'D' in a stylized, cursive-like font.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/19/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/19/2022 11:50 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	1/19/2022 8:10 AM
Departed Site	1/19/2022 9:15 AM

Field Notes

8:32 Arrived on site to finish loading the stockpile out

8:35 Three trucks are running two loads today for 120 yards

Next Steps & Recommendations

1

Daily Site Visit Report



Site Photos

Viewing Direction: East



What is left of the stockpile

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

Handwritten signature consisting of the letters 'C' and 'D' in a stylized, cursive-like font.

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/21/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/21/2022 7:57 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 1/21/2022 8:36 AM

Departed Site

Field Notes

8:37 Additional excavation in east corner for an extra foot to collect confirmation samples that exceeded criteria

10:14 Base samples collected and ran for field screening. Field screens show samples to be clean and will pass strictest criteria

10:15 Trackhoe loading contamination directly into belly dumps instead of placing liner down to stockpile contamination

Next Steps & Recommendations

- 1 Submit for lab analysis
- 2 Closure report

Daily Site Visit Report



Site Photos

Viewing Direction: North



Area of excavation

Viewing Direction: Northwest



Base area for additional sampling

Viewing Direction: Northeast



Excavation area

Viewing Direction: Northwest



Additional excavation

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Monica Peppin

Signature:



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/26/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/26/2022 11:32 PM
Client Contact Name:	Chase Settle	API #:	
Client Contact Phone #:	575-703-6537		
Unique Project ID		Project Owner:	
Project Reference #		Project Manager:	

Summary of Times

Arrived at Site 1/26/2022 2:37 PM

Departed Site 1/26/2022 3:00 PM

Field Notes

14:39 Arrived on site to collect BES22-25 at 9.5' and send to lab for analysis. The 9' sample came back from analysis just hot on chlorides.

Next Steps & Recommendations

- 1 Send sample to lab for analysis to complete confirmation.

Daily Site Visit Report



Site Photos

Viewing Direction: Northwest



Sample area for BES22-25

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

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

Signature



Daily Site Visit Report

Client:	EOG Resources Inc.	Inspection Date:	1/28/2022
Site Location Name:	Allison CQ Federal #9	Report Run Date:	1/29/2022 5:09 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	1/28/2022 12:00 PM
Departed Site	1/28/2022 2:45 PM

Field Notes

12:34 Arrived on site to collect the rest of the samples needed for NMOCD 200 square foot rule.

9:53 BES22-26-BES22-31 and WES22-82-WES22-94 are all clean on titration, PID, and PetroFlag.

Next Steps & Recommendations

1 No recommendations at this time.

Daily Site Visit Report



Site Photos

Viewing Direction: North



Sample area for WES22-82

Viewing Direction: Northwest



Sample area for WES22-91-WES22-92

Viewing Direction: Northwest



Sample area for WES22-93

Viewing Direction: Southeast



Sample area for WES22-83-WES22-85



Daily Site Visit Report

Viewing Direction: Southwest



Sample area for WES22-86-WES22-87

Viewing Direction: North



Sample area for BES22-26-BES22-28

Viewing Direction: South



Sample area for WES22-88

Viewing Direction: Southeast



Sample area for WES22-89



Daily Site Visit Report

Viewing Direction: Northwest



Sample area for WES22-89

Viewing Direction: Southwest



Sample area for WES22-90

Viewing Direction: West



Sample area for BES22-29-BES22-31

Daily Site Visit Report



Daily Site Visit Signature

Inspector: Chance Dixon

Signature:

CD

Signature

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/2/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-01	4.0	0	73	0.55	18	825	1045	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-02	4.0	0	27	0.99	23.5	1222		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-03	4.0	0	39	0.22	23.3	119		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BG21-01	1.0	0					330	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BG21-01	1.5	0					300	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-01	2.0	0	29	1.21	17.9	1782	1955	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-02	2.0	0	92	1.03	17.7	1531	2097	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-03	2.0	0	38	0.72	17.6	1088	1425	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-04	2.0	0	100	1.23	22.9	1594		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES21-05	2.0	0	17	0.31	22.9	266		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-06	2.0	0	42	1.46	23.1	1918		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-07	2.0	0	70	0.53	22.3	610		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/3/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES21-08	2.0	0	20	0.07	19.5	67		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-09	3.0	0		0.55	20.4	721		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-10	3.0	0		1.01	20.1	1398		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/6/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-04	2.0	1	51	0.12	16.5	269		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-05	2.0	0	74	0.33	16.6	568		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-11	1.0	1	20	0.40	16.9	656		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-12	1.0	0	19	0.10	17.3	206		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-13	1.0	0	36	0.38	16.3	653		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/6/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-04	2.0	1	51	0.12	16.5	269		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-05	2.0	0	74	0.33	16.6	568		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-05	4.0	0	7	0.18	18.8	256		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-06	4.0	0	42	0.18	19.2	239		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-07	4.0	0	25	0.20	19.3	264		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-08	4.0	0	63	0.19	19.4	245		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-11	1.0	1	20	0.40	16.9	656		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-12	1.0	0	19	0.10	17.3	206		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-13	1.0	0	36	0.38	16.3	653		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES21-14	2.0	0		0.48	20.4	620		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-15	2.0	0		0.49	19.4	678		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-16	2.0	0		0.58	19.6	799		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-17	2.0	0		0.84	19.3	1187		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-18	2.0	0		0.86	19	1229		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-19	2.0	0		0.57	19	811		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/8/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-09	4.0	0	28	0.23	17.1	402		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-20	2.0	0		0.36	17.1	590		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-21	2.0	0		0.38	17.5	601		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-22	2.0	0		0.31	17.2	513		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-23	2.0	0		0.34	17.4	548		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/10/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-10	4.0	0	29	0.11	18.1	186		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-11	4.0	0	38	0.18	18	291		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-12	4.0	0	45	0.26	18.3	393		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-13	4.0	0		0.57	20	767		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-14	4.0	0		0.56	18	839		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-15	4.0	0		0.67	18.3	985		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-24	2.0	0	72	0.23	18.6	337		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-25	2.0	0	25	0.30	18.9	425		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-26	2.0	0		0.74	18.1	1095		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES21-27	2.0	0		0.50	18.3	740		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-28	2.0	0		1.06	18.6	1535		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/10/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES21-29	3.0	0		0.82	19.3	1158		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-30	3.0	0		1.04	18.4	1515		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-31	3.0	0		0.58	18	868		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/13/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-13	6.0	0	15	0.37	17.9	570		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-14	6.0	0	12	0.06	17.5	139		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-15	6.0	1	54	0.14	18.6	207		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-16	6.0	1	32	0.17	17.7	290		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-17	6.0	0	48	0.16	17.9	266		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-18	6.0	1	79	0.21	18.2	326		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-32	2.0	0	1235	0.57	18	854		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-33	3.0	0	62	0.35	17.4	562		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-34	3.0	0	50	0.35	17.7	549		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES21-35	3.0	0	13	0.10	20.3	76		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-36	2.0	0		0.68	22.6	813		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	


Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/14/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES21-37	2.0	0	45	0.39	19.3	538		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/16/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-19	6.0	0		0.85	18.9	1219		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-20	6.0	0		0.81	19.9	1118		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-21	6.0	0	31	0.39	19.2	542		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-38	2.0	0	18	0.35	19	493		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-39	3.0	0	28	0.38	18.8	545		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-40	3.0	0		1.16	19.1	1658		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-41	3.0	0		0.52	17.6	799		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-42	3.0	0		0.70	20.3	942		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-43	3.0	0		0.65	19.5	904		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES21-44	3.0	0	63	0.34	20.5	414		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-45	3.0	0		1.11	21.3	1490		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-46	3.0	0		1.45	20.7	2007		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/17/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-22	6.0	0		0.84	19.4	1183		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-22	6.0	0		0.86	19.4	1212		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-23	6.0	0	62	0.44	19.5	601		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-23	6.0	0	62	0.44	19.5	601		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-47	3.0	0		0.88	16.4	1371		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-48	3.0	0		0.52	16.2	860		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-49	3.0	0		0.84	19.1	1196		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-50	3.0	0		0.62	17.9	930		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-51	3.0	0		0.77	21.6	987		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES21-52	3.0	0		0.95	18.9	1363		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
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Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/20/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES21-53	3.0	0		0.49	17.4	764				✓	
WES21-54	3.0	0		1.01	16.8	1541				✓	
WES21-55	3.0	0		0.49	20.3	639				✓	
WES21-56	3.0	0		0.63	18.5	919				✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/21/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES21-57	3.0	0	81	0.09	18.1	157		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-58	3.0	0		0.62	17.5	948		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-59	3.0	0	40	0.39	19.4	533		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/22/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-01	8.0	0	5	0.28	20.1	344		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-02	8.0	0	12	0.34	20	435		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES21-22	8.0	0	8	0.30	19.8	386		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-60	3.0	0	67	0.30	23.8	213		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-61	3.0	0	52	0.34	23.1	301		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/23/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES21-62	3.0	0		0.70	18.6	1016		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-63	3.0	0		0.67	18.7	968		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-64	3.0	0	26	0.25	19.4	331		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-65	3.0	0	61	0.20	19.7	246		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/29/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-19	8.0	0	36	0.23	21.5	212		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			
BES21-20	8.0	0	20	1.45	19.9	2042		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			
WES21-66	3.0	0	13	0.42	21.5	486		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 12/30/21)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES21-20	10.0	0	37	0.38	19.6	510		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES21-67	4.0	0		0.87	16.8	1339				✓	
WES21-68	4.0	0		0.63	16.7	997				✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 1/4/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES22-69	4.0	0	30	0.71	17.7	1069		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-70	4.0	0	24	1.02	18.7	1473		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 1/5/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
WES22-71	2.0	0	57	0.75	16.1	1196		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-72	2.0	0	71	0.93	16.3	1447		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-73	2.0	0	98	0.78	16.9	1205		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-74	3.0	0	17	0.85	16.5	1323		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-75	3.0	0	39	0.64	16.5	1020		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-76	3.0	0	25	0.81	16.4	1270		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-77	4.0	0	83	0.87	16.9	1335		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 1/17/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-20	11.0	0	42	0.30	18.4	447		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-24	8.0	0	27	0.26	16.5	471		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-25	8.0	0	61	0.29	17.8	458		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-78	4.0	0		0.78	17.8	1166		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-79	4.0	0		0.73	18.2	1076		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-80	4.0	0	39	0.34	19.2	470		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-81	4.0	0	36	0.30	19.4	404		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	





Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 1/21/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (l)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-24	9.0	0	7				407	Benzene (EPA SW-846 Method 8021B/8260B), BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			
BES22-25	9.0	0	5				227	Benzene (EPA SW-846 Method 8021B/8260B), BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			


Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 1/26/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-25	9.5	0	20	0.23	19.1	316		BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)			

Daily Soil Sampling



Client: Client: EOG Resources Inc.

Location: Site: Allison CQ Federal #9

Date: (SD: 1/29/22)

Sampling											
		Field Screening							Data Collection		
		Hydrocarbon		Chloride							
Sample ID	Depth (ft)	VOC (PID)	TPH (ppm)	EC Reading (mS/cm)	Temp (°C)	EC Chloride (ppm)	Chloride Titration (ppm)	Lab Analysis	Photo Taken	Marked on Sketch	Refusal Depth (ft)
BES22-26	8.0	0	4				267	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-27	8.0	0	18				377	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-28	8.0	0	29				585	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-29	4.0	0	31				432	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-30	4.0	0	25				389	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
BES22-31	4.0	0	45				377	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-82	4.0	0	16				280	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-83	4.0	0	28				277	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-84	4.0	0	75				312	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

Daily Soil Sampling



WES22-85	4.0	0	71				475	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-86	2.0	0	14				452	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-87	2.0	0	29				570	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-88	2.0	0	63				538	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-89	2.0	0	59				492	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-90	4.0	0	65				345	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-91	3.0	0	91				430	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-92	3.0	0					320	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-93	4.0	0	10				525	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-94	4.0	0	9				389	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	
WES22-95	2.0	0	16				245	BTEX (EPA SW-846 Method 8021B/8260B), Chloride (EPA 300.0), TPH (EPA SW-846 Method 8015M)		✓	

ATTACHMENT 5

Chance Dixon

From: Chase Settle <Chase_Settle@eogresources.com>
Sent: January 12, 2022 11:14 AM
To: Michael Moffitt
Subject: FW: Allison CQ Federal 9 Sampling Notification

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, January 12, 2022 11:13 AM
To: Robert.Hamlet@state.nm.us; Alan & Cheryl <ahowell@pvt.net>; Austin Weyant <austin@atkinseng.com>
Cc: Andrea Felix <Andrea_Felix@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; BODEE EUDY <BODEE_EUDY@eogresources.com>; Michael Yemm <Michael_Yemm@eogresources.com>
Subject: RE: Allison CQ Federal 9 Sampling Notification

Sorry for the mix up this should have been January.

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, January 12, 2022 11:11 AM
To: Robert.Hamlet@state.nm.us; Alan & Cheryl <ahowell@pvt.net>; Austin Weyant <austin@atkinseng.com>
Cc: Andrea Felix <Andrea_Felix@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; BODEE EUDY <BODEE_EUDY@eogresources.com>; Michael Yemm <Michael_Yemm@eogresources.com>
Subject: Allison CQ Federal 9 Sampling Notification

Good Morning,

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

Allison CQ Federal 9
D-15-19S-24E
Eddy County, NM

Sampling will be continuous beginning on Monday, January 17th – Friday, January 21st.

Thank you,

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



Chance Dixon

From: Chase Settle <Chase_Settle@eogresources.com>
Sent: January 24, 2022 4:11 PM
To: Michael Moffitt
Subject: FW: Allison CQ Federal #9 Sampling Notification

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Monday, January 24, 2022 4:09 PM
To: Robert.Hamlet@state.nm.us; blm_nm_cfo_spill@blm.gov; Alan & Cheryl <ahowell@pvt.n.net>; Austin Weyant <austin@atkinseng.com>
Cc: Andrea Felix <Andrea_Felix@eogresources.com>; Katie Jamison <Katie_Jamison@eogresources.com>; BODEE EUDY <BODEE_EUDY@eogresources.com>; Michael Yemm <Michael_Yemm@eogresources.com>
Subject: Allison CQ Federal #9 Sampling Notification

Good afternoon,

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

Allison CQ Federal 9
D-15-19S-24E
Eddy County, NM

Sampling will be continuous beginning on Wednesday January 26th at 4:00 p.m. until Friday, January 28, 2022.

Thank you,

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



Artesia Division

ATTACHMENT 6

SOIL BTEX (EPA 8021B), TPH (EPA 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA												
ALLISON CQ FEDERAL #9												
EDDY COUNTY, NEW MEXICO												
All values presented in parts per million (mg/Kg)												
SAMPLE ID	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C35	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	CHLORIDE
December 2020 - EOG Collected Soil Samples												
Pad 1.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	19,500	47,200	19,500	96,700	155
Pad 1.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	14,400	32,400	14,400	46,800	166
Pad 1.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	38.1	97.5	38.1	136	27.2
Pad 1.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	22.9
Pad 2.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,880
Pad 2.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	2,650
Pad 2.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	776
Pad 2.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	793
Pad 3.SU	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	51.9	<45.0	51.9	185
Pad 3.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	2,780
Pad 3.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	3,330
Pad 3.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,680
Pad 3.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,230
Pad 4.S	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	250	<50.0	250	250	113
Pad 4.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	110	<50.0	110	110	227
Pad 4.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	78.4	<50.0	78.4	78.4	431
Pad 4.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,010
Pad 4.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	892
Pad 5.SU	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	140
Pad 5.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	121
Pad 5.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	410
Pad 5.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	890
Pad 5.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	330
Pad 6.SU	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	<20.0
Pad 6.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	<20.0
Pad 6.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	26.1
Pad 6.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	<20.0
Pad 6.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	22.6
Ranger Soil Samples - September & October 2021												
TH-1-3'	9/30/2021	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.5	<48	<9.5	<48	900
TH-1-5'	9/30/2021	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<9.4	<47	<9.4	<47	390
TH-2-2'	9/30/2021	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.7	<48	<9.7	<48	2,400
TH-2-5'	9/30/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.8	<49	<9.8	<49	140
TH-3-0'	9/30/2021	<0.025	<0.049	<0.049	<0.099	<0.10	<4.9	<9.5	<48	<9.5	<48	2,900
TH-3-3'	9/30/2021	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.5	<47	<9.5	<47	480
TH-4-3'	9/30/2021	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<9.4	<47	<9.4	<47	1,300
TH-4-10'	9/30/2021	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<9.5	<48	<9.5	<48	500
TH-5-0'	9/30/2021	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	230	1,300	230	1,330	500
TH-5-3'	9/30/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.5	<48	<9.5	<48	<60
TH-5-5'	9/30/2021	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	11.0	67.0	11.0	78.0	<60
TH-6-0'	9/30/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.9	<50	<9.9	<50	<60
TH-6-2'	9/30/2021	<0.025	<0.050	<0.050	<0.10	<0.10	<5.0	<9.5	<48	<9.5	<48	<60
TH-7-0'	10/14/2021	<0.024	<0.047	<0.047	<0.094	<0.09	<4.7	<9.4	<47	<9.4	<47	<60
TH-7-2'	10/14/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.8	<49	<9.8	<49	100
TH-8-0'	10/14/2021	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<9.7	<49	<9.7	<49	77
TH-8-4'	10/14/2021	<0.023	<0.046	<0.046	<0.092	<0.09	<4.6	<9.7	<48	<9.7	<48	900
TH-9-1'	10/14/2021	<0.024	<0.049	<0.049	<0.098	<0.10	<4.9	<10	<50	<10	<50	<60
TH-9-6'	10/14/2021	<0.024	<0.047	<0.047	<0.095	<0.09	<4.7	<9.2	56	<9.2	56	<60
TH-10-1'	10/14/2021	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.9	<50	<9.9	<50	510
TH-10-4'	10/14/2021	<0.023	<0.047	<0.047	<0.094	<0.09	<4.7	<10	<50	<10	<50	170
TH-11-2'	10/14/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.8	<49	<9.8	<49	580
TH-11-4'	10/14/2021	<0.023	<0.046	<0.046	<0.091	<0.09	<4.6	<9.8	<49	<9.8	<49	150
TH-12-1'	10/14/2021	<0.024	<0.048	<0.048	<0.096	<0.10	<4.8	<9.5	<48	<9.5	<48	<60
TH-12-4'	10/14/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.6	<48	<9.6	<48	<60
TH-13-1'	10/14/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.0	<45	<9.0	<45	<60
TH-13-4'	10/14/2021	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<9.9	<50	<9.9	<50	730
TH-14-4'	10/14/2021	<0.023	<0.046	<0.046	<0.093	<0.09	<4.6	<9.8	<49	<9.8	<49	1,200
TH-14-6'	10/14/2021	<0.025	<0.049	<0.049	<0.098	<0.10	<4.9	<9.0	<45	<9.0	<45	800
TH-15-1'	10/14/2021	<0.024	<0.049	<0.049	<0.097	<0.10	<4.9	<9.9	<49	<9.9	<49	<60
TH-15-4'	10/14/2021	<0.025	<0.050	<0.050	<0.099	<0.10	<5.0	<10	<50	<10	<50	460
TH-16-1'	10/14/2021	<0.024	<0.048	<0.048	<0.097	<0.10	<4.8	<9.4	<47	<9.4	<47	1,200
TH-16-4'	10/14/2021	<0.023	<0.047	<0.047	<0.093	<0.09	<4.7	<9.3	<46	<9.3	<46	870
19.15.29.13 NMAC Reclamation Criteria (0"-4" Soils Only)												
		10 ³	---	---	---	50 ³	---	---	---	---	100 ³	600
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW ≤ 50')												
		10	---	---	---	50	---	---	---	---	100	600
Notes:												
1. Results exceeding the Table 1 Closure Criteria are presented in bold type and are highlighted yellow.												
2. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.												
3. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.												

Client Name: EOG Resources, Inc.

Site Name: Allison CQ Federal #9

NM OCD Tracking #: nAPP2124535531

Project #: 22E-00123-012

Lab Report(sX): 2112368, 2112464, 2112627, 2112734, 2112842, 2112927, 2112A11, 2112B63, 2112C11, 2112C68, 2112D30, 2112D86, 2201189, 2201190, 2201266, 2201693, 2201897

Table 2. Confirmatory Sample Field Screen and Laboratory Results - Depth to Groundwater <50 feet bgs

Sample Description			Field Screening			Petroleum Hydrocarbons								Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile Organic Compounds (PID)	Extractable Organic Compounds (PetroFlag)	Chloride Concentration	Volatile		Extractable					Chloride Concentration	
						Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)		
			(ppm)	(ppm)	(ppm)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
BES21-01	4	12/2/2021	0	73	1,045	-	-	-	-	-	-	-	-	
BES21-01	8	12/22/2021	0	5	344	ND	ND	ND	ND	ND	ND	ND	320	
BES21-02	4	12/2/2021	0	27	1,222	-	-	-	-	-	-	-	-	
BES21-02	8	12/22/2021	0	12	435	ND	ND	ND	ND	ND	ND	ND	190	
BES21-03	4	12/2/2021	0	39	119	ND	ND	ND	ND	ND	ND	ND	240	
BES21-04	2	12/6/2021	1	51	269	ND	ND	ND	ND	ND	ND	ND	ND	
BES21-05	2	12/6/2021	0	74	727	-	-	-	-	-	-	-	-	
BES21-05	4	12/6/2021	0	7	256	ND	ND	ND	ND	ND	ND	ND	ND	
BES21-06	4	12/6/2021	0	42	239	ND	ND	ND	ND	ND	ND	ND	200	
BES21-07	4	12/6/2021	0	25	264	ND	ND	ND	ND	ND	ND	ND	210	
BES21-08	4	12/6/2021	0	63	245	ND	ND	ND	ND	ND	ND	ND	220	
BES21-09	4	12/8/2021	0	28	402	ND	ND	ND	ND	ND	ND	ND	21	
BES21-10	4	12/9/2021	0	29	186	ND	ND	ND	ND	ND	ND	ND	97	
BES21-11	4	12/9/2021	0	38	291	ND	ND	ND	ND	ND	ND	ND	180	
BES21-12	4	12/9/2021	0	45	393	ND	ND	ND	ND	ND	ND	ND	290	
BES21-13	4	12/9/2021	0	-	767	-	-	-	-	-	-	-	-	
BES21-13	6	12/13/2021	0	15	570	ND	ND	ND	ND	ND	ND	ND	130	
BES21-14	4	12/9/2021	0	-	839	-	-	-	-	-	-	-	-	
BES21-14	6	12/13/2021	0	12	139	ND	ND	ND	ND	ND	ND	ND	70	
BES21-15	4	12/9/2021	0	-	985	-	-	-	-	-	-	-	-	
BES21-15	6	12/13/2021	1	54	207	ND	ND	ND	ND	ND	ND	ND	180	
BES21-16	6	12/13/2021	1	32	290	ND	ND	ND	ND	ND	ND	ND	280	
BES21-17	6	12/13/2021	0	48	266	ND	ND	ND	ND	ND	ND	ND	240	
BES21-18	6	12/13/2021	1	79	326	ND	ND	ND	ND	ND	ND	ND	230	
BES21-19	6	12/16/2021	0	-	1,219	-	-	-	-	-	-	-	-	
BES21-19	8	12/29/2021	0	36	212	ND	ND	ND	ND	ND	ND	ND	480	
BES21-20	6	12/16/2021	0	-	1,118	-	-	-	-	-	-	-	-	
BES21-20	8	12/29/2021	0	20	2,042	-	-	-	-	-	-	-	-	
BES21-20	10	12/30/2021	0	37	510	ND	ND	ND	ND	ND	ND	ND	700	
BES22-20	11	1/17/2022	0	42	447	ND	ND	ND	ND	ND	ND	ND	490	
BES21-21	6	12/16/2021	0	31	542	ND	ND	ND	ND	ND	ND	ND	240	
BES21-22	6	12/17/2021	0	-	1,183	-	-	-	-	-	-	-	-	
BES21-22	8	12/22/2021	0	8	386	ND	ND	ND	ND	ND	ND	ND	170	
BES21-23	6	12/17/2021	0	62	601	ND	ND	ND	ND	ND	ND	ND	520	
BES22-24	8	1/17/2022	0	27	471	ND	ND	ND	ND	ND	ND	ND	870	
BES22-24	9	1/21/2022	0	7	407	ND	ND	ND	ND	ND	ND	ND	690	
BES22-24	9.5	1/26/2022	0	20	316	ND	ND	ND	ND	ND	ND	ND	220	
BES22-25	8	1/17/2022	0	61	458	ND	ND	ND	ND	ND	ND	ND	880	
BES22-25	9	1/21/2022	0	9	227	ND	ND	ND	ND	ND	ND	ND	420	
BES22-26	8	1/28/2022	0	4	267	ND	ND	ND	ND	ND	ND	ND	310	
BES22-27	8	1/28/2022	0	18	377	ND	ND	ND	17	ND	17	17	65	
BES22-28	8	1/28/2022	0	29	585	ND	ND	ND	ND	ND	ND	ND	110	
BES22-29	4	1/28/2022	0	31	432	ND	ND	ND	9.5	ND	9.5	9.5	270	
BES22-30	4	1/28/2022	0	25	389	ND	ND	ND	18	ND	18	18	310	
BES22-31	4	1/28/2022	0	45	377	ND	ND	ND	15	ND	15	15	380	

WES21-05	2	12/2/2021	0	17	266	ND	ND	ND	ND	ND	ND	ND	ND
WES21-08	2	12/3/2021	0	20	67	ND	ND	ND	10	ND	10	10	440
WES21-11	1	12/6/2021	1	20	656	ND	ND	ND	ND	ND	ND	ND	260
WES21-12	1	12/6/2021	0	19	206	ND	ND	ND	ND	ND	ND	ND	ND
WES21-13	1	12/6/2021	0	36	653	ND	ND	ND	ND	ND	ND	ND	300
WES21-20	2	12/8/2021	0	-	590	ND	ND	ND	ND	ND	ND	ND	670
WES21-21	2	12/8/2021	0	-	601	ND	ND	ND	ND	ND	ND	ND	280
WES21-22	2	12/8/2021	0	-	513	ND	ND	ND	ND	ND	ND	ND	200
WES21-23	2	12/8/2021	0	-	548	ND	ND	ND	ND	ND	ND	ND	230
WES21-24	2	12/9/2021	0	72	337	ND	ND	ND	ND	ND	ND	ND	290
WES21-25	2	12/9/2021	0	25	425	ND	ND	ND	ND	ND	ND	ND	380
WES21-33	3	12/13/2021	0	62	562	ND	ND	ND	ND	ND	ND	ND	970
WES21-34	3	12/13/2021	0	50	549	ND	ND	ND	ND	ND	ND	ND	890
WES21-35	3	12/13/2021	0	13	76	ND	ND	ND	ND	ND	ND	ND	110
WES21-37	2	12/14/2021	0	45	538	ND	ND	ND	ND	ND	ND	ND	300
WES21-38	2	12/16/2021	0	18	493	ND	ND	ND	ND	ND	ND	ND	450
WES21-39	3	12/16/2021	0	28	545	ND	ND	ND	ND	ND	ND	ND	270
WES21-44	3	12/16/2021	0	63	414	ND	ND	ND	ND	ND	ND	ND	ND
WES21-57	3	12/21/2021	0	81	157	ND	ND	ND	ND	ND	ND	ND	ND
WES21-59	3	12/21/2021	0	40	533	ND	ND	ND	ND	ND	ND	ND	130
WES21-60	3	12/22/2021	0	67	213	ND	ND	ND	ND	ND	ND	ND	120
WES21-61	3	12/22/2021	0	52	301	ND	ND	ND	ND	ND	ND	ND	160
WES21-64	3	12/23/2021	0	26	331	ND	ND	ND	ND	ND	ND	ND	410
WES21-65	3	12/23/2021	0	61	246	ND	ND	ND	ND	ND	ND	ND	480
WES21-66	3	12/29/2021	0	13	486	ND	ND	ND	ND	ND	ND	ND	400
WES22-80	4	1/17/2022	0	39	470	ND	ND	ND	ND	ND	ND	ND	150
WES22-81	4	1/17/2022	0	36	404	ND	ND	ND	ND	ND	ND	ND	190
WES22-82	4	1/28/2022	0	16	280	ND	ND	ND	ND	ND	ND	ND	89
WES22-83	4	1/28/2022	0	28	277	ND	ND	ND	10	ND	10	10	520
WES22-84	4	1/28/2022	0	75	312	ND	ND	ND	ND	ND	ND	ND	160
WES22-85	4	1/28/2022	0	71	475	ND	ND	ND	ND	ND	ND	ND	260
WES22-86	2	1/28/2022	0	14	452	ND	ND	ND	ND	ND	ND	ND	69
WES22-87	2	1/28/2022	0	29	570	ND	ND	ND	ND	ND	ND	ND	110
WES22-88	2	1/28/2022	0	63	538	ND	ND	ND	ND	ND	ND	ND	100
WES22-89	2	1/28/2022	0	59	492	ND	ND	ND	ND	ND	ND	ND	93
WES22-90	4	1/28/2022	0	65	345	ND	ND	ND	11	ND	11	11	310
WES22-91	3	1/28/2022	0	91	430	ND	ND	ND	11	ND	11	11	96
WES22-92	3	1/28/2022	0	19	320	ND	ND	ND	14	ND	14	14	490
WES22-93	4	1/28/2022	0	10	525	ND	ND	ND	10	ND	10	10	ND
WES22-95	5	1/28/2022	0	16	245	ND	ND	ND	ND	ND	ND	ND	180
North excavation sidewall pit samples that were collected for documentation purposes													
WES22-69	4	1/4/2022	0	30	1,069	ND	ND	ND	ND	ND	ND	ND	890
WES22-70	4	1/4/2022	0	24	1,473	ND	ND	ND	ND	ND	ND	ND	1300
WES22-71	2	1/5/2022	0	57	1,196	ND	ND	ND	ND	ND	ND	ND	1400
WES22-72	2	1/5/2022	0	71	1,447	ND	ND	ND	ND	ND	ND	ND	1400
WES22-73	2	1/5/2022	0	98	1,205	ND	ND	ND	ND	ND	ND	ND	2600
WES22-74	3	1/5/2022	0	17	1,323	ND	ND	ND	ND	ND	ND	ND	2100
WES22-75	3	1/5/2022	0	39	1,020	ND	ND	ND	ND	ND	ND	ND	830
WES22-76	3	1/5/2022	0	25	1,270	ND	ND	ND	ND	ND	ND	ND	ND
WES22-77	4	1/5/2022	0	83	1,335	ND	ND	ND	ND	ND	ND	ND	2100

"ND" Not Detected at the Reporting Limit

"-" indicates not analyzed/assessed

Bold and grey shaded indicates exceedance outside of NM OCD Closure Criteria (excavated)

ATTACHMENT 7

Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-10/1

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 12:54:00 PM

Lab ID: 2110770-001

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	510	60		mg/Kg	20	10/21/2021 8:08:09 PM	63457
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/21/2021 12:19:15 AM	63392
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2021 12:19:15 AM	63392
Surr: DNOP	90.2	70-130		%Rec	1	10/21/2021 12:19:15 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2021 12:45:09 AM	63372
Surr: BFB	101	70-130		%Rec	1	10/22/2021 12:45:09 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 12:45:09 AM	63372
Toluene	ND	0.048		mg/Kg	1	10/22/2021 12:45:09 AM	63372
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2021 12:45:09 AM	63372
Xylenes, Total	ND	0.096		mg/Kg	1	10/22/2021 12:45:09 AM	63372
Surr: 4-Bromofluorobenzene	86.2	70-130		%Rec	1	10/22/2021 12:45:09 AM	63372

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

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

Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-10/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 1:06:00 PM

Lab ID: 2110770-002

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	170	60		mg/Kg	20	10/21/2021 8:45:22 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/21/2021 12:30:04 AM	63392
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/21/2021 12:30:04 AM	63392
Surr: DNOP	105	70-130		%Rec	1	10/21/2021 12:30:04 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/22/2021 1:08:34 AM	63372
Surr: BFB	102	70-130		%Rec	1	10/22/2021 1:08:34 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	10/22/2021 1:08:34 AM	63372
Toluene	ND	0.047		mg/Kg	1	10/22/2021 1:08:34 AM	63372
Ethylbenzene	ND	0.047		mg/Kg	1	10/22/2021 1:08:34 AM	63372
Xylenes, Total	ND	0.094		mg/Kg	1	10/22/2021 1:08:34 AM	63372
Surr: 4-Bromofluorobenzene	85.7	70-130		%Rec	1	10/22/2021 1:08:34 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-11/2

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 1:39:00 PM

Lab ID: 2110770-003

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	580	60		mg/Kg	20	10/21/2021 8:57:47 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/21/2021 12:40:52 AM	63392
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/21/2021 12:40:52 AM	63392
Surr: DNOP	79.0	70-130		%Rec	1	10/21/2021 12:40:52 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2021 1:31:57 AM	63372
Surr: BFB	101	70-130		%Rec	1	10/22/2021 1:31:57 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 1:31:57 AM	63372
Toluene	ND	0.048		mg/Kg	1	10/22/2021 1:31:57 AM	63372
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2021 1:31:57 AM	63372
Xylenes, Total	ND	0.097		mg/Kg	1	10/22/2021 1:31:57 AM	63372
Surr: 4-Bromofluorobenzene	85.2	70-130		%Rec	1	10/22/2021 1:31:57 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-11/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 1:45:00 PM

Lab ID: 2110770-004

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	150	60		mg/Kg	20	10/21/2021 9:10:11 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/21/2021 12:51:40 AM	63392
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/21/2021 12:51:40 AM	63392
Surr: DNOP	86.7	70-130		%Rec	1	10/21/2021 12:51:40 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/22/2021 1:55:20 AM	63372
Surr: BFB	103	70-130		%Rec	1	10/22/2021 1:55:20 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	10/22/2021 1:55:20 AM	63372
Toluene	ND	0.046		mg/Kg	1	10/22/2021 1:55:20 AM	63372
Ethylbenzene	ND	0.046		mg/Kg	1	10/22/2021 1:55:20 AM	63372
Xylenes, Total	ND	0.091		mg/Kg	1	10/22/2021 1:55:20 AM	63372
Surr: 4-Bromofluorobenzene	87.3	70-130		%Rec	1	10/22/2021 1:55:20 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-12/1

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 2:04:00 PM

Lab ID: 2110770-005

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/21/2021 9:22:35 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/21/2021 1:02:26 AM	63392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2021 1:02:26 AM	63392
Surr: DNOP	92.0	70-130		%Rec	1	10/21/2021 1:02:26 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2021 2:42:16 AM	63372
Surr: BFB	102	70-130		%Rec	1	10/22/2021 2:42:16 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 2:42:16 AM	63372
Toluene	ND	0.048		mg/Kg	1	10/22/2021 2:42:16 AM	63372
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2021 2:42:16 AM	63372
Xylenes, Total	ND	0.096		mg/Kg	1	10/22/2021 2:42:16 AM	63372
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	10/22/2021 2:42:16 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-12/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 2:16:00 PM

Lab ID: 2110770-006

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/21/2021 9:59:48 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	10/21/2021 1:13:10 AM	63392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2021 1:13:10 AM	63392
Surr: DNOP	105	70-130		%Rec	1	10/21/2021 1:13:10 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2021 3:05:41 AM	63372
Surr: BFB	104	70-130		%Rec	1	10/22/2021 3:05:41 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 3:05:41 AM	63372
Toluene	ND	0.048		mg/Kg	1	10/22/2021 3:05:41 AM	63372
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2021 3:05:41 AM	63372
Xylenes, Total	ND	0.097		mg/Kg	1	10/22/2021 3:05:41 AM	63372
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	10/22/2021 3:05:41 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-7/0

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 2:31:00 PM

Lab ID: 2110770-007

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/21/2021 10:12:13 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/21/2021 1:23:54 AM	63392
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/21/2021 1:23:54 AM	63392
Surr: DNOP	64.8	70-130	S	%Rec	1	10/21/2021 1:23:54 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/22/2021 3:29:09 AM	63372
Surr: BFB	104	70-130		%Rec	1	10/22/2021 3:29:09 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 3:29:09 AM	63372
Toluene	ND	0.047		mg/Kg	1	10/22/2021 3:29:09 AM	63372
Ethylbenzene	ND	0.047		mg/Kg	1	10/22/2021 3:29:09 AM	63372
Xylenes, Total	ND	0.094		mg/Kg	1	10/22/2021 3:29:09 AM	63372
Surr: 4-Bromofluorobenzene	88.8	70-130		%Rec	1	10/22/2021 3:29:09 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-7/2

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 2:38:00 PM

Lab ID: 2110770-008

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	100	60		mg/Kg	20	10/21/2021 10:24:38 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/21/2021 1:34:37 AM	63392
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/21/2021 1:34:37 AM	63392
Surr: DNOP	90.5	70-130		%Rec	1	10/21/2021 1:34:37 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2021 3:52:30 AM	63372
Surr: BFB	103	70-130		%Rec	1	10/22/2021 3:52:30 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 3:52:30 AM	63372
Toluene	ND	0.048		mg/Kg	1	10/22/2021 3:52:30 AM	63372
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2021 3:52:30 AM	63372
Xylenes, Total	ND	0.097		mg/Kg	1	10/22/2021 3:52:30 AM	63372
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	10/22/2021 3:52:30 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-8/0

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 2:40:00 PM

Lab ID: 2110770-009

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	77	60		mg/Kg	20	10/21/2021 10:37:03 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/21/2021 1:45:19 AM	63392
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/21/2021 1:45:19 AM	63392
Surr: DNOP	92.5	70-130		%Rec	1	10/21/2021 1:45:19 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/22/2021 4:15:56 AM	63372
Surr: BFB	104	70-130		%Rec	1	10/22/2021 4:15:56 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/22/2021 4:15:56 AM	63372
Toluene	ND	0.047		mg/Kg	1	10/22/2021 4:15:56 AM	63372
Ethylbenzene	ND	0.047		mg/Kg	1	10/22/2021 4:15:56 AM	63372
Xylenes, Total	ND	0.095		mg/Kg	1	10/22/2021 4:15:56 AM	63372
Surr: 4-Bromofluorobenzene	87.3	70-130		%Rec	1	10/22/2021 4:15:56 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-8/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 2:52:00 PM

Lab ID: 2110770-010

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	900	60		mg/Kg	20	10/21/2021 10:49:27 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/21/2021 1:56:00 AM	63392
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/21/2021 1:56:00 AM	63392
Surr: DNOP	89.4	70-130		%Rec	1	10/21/2021 1:56:00 AM	63392
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/22/2021 4:39:17 AM	63372
Surr: BFB	103	70-130		%Rec	1	10/22/2021 4:39:17 AM	63372
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	10/22/2021 4:39:17 AM	63372
Toluene	ND	0.046		mg/Kg	1	10/22/2021 4:39:17 AM	63372
Ethylbenzene	ND	0.046		mg/Kg	1	10/22/2021 4:39:17 AM	63372
Xylenes, Total	ND	0.092		mg/Kg	1	10/22/2021 4:39:17 AM	63372
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	10/22/2021 4:39:17 AM	63372

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-9/1

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 3:13:00 PM

Lab ID: 2110770-011

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/21/2021 11:01:51 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/20/2021 6:53:40 PM	63399
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/20/2021 6:53:40 PM	63399
Surr: DNOP	114	70-130		%Rec	1	10/20/2021 6:53:40 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/21/2021 9:34:00 PM	63381
Surr: BFB	109	70-130		%Rec	1	10/21/2021 9:34:00 PM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	10/21/2021 9:34:00 PM	63381
Toluene	ND	0.049		mg/Kg	1	10/21/2021 9:34:00 PM	63381
Ethylbenzene	ND	0.049		mg/Kg	1	10/21/2021 9:34:00 PM	63381
Xylenes, Total	ND	0.098		mg/Kg	1	10/21/2021 9:34:00 PM	63381
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	10/21/2021 9:34:00 PM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-9/6

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 3:25:00 PM

Lab ID: 2110770-012

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/21/2021 11:14:15 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	10/20/2021 7:06:38 PM	63399
Motor Oil Range Organics (MRO)	56	46		mg/Kg	1	10/20/2021 7:06:38 PM	63399
Surr: DNOP	98.9	70-130		%Rec	1	10/20/2021 7:06:38 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/21/2021 10:33:00 PM	63381
Surr: BFB	101	70-130		%Rec	1	10/21/2021 10:33:00 PM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	10/21/2021 10:33:00 PM	63381
Toluene	ND	0.047		mg/Kg	1	10/21/2021 10:33:00 PM	63381
Ethylbenzene	ND	0.047		mg/Kg	1	10/21/2021 10:33:00 PM	63381
Xylenes, Total	ND	0.095		mg/Kg	1	10/21/2021 10:33:00 PM	63381
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	10/21/2021 10:33:00 PM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-13/1

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 3:35:00 PM

Lab ID: 2110770-013

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/21/2021 11:26:40 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	10/20/2021 7:45:18 PM	63399
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/20/2021 7:45:18 PM	63399
Surr: DNOP	110	70-130		%Rec	1	10/20/2021 7:45:18 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/21/2021 11:31:00 PM	63381
Surr: BFB	103	70-130		%Rec	1	10/21/2021 11:31:00 PM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	10/21/2021 11:31:00 PM	63381
Toluene	ND	0.048		mg/Kg	1	10/21/2021 11:31:00 PM	63381
Ethylbenzene	ND	0.048		mg/Kg	1	10/21/2021 11:31:00 PM	63381
Xylenes, Total	ND	0.097		mg/Kg	1	10/21/2021 11:31:00 PM	63381
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	10/21/2021 11:31:00 PM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-13/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 3:42:00 PM

Lab ID: 2110770-014

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	730	59		mg/Kg	20	10/21/2021 11:39:05 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/20/2021 7:57:53 PM	63399
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/20/2021 7:57:53 PM	63399
Surr: DNOP	110	70-130		%Rec	1	10/20/2021 7:57:53 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/21/2021 11:51:00 PM	63381
Surr: BFB	106	70-130		%Rec	1	10/21/2021 11:51:00 PM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	10/21/2021 11:51:00 PM	63381
Toluene	ND	0.049		mg/Kg	1	10/21/2021 11:51:00 PM	63381
Ethylbenzene	ND	0.049		mg/Kg	1	10/21/2021 11:51:00 PM	63381
Xylenes, Total	ND	0.097		mg/Kg	1	10/21/2021 11:51:00 PM	63381
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	10/21/2021 11:51:00 PM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-14/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 4:05:00 PM

Lab ID: 2110770-015

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1200	60		mg/Kg	20	10/21/2021 11:51:30 PM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/20/2021 8:10:47 PM	63399
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/20/2021 8:10:47 PM	63399
Surr: DNOP	120	70-130		%Rec	1	10/20/2021 8:10:47 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/22/2021 12:11:00 AM	63381
Surr: BFB	108	70-130		%Rec	1	10/22/2021 12:11:00 AM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	10/22/2021 12:11:00 AM	63381
Toluene	ND	0.046		mg/Kg	1	10/22/2021 12:11:00 AM	63381
Ethylbenzene	ND	0.046		mg/Kg	1	10/22/2021 12:11:00 AM	63381
Xylenes, Total	ND	0.093		mg/Kg	1	10/22/2021 12:11:00 AM	63381
Surr: 4-Bromofluorobenzene	89.3	70-130		%Rec	1	10/22/2021 12:11:00 AM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-14/6

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 4:10:00 PM

Lab ID: 2110770-016

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	800	60		mg/Kg	20	10/22/2021 12:28:45 AM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	10/20/2021 8:23:16 PM	63399
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/20/2021 8:23:16 PM	63399
Surr: DNOP	127	70-130		%Rec	1	10/20/2021 8:23:16 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/22/2021 12:30:00 AM	63381
Surr: BFB	108	70-130		%Rec	1	10/22/2021 12:30:00 AM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	10/22/2021 12:30:00 AM	63381
Toluene	ND	0.049		mg/Kg	1	10/22/2021 12:30:00 AM	63381
Ethylbenzene	ND	0.049		mg/Kg	1	10/22/2021 12:30:00 AM	63381
Xylenes, Total	ND	0.098		mg/Kg	1	10/22/2021 12:30:00 AM	63381
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	10/22/2021 12:30:00 AM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-15/1

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 4:32:00 PM

Lab ID: 2110770-017

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	ND	60		mg/Kg	20	10/22/2021 12:41:10 AM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/20/2021 8:35:58 PM	63399
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/20/2021 8:35:58 PM	63399
Surr: DNOP	136	70-130	S	%Rec	1	10/20/2021 8:35:58 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/22/2021 12:50:00 AM	63381
Surr: BFB	101	70-130		%Rec	1	10/22/2021 12:50:00 AM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	10/22/2021 12:50:00 AM	63381
Toluene	ND	0.049		mg/Kg	1	10/22/2021 12:50:00 AM	63381
Ethylbenzene	ND	0.049		mg/Kg	1	10/22/2021 12:50:00 AM	63381
Xylenes, Total	ND	0.097		mg/Kg	1	10/22/2021 12:50:00 AM	63381
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	10/22/2021 12:50:00 AM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-15/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 4:40:00 PM

Lab ID: 2110770-018

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	460	59		mg/Kg	20	10/22/2021 12:53:34 AM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/20/2021 8:48:28 PM	63399
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/20/2021 8:48:28 PM	63399
Surr: DNOP	106	70-130		%Rec	1	10/20/2021 8:48:28 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/22/2021 1:49:00 AM	63381
Surr: BFB	106	70-130		%Rec	1	10/22/2021 1:49:00 AM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	10/22/2021 1:49:00 AM	63381
Toluene	ND	0.050		mg/Kg	1	10/22/2021 1:49:00 AM	63381
Ethylbenzene	ND	0.050		mg/Kg	1	10/22/2021 1:49:00 AM	63381
Xylenes, Total	ND	0.099		mg/Kg	1	10/22/2021 1:49:00 AM	63381
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	10/22/2021 1:49:00 AM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-16/1

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 4:44:00 PM

Lab ID: 2110770-019

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	1200	60		mg/Kg	20	10/22/2021 1:05:59 AM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/20/2021 9:01:04 PM	63399
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/20/2021 9:01:04 PM	63399
Surr: DNOP	110	70-130		%Rec	1	10/20/2021 9:01:04 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/22/2021 2:08:00 AM	63381
Surr: BFB	105	70-130		%Rec	1	10/22/2021 2:08:00 AM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	10/22/2021 2:08:00 AM	63381
Toluene	ND	0.048		mg/Kg	1	10/22/2021 2:08:00 AM	63381
Ethylbenzene	ND	0.048		mg/Kg	1	10/22/2021 2:08:00 AM	63381
Xylenes, Total	ND	0.097		mg/Kg	1	10/22/2021 2:08:00 AM	63381
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	10/22/2021 2:08:00 AM	63381

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

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

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Analytical Report

Lab Order 2110770

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-16/4

Project: Allison CQ Federal 9

Collection Date: 10/14/2021 4:49:00 PM

Lab ID: 2110770-020

Matrix: SOIL

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

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: VP
Chloride	870	61		mg/Kg	20	10/22/2021 1:43:13 AM	63459
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	10/20/2021 9:13:22 PM	63399
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/20/2021 9:13:22 PM	63399
Surr: DNOP	123	70-130		%Rec	1	10/20/2021 9:13:22 PM	63399
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/22/2021 2:28:00 AM	63381
Surr: BFB	103	70-130		%Rec	1	10/22/2021 2:28:00 AM	63381
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.023		mg/Kg	1	10/22/2021 2:28:00 AM	63381
Toluene	ND	0.047		mg/Kg	1	10/22/2021 2:28:00 AM	63381
Ethylbenzene	ND	0.047		mg/Kg	1	10/22/2021 2:28:00 AM	63381
Xylenes, Total	ND	0.093		mg/Kg	1	10/22/2021 2:28:00 AM	63381
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	10/22/2021 2:28:00 AM	63381

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

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

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

October 14, 2021

Will Kierdorf

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX

RE: Allison Fed 9

OrderNo.: 2110089

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 13 sample(s) on 10/2/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-1-3'

Project: Allison Fed 9

Collection Date: 9/30/2021 8:52:00 AM

Lab ID: 2110089-001

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	900	60		mg/Kg	20	10/9/2021 6:00:25 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/10/2021 11:52:26 PM	63114
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/10/2021 11:52:26 PM	63114
Surr: DNOP	95.0	70-130		%Rec	1	10/10/2021 11:52:26 PM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/10/2021 7:05:00 AM	63103
Surr: BFB	91.7	70-130		%Rec	1	10/10/2021 7:05:00 AM	63103
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	10/10/2021 7:05:00 AM	63103
Toluene	ND	0.049		mg/Kg	1	10/10/2021 7:05:00 AM	63103
Ethylbenzene	ND	0.049		mg/Kg	1	10/10/2021 7:05:00 AM	63103
Xylenes, Total	ND	0.098		mg/Kg	1	10/10/2021 7:05:00 AM	63103
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	10/10/2021 7:05:00 AM	63103

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-1-5'

Project: Allison Fed 9

Collection Date: 9/30/2021 9:53:00 AM

Lab ID: 2110089-002

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	390	59		mg/Kg	20	10/9/2021 6:12:46 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/11/2021 12:16:08 AM	63114
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/11/2021 12:16:08 AM	63114
Surr: DNOP	103	70-130		%Rec	1	10/11/2021 12:16:08 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/9/2021 1:21:05 AM	63106
Surr: BFB	95.3	70-130		%Rec	1	10/9/2021 1:21:05 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/9/2021 1:21:05 AM	63106
Toluene	ND	0.049		mg/Kg	1	10/9/2021 1:21:05 AM	63106
Ethylbenzene	ND	0.049		mg/Kg	1	10/9/2021 1:21:05 AM	63106
Xylenes, Total	ND	0.097		mg/Kg	1	10/9/2021 1:21:05 AM	63106
Surr: 4-Bromofluorobenzene	83.8	70-130		%Rec	1	10/9/2021 1:21:05 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-2-2'

Project: Allison Fed 9

Collection Date: 9/30/2021 10:03:00 AM

Lab ID: 2110089-003

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2400	60		mg/Kg	20	10/9/2021 6:49:48 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	10/11/2021 12:39:49 AM	63114
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/11/2021 12:39:49 AM	63114
Surr: DNOP	96.8	70-130		%Rec	1	10/11/2021 12:39:49 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2021 2:32:09 AM	63106
Surr: BFB	95.6	70-130		%Rec	1	10/9/2021 2:32:09 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/9/2021 2:32:09 AM	63106
Toluene	ND	0.050		mg/Kg	1	10/9/2021 2:32:09 AM	63106
Ethylbenzene	ND	0.050		mg/Kg	1	10/9/2021 2:32:09 AM	63106
Xylenes, Total	ND	0.10		mg/Kg	1	10/9/2021 2:32:09 AM	63106
Surr: 4-Bromofluorobenzene	85.3	70-130		%Rec	1	10/9/2021 2:32:09 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-2-5'

Project: Allison Fed 9

Collection Date: 9/30/2021 10:15:00 AM

Lab ID: 2110089-004

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	140	60		mg/Kg	20	10/9/2021 7:02:10 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	10/11/2021 1:03:26 AM	63114
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/11/2021 1:03:26 AM	63114
Surr: DNOP	103	70-130		%Rec	1	10/11/2021 1:03:26 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/9/2021 3:43:20 AM	63106
Surr: BFB	95.7	70-130		%Rec	1	10/9/2021 3:43:20 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/9/2021 3:43:20 AM	63106
Toluene	ND	0.048		mg/Kg	1	10/9/2021 3:43:20 AM	63106
Ethylbenzene	ND	0.048		mg/Kg	1	10/9/2021 3:43:20 AM	63106
Xylenes, Total	ND	0.097		mg/Kg	1	10/9/2021 3:43:20 AM	63106
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	10/9/2021 3:43:20 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-3-0'

Project: Allison Fed 9

Collection Date: 9/30/2021 10:19:00 AM

Lab ID: 2110089-005

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	2900	150		mg/Kg	50	10/11/2021 1:19:13 AM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/9/2021 6:25:51 PM	63114
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/9/2021 6:25:51 PM	63114
Surr: DNOP	86.8	70-130		%Rec	1	10/9/2021 6:25:51 PM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/9/2021 4:06:55 AM	63106
Surr: BFB	94.7	70-130		%Rec	1	10/9/2021 4:06:55 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/9/2021 4:06:55 AM	63106
Toluene	ND	0.049		mg/Kg	1	10/9/2021 4:06:55 AM	63106
Ethylbenzene	ND	0.049		mg/Kg	1	10/9/2021 4:06:55 AM	63106
Xylenes, Total	ND	0.099		mg/Kg	1	10/9/2021 4:06:55 AM	63106
Surr: 4-Bromofluorobenzene	83.6	70-130		%Rec	1	10/9/2021 4:06:55 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-3-3'

Project: Allison Fed 9

Collection Date: 9/30/2021 10:28:00 AM

Lab ID: 2110089-006

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	480	59		mg/Kg	20	10/9/2021 7:26:52 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/11/2021 1:27:03 AM	63114
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/11/2021 1:27:03 AM	63114
Surr: DNOP	98.2	70-130		%Rec	1	10/11/2021 1:27:03 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/9/2021 4:30:28 AM	63106
Surr: BFB	93.8	70-130		%Rec	1	10/9/2021 4:30:28 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/9/2021 4:30:28 AM	63106
Toluene	ND	0.049		mg/Kg	1	10/9/2021 4:30:28 AM	63106
Ethylbenzene	ND	0.049		mg/Kg	1	10/9/2021 4:30:28 AM	63106
Xylenes, Total	ND	0.098		mg/Kg	1	10/9/2021 4:30:28 AM	63106
Surr: 4-Bromofluorobenzene	83.3	70-130		%Rec	1	10/9/2021 4:30:28 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-4-3'

Project: Allison Fed 9

Collection Date: 9/30/2021 10:54:00 AM

Lab ID: 2110089-007

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	1300	59		mg/Kg	20	10/9/2021 7:39:13 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	10/11/2021 2:14:13 AM	63114
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/11/2021 2:14:13 AM	63114
Surr: DNOP	101	70-130		%Rec	1	10/11/2021 2:14:13 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2021 4:53:56 AM	63106
Surr: BFB	97.4	70-130		%Rec	1	10/9/2021 4:53:56 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/9/2021 4:53:56 AM	63106
Toluene	ND	0.050		mg/Kg	1	10/9/2021 4:53:56 AM	63106
Ethylbenzene	ND	0.050		mg/Kg	1	10/9/2021 4:53:56 AM	63106
Xylenes, Total	ND	0.099		mg/Kg	1	10/9/2021 4:53:56 AM	63106
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	10/9/2021 4:53:56 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-4-10'

Project: Allison Fed 9

Collection Date: 9/30/2021 11:24:00 AM

Lab ID: 2110089-008

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	500	60		mg/Kg	20	10/9/2021 7:51:34 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/11/2021 2:37:45 AM	63114
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/11/2021 2:37:45 AM	63114
Surr: DNOP	95.0	70-130		%Rec	1	10/11/2021 2:37:45 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/9/2021 5:17:29 AM	63106
Surr: BFB	96.3	70-130		%Rec	1	10/9/2021 5:17:29 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/9/2021 5:17:29 AM	63106
Toluene	ND	0.049		mg/Kg	1	10/9/2021 5:17:29 AM	63106
Ethylbenzene	ND	0.049		mg/Kg	1	10/9/2021 5:17:29 AM	63106
Xylenes, Total	ND	0.097		mg/Kg	1	10/9/2021 5:17:29 AM	63106
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	10/9/2021 5:17:29 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-5-0'

Project: Allison Fed 9

Collection Date: 9/30/2021 11:34:00 AM

Lab ID: 2110089-009

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	500	60		mg/Kg	20	10/9/2021 8:03:54 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	230	92		mg/Kg	10	10/11/2021 9:35:34 PM	63114
Motor Oil Range Organics (MRO)	1300	460		mg/Kg	10	10/11/2021 9:35:34 PM	63114
Surr: DNOP	0	70-130	S	%Rec	10	10/11/2021 9:35:34 PM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/9/2021 5:41:07 AM	63106
Surr: BFB	95.6	70-130		%Rec	1	10/9/2021 5:41:07 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/9/2021 5:41:07 AM	63106
Toluene	ND	0.049		mg/Kg	1	10/9/2021 5:41:07 AM	63106
Ethylbenzene	ND	0.049		mg/Kg	1	10/9/2021 5:41:07 AM	63106
Xylenes, Total	ND	0.097		mg/Kg	1	10/9/2021 5:41:07 AM	63106
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	10/9/2021 5:41:07 AM	63106

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

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

Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-5-3'

Project: Allison Fed 9

Collection Date: 9/30/2021 11:42:00 AM

Lab ID: 2110089-010

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2021 8:16:15 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/11/2021 3:48:19 AM	63114
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/11/2021 3:48:19 AM	63114
Surr: DNOP	102	70-130		%Rec	1	10/11/2021 3:48:19 AM	63114
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/9/2021 6:04:33 AM	63106
Surr: BFB	98.2	70-130		%Rec	1	10/9/2021 6:04:33 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/9/2021 6:04:33 AM	63106
Toluene	ND	0.048		mg/Kg	1	10/9/2021 6:04:33 AM	63106
Ethylbenzene	ND	0.048		mg/Kg	1	10/9/2021 6:04:33 AM	63106
Xylenes, Total	ND	0.097		mg/Kg	1	10/9/2021 6:04:33 AM	63106
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	10/9/2021 6:04:33 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-5-5'

Project: Allison Fed 9

Collection Date: 9/30/2021 11:48:00 AM

Lab ID: 2110089-011

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2021 8:28:36 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	11	10		mg/Kg	1	10/11/2021 10:26:39 PM	63151
Motor Oil Range Organics (MRO)	67	50		mg/Kg	1	10/11/2021 10:26:39 PM	63151
Surr: DNOP	90.9	70-130		%Rec	1	10/11/2021 10:26:39 PM	63151
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2021 6:28:14 AM	63106
Surr: BFB	96.8	70-130		%Rec	1	10/9/2021 6:28:14 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/9/2021 6:28:14 AM	63106
Toluene	ND	0.050		mg/Kg	1	10/9/2021 6:28:14 AM	63106
Ethylbenzene	ND	0.050		mg/Kg	1	10/9/2021 6:28:14 AM	63106
Xylenes, Total	ND	0.10		mg/Kg	1	10/9/2021 6:28:14 AM	63106
Surr: 4-Bromofluorobenzene	86.1	70-130		%Rec	1	10/9/2021 6:28:14 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-6-0'

Project: Allison Fed 9

Collection Date: 9/30/2021 12:02:00 PM

Lab ID: 2110089-012

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2021 8:40:57 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/11/2021 11:05:12 PM	63151
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/11/2021 11:05:12 PM	63151
Surr: DNOP	94.8	70-130		%Rec	1	10/11/2021 11:05:12 PM	63151
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/9/2021 8:02:29 AM	63106
Surr: BFB	96.1	70-130		%Rec	1	10/9/2021 8:02:29 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	10/9/2021 8:02:29 AM	63106
Toluene	ND	0.048		mg/Kg	1	10/9/2021 8:02:29 AM	63106
Ethylbenzene	ND	0.048		mg/Kg	1	10/9/2021 8:02:29 AM	63106
Xylenes, Total	ND	0.097		mg/Kg	1	10/9/2021 8:02:29 AM	63106
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	10/9/2021 8:02:29 AM	63106

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

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

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Analytical Report

Lab Order 2110089

Date Reported: 10/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: TH-6-2'

Project: Allison Fed 9

Collection Date: 9/30/2021 12:10:00 PM

Lab ID: 2110089-013

Matrix: SOIL

Received Date: 10/2/2021 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	10/9/2021 9:18:00 PM	63166
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/11/2021 11:17:49 PM	63151
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/11/2021 11:17:49 PM	63151
Surr: DNOP	95.4	70-130		%Rec	1	10/11/2021 11:17:49 PM	63151
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/9/2021 8:26:08 AM	63106
Surr: BFB	95.6	70-130		%Rec	1	10/9/2021 8:26:08 AM	63106
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	10/9/2021 8:26:08 AM	63106
Toluene	ND	0.050		mg/Kg	1	10/9/2021 8:26:08 AM	63106
Ethylbenzene	ND	0.050		mg/Kg	1	10/9/2021 8:26:08 AM	63106
Xylenes, Total	ND	0.10		mg/Kg	1	10/9/2021 8:26:08 AM	63106
Surr: 4-Bromofluorobenzene	85.0	70-130		%Rec	1	10/9/2021 8:26:08 AM	63106

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

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

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

WO#: 2110089

14-Oct-21

Client: EOG
Project: Allison Fed 9

Sample ID: MB-63166	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 63166	RunNo: 81933								
Prep Date: 10/8/2021	Analysis Date: 10/9/2021	SeqNo: 2900169	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-63166	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 63166	RunNo: 81933								
Prep Date: 10/8/2021	Analysis Date: 10/9/2021	SeqNo: 2900170	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix

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

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

WO#: 2110089

14-Oct-21

Client: EOG
Project: Allison Fed 9

Sample ID: MB-63114	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63114	RunNo: 81862								
Prep Date: 10/7/2021	Analysis Date: 10/10/2021	SeqNo: 2900919	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		117	70	130			

Sample ID: LCS-63114	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63114	RunNo: 81862								
Prep Date: 10/7/2021	Analysis Date: 10/10/2021	SeqNo: 2900920	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.6	68.9	135			
Surr: DNOP	5.0		5.000		99.7	70	130			

Sample ID: MB-63151	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 63151	RunNo: 81939								
Prep Date: 10/8/2021	Analysis Date: 10/11/2021	SeqNo: 2901412	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.6	70	130			

Sample ID: LCS-63151	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 63151	RunNo: 81939								
Prep Date: 10/8/2021	Analysis Date: 10/11/2021	SeqNo: 2901413	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	98.1	68.9	135			
Surr: DNOP	4.9		5.000		98.8	70	130			

Qualifiers:

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

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

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

WO#: 2110089

14-Oct-21

Client: EOG
Project: Allison Fed 9

Sample ID: mb-63106	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63106	RunNo: 81923								
Prep Date: 10/6/2021	Analysis Date: 10/9/2021	SeqNo: 2899238	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.9	70	130			

Sample ID: lcs-63106	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63106	RunNo: 81923								
Prep Date: 10/6/2021	Analysis Date: 10/8/2021	SeqNo: 2899245	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	100	78.6	131			
Surr: BFB	1000		1000		103	70	130			

Sample ID: mb-63103	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 63103	RunNo: 81915								
Prep Date: 10/6/2021	Analysis Date: 10/9/2021	SeqNo: 2899485	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.7	70	130			

Sample ID: lcs-63103	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 63103	RunNo: 81915								
Prep Date: 10/6/2021	Analysis Date: 10/9/2021	SeqNo: 2899488	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Qualifiers:

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

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

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

WO#: 2110089

14-Oct-21

Client: EOG
Project: Allison Fed 9

Sample ID: mb-63106	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63106	RunNo: 81923								
Prep Date: 10/6/2021	Analysis Date: 10/9/2021	SeqNo: 2899430	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		84.5	70	130			

Sample ID: LCS-63106	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63106	RunNo: 81923								
Prep Date: 10/6/2021	Analysis Date: 10/8/2021	SeqNo: 2899431	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.4	80	120			
Toluene	0.93	0.050	1.000	0	93.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	91.7	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	70	130			

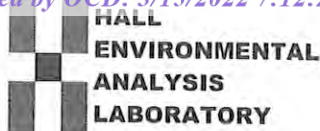
Sample ID: mb-63103	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 63103	RunNo: 81915								
Prep Date: 10/6/2021	Analysis Date: 10/9/2021	SeqNo: 2899542	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.85		1.000		85.4	70	130			

Sample ID: lcs-63103	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 63103	RunNo: 81915								
Prep Date: 10/6/2021	Analysis Date: 10/9/2021	SeqNo: 2899544	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.8	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.5	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		87.4	70	130			

Qualifiers:

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

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2110089

RcptNo: 1

Received By: Sean Livingston 10/2/2021 9:15:00 AM

Completed By: Sean Livingston 10/2/2021 10:35:22 AM

Reviewed By: *See 10/2/21*

See Log
See Log

Chain of Custody1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? CourierLog In3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *DAD 10-2-21*Special Handling (if applicable)15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good				
2	3.0	Good				
3	1.3	Good				
4	5.3	Good				

Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

QA/QC Package:

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

☒ EDD (Type)
 ☐ Excel

Turn-Around Time:

☒ Standard
 ☐ Rush

Project Name:

Allison Fed #9

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. Kennedy

On Ice: ☒ Yes ☐ No

of Coolers: 4

Cooler Temp (including CH): See remarks

Container Type and #

Preservative Type

HEAL No.

Z110089

001

002

003

004

005

006

007

008

009

010

011

012

013

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Chain-of-Custody Record

Client: EOG-Artesia / Ranger Env.

Mailing Address: EOG - 105 S 4th St, Artesia NM, 88210

Ranger: PO Box 201179, Austin TX 78720

Phone #: 521-335-1785

email or Fax#: Will@RangerEnv.com

QA/QC Package:

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

☒ EDD (Type)
 ☐ Excel

Turn-Around Time:

☒ Standard
 ☐ Rush

Project Name:

Alison Fed #9

Project #: 5375

Project Manager: W. Kierdorf

Sampler: W. Kennedy

On Ice: ☒ Yes ☐ No

of Coolers: 4

Cooler Temp (including CF): See remarks

Container

Type and #

Preservative

Type

HEAL No.

013

BTEx (8021)

X

TPH:8015D(GRO / DRO / MRO)

X

Chloride (EPA 300)

X

Date: 10/11/20

Time: 0700

Relinquished by: W. Kennedy

Relinquished by:

Date: 10/11/20

Time: 1900

Relinquished by: Alison

Relinquished by:

Received by:

Via:

Date: 10/11/20

Time: 700

Received by: Alison

Received by:

Date: 10/21/21

Time: 9:15

Received by: See courier

Received by:

Remarks: Bill to EOG Artesia

2.8 ± 0.2 = 2.8%

3.0 ± 0.2 = 3.0%

1.3 ± 0.2 = 1.3%

5.5 ± 0.2 = 5.5%

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



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

December 10, 2021

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112368

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/7/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2112368

Date Reported: 12/10/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-03 4'

Project: Allison CQ Federal 9

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

Lab ID: 2112368-001

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	240	60		mg/Kg	20	12/9/2021 2:00:42 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/8/2021 10:01:28 AM	64349
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/8/2021 10:01:28 AM	64349
Surr: DNOP	96.3	70-130		%Rec	1	12/8/2021 10:01:28 AM	64349
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/8/2021 8:57:00 AM	64346
Surr: BFB	94.0	70-130		%Rec	1	12/8/2021 8:57:00 AM	64346
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	12/8/2021 8:57:00 AM	64346
Toluene	ND	0.048		mg/Kg	1	12/8/2021 8:57:00 AM	64346
Ethylbenzene	ND	0.048		mg/Kg	1	12/8/2021 8:57:00 AM	64346
Xylenes, Total	ND	0.097		mg/Kg	1	12/8/2021 8:57:00 AM	64346
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	12/8/2021 8:57:00 AM	64346

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

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

Page 1 of 7

Analytical Report

Lab Order 2112368

Date Reported: 12/10/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-05 2'

Project: Allison CQ Federal 9

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

Lab ID: 2112368-002

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/9/2021 2:13:03 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/8/2021 10:11:57 AM	64349
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/8/2021 10:11:57 AM	64349
Surr: DNOP	90.1	70-130		%Rec	1	12/8/2021 10:11:57 AM	64349
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/8/2021 9:56:00 AM	64346
Surr: BFB	93.2	70-130		%Rec	1	12/8/2021 9:56:00 AM	64346
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	12/8/2021 9:56:00 AM	64346
Toluene	ND	0.046		mg/Kg	1	12/8/2021 9:56:00 AM	64346
Ethylbenzene	ND	0.046		mg/Kg	1	12/8/2021 9:56:00 AM	64346
Xylenes, Total	ND	0.091		mg/Kg	1	12/8/2021 9:56:00 AM	64346
Surr: 4-Bromofluorobenzene	83.0	70-130		%Rec	1	12/8/2021 9:56:00 AM	64346

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

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

Page 2 of 7

Analytical Report

Lab Order 2112368

Date Reported: 12/10/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-08 2'

Project: Allison CQ Federal 9

Collection Date: 12/3/2021 8:00:00 AM

Lab ID: 2112368-003

Matrix: SOIL

Received Date: 12/7/2021 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	440	60		mg/Kg	20	12/9/2021 2:25:25 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	10	10		mg/Kg	1	12/8/2021 10:22:29 AM	64349
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/8/2021 10:22:29 AM	64349
Surr: DNOP	88.0	70-130		%Rec	1	12/8/2021 10:22:29 AM	64349
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/8/2021 10:55:00 AM	64346
Surr: BFB	84.3	70-130		%Rec	1	12/8/2021 10:55:00 AM	64346
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	12/8/2021 10:55:00 AM	64346
Toluene	ND	0.047		mg/Kg	1	12/8/2021 10:55:00 AM	64346
Ethylbenzene	ND	0.047		mg/Kg	1	12/8/2021 10:55:00 AM	64346
Xylenes, Total	ND	0.094		mg/Kg	1	12/8/2021 10:55:00 AM	64346
Surr: 4-Bromofluorobenzene	78.8	70-130		%Rec	1	12/8/2021 10:55:00 AM	64346

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

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

Page 3 of 7

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

WO#: 2112368

10-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64406	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64406	RunNo: 84430								
Prep Date: 12/9/2021	Analysis Date: 12/9/2021	SeqNo: 2965973	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64406	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64406	RunNo: 84430								
Prep Date: 12/9/2021	Analysis Date: 12/9/2021	SeqNo: 2965974	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			

Qualifiers:

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

Page 4 of 7

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

WO#: 2112368

10-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64349	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64349	RunNo: 84359								
Prep Date: 12/7/2021	Analysis Date: 12/8/2021	SeqNo: 2963755 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	13		10.00		126	70	130			

Sample ID: LCS-64349	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64349	RunNo: 84359								
Prep Date: 12/7/2021	Analysis Date: 12/8/2021	SeqNo: 2963756 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.3	68.9	135			
Surr: DNOP	4.1		5.000		82.8	70	130			

Sample ID: LCS-64391	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64391	RunNo: 84388								
Prep Date: 12/9/2021	Analysis Date: 12/9/2021	SeqNo: 2964799 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		76.5	70	130			

Sample ID: MB-64391	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64391	RunNo: 84388								
Prep Date: 12/9/2021	Analysis Date: 12/9/2021	SeqNo: 2964801 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.2		10.00		82.0	70	130			

Qualifiers:

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

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: 2112368
10-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: lcs-64346	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64346	RunNo: 84404								
Prep Date: 12/7/2021	Analysis Date: 12/8/2021	SeqNo: 2965075	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	106	78.6	131			
Surr: BFB	1000		1000		103	70	130			

Sample ID: mb-64346	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64346	RunNo: 84404								
Prep Date: 12/7/2021	Analysis Date: 12/8/2021	SeqNo: 2965076	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.3	70	130			

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix interference
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2112368

10-Dec-21

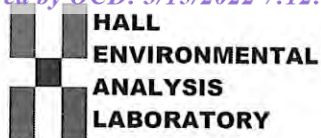
Client: EOG
Project: Allison CQ Federal 9

Sample ID: lcs-64346	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 64346			RunNo: 84404						
Prep Date: 12/7/2021	Analysis Date: 12/8/2021			SeqNo: 2965167		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.1	80	120			
Toluene	0.91	0.050	1.000	0	90.6	80	120			
Ethylbenzene	0.92	0.050	1.000	0	92.1	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.1	80	120			
Surr: 4-Bromofluorobenzene	0.81		1.000		81.2	70	130			

Sample ID: mb-64346	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 64346			RunNo: 84404						
Prep Date: 12/7/2021	Analysis Date: 12/8/2021			SeqNo: 2965168		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.84		1.000		84.1	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112368

RcptNo: 1

Received By: Sean Livingston 12/7/2021 8:20:00 AM

Completed By: Sean Livingston 12/7/2021 8:38:06 AM

Reviewed By: 12/07/21 KPA

San Livingston
San Livingston

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:
(<2 or >12 unless noted)

Adjusted? _____

Checked by: JR 12/7/21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.5	Good				

Analytical Report

Lab Order 2112464

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-11 1'

Project: Allison CQ Federal 9

Collection Date: 12/6/2021 9:00:00 AM

Lab ID: 2112464-001

Matrix: SOIL

Received Date: 12/8/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	260	60		mg/Kg	20	12/9/2021 5:05:59 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/10/2021 11:34:09 AM	64410
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/10/2021 11:34:09 AM	64410
Surr: DNOP	61.8	70-130	S	%Rec	1	12/10/2021 11:34:09 AM	64410
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/9/2021 4:12:52 PM	64373
Surr: BFB	102	70-130		%Rec	1	12/9/2021 4:12:52 PM	64373
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/9/2021 4:12:52 PM	64373
Toluene	ND	0.049		mg/Kg	1	12/9/2021 4:12:52 PM	64373
Ethylbenzene	ND	0.049		mg/Kg	1	12/9/2021 4:12:52 PM	64373
Xylenes, Total	ND	0.097		mg/Kg	1	12/9/2021 4:12:52 PM	64373
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/9/2021 4:12:52 PM	64373

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

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

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Analytical Report

Lab Order 2112464

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-12 1'

Project: Allison CQ Federal 9

Collection Date: 12/6/2021 9:10:00 AM

Lab ID: 2112464-002

Matrix: SOIL

Received Date: 12/8/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/9/2021 5:18:19 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/10/2021 11:44:36 AM	64410
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/10/2021 11:44:36 AM	64410
Surr: DNOP	46.1	70-130	S	%Rec	1	12/10/2021 11:44:36 AM	64410
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/9/2021 4:36:31 PM	64373
Surr: BFB	101	70-130		%Rec	1	12/9/2021 4:36:31 PM	64373
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/9/2021 4:36:31 PM	64373
Toluene	ND	0.049		mg/Kg	1	12/9/2021 4:36:31 PM	64373
Ethylbenzene	ND	0.049		mg/Kg	1	12/9/2021 4:36:31 PM	64373
Xylenes, Total	ND	0.097		mg/Kg	1	12/9/2021 4:36:31 PM	64373
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	12/9/2021 4:36:31 PM	64373

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

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

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Analytical Report

Lab Order 2112464

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-13 1'

Project: Allison CQ Federal 9

Collection Date: 12/6/2021 9:20:00 AM

Lab ID: 2112464-003

Matrix: SOIL

Received Date: 12/8/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	300	60		mg/Kg	20	12/9/2021 5:55:22 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/10/2021 12:07:50 PM	64410
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/10/2021 12:07:50 PM	64410
Surr: DNOP	66.8	70-130	S	%Rec	1	12/10/2021 12:07:50 PM	64410
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/9/2021 5:00:07 PM	64373
Surr: BFB	99.3	70-130		%Rec	1	12/9/2021 5:00:07 PM	64373
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/9/2021 5:00:07 PM	64373
Toluene	ND	0.049		mg/Kg	1	12/9/2021 5:00:07 PM	64373
Ethylbenzene	ND	0.049		mg/Kg	1	12/9/2021 5:00:07 PM	64373
Xylenes, Total	ND	0.098		mg/Kg	1	12/9/2021 5:00:07 PM	64373
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/9/2021 5:00:07 PM	64373

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

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

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Analytical Report

Lab Order 2112464

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-04 2'

Project: Allison CQ Federal 9

Collection Date: 12/6/2021 9:30:00 AM

Lab ID: 2112464-004

Matrix: SOIL

Received Date: 12/8/2021 8:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/10/2021 12:27:28 PM	64406
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/10/2021 12:18:18 PM	64410
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/10/2021 12:18:18 PM	64410
Surr: DNOP	76.3	70-130		%Rec	1	12/10/2021 12:18:18 PM	64410
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/9/2021 5:23:34 PM	64373
Surr: BFB	101	70-130		%Rec	1	12/9/2021 5:23:34 PM	64373
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/9/2021 5:23:34 PM	64373
Toluene	ND	0.050		mg/Kg	1	12/9/2021 5:23:34 PM	64373
Ethylbenzene	ND	0.050		mg/Kg	1	12/9/2021 5:23:34 PM	64373
Xylenes, Total	ND	0.10		mg/Kg	1	12/9/2021 5:23:34 PM	64373
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	12/9/2021 5:23:34 PM	64373

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

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

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

December 14, 2021

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112627

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/9/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2112627

Date Reported: 12/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-05 4'

Project: Allison CQ Federal 9

Collection Date: 12/7/2021 10:00:00 AM

Lab ID: 2112627-001

Matrix: SOIL

Received Date: 12/9/2021 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	59		mg/Kg	20	12/10/2021 8:16:46 PM	64438
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/10/2021 6:04:52 PM	64414
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/10/2021 6:04:52 PM	64414
Surr: DNOP	86.4	70-130		%Rec	1	12/10/2021 6:04:52 PM	64414
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/10/2021 12:17:41 PM	64409
Surr: BFB	102	70-130		%Rec	1	12/10/2021 12:17:41 PM	64409
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/10/2021 12:17:41 PM	64409
Toluene	ND	0.048		mg/Kg	1	12/10/2021 12:17:41 PM	64409
Ethylbenzene	ND	0.048		mg/Kg	1	12/10/2021 12:17:41 PM	64409
Xylenes, Total	ND	0.096		mg/Kg	1	12/10/2021 12:17:41 PM	64409
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/10/2021 12:17:41 PM	64409

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

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

Page 1 of 8

Analytical Report

Lab Order 2112627

Date Reported: 12/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-06 4'

Project: Allison CQ Federal 9

Collection Date: 12/7/2021 11:30:00 AM

Lab ID: 2112627-002

Matrix: SOIL

Received Date: 12/9/2021 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	200	61		mg/Kg	20	12/10/2021 8:53:49 PM	64438
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/10/2021 6:15:23 PM	64414
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/10/2021 6:15:23 PM	64414
Surr: DNOP	78.3	70-130		%Rec	1	12/10/2021 6:15:23 PM	64414
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/10/2021 12:41:00 PM	64409
Surr: BFB	104	70-130		%Rec	1	12/10/2021 12:41:00 PM	64409
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/10/2021 12:41:00 PM	64409
Toluene	ND	0.049		mg/Kg	1	12/10/2021 12:41:00 PM	64409
Ethylbenzene	ND	0.049		mg/Kg	1	12/10/2021 12:41:00 PM	64409
Xylenes, Total	ND	0.098		mg/Kg	1	12/10/2021 12:41:00 PM	64409
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	12/10/2021 12:41:00 PM	64409

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

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

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Analytical Report

Lab Order 2112627

Date Reported: 12/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-07 4'

Project: Allison CQ Federal 9

Collection Date: 12/7/2021 11:40:00 AM

Lab ID: 2112627-003

Matrix: SOIL

Received Date: 12/9/2021 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	210	60		mg/Kg	20	12/10/2021 9:06:10 PM	64438
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/10/2021 6:25:53 PM	64414
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/10/2021 6:25:53 PM	64414
Surr: DNOP	86.9	70-130		%Rec	1	12/10/2021 6:25:53 PM	64414
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/10/2021 1:04:41 PM	64409
Surr: BFB	101	70-130		%Rec	1	12/10/2021 1:04:41 PM	64409
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/10/2021 1:04:41 PM	64409
Toluene	ND	0.048		mg/Kg	1	12/10/2021 1:04:41 PM	64409
Ethylbenzene	ND	0.048		mg/Kg	1	12/10/2021 1:04:41 PM	64409
Xylenes, Total	ND	0.096		mg/Kg	1	12/10/2021 1:04:41 PM	64409
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	12/10/2021 1:04:41 PM	64409

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

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

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Analytical Report

Lab Order 2112627

Date Reported: 12/14/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-08 4'

Project: Allison CQ Federal 9

Collection Date: 12/7/2021 11:50:00 AM

Lab ID: 2112627-004

Matrix: SOIL

Received Date: 12/9/2021 10:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	220	60		mg/Kg	20	12/10/2021 9:18:31 PM	64438
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/10/2021 6:36:21 PM	64414
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/10/2021 6:36:21 PM	64414
Surr: DNOP	87.8	70-130		%Rec	1	12/10/2021 6:36:21 PM	64414
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/10/2021 1:28:15 PM	64409
Surr: BFB	102	70-130		%Rec	1	12/10/2021 1:28:15 PM	64409
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	12/10/2021 1:28:15 PM	64409
Toluene	ND	0.046		mg/Kg	1	12/10/2021 1:28:15 PM	64409
Ethylbenzene	ND	0.046		mg/Kg	1	12/10/2021 1:28:15 PM	64409
Xylenes, Total	ND	0.093		mg/Kg	1	12/10/2021 1:28:15 PM	64409
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/10/2021 1:28:15 PM	64409

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

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

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

WO#: 2112627

14-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64438	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64438	RunNo: 84474								
Prep Date: 12/10/2021	Analysis Date: 12/10/2021	SeqNo: 2968263	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64438	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64438	RunNo: 84474								
Prep Date: 12/10/2021	Analysis Date: 12/10/2021	SeqNo: 2968265	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

Qualifiers:

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

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

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

WO#: 2112627

14-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64414	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64414			RunNo: 84438						
Prep Date: 12/9/2021	Analysis Date: 12/10/2021			SeqNo: 2967457		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	68.9	135			
Surr: DNOP	3.8		5.000		76.7	70	130			

Sample ID: MB-64414	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64414			RunNo: 84438						
Prep Date: 12/9/2021	Analysis Date: 12/10/2021			SeqNo: 2967458		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	8.5		10.00		85.0	70	130			

Qualifiers:

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2112627

14-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64409	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64409	RunNo: 84464								
Prep Date: 12/9/2021	Analysis Date: 12/10/2021	SeqNo: 2967398		Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		101	70	130			

Sample ID: lcs-64409	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64409	RunNo: 84464								
Prep Date: 12/9/2021	Analysis Date: 12/10/2021	SeqNo: 2967399		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	102	78.6	131			
Surr: BFB	1100		1000		114	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2112627

14-Dec-21

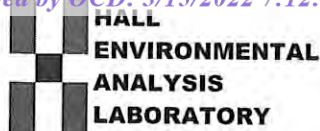
Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64409	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64409	RunNo: 84464								
Prep Date: 12/9/2021	Analysis Date: 12/10/2021	SeqNo: 2967793	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: LCS-64409	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64409	RunNo: 84464								
Prep Date: 12/9/2021	Analysis Date: 12/10/2021	SeqNo: 2967794	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	94.0	80	120			
Toluene	0.94	0.050	1.000	0	93.8	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.0	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112627

RcptNo: 1

Received By: Juan Rojas 12/9/2021 10:05:00 AM

Completed By: Sean Livingston 12/9/2021 10:41:56 AM

Reviewed By: JN 12/9/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)

Adjusted? _____

Checked by: me 12/9/21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.2	Good				
2	0.8	Good				

Analytical Report

Lab Order 2112734

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-20 2'

Project: Allison CQ Federal 9

Collection Date: 12/8/2021 8:30:00 AM

Lab ID: 2112734-001

Matrix: SOIL

Received Date: 12/10/2021 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	670	59		mg/Kg	20	12/13/2021 10:18:29 PM	64456
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/13/2021 6:53:32 PM	64447
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/13/2021 6:53:32 PM	64447
Surr: DNOP	79.2	70-130		%Rec	1	12/13/2021 6:53:32 PM	64447
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/13/2021 9:55:00 AM	64435
Surr: BFB	115	70-130		%Rec	1	12/13/2021 9:55:00 AM	64435
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/13/2021 9:55:00 AM	64435
Toluene	ND	0.050		mg/Kg	1	12/13/2021 9:55:00 AM	64435
Ethylbenzene	ND	0.050		mg/Kg	1	12/13/2021 9:55:00 AM	64435
Xylenes, Total	ND	0.10		mg/Kg	1	12/13/2021 9:55:00 AM	64435
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/13/2021 9:55:00 AM	64435

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

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

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Analytical Report

Lab Order 2112734

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-21 2'

Project: Allison CQ Federal 9

Collection Date: 12/8/2021 8:40:00 AM

Lab ID: 2112734-002

Matrix: SOIL

Received Date: 12/10/2021 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	280	60		mg/Kg	20	12/13/2021 11:20:32 PM	64456
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/13/2021 7:03:58 PM	64447
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/13/2021 7:03:58 PM	64447
Surr: DNOP	77.1	70-130		%Rec	1	12/13/2021 7:03:58 PM	64447
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/13/2021 10:54:00 AM	64435
Surr: BFB	99.4	70-130		%Rec	1	12/13/2021 10:54:00 AM	64435
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/13/2021 10:54:00 AM	64435
Toluene	ND	0.049		mg/Kg	1	12/13/2021 10:54:00 AM	64435
Ethylbenzene	ND	0.049		mg/Kg	1	12/13/2021 10:54:00 AM	64435
Xylenes, Total	ND	0.098		mg/Kg	1	12/13/2021 10:54:00 AM	64435
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	12/13/2021 10:54:00 AM	64435

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

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

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Analytical Report

Lab Order 2112734

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-22 2'

Project: Allison CQ Federal 9

Collection Date: 12/8/2021 8:50:00 AM

Lab ID: 2112734-003

Matrix: SOIL

Received Date: 12/10/2021 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	200	60		mg/Kg	20	12/13/2021 11:32:56 PM	64456
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/13/2021 7:14:24 PM	64447
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/13/2021 7:14:24 PM	64447
Surr: DNOP	80.9	70-130		%Rec	1	12/13/2021 7:14:24 PM	64447
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/13/2021 11:53:00 AM	64435
Surr: BFB	93.3	70-130		%Rec	1	12/13/2021 11:53:00 AM	64435
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/13/2021 11:53:00 AM	64435
Toluene	ND	0.050		mg/Kg	1	12/13/2021 11:53:00 AM	64435
Ethylbenzene	ND	0.050		mg/Kg	1	12/13/2021 11:53:00 AM	64435
Xylenes, Total	ND	0.10		mg/Kg	1	12/13/2021 11:53:00 AM	64435
Surr: 4-Bromofluorobenzene	84.2	70-130		%Rec	1	12/13/2021 11:53:00 AM	64435

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

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

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Analytical Report

Lab Order 2112734

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-23 2'

Project: Allison CQ Federal 9

Collection Date: 12/8/2021 8:55:00 AM

Lab ID: 2112734-004

Matrix: SOIL

Received Date: 12/10/2021 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	230	60		mg/Kg	20	12/13/2021 11:45:21 PM	64456
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/13/2021 7:24:51 PM	64447
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/13/2021 7:24:51 PM	64447
Surr: DNOP	77.7	70-130		%Rec	1	12/13/2021 7:24:51 PM	64447
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/13/2021 12:13:00 PM	64435
Surr: BFB	92.6	70-130		%Rec	1	12/13/2021 12:13:00 PM	64435
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/13/2021 12:13:00 PM	64435
Toluene	ND	0.048		mg/Kg	1	12/13/2021 12:13:00 PM	64435
Ethylbenzene	ND	0.048		mg/Kg	1	12/13/2021 12:13:00 PM	64435
Xylenes, Total	ND	0.097		mg/Kg	1	12/13/2021 12:13:00 PM	64435
Surr: 4-Bromofluorobenzene	84.6	70-130		%Rec	1	12/13/2021 12:13:00 PM	64435

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

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

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Analytical Report

Lab Order 2112734

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-09 4'

Project: Allison CQ Federal 9

Collection Date: 12/8/2021 9:00:00 AM

Lab ID: 2112734-005

Matrix: SOIL

Received Date: 12/10/2021 7:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	21	6.0		mg/Kg	2	12/13/2021 11:57:45 PM	64456
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/13/2021 7:35:18 PM	64447
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/13/2021 7:35:18 PM	64447
Surr: DNOP	81.0	70-130		%Rec	1	12/13/2021 7:35:18 PM	64447
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/13/2021 12:32:00 PM	64435
Surr: BFB	92.3	70-130		%Rec	1	12/13/2021 12:32:00 PM	64435
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/13/2021 12:32:00 PM	64435
Toluene	ND	0.049		mg/Kg	1	12/13/2021 12:32:00 PM	64435
Ethylbenzene	ND	0.049		mg/Kg	1	12/13/2021 12:32:00 PM	64435
Xylenes, Total	ND	0.098		mg/Kg	1	12/13/2021 12:32:00 PM	64435
Surr: 4-Bromofluorobenzene	83.4	70-130		%Rec	1	12/13/2021 12:32:00 PM	64435

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

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

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

December 20, 2021

Mike Moffitt
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX

RE: Allison CQ Federal 9

OrderNo.: 2112842

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 5 sample(s) on 12/14/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2112842

Date Reported: 12/20/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-10 4'

Project: Allison CQ Federal 9

Collection Date: 12/9/2021 10:30:00 AM

Lab ID: 2112842-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	97	60		mg/Kg	20	12/15/2021 6:17:45 PM	64536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 7:08:50 PM	64498
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 7:08:50 PM	64498
Surr: DNOP	90.7	70-130		%Rec	1	12/14/2021 7:08:50 PM	64498
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 9:18:00 PM	64491
Surr: BFB	86.7	70-130		%Rec	1	12/15/2021 9:18:00 PM	64491
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 9:18:00 PM	64491
Toluene	ND	0.047		mg/Kg	1	12/15/2021 9:18:00 PM	64491
Ethylbenzene	ND	0.047		mg/Kg	1	12/15/2021 9:18:00 PM	64491
Xylenes, Total	ND	0.095		mg/Kg	1	12/15/2021 9:18:00 PM	64491
Surr: 4-Bromofluorobenzene	80.7	70-130		%Rec	1	12/15/2021 9:18:00 PM	64491

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

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

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Analytical Report

Lab Order 2112842

Date Reported: 12/20/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-11 4'

Project: Allison CQ Federal 9

Collection Date: 12/9/2021 10:40:00 AM

Lab ID: 2112842-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	180	60		mg/Kg	20	12/15/2021 6:55:00 PM	64536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/14/2021 7:19:20 PM	64498
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/14/2021 7:19:20 PM	64498
Surr: DNOP	115	70-130		%Rec	1	12/14/2021 7:19:20 PM	64498
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 9:37:00 PM	64491
Surr: BFB	93.7	70-130		%Rec	1	12/15/2021 9:37:00 PM	64491
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 9:37:00 PM	64491
Toluene	ND	0.048		mg/Kg	1	12/15/2021 9:37:00 PM	64491
Ethylbenzene	ND	0.048		mg/Kg	1	12/15/2021 9:37:00 PM	64491
Xylenes, Total	ND	0.096		mg/Kg	1	12/15/2021 9:37:00 PM	64491
Surr: 4-Bromofluorobenzene	82.0	70-130		%Rec	1	12/15/2021 9:37:00 PM	64491

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

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

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Analytical Report

Lab Order 2112842

Date Reported: 12/20/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-12 4'

Project: Allison CQ Federal 9

Collection Date: 12/9/2021 10:50:00 AM

Lab ID: 2112842-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	290	60		mg/Kg	20	12/15/2021 7:32:14 PM	64536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/14/2021 7:29:47 PM	64498
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/14/2021 7:29:47 PM	64498
Surr: DNOP	90.6	70-130		%Rec	1	12/14/2021 7:29:47 PM	64498
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/15/2021 9:57:00 PM	64491
Surr: BFB	86.4	70-130		%Rec	1	12/15/2021 9:57:00 PM	64491
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/15/2021 9:57:00 PM	64491
Toluene	ND	0.048		mg/Kg	1	12/15/2021 9:57:00 PM	64491
Ethylbenzene	ND	0.048		mg/Kg	1	12/15/2021 9:57:00 PM	64491
Xylenes, Total	ND	0.096		mg/Kg	1	12/15/2021 9:57:00 PM	64491
Surr: 4-Bromofluorobenzene	81.2	70-130		%Rec	1	12/15/2021 9:57:00 PM	64491

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

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

Analytical Report

Lab Order 2112842

Date Reported: 12/20/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-24 2'

Project: Allison CQ Federal 9

Collection Date: 12/9/2021 11:00:00 AM

Lab ID: 2112842-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	290	61		mg/Kg	20	12/15/2021 7:44:38 PM	64536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/14/2021 7:40:15 PM	64498
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/14/2021 7:40:15 PM	64498
Surr: DNOP	96.1	70-130		%Rec	1	12/14/2021 7:40:15 PM	64498
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/15/2021 10:56:00 PM	64491
Surr: BFB	91.0	70-130		%Rec	1	12/15/2021 10:56:00 PM	64491
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	12/15/2021 10:56:00 PM	64491
Toluene	ND	0.047		mg/Kg	1	12/15/2021 10:56:00 PM	64491
Ethylbenzene	ND	0.047		mg/Kg	1	12/15/2021 10:56:00 PM	64491
Xylenes, Total	ND	0.093		mg/Kg	1	12/15/2021 10:56:00 PM	64491
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	12/15/2021 10:56:00 PM	64491

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

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

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Analytical Report

Lab Order 2112842

Date Reported: 12/20/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-25 2'

Project: Allison CQ Federal 9

Collection Date: 12/9/2021 11:10:00 AM

Lab ID: 2112842-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	380	60		mg/Kg	20	12/15/2021 7:57:03 PM	64536
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	12/14/2021 7:50:44 PM	64498
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/14/2021 7:50:44 PM	64498
Surr: DNOP	84.9	70-130		%Rec	1	12/14/2021 7:50:44 PM	64498
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/15/2021 11:15:00 PM	64491
Surr: BFB	88.5	70-130		%Rec	1	12/15/2021 11:15:00 PM	64491
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/15/2021 11:15:00 PM	64491
Toluene	ND	0.049		mg/Kg	1	12/15/2021 11:15:00 PM	64491
Ethylbenzene	ND	0.049		mg/Kg	1	12/15/2021 11:15:00 PM	64491
Xylenes, Total	ND	0.098		mg/Kg	1	12/15/2021 11:15:00 PM	64491
Surr: 4-Bromofluorobenzene	80.0	70-130		%Rec	1	12/15/2021 11:15:00 PM	64491

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

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

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

WO#: 2112842

20-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64536	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64536	RunNo: 84572								
Prep Date: 12/15/2021	Analysis Date: 12/15/2021	SeqNo: 2972732	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64536	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64536	RunNo: 84572								
Prep Date: 12/15/2021	Analysis Date: 12/15/2021	SeqNo: 2972733	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	90.7	90	110			

Qualifiers:

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

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

WO#: 2112842

20-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64498	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64498	RunNo: 84493								
Prep Date: 12/14/2021	Analysis Date: 12/14/2021	SeqNo: 2970622 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		87.9	70	130			

Sample ID: LCS-64498	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64498	RunNo: 84493								
Prep Date: 12/14/2021	Analysis Date: 12/14/2021	SeqNo: 2970623 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	88.6	68.9	135			
Surr: DNOP	4.1		5.000		81.7	70	130			

Qualifiers:

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

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

WO#: 2112842

20-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64491	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64491	RunNo: 84562								
Prep Date: 12/14/2021	Analysis Date: 12/15/2021	SeqNo: 2972095	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.2	70	130			

Sample ID: lcs-64491	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64491	RunNo: 84562								
Prep Date: 12/14/2021	Analysis Date: 12/15/2021	SeqNo: 2972097	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	78.6	131			
Surr: BFB	1000		1000		102	70	130			

Qualifiers:

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

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

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

WO#: 2112842

20-Dec-21

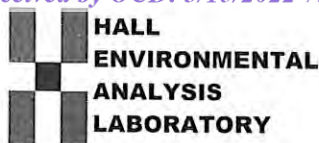
Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64491	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64491	RunNo: 84562								
Prep Date: 12/14/2021	Analysis Date: 12/15/2021	SeqNo: 2972143 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.78		1.000		78.0	70	130			

Sample ID: lcs-64491	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64491	RunNo: 84562								
Prep Date: 12/14/2021	Analysis Date: 12/15/2021	SeqNo: 2972145 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.8	80	120			
Toluene	0.89	0.050	1.000	0	88.8	80	120			
Ethylbenzene	0.88	0.050	1.000	0	87.8	80	120			
Xylenes, Total	2.6	0.10	3.000	0	85.4	80	120			
Surr: 4-Bromofluorobenzene	0.79		1.000		79.4	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: **EOG**Work Order Number: **2112842**RcptNo: **1**Received By: **Desiree Dominguez** **12/14/2021 8:10:00 AM**Completed By: **Desiree Dominguez** **12/14/2021 9:10:55 AM**Reviewed By: **See 12/14/21**

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: **KRG 12/14/21**

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				



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

December 21, 2021

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 4

OrderNo.: 2112927

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 9 sample(s) on 12/15/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-33 3'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 10:00:00 AM

Lab ID: 2112927-001

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	970	60		mg/Kg	20	12/17/2021 12:04:24 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/17/2021 10:30:36 AM	64568
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/17/2021 10:30:36 AM	64568
Surr: DNOP	84.6	70-130		%Rec	1	12/17/2021 10:30:36 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 6:46:00 AM	64537
Surr: BFB	88.0	70-130		%Rec	1	12/16/2021 6:46:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 6:46:00 AM	64537
Toluene	ND	0.049		mg/Kg	1	12/16/2021 6:46:00 AM	64537
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 6:46:00 AM	64537
Xylenes, Total	ND	0.099		mg/Kg	1	12/16/2021 6:46:00 AM	64537
Surr: 4-Bromofluorobenzene	79.5	70-130		%Rec	1	12/16/2021 6:46:00 AM	64537

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

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

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-34 3'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 10:10:00 AM

Lab ID: 2112927-002

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	890	60		mg/Kg	20	12/17/2021 12:16:45 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/17/2021 10:41:02 AM	64568
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/17/2021 10:41:02 AM	64568
Surr: DNOP	81.3	70-130		%Rec	1	12/17/2021 10:41:02 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/16/2021 7:44:00 AM	64537
Surr: BFB	89.8	70-130		%Rec	1	12/16/2021 7:44:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 7:44:00 AM	64537
Toluene	ND	0.048		mg/Kg	1	12/16/2021 7:44:00 AM	64537
Ethylbenzene	ND	0.048		mg/Kg	1	12/16/2021 7:44:00 AM	64537
Xylenes, Total	ND	0.096		mg/Kg	1	12/16/2021 7:44:00 AM	64537
Surr: 4-Bromofluorobenzene	84.4	70-130		%Rec	1	12/16/2021 7:44:00 AM	64537

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

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

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-35 3'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 10:20:00 AM

Lab ID: 2112927-003

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	110	60		mg/Kg	20	12/17/2021 12:29:05 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/17/2021 10:51:29 AM	64568
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/17/2021 10:51:29 AM	64568
Surr: DNOP	68.1	70-130	S	%Rec	1	12/17/2021 10:51:29 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/16/2021 8:43:00 AM	64537
Surr: BFB	86.3	70-130		%Rec	1	12/16/2021 8:43:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	12/16/2021 8:43:00 AM	64537
Toluene	ND	0.046		mg/Kg	1	12/16/2021 8:43:00 AM	64537
Ethylbenzene	ND	0.046		mg/Kg	1	12/16/2021 8:43:00 AM	64537
Xylenes, Total	ND	0.092		mg/Kg	1	12/16/2021 8:43:00 AM	64537
Surr: 4-Bromofluorobenzene	78.2	70-130		%Rec	1	12/16/2021 8:43:00 AM	64537

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

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

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Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-13 6'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 10:30:00 AM

Lab ID: 2112927-004

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	130	60		mg/Kg	20	12/17/2021 12:41:26 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	12/17/2021 11:01:59 AM	64568
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	12/17/2021 11:01:59 AM	64568
Surr: DNOP	70.1	70-130		%Rec	1	12/17/2021 11:01:59 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/16/2021 9:02:00 AM	64537
Surr: BFB	87.5	70-130		%Rec	1	12/16/2021 9:02:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 9:02:00 AM	64537
Toluene	ND	0.049		mg/Kg	1	12/16/2021 9:02:00 AM	64537
Ethylbenzene	ND	0.049		mg/Kg	1	12/16/2021 9:02:00 AM	64537
Xylenes, Total	ND	0.099		mg/Kg	1	12/16/2021 9:02:00 AM	64537
Surr: 4-Bromofluorobenzene	78.8	70-130		%Rec	1	12/16/2021 9:02:00 AM	64537

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

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

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-14 6'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 10:40:00 AM

Lab ID: 2112927-005

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	70	60		mg/Kg	20	12/17/2021 12:53:47 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	12/17/2021 11:12:27 AM	64568
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/17/2021 11:12:27 AM	64568
Surr: DNOP	78.9	70-130		%Rec	1	12/17/2021 11:12:27 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/16/2021 9:22:00 AM	64537
Surr: BFB	92.1	70-130		%Rec	1	12/16/2021 9:22:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/16/2021 9:22:00 AM	64537
Toluene	ND	0.050		mg/Kg	1	12/16/2021 9:22:00 AM	64537
Ethylbenzene	ND	0.050		mg/Kg	1	12/16/2021 9:22:00 AM	64537
Xylenes, Total	ND	0.10		mg/Kg	1	12/16/2021 9:22:00 AM	64537
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	12/16/2021 9:22:00 AM	64537

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

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

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-15 6'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 10:50:00 AM

Lab ID: 2112927-006

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	180	61		mg/Kg	20	12/17/2021 1:06:08 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	12/17/2021 11:22:57 AM	64568
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/17/2021 11:22:57 AM	64568
Surr: DNOP	61.4	70-130	S	%Rec	1	12/17/2021 11:22:57 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	12/16/2021 9:41:00 AM	64537
Surr: BFB	97.4	70-130		%Rec	1	12/16/2021 9:41:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	12/16/2021 9:41:00 AM	64537
Toluene	ND	0.046		mg/Kg	1	12/16/2021 9:41:00 AM	64537
Ethylbenzene	ND	0.046		mg/Kg	1	12/16/2021 9:41:00 AM	64537
Xylenes, Total	ND	0.093		mg/Kg	1	12/16/2021 9:41:00 AM	64537
Surr: 4-Bromofluorobenzene	87.3	70-130		%Rec	1	12/16/2021 9:41:00 AM	64537

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

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

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Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-16 6'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 11:00:00 AM

Lab ID: 2112927-007

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	280	60		mg/Kg	20	12/17/2021 1:18:30 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/17/2021 11:33:28 AM	64568
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/17/2021 11:33:28 AM	64568
Surr: DNOP	95.1	70-130		%Rec	1	12/17/2021 11:33:28 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2021 10:01:00 AM	64537
Surr: BFB	90.5	70-130		%Rec	1	12/16/2021 10:01:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 10:01:00 AM	64537
Toluene	ND	0.047		mg/Kg	1	12/16/2021 10:01:00 AM	64537
Ethylbenzene	ND	0.047		mg/Kg	1	12/16/2021 10:01:00 AM	64537
Xylenes, Total	ND	0.095		mg/Kg	1	12/16/2021 10:01:00 AM	64537
Surr: 4-Bromofluorobenzene	83.2	70-130		%Rec	1	12/16/2021 10:01:00 AM	64537

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

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

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-17 6'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 11:10:00 AM

Lab ID: 2112927-008

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	240	60		mg/Kg	20	12/17/2021 1:30:51 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/17/2021 11:44:01 AM	64568
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/17/2021 11:44:01 AM	64568
Surr: DNOP	74.3	70-130		%Rec	1	12/17/2021 11:44:01 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2021 10:21:00 AM	64537
Surr: BFB	89.3	70-130		%Rec	1	12/16/2021 10:21:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/16/2021 10:21:00 AM	64537
Toluene	ND	0.047		mg/Kg	1	12/16/2021 10:21:00 AM	64537
Ethylbenzene	ND	0.047		mg/Kg	1	12/16/2021 10:21:00 AM	64537
Xylenes, Total	ND	0.094		mg/Kg	1	12/16/2021 10:21:00 AM	64537
Surr: 4-Bromofluorobenzene	81.7	70-130		%Rec	1	12/16/2021 10:21:00 AM	64537

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

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

Analytical Report

Lab Order 2112927

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-18 6'

Project: Allison CQ Federal 4

Collection Date: 12/13/2021 11:20:00 AM

Lab ID: 2112927-009

Matrix: SOIL

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

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	230	60		mg/Kg	20	12/17/2021 2:07:54 AM	64573
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	12/17/2021 11:54:41 AM	64568
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/17/2021 11:54:41 AM	64568
Surr: DNOP	96.4	70-130		%Rec	1	12/17/2021 11:54:41 AM	64568
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/16/2021 10:40:00 AM	64537
Surr: BFB	90.7	70-130		%Rec	1	12/16/2021 10:40:00 AM	64537
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	12/16/2021 10:40:00 AM	64537
Toluene	ND	0.047		mg/Kg	1	12/16/2021 10:40:00 AM	64537
Ethylbenzene	ND	0.047		mg/Kg	1	12/16/2021 10:40:00 AM	64537
Xylenes, Total	ND	0.094		mg/Kg	1	12/16/2021 10:40:00 AM	64537
Surr: 4-Bromofluorobenzene	82.6	70-130		%Rec	1	12/16/2021 10:40:00 AM	64537

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

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2112927

21-Dec-21

Client: EOG
Project: Allison CQ Federal 4

Sample ID: MB-64573		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 64573		RunNo: 84617						
Prep Date: 12/16/2021		Analysis Date: 12/16/2021		SeqNo: 2974432			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64573		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 64573		RunNo: 84617						
Prep Date: 12/16/2021		Analysis Date: 12/16/2021		SeqNo: 2974433			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2112927

21-Dec-21

Client: EOG
Project: Allison CQ Federal 4

Sample ID: LCS-64568	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 64568		RunNo: 84632							
Prep Date: 12/16/2021	Analysis Date: 12/17/2021		SeqNo: 2975392		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.4	68.9	135			
Surr: DNOP	4.4		5.000		87.8	70	130			

Sample ID: MB-64568	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 64568		RunNo: 84632							
Prep Date: 12/16/2021	Analysis Date: 12/17/2021		SeqNo: 2975393		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.7	70	130			

Qualifiers:

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

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

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

WO#: 2112927

21-Dec-21

Client: EOG
Project: Allison CQ Federal 4

Sample ID: mb-64537	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64537	RunNo: 84604								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2973976 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		91.6	70	130			

Sample ID: mb-64500	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2973977 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		90.8	70	130			

Sample ID: lcs-64537	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64537	RunNo: 84604								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2973978 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	78.6	131			
Surr: BFB	1100		1000		108	70	130			

Sample ID: lcs-64500	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2973979 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		109	70	130			

Qualifiers:

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

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

WO#: 2112927

21-Dec-21

Client: EOG
Project: Allison CQ Federal 4

Sample ID: mb-64537	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64537	RunNo: 84604								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2974024 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.85		1.000		84.6	70	130			

Sample ID: mb-64500	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2974025 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.78		1.000		78.2	70	130			

Sample ID: lcs-64537	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64537	RunNo: 84604								
Prep Date: 12/15/2021	Analysis Date: 12/16/2021	SeqNo: 2974026 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.7	80	120			
Toluene	0.93	0.050	1.000	0	93.2	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.4	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.4	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.9	70	130			

Sample ID: lcs-64500	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64500	RunNo: 84604								
Prep Date: 12/14/2021	Analysis Date: 12/16/2021	SeqNo: 2974027 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.80		1.000		80.2	70	130			

Qualifiers:

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

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112927

RcptNo: 1

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

ID3

Completed By: Desiree Dominguez 12/15/2021 9:03:28 AM

ID3

Reviewed By: DAD 12/15/21

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: cm 12/15/21Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

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



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

December 21, 2021

Mike Moffitt
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112A11

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/16/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2112A11

Date Reported: 12/21/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-37 2'

Project: Allison CQ Federal 9

Collection Date: 12/14/2021 11:00:00 AM

Lab ID: 2112A11-001

Matrix: SOIL

Received Date: 12/16/2021 7:52:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	300	60		mg/Kg	20	12/17/2021 12:20:07 PM	64590
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	12/20/2021 8:35:04 AM	64569
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/20/2021 8:35:04 AM	64569
Surr: DNOP	85.0	70-130		%Rec	1	12/20/2021 8:35:04 AM	64569
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/17/2021 10:23:00 AM	64559
Surr: BFB	92.1	70-130		%Rec	1	12/17/2021 10:23:00 AM	64559
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/17/2021 10:23:00 AM	64559
Toluene	ND	0.048		mg/Kg	1	12/17/2021 10:23:00 AM	64559
Ethylbenzene	ND	0.048		mg/Kg	1	12/17/2021 10:23:00 AM	64559
Xylenes, Total	ND	0.096		mg/Kg	1	12/17/2021 10:23:00 AM	64559
Surr: 4-Bromofluorobenzene	81.6	70-130		%Rec	1	12/17/2021 10:23:00 AM	64559

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

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

Page 1 of 5

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

WO#: 2112A11

21-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64590	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64590	RunNo: 84636								
Prep Date: 12/17/2021	Analysis Date: 12/17/2021	SeqNo: 2976320	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64590	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64590	RunNo: 84636								
Prep Date: 12/17/2021	Analysis Date: 12/17/2021	SeqNo: 2976321	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Qualifiers:

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

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

Page 2 of 5

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

WO#: 2112A11

21-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64569	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64569	RunNo: 84661								
Prep Date: 12/16/2021	Analysis Date: 12/20/2021	SeqNo: 2976994 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.5	70	130			

Sample ID: LCS-64569	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64569	RunNo: 84661								
Prep Date: 12/16/2021	Analysis Date: 12/20/2021	SeqNo: 2976996 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.4	68.9	135			
Surr: DNOP	4.2		5.000		84.2	70	130			

Qualifiers:

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

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

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

WO#: 2112A11

21-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64559	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975677			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		89.9	70	130			

Sample ID: lcs-64559	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975679			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	78.6	131			
Surr: BFB	1000		1000		99.6	70	130			

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

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

Qualifiers:

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

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

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

WO#: 2112A11

21-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64559	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975725 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.79		1.000		79.4	70	130			

Sample ID: lcs-64559	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64559	RunNo: 84642								
Prep Date: 12/16/2021	Analysis Date: 12/17/2021	SeqNo: 2975727 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.7	80	120			
Toluene	0.89	0.050	1.000	0	88.9	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	86.2	80	120			
Surr: 4-Bromofluorobenzene	0.85		1.000		85.0	70	130			

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

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

Qualifiers:

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



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

Sample Log-In Check List

Client Name: **EOG**Work Order Number: **2112A11**RcptNo: **1**Received By: **Desiree Dominguez** **12/16/2021 7:52:00 AM**Completed By: **Desiree Dominguez** **12/16/2021 8:26:45 AM**Reviewed By: **KAG** **12/16/21**

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: **JN 12/16/21**

Special Handling (if applicable)

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

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

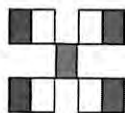
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good				

[illegible]

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



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks: CC: Charles Dixon, Mike Moss, et al

Direct Bill EOG Resources

Received by:	Via:	Date	Time
--------------	------	------	------

Date _____ Time _____

Via:

Received by:

Received by:	Via:	Date	Time
--------------	------	------	------

Date	Time
------	------

15

Received by:

Concise 12/16/21 ZS:it

2/16/21 7:52

cell

A



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

December 27, 2021

Mike Moffitt
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112B63

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/18/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2112B63

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-38 2'

Project: Allison CQ Federal 9

Collection Date: 12/16/2021 8:30:00 AM

Lab ID: 2112B63-001

Matrix: SOIL

Received Date: 12/18/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	450	60		mg/Kg	20	12/21/2021 7:10:56 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.0		mg/Kg	1	12/20/2021 12:11:20 PM	64609
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	12/20/2021 12:11:20 PM	64609
Surr: DNOP	91.2	70-130		%Rec	1	12/20/2021 12:11:20 PM	64609
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/20/2021 3:32:00 PM	64606
Surr: BFB	84.6	70-130		%Rec	1	12/20/2021 3:32:00 PM	64606
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/20/2021 3:32:00 PM	64606
Toluene	ND	0.049		mg/Kg	1	12/20/2021 3:32:00 PM	64606
Ethylbenzene	ND	0.049		mg/Kg	1	12/20/2021 3:32:00 PM	64606
Xylenes, Total	ND	0.097		mg/Kg	1	12/20/2021 3:32:00 PM	64606
Surr: 4-Bromofluorobenzene	78.6	70-130		%Rec	1	12/20/2021 3:32:00 PM	64606

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

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

Analytical Report

Lab Order 2112B63

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-21 6'

Project: Allison CQ Federal 9

Collection Date: 12/16/2021 10:00:00 AM

Lab ID: 2112B63-002

Matrix: SOIL

Received Date: 12/18/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	240	60		mg/Kg	20	12/21/2021 7:23:21 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/20/2021 12:23:10 PM	64609
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	12/20/2021 12:23:10 PM	64609
Surr: DNOP	90.9	70-130		%Rec	1	12/20/2021 12:23:10 PM	64609
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/20/2021 3:52:00 PM	64606
Surr: BFB	86.5	70-130		%Rec	1	12/20/2021 3:52:00 PM	64606
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/20/2021 3:52:00 PM	64606
Toluene	ND	0.048		mg/Kg	1	12/20/2021 3:52:00 PM	64606
Ethylbenzene	ND	0.048		mg/Kg	1	12/20/2021 3:52:00 PM	64606
Xylenes, Total	ND	0.097		mg/Kg	1	12/20/2021 3:52:00 PM	64606
Surr: 4-Bromofluorobenzene	78.0	70-130		%Rec	1	12/20/2021 3:52:00 PM	64606

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

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

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Analytical Report

Lab Order 2112B63

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-39 3'

Project: Allison CQ Federal 9

Collection Date: 12/16/2021 10:10:00 AM

Lab ID: 2112B63-003

Matrix: SOIL

Received Date: 12/18/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	270	60		mg/Kg	20	12/21/2021 7:35:46 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	12/20/2021 12:35:28 PM	64609
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/20/2021 12:35:28 PM	64609
Surr: DNOP	91.2	70-130		%Rec	1	12/20/2021 12:35:28 PM	64609
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/20/2021 4:51:00 PM	64606
Surr: BFB	86.2	70-130		%Rec	1	12/20/2021 4:51:00 PM	64606
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/20/2021 4:51:00 PM	64606
Toluene	ND	0.049		mg/Kg	1	12/20/2021 4:51:00 PM	64606
Ethylbenzene	ND	0.049		mg/Kg	1	12/20/2021 4:51:00 PM	64606
Xylenes, Total	ND	0.098		mg/Kg	1	12/20/2021 4:51:00 PM	64606
Surr: 4-Bromofluorobenzene	80.7	70-130		%Rec	1	12/20/2021 4:51:00 PM	64606

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

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

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Analytical Report

Lab Order 2112B63

Date Reported: 12/27/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-44 3'

Project: Allison CQ Federal 9

Collection Date: 12/16/2021 2:30:00 PM

Lab ID: 2112B63-004

Matrix: SOIL

Received Date: 12/18/2021 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	61		mg/Kg	20	12/21/2021 7:48:11 PM	64676
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	12/20/2021 12:47:24 PM	64609
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/20/2021 12:47:24 PM	64609
Surr: DNOP	89.3	70-130		%Rec	1	12/20/2021 12:47:24 PM	64609
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	12/20/2021 5:11:00 PM	64606
Surr: BFB	85.4	70-130		%Rec	1	12/20/2021 5:11:00 PM	64606
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/20/2021 5:11:00 PM	64606
Toluene	ND	0.050		mg/Kg	1	12/20/2021 5:11:00 PM	64606
Ethylbenzene	ND	0.050		mg/Kg	1	12/20/2021 5:11:00 PM	64606
Xylenes, Total	ND	0.10		mg/Kg	1	12/20/2021 5:11:00 PM	64606
Surr: 4-Bromofluorobenzene	77.2	70-130		%Rec	1	12/20/2021 5:11:00 PM	64606

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2112B63
27-Dec-21

Client: EOG
Project: Allison CQ Federal 9

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

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

Qualifiers:

- *

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix interference
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit

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

WO#: 2112B63

27-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64609	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 64609		RunNo: 84660							
Prep Date: 12/20/2021	Analysis Date: 12/20/2021		SeqNo: 2976310		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	8.4		10.00		84.4	70	130			

Sample ID: LCS-64609	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 64609		RunNo: 84660							
Prep Date: 12/20/2021	Analysis Date: 12/20/2021		SeqNo: 2976311		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	55	10	50.00	0	110	68.9	135			
Surr: DNOP	4.2		5.000		83.9	70	130			

Qualifiers:

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

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

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

WO#: 2112B63

27-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64606	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64606	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977285 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	960		1000		95.6	70	130			

Sample ID: mb-64605	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64605	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977286 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	850		1000		85.0	70	130			

Sample ID: lcs-64606	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64606	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977287 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	78.6	131			
Surr: BFB	1200		1000		123	70	130			

Sample ID: lcs-64605	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64605	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977288 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		101	70	130			

Qualifiers:

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

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

WO#: 2112B63

27-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64606	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64606	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977334 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.85		1.000		84.8	70	130			

Sample ID: mb-64605	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64605	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977335 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.78		1.000		78.2	70	130			

Sample ID: lcs-64606	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64606	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977336 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	91.8	80	120			
Toluene	0.92	0.050	1.000	0	92.1	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.0	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		93.1	70	130			

Sample ID: lcs-64605	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64605	RunNo: 84678								
Prep Date: 12/18/2021	Analysis Date: 12/20/2021	SeqNo: 2977337 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.79		1.000		79.0	70	130			

Qualifiers:

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

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112B63

RcptNo: 1

Received By: Isaiah Ortiz

12/18/2021 10:00:00 AM

I-OK

Completed By: Isaiah Ortiz

12/18/2021 12:10:49 PM

I-OK

Reviewed By: *12/18/2021*

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

12/18/21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Not Present			
2	2.2	Good	Not Present			



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

December 29, 2021

Mike Moffitt
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112C11

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/21/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2112C11

Date Reported: 12/29/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-23 6'

Project: Allison CQ Federal 9

Collection Date: 12/17/2021 2:30:00 PM

Lab ID: 2112C11-001

Matrix: SOIL

Received Date: 12/21/2021 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	520	60		mg/Kg	20	12/22/2021 8:55:03 PM	64701
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/23/2021 9:19:39 AM	64689
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/23/2021 9:19:39 AM	64689
Surr: DNOP	92.6	70-130		%Rec	1	12/23/2021 9:19:39 AM	64689
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/22/2021 6:30:00 AM	64672
Surr: BFB	94.4	70-130		%Rec	1	12/22/2021 6:30:00 AM	64672
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/22/2021 6:30:00 AM	64672
Toluene	ND	0.049		mg/Kg	1	12/22/2021 6:30:00 AM	64672
Ethylbenzene	ND	0.049		mg/Kg	1	12/22/2021 6:30:00 AM	64672
Xylenes, Total	ND	0.098		mg/Kg	1	12/22/2021 6:30:00 AM	64672
Surr: 4-Bromofluorobenzene	84.7	70-130		%Rec	1	12/22/2021 6:30:00 AM	64672

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

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

Page 1 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2112C11

29-Dec-21

Client: EOG

Project: Allison CQ Federal 9

Sample ID: MB-64701		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 64701		RunNo: 84755						
Prep Date: 12/22/2021		Analysis Date: 12/22/2021		SeqNo: 2980646			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64701		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 64701		RunNo: 84755						
Prep Date: 12/22/2021		Analysis Date: 12/22/2021		SeqNo: 2980647			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 5

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

WO#: 2112C11

29-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64689	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64689	RunNo: 84753								
Prep Date: 12/22/2021	Analysis Date: 12/23/2021	SeqNo: 2980585			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.8	68.9	135			
Surr: DNOP	5.3		5.000		106	70	130			

Sample ID: MB-64689	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64689	RunNo: 84753								
Prep Date: 12/22/2021	Analysis Date: 12/23/2021	SeqNo: 2980586			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		112	70	130			

Sample ID: LCS-64721	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64721	RunNo: 84779								
Prep Date: 12/23/2021	Analysis Date: 12/27/2021	SeqNo: 2982379			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		89.8	70	130			

Sample ID: MB-64721	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64721	RunNo: 84779								
Prep Date: 12/23/2021	Analysis Date: 12/27/2021	SeqNo: 2982382			Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		95.2	70	130			

Qualifiers:

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

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

WO#: 2112C11

29-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64672	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64672	RunNo: 84715								
Prep Date: 12/21/2021	Analysis Date: 12/22/2021	SeqNo: 2978906	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.3	70	130			

Sample ID: lcs-64672	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64672	RunNo: 84715								
Prep Date: 12/21/2021	Analysis Date: 12/22/2021	SeqNo: 2978907	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	78.6	131			
Surr: BFB	1000		1000		104	70	130			

Qualifiers:

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

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

WO#: 2112C11

29-Dec-21

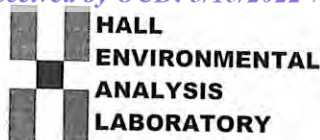
Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64672	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64672	RunNo: 84715								
Prep Date: 12/21/2021	Analysis Date: 12/22/2021	SeqNo: 2978909	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	0.82		1.000		82.2	70	130			

Sample ID: lcs-64672	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64672	RunNo: 84715								
Prep Date: 12/21/2021	Analysis Date: 12/22/2021	SeqNo: 2978910	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.2	80	120			
Toluene	0.91	0.050	1.000	0	91.5	80	120			
Ethylbenzene	0.91	0.050	1.000	0	91.0	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.9	80	120			
Surr: 4-Bromofluorobenzene	0.80		1.000		80.5	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112C11

RcptNo: 1

Received By: Cheyenne Cason 12/21/2021 8:00:00 AM

Completed By: Desiree Dominguez 12/21/2021 8:44:52 AM

Reviewed By: TME 12/21/21 9:10

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: JN 12/21/21

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

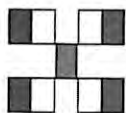
16. Additional remarks:

17. Cooler Information

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

[illegible]

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



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks: CC: MIKE MOFFITT, Chance Dixon

Direct Bill EOG Resources



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

December 30, 2021

Mike Moffitt
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112C68

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 2 sample(s) on 12/22/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2112C68

Date Reported: 12/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-57 3'

Project: Allison CQ Federal 9

Collection Date: 12/21/2021 9:00:00 AM

Lab ID: 2112C68-001

Matrix: SOIL

Received Date: 12/22/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	12/27/2021 10:42:09 AM	64713
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/22/2021 10:01:04 PM	64695
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/22/2021 10:01:04 PM	64695
Surr: DNOP	87.1	70-130		%Rec	1	12/22/2021 10:01:04 PM	64695
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/23/2021 4:10:29 PM	64694
Surr: BFB	101	70-130		%Rec	1	12/23/2021 4:10:29 PM	64694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	12/23/2021 4:10:29 PM	64694
Toluene	ND	0.048		mg/Kg	1	12/23/2021 4:10:29 PM	64694
Ethylbenzene	ND	0.048		mg/Kg	1	12/23/2021 4:10:29 PM	64694
Xylenes, Total	ND	0.096		mg/Kg	1	12/23/2021 4:10:29 PM	64694
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/23/2021 4:10:29 PM	64694

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

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

Analytical Report

Lab Order 2112C68

Date Reported: 12/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-59 3'

Project: Allison CQ Federal 9

Collection Date: 12/21/2021 10:00:00 AM

Lab ID: 2112C68-002

Matrix: SOIL

Received Date: 12/22/2021 7:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	130	60		mg/Kg	20	12/27/2021 10:54:30 AM	64713
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/22/2021 3:42:18 PM	64695
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/22/2021 3:42:18 PM	64695
Surr: DNOP	99.3	70-130		%Rec	1	12/22/2021 3:42:18 PM	64695
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/23/2021 4:33:49 PM	64694
Surr: BFB	96.6	70-130		%Rec	1	12/23/2021 4:33:49 PM	64694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	12/23/2021 4:33:49 PM	64694
Toluene	ND	0.049		mg/Kg	1	12/23/2021 4:33:49 PM	64694
Ethylbenzene	ND	0.049		mg/Kg	1	12/23/2021 4:33:49 PM	64694
Xylenes, Total	ND	0.098		mg/Kg	1	12/23/2021 4:33:49 PM	64694
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	12/23/2021 4:33:49 PM	64694

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

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

Page 2 of 6

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

WO#: 2112C68

30-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64713	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64713	RunNo: 84765								
Prep Date: 12/23/2021	Analysis Date: 12/23/2021	SeqNo: 2981789	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64713	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64713	RunNo: 84765								
Prep Date: 12/23/2021	Analysis Date: 12/23/2021	SeqNo: 2981790	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

Qualifiers:

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

Page 3 of 6

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

WO#: 2112C68

30-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64695	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64695			RunNo: 84722						
Prep Date: 12/22/2021	Analysis Date: 12/22/2021			SeqNo: 2980536		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.1	68.9	135			
Surr: DNOP	4.4		5.000		88.7	70	130			

Sample ID: MB-64695	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64695			RunNo: 84722						
Prep Date: 12/22/2021	Analysis Date: 12/22/2021			SeqNo: 2980537		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		93.8	70	130			

Qualifiers:

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

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

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

WO#: 2112C68

30-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: lcs-64694	SampType: LCS				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch ID: 64694				RunNo: 84776					
Prep Date: 12/22/2021	Analysis Date: 12/23/2021				SeqNo: 2981531	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	78.6	131			
Surr: BFB	1200		1000		124	70	130			

Sample ID: mb-64694	SampType: MBLK				TestCode: EPA Method 8015D: Gasoline Range					
Client ID: PBS	Batch ID: 64694				RunNo: 84776					
Prep Date: 12/22/2021	Analysis Date: 12/23/2021				SeqNo: 2981533	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.1	70	130			

Qualifiers:

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

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

WO#: 2112C68

30-Dec-21

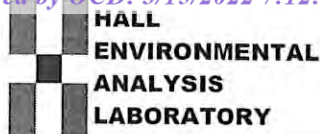
Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64694	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 64694			RunNo: 84776						
Prep Date: 12/22/2021	Analysis Date: 12/23/2021			SeqNo: 2981610		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	94.1	80	120			
Toluene	0.94	0.050	1.000	0	94.4	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: mb-64694	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 64694			RunNo: 84776						
Prep Date: 12/22/2021	Analysis Date: 12/23/2021			SeqNo: 2981612		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		99.6	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112C68

RcptNo: 1

Received By: Isaiah Ortiz 12/22/2021 7:25:00 AM

Completed By: Sean Livingston 12/22/2021 8:11:08 AM

Reviewed By: KPA 12/22/21

I-Ox
S-Ly

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: JN 12/22/21

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good				



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

December 30, 2021

Mike Moffitt
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112D30

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 3 sample(s) on 12/23/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2112D30

Date Reported: 12/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-01 8'

Project: Allison CQ Federal 9

Collection Date: 12/22/2021 10:00:00 AM

Lab ID: 2112D30-001

Matrix: SOIL

Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	320	60		mg/Kg	20	12/27/2021 7:57:55 PM	64737
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	12/27/2021 2:02:11 PM	64721
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	12/27/2021 2:02:11 PM	64721
Surr: DNOP	92.8	70-130		%Rec	1	12/27/2021 2:02:11 PM	64721
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/27/2021 9:10:00 AM	64717
Surr: BFB	85.6	70-130		%Rec	1	12/27/2021 9:10:00 AM	64717
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/27/2021 9:10:00 AM	64717
Toluene	ND	0.049		mg/Kg	1	12/27/2021 9:10:00 AM	64717
Ethylbenzene	ND	0.049		mg/Kg	1	12/27/2021 9:10:00 AM	64717
Xylenes, Total	ND	0.097		mg/Kg	1	12/27/2021 9:10:00 AM	64717
Surr: 4-Bromofluorobenzene	77.8	70-130		%Rec	1	12/27/2021 9:10:00 AM	64717

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

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

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Analytical Report

Lab Order 2112D30

Date Reported: 12/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-02 8'

Project: Allison CQ Federal 9

Collection Date: 12/22/2021 10:05:00 AM

Lab ID: 2112D30-002

Matrix: SOIL

Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	190	59		mg/Kg	20	12/27/2021 8:10:15 PM	64737
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	12/27/2021 2:12:45 PM	64721
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	12/27/2021 2:12:45 PM	64721
Surr: DNOP	90.1	70-130		%Rec	1	12/27/2021 2:12:45 PM	64721
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/27/2021 10:09:00 AM	64717
Surr: BFB	88.1	70-130		%Rec	1	12/27/2021 10:09:00 AM	64717
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/27/2021 10:09:00 AM	64717
Toluene	ND	0.049		mg/Kg	1	12/27/2021 10:09:00 AM	64717
Ethylbenzene	ND	0.049		mg/Kg	1	12/27/2021 10:09:00 AM	64717
Xylenes, Total	ND	0.099		mg/Kg	1	12/27/2021 10:09:00 AM	64717
Surr: 4-Bromofluorobenzene	82.1	70-130		%Rec	1	12/27/2021 10:09:00 AM	64717

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

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

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Analytical Report

Lab Order 2112D30

Date Reported: 12/30/2021

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-22 8'

Project: Allison CQ Federal 9

Collection Date: 12/22/2021 10:10:00 AM

Lab ID: 2112D30-003

Matrix: SOIL

Received Date: 12/23/2021 7:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	170	59		mg/Kg	20	12/27/2021 8:22:36 PM	64737
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	12/27/2021 2:23:19 PM	64721
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	12/27/2021 2:23:19 PM	64721
Surr: DNOP	95.6	70-130		%Rec	1	12/27/2021 2:23:19 PM	64721
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/27/2021 11:07:00 AM	64717
Surr: BFB	86.1	70-130		%Rec	1	12/27/2021 11:07:00 AM	64717
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/27/2021 11:07:00 AM	64717
Toluene	ND	0.049		mg/Kg	1	12/27/2021 11:07:00 AM	64717
Ethylbenzene	ND	0.049		mg/Kg	1	12/27/2021 11:07:00 AM	64717
Xylenes, Total	ND	0.099		mg/Kg	1	12/27/2021 11:07:00 AM	64717
Surr: 4-Bromofluorobenzene	79.7	70-130		%Rec	1	12/27/2021 11:07:00 AM	64717

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

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

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

WO#: 2112D30

30-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64737	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64737	RunNo: 84790								
Prep Date: 12/27/2021	Analysis Date: 12/27/2021	SeqNo: 2983088	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64737	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64737	RunNo: 84790								
Prep Date: 12/27/2021	Analysis Date: 12/27/2021	SeqNo: 2983089	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Qualifiers:

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

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

WO#: 2112D30

30-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64721	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64721			RunNo: 84779						
Prep Date: 12/23/2021	Analysis Date: 12/27/2021			SeqNo: 2982379		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.1	68.9	135			
Surr: DNOP	4.5		5.000		89.8	70	130			

Sample ID: MB-64721	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64721			RunNo: 84779						
Prep Date: 12/23/2021	Analysis Date: 12/27/2021			SeqNo: 2982382		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		95.2	70	130			

Sample ID: LCS-64735	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64735			RunNo: 84808						
Prep Date: 12/27/2021	Analysis Date: 12/28/2021			SeqNo: 2983329		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.8		5.000		117	70	130			

Qualifiers:

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

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

WO#: 2112D30

30-Dec-21

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64717	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 64717		RunNo: 84781							
Prep Date: 12/23/2021	Analysis Date: 12/27/2021		SeqNo: 2981729		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	810		1000		80.5	70	130			

Sample ID: lcs-64717	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 64717		RunNo: 84781							
Prep Date: 12/23/2021	Analysis Date: 12/27/2021		SeqNo: 2981730		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	96.7	78.6	131			
Surr: BFB	960		1000		95.8	70	130			

Qualifiers:

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

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

WO#: 2112D30

30-Dec-21

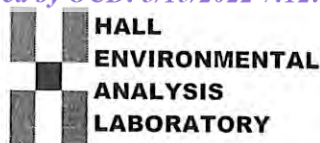
Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64717	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64717	RunNo: 84781								
Prep Date: 12/23/2021	Analysis Date: 12/27/2021	SeqNo: 2981737	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.79		1.000		78.9	70	130			

Sample ID: lcs-64717	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64717	RunNo: 84781								
Prep Date: 12/23/2021	Analysis Date: 12/27/2021	SeqNo: 2981738	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.6	80	120			
Toluene	0.89	0.050	1.000	0	89.4	80	120			
Ethylbenzene	0.88	0.050	1.000	0	88.2	80	120			
Xylenes, Total	2.6	0.10	3.000	0	85.5	80	120			
Surr: 4-Bromofluorobenzene	0.78		1.000		78.4	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112D30

RcptNo: 1

Received By: Isaiah Ortiz 12/23/2021 7:40:00 AM

Completed By: Isaiah Ortiz 12/23/2021 8:22:39 AM

Reviewed By: *WPC* 12/23/21

I-OX
I-OX

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JN 12/23/21*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Not Present			
2	4.7	Good	Not Present			

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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



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

January 05, 2022

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 9

OrderNo.: 2112D86

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 4 sample(s) on 12/28/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2112D86

Date Reported: 1/5/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-60 3'

Project: Allison CQ Federal 9

Collection Date: 12/22/2021 1:30:00 PM

Lab ID: 2112D86-001

Matrix: SOIL

Received Date: 12/28/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	120	60		mg/Kg	20	12/30/2021 12:29:11 AM	64794
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.7		mg/Kg	1	12/30/2021 11:07:36 AM	64781
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	12/30/2021 11:07:36 AM	64781
Surr: DNOP	91.2	70-130		%Rec	1	12/30/2021 11:07:36 AM	64781
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/29/2021 11:37:00 AM	64756
Surr: BFB	85.9	70-130		%Rec	1	12/29/2021 11:37:00 AM	64756
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/29/2021 11:37:00 AM	64756
Toluene	ND	0.048		mg/Kg	1	12/29/2021 11:37:00 AM	64756
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2021 11:37:00 AM	64756
Xylenes, Total	ND	0.096		mg/Kg	1	12/29/2021 11:37:00 AM	64756
Surr: 4-Bromofluorobenzene	78.6	70-130		%Rec	1	12/29/2021 11:37:00 AM	64756

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

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

Analytical Report

Lab Order 2112D86

Date Reported: 1/5/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-61 3'

Project: Allison CQ Federal 9

Collection Date: 12/22/2021 1:35:00 PM

Lab ID: 2112D86-002

Matrix: SOIL

Received Date: 12/28/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	160	60		mg/Kg	20	12/30/2021 12:41:35 AM	64794
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/3/2022 4:16:17 PM	64781
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	1/3/2022 4:16:17 PM	64781
Surr: DNOP	95.6	70-130		%Rec	1	1/3/2022 4:16:17 PM	64781
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	12/29/2021 11:56:00 AM	64756
Surr: BFB	83.0	70-130		%Rec	1	12/29/2021 11:56:00 AM	64756
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/29/2021 11:56:00 AM	64756
Toluene	ND	0.048		mg/Kg	1	12/29/2021 11:56:00 AM	64756
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2021 11:56:00 AM	64756
Xylenes, Total	ND	0.096		mg/Kg	1	12/29/2021 11:56:00 AM	64756
Surr: 4-Bromofluorobenzene	77.6	70-130		%Rec	1	12/29/2021 11:56:00 AM	64756

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

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

Analytical Report

Lab Order 2112D86

Date Reported: 1/5/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-64 3'

Project: Allison CQ Federal 9

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

Lab ID: 2112D86-003

Matrix: SOIL

Received Date: 12/28/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	410	60		mg/Kg	20	12/30/2021 12:53:59 AM	64794
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/3/2022 4:39:48 PM	64781
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/3/2022 4:39:48 PM	64781
Surr: DNOP	90.3	70-130		%Rec	1	1/3/2022 4:39:48 PM	64781
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	12/29/2021 12:16:00 PM	64756
Surr: BFB	84.4	70-130		%Rec	1	12/29/2021 12:16:00 PM	64756
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	12/29/2021 12:16:00 PM	64756
Toluene	ND	0.049		mg/Kg	1	12/29/2021 12:16:00 PM	64756
Ethylbenzene	ND	0.049		mg/Kg	1	12/29/2021 12:16:00 PM	64756
Xylenes, Total	ND	0.098		mg/Kg	1	12/29/2021 12:16:00 PM	64756
Surr: 4-Bromofluorobenzene	77.9	70-130		%Rec	1	12/29/2021 12:16:00 PM	64756

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

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

Analytical Report

Lab Order 2112D86

Date Reported: 1/5/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-65 3'

Project: Allison CQ Federal 9

Collection Date: 12/23/2021 11:10:00 AM

Lab ID: 2112D86-004

Matrix: SOIL

Received Date: 12/28/2021 7:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	480	60		mg/Kg	20	12/30/2021 1:06:23 AM	64794
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	12/30/2021 11:39:20 AM	64781
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	12/30/2021 11:39:20 AM	64781
Surr: DNOP	78.1	70-130		%Rec	1	12/30/2021 11:39:20 AM	64781
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	12/29/2021 12:36:00 PM	64756
Surr: BFB	85.6	70-130		%Rec	1	12/29/2021 12:36:00 PM	64756
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	12/29/2021 12:36:00 PM	64756
Toluene	ND	0.047		mg/Kg	1	12/29/2021 12:36:00 PM	64756
Ethylbenzene	ND	0.047		mg/Kg	1	12/29/2021 12:36:00 PM	64756
Xylenes, Total	ND	0.095		mg/Kg	1	12/29/2021 12:36:00 PM	64756
Surr: 4-Bromofluorobenzene	79.8	70-130		%Rec	1	12/29/2021 12:36:00 PM	64756

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

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

Page 4 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2112D86
05-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64794	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 64794	RunNo: 84845
Prep Date: 12/29/2021	Analysis Date: 12/29/2021	SeqNo: 2985315 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-64794	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 64794	RunNo: 84845
Prep Date: 12/29/2021	Analysis Date: 12/29/2021	SeqNo: 2985316 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 Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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

WO#: 2112D86

05-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64781	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64781			RunNo: 84875						
Prep Date: 12/29/2021	Analysis Date: 12/30/2021			SeqNo: 2985761		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	84.6	68.9	135			
Surr: DNOP	4.1		5.000		82.4	70	130			

Sample ID: MB-64781	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64781			RunNo: 84875						
Prep Date: 12/29/2021	Analysis Date: 12/30/2021			SeqNo: 2985763		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.9		10.00		88.8	70	130			

Qualifiers:

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

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

WO#: 2112D86

05-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64756	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64756	RunNo: 84840								
Prep Date: 12/28/2021	Analysis Date: 12/29/2021	SeqNo: 2984350	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		86.1	70	130			

Sample ID: lcs-64756	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64756	RunNo: 84840								
Prep Date: 12/28/2021	Analysis Date: 12/29/2021	SeqNo: 2984351	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	78.6	131			
Surr: BFB	1100		1000		106	70	130			

Qualifiers:

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

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

WO#: 2112D86

05-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64756	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64756	RunNo: 84840								
Prep Date: 12/28/2021	Analysis Date: 12/29/2021	SeqNo: 2984364	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.79		1.000		78.5	70	130			

Sample ID: lcs-64756	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64756	RunNo: 84840								
Prep Date: 12/28/2021	Analysis Date: 12/29/2021	SeqNo: 2984365	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	87.5	80	120			
Toluene	0.86	0.050	1.000	0	86.2	80	120			
Ethylbenzene	0.87	0.050	1.000	0	86.7	80	120			
Xylenes, Total	2.5	0.10	3.000	0	84.8	80	120			
Surr: 4-Bromofluorobenzene	0.80		1.000		80.4	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2112D86

RcptNo: 1

Received By: Tracy Casarrubias 12/28/2021 7:50:00 AM

Completed By: Desiree Dominguez 12/28/2021 8:31:04 AM

Reviewed By: *one* 12/28/21

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. Received at least 1 vial with headspace $<1/4"$ for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐
- # of preserved bottles checked for pH:
 (<2 or >12 unless noted)
 Adjusted?
 Checked by: *jn 12/28/21*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good				



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

January 13, 2022

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 9

OrderNo.: 2201189

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/6/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2201189

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-66 3'

Project: Allison CQ Federal 9

Collection Date: 12/29/2021 9:00:00 AM

Lab ID: 2201189-001

Matrix: SOIL

Received Date: 1/6/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	400	60		mg/Kg	20	1/7/2022 5:52:59 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/10/2022 10:57:42 AM	64893
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2022 10:57:42 AM	64893
Surr: DNOP	82.4	70-130		%Rec	1	1/10/2022 10:57:42 AM	64893
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/7/2022 9:05:39 AM	64890
Surr: BFB	91.3	70-130		%Rec	1	1/7/2022 9:05:39 AM	64890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/7/2022 9:05:39 AM	64890
Toluene	ND	0.050		mg/Kg	1	1/7/2022 9:05:39 AM	64890
Ethylbenzene	ND	0.050		mg/Kg	1	1/7/2022 9:05:39 AM	64890
Xylenes, Total	ND	0.10		mg/Kg	1	1/7/2022 9:05:39 AM	64890
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/7/2022 9:05:39 AM	64890

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

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

Analytical Report

Lab Order 2201189

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-19 8'

Project: Allison CQ Federal 9

Collection Date: 12/29/2021 3:00:00 PM

Lab ID: 2201189-002

Matrix: SOIL

Received Date: 1/6/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	480	61		mg/Kg	20	1/7/2022 6:05:24 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/10/2022 11:08:13 AM	64893
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2022 11:08:13 AM	64893
Surr: DNOP	84.5	70-130		%Rec	1	1/10/2022 11:08:13 AM	64893
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/7/2022 10:15:56 AM	64890
Surr: BFB	93.4	70-130		%Rec	1	1/7/2022 10:15:56 AM	64890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/7/2022 10:15:56 AM	64890
Toluene	ND	0.049		mg/Kg	1	1/7/2022 10:15:56 AM	64890
Ethylbenzene	ND	0.049		mg/Kg	1	1/7/2022 10:15:56 AM	64890
Xylenes, Total	ND	0.099		mg/Kg	1	1/7/2022 10:15:56 AM	64890
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	1/7/2022 10:15:56 AM	64890

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

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

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Analytical Report

Lab Order 2201189

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES21-20 10'

Project: Allison CQ Federal 9

Collection Date: 12/30/2021 11:45:00 AM

Lab ID: 2201189-003

Matrix: SOIL

Received Date: 1/6/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	700	59		mg/Kg	20	1/7/2022 6:17:49 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/10/2022 11:18:42 AM	64893
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2022 11:18:42 AM	64893
Surr: DNOP	78.4	70-130		%Rec	1	1/10/2022 11:18:42 AM	64893
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/7/2022 11:26:34 AM	64890
Surr: BFB	94.1	70-130		%Rec	1	1/7/2022 11:26:34 AM	64890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	1/7/2022 11:26:34 AM	64890
Toluene	ND	0.047		mg/Kg	1	1/7/2022 11:26:34 AM	64890
Ethylbenzene	ND	0.047		mg/Kg	1	1/7/2022 11:26:34 AM	64890
Xylenes, Total	ND	0.094		mg/Kg	1	1/7/2022 11:26:34 AM	64890
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	1/7/2022 11:26:34 AM	64890

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

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

Page 3 of 7

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

WO#: 2201189

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64921	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64921	RunNo: 85026								
Prep Date: 1/7/2022	Analysis Date: 1/7/2022	SeqNo: 2991516	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64921	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64921	RunNo: 85026								
Prep Date: 1/7/2022	Analysis Date: 1/7/2022	SeqNo: 2991517	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			

Qualifiers:

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

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

WO#: 2201189

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64893	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64893			RunNo: 85041						
Prep Date: 1/6/2022	Analysis Date: 1/10/2022			SeqNo: 2992199		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.8	68.9	135			
Surr: DNOP	4.0		5.000		80.9	70	130			

Sample ID: MB-64893	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64893			RunNo: 85041						
Prep Date: 1/6/2022	Analysis Date: 1/10/2022			SeqNo: 2992200		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	8.6		10.00		85.6	70	130			

Qualifiers:

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

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

WO#: 2201189

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64890	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991619	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.4	70	130			

Sample ID: lcs-64890	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991620	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	78.6	131			
Surr: BFB	1000		1000		102	70	130			

Qualifiers:

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

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

WO#: 2201189

13-Jan-22

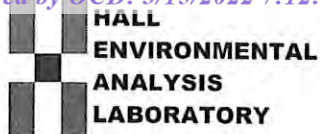
Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64890	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991646	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	70	130			

Sample ID: LCS-64890	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991647	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.94	0.050	1.000	0	93.9	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2201189

RcptNo: 1

Received By: Tracy Casarrubias 1/6/2022 8:00:00 AM

Completed By: Tracy Casarrubias 1/6/2022 8:35:27 AM

Reviewed By: *Cmc* 1/6/22Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *gm-1/6/22*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	4.8	Good	Yes			



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

January 13, 2022

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 9

OrderNo.: 2201190

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/6/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2201190

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-69 4'

Project: Allison CQ Federal 9

Collection Date: 1/4/2022 10:00:00 AM

Lab ID: 2201190-001

Matrix: SOIL

Received Date: 1/6/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	890	60		mg/Kg	20	1/7/2022 6:30:14 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/10/2022 11:29:13 AM	64893
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/10/2022 11:29:13 AM	64893
Surr: DNOP	86.0	70-130		%Rec	1	1/10/2022 11:29:13 AM	64893
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/7/2022 11:50:18 AM	64890
Surr: BFB	94.6	70-130		%Rec	1	1/7/2022 11:50:18 AM	64890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	1/7/2022 11:50:18 AM	64890
Toluene	ND	0.048		mg/Kg	1	1/7/2022 11:50:18 AM	64890
Ethylbenzene	ND	0.048		mg/Kg	1	1/7/2022 11:50:18 AM	64890
Xylenes, Total	ND	0.096		mg/Kg	1	1/7/2022 11:50:18 AM	64890
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	1/7/2022 11:50:18 AM	64890

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

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

Page 1 of 6

Analytical Report

Lab Order 2201190

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES21-70 4'

Project: Allison CQ Federal 9

Collection Date: 1/4/2022 10:05:00 AM

Lab ID: 2201190-002

Matrix: SOIL

Received Date: 1/6/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	1300	59		mg/Kg	20	1/7/2022 6:42:38 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/10/2022 11:39:43 AM	64893
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/10/2022 11:39:43 AM	64893
Surr: DNOP	96.2	70-130		%Rec	1	1/10/2022 11:39:43 AM	64893
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/7/2022 12:13:59 PM	64890
Surr: BFB	93.3	70-130		%Rec	1	1/7/2022 12:13:59 PM	64890
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/7/2022 12:13:59 PM	64890
Toluene	ND	0.050		mg/Kg	1	1/7/2022 12:13:59 PM	64890
Ethylbenzene	ND	0.050		mg/Kg	1	1/7/2022 12:13:59 PM	64890
Xylenes, Total	ND	0.10		mg/Kg	1	1/7/2022 12:13:59 PM	64890
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	1/7/2022 12:13:59 PM	64890

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

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

Page 2 of 6

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

WO#: 2201190

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64921	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64921	RunNo: 85026								
Prep Date: 1/7/2022	Analysis Date: 1/7/2022	SeqNo: 2991516	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64921	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64921	RunNo: 85026								
Prep Date: 1/7/2022	Analysis Date: 1/7/2022	SeqNo: 2991517	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			

Qualifiers:

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

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

WO#: 2201190

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64893	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64893			RunNo: 85041						
Prep Date: 1/6/2022	Analysis Date: 1/10/2022			SeqNo: 2992199		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.8	68.9	135			
Surr: DNOP	4.0		5.000		80.9	70	130			

Sample ID: MB-64893	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64893			RunNo: 85041						
Prep Date: 1/6/2022	Analysis Date: 1/10/2022			SeqNo: 2992200		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	8.6		10.00		85.6	70	130			

Qualifiers:

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

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

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

WO#: 2201190

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64890	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991619	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.4	70	130			

Sample ID: lcs-64890	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991620	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	78.6	131			
Surr: BFB	1000		1000		102	70	130			

Qualifiers:

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

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

WO#: 2201190

13-Jan-22

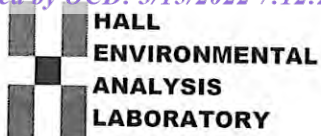
Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64890	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991646	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		105	70	130			

Sample ID: LCS-64890	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64890	RunNo: 85032								
Prep Date: 1/6/2022	Analysis Date: 1/7/2022	SeqNo: 2991647	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	93.4	80	120			
Toluene	0.94	0.050	1.000	0	93.9	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.2	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2201190

RcptNo: 1

Received By: Tracy Casarrubias 1/6/2022 8:00:00 AM

Completed By: Tracy Casarrubias 1/6/2022 8:32:27 AM

Reviewed By: Cme 1/6/22

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: Jm 1/6/22

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good	Yes			

Chain-of-Custody Record

Client:

EOG

Mailing Address:

3715, 12

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard
 ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAC
 ☐ Az Compliance
 ☐ Other

☐ EDD (Type)

Turn-Around Time: 2-1049

☐ Standard
 ☒ Rush

Project Name:

Allison C & Feldman #9

Project #:

215-03278-012

Project Manager:

Mike Moffitt

Sampler: C1)

On Ice: ☒ Yes ☐ No

of Coolers: 1

Cooler Temp (including CF): 5.0 - 0.2 - 4.8 (°C)

Container Type and #

Preservative Type

HEAL No.

2201190

402

001

1

002

BTEX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

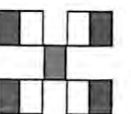
RCRA 8 Metals

Cl, F, Br, NO₃, NO₂, PO₄, SO₄

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)


**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:	Relinquished by:	Received by:	Via:	Date	Time
1/14	10:05	Mike Moffitt	Mike Moffitt	1/5/22	9:30	8:00

Remarks: CC: Chance Dixon, Mike Moffitt

Direct 8771 EOG Resources



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

January 13, 2022

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX:

RE: Allison CQ Federal 9

OrderNo.: 2201266

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/7/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", with a stylized flourish at the end.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-71 2'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 9:00:00 AM

Lab ID: 2201266-001

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	1400	60		mg/Kg	20	1/7/2022 7:19:53 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/11/2022 11:16:18 AM	64911
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/11/2022 11:16:18 AM	64911
Surr: DNOP	94.3	70-130		%Rec	1	1/11/2022 11:16:18 AM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/10/2022 10:34:00 AM	64908
Surr: BFB	92.5	70-130		%Rec	1	1/10/2022 10:34:00 AM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	1/10/2022 10:34:00 AM	64908
Toluene	ND	0.046		mg/Kg	1	1/10/2022 10:34:00 AM	64908
Ethylbenzene	ND	0.046		mg/Kg	1	1/10/2022 10:34:00 AM	64908
Xylenes, Total	ND	0.093		mg/Kg	1	1/10/2022 10:34:00 AM	64908
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	1/10/2022 10:34:00 AM	64908

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

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

Page 1 of 11

Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-72 2'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 9:10:00 AM

Lab ID: 2201266-002

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	1400	60		mg/Kg	20	1/7/2022 7:32:18 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/11/2022 11:27:03 AM	64911
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/11/2022 11:27:03 AM	64911
Surr: DNOP	86.4	70-130		%Rec	1	1/11/2022 11:27:03 AM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/10/2022 11:35:00 AM	64908
Surr: BFB	88.3	70-130		%Rec	1	1/10/2022 11:35:00 AM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	1/10/2022 11:35:00 AM	64908
Toluene	ND	0.047		mg/Kg	1	1/10/2022 11:35:00 AM	64908
Ethylbenzene	ND	0.047		mg/Kg	1	1/10/2022 11:35:00 AM	64908
Xylenes, Total	ND	0.093		mg/Kg	1	1/10/2022 11:35:00 AM	64908
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	1/10/2022 11:35:00 AM	64908

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

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

Page 2 of 11

Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-73 2'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 9:20:00 AM

Lab ID: 2201266-003

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2600	150		mg/Kg	50	1/8/2022 8:24:25 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/11/2022 11:37:45 AM	64911
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/11/2022 11:37:45 AM	64911
Surr: DNOP	87.5	70-130		%Rec	1	1/11/2022 11:37:45 AM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2022 12:34:00 PM	64908
Surr: BFB	95.2	70-130		%Rec	1	1/10/2022 12:34:00 PM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	1/10/2022 12:34:00 PM	64908
Toluene	ND	0.049		mg/Kg	1	1/10/2022 12:34:00 PM	64908
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2022 12:34:00 PM	64908
Xylenes, Total	ND	0.099		mg/Kg	1	1/10/2022 12:34:00 PM	64908
Surr: 4-Bromofluorobenzene	88.7	70-130		%Rec	1	1/10/2022 12:34:00 PM	64908

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

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

Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-74 3'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 9:30:00 AM

Lab ID: 2201266-004

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	2100	60		mg/Kg	20	1/7/2022 7:57:08 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	13	9.0		mg/Kg	1	1/11/2022 11:48:25 AM	64911
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/11/2022 11:48:25 AM	64911
Surr: DNOP	81.7	70-130		%Rec	1	1/11/2022 11:48:25 AM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/10/2022 12:54:00 PM	64908
Surr: BFB	93.3	70-130		%Rec	1	1/10/2022 12:54:00 PM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	1/10/2022 12:54:00 PM	64908
Toluene	ND	0.048		mg/Kg	1	1/10/2022 12:54:00 PM	64908
Ethylbenzene	ND	0.048		mg/Kg	1	1/10/2022 12:54:00 PM	64908
Xylenes, Total	ND	0.096		mg/Kg	1	1/10/2022 12:54:00 PM	64908
Surr: 4-Bromofluorobenzene	87.9	70-130		%Rec	1	1/10/2022 12:54:00 PM	64908

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

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

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Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-75 3'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 9:40:00 AM

Lab ID: 2201266-005

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	830	61		mg/Kg	20	1/7/2022 8:09:33 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	320	9.8		mg/Kg	1	1/11/2022 11:59:04 AM	64911
Motor Oil Range Organics (MRO)	610	49		mg/Kg	1	1/11/2022 11:59:04 AM	64911
Surr: DNOP	88.6	70-130		%Rec	1	1/11/2022 11:59:04 AM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/10/2022 1:14:00 PM	64908
Surr: BFB	92.9	70-130		%Rec	1	1/10/2022 1:14:00 PM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	1/10/2022 1:14:00 PM	64908
Toluene	ND	0.046		mg/Kg	1	1/10/2022 1:14:00 PM	64908
Ethylbenzene	ND	0.046		mg/Kg	1	1/10/2022 1:14:00 PM	64908
Xylenes, Total	ND	0.093		mg/Kg	1	1/10/2022 1:14:00 PM	64908
Surr: 4-Bromofluorobenzene	86.4	70-130		%Rec	1	1/10/2022 1:14:00 PM	64908

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

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

Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-76 3'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 9:50:00 AM

Lab ID: 2201266-006

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	ND	60		mg/Kg	20	1/7/2022 8:21:57 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	1/11/2022 2:49:29 PM	64911
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	1/11/2022 2:49:29 PM	64911
Surr: DNOP	83.0	70-130		%Rec	1	1/11/2022 2:49:29 PM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/10/2022 1:33:00 PM	64908
Surr: BFB	89.9	70-130		%Rec	1	1/10/2022 1:33:00 PM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	1/10/2022 1:33:00 PM	64908
Toluene	ND	0.047		mg/Kg	1	1/10/2022 1:33:00 PM	64908
Ethylbenzene	ND	0.047		mg/Kg	1	1/10/2022 1:33:00 PM	64908
Xylenes, Total	ND	0.095		mg/Kg	1	1/10/2022 1:33:00 PM	64908
Surr: 4-Bromofluorobenzene	86.7	70-130		%Rec	1	1/10/2022 1:33:00 PM	64908

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

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

Analytical Report

Lab Order 2201266

Date Reported: 1/13/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-77 4'

Project: Allison CQ Federal 9

Collection Date: 1/5/2022 10:00:00 AM

Lab ID: 2201266-007

Matrix: SOIL

Received Date: 1/7/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	2100	59		mg/Kg	20	1/7/2022 8:34:22 PM	64921
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/11/2022 12:20:28 PM	64911
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/11/2022 12:20:28 PM	64911
Surr: DNOP	81.3	70-130		%Rec	1	1/11/2022 12:20:28 PM	64911
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/10/2022 1:53:00 PM	64908
Surr: BFB	88.8	70-130		%Rec	1	1/10/2022 1:53:00 PM	64908
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	1/10/2022 1:53:00 PM	64908
Toluene	ND	0.049		mg/Kg	1	1/10/2022 1:53:00 PM	64908
Ethylbenzene	ND	0.049		mg/Kg	1	1/10/2022 1:53:00 PM	64908
Xylenes, Total	ND	0.097		mg/Kg	1	1/10/2022 1:53:00 PM	64908
Surr: 4-Bromofluorobenzene	85.5	70-130		%Rec	1	1/10/2022 1:53:00 PM	64908

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

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

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

WO#: 2201266

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-64921	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 64921	RunNo: 85026								
Prep Date: 1/7/2022	Analysis Date: 1/7/2022	SeqNo: 2991516	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-64921	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 64921	RunNo: 85026								
Prep Date: 1/7/2022	Analysis Date: 1/7/2022	SeqNo: 2991517	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			

Qualifiers:

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

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

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

WO#: 2201266

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-64911	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 64911			RunNo: 85066						
Prep Date: 1/7/2022	Analysis Date: 1/11/2022			SeqNo: 2992974		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	81.6	68.9	135			
Surr: DNOP	3.9		5.000		77.8	70	130			

Sample ID: MB-64911	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 64911			RunNo: 85066						
Prep Date: 1/7/2022	Analysis Date: 1/11/2022			SeqNo: 2992976		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.7		10.00		86.9	70	130			

Qualifiers:

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

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

WO#: 2201266

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-64908	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64908	RunNo: 85038								
Prep Date: 1/7/2022	Analysis Date: 1/10/2022	SeqNo: 2992243	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		90.1	70	130			

Sample ID: lcs-64908	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64908	RunNo: 85038								
Prep Date: 1/7/2022	Analysis Date: 1/10/2022	SeqNo: 2992244	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	102	78.6	131			
Surr: BFB	1000		1000		99.6	70	130			

Qualifiers:

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

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

WO#: 2201266

13-Jan-22

Client: EOG
Project: Allison CQ Federal 9

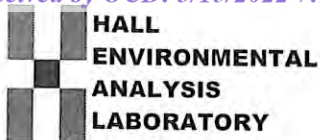
Sample ID: mb-64908	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64908	RunNo: 85038								
Prep Date: 1/7/2022	Analysis Date: 1/10/2022	SeqNo: 2992253	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		85.6	70	130			

Sample ID: lcs-64908	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64908	RunNo: 85038								
Prep Date: 1/7/2022	Analysis Date: 1/10/2022	SeqNo: 2992254	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	85.0	80	120			
Toluene	0.84	0.050	1.000	0	84.2	80	120			
Ethylbenzene	0.85	0.050	1.000	0	84.7	80	120			
Xylenes, Total	2.5	0.10	3.000	0	82.6	80	120			
Surr: 4-Bromofluorobenzene	0.87		1.000		86.5	70	130			

Qualifiers:

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

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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2201266

RcptNo: 1

Received By: Cheyenne Cason

1/7/2022 8:00:00 AM

CC

Completed By: Desiree Dominguez

1/7/2022 8:03:16 AM

*DD*Reviewed By: *CM*

1/7/22

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JR*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: _____

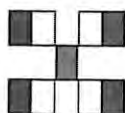
16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good				

Chain-of-Custody Record

Client: <u>EOG</u>		Turn-Around Time: <u>2- Day</u>	
Mailing Address: <u>On File</u>		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush Project Name: <u>Allison CQ Federal #9</u>	
Phone #: <u> </u>		Project #: <u>215-03278-012</u>	
email or Fax#: <u> </u>		Project Manager: <u>Mike Moffett</u>	
QA/QC Package: <u> </u>		Sampler: <u>CD</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation) <input type="checkbox"/> Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> No <input type="checkbox"/> NELAC <input type="checkbox"/> Other		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type) <u> </u> <input type="checkbox"/> # of Coolers: <u> </u>		# of Coolers: <u> </u>	
Cooler Temp (including CFI): <u>3,9-0.1 = 3.8</u> (°C)		Cooler Temp (including CFI): <u>3,9-0.1 = 3.8</u> (°C)	
Date	Time	Matrix	Sample Name
3/15	9:00	SOI	WES22-71 2'
	9:10		WES22-72 2'
	9:20		WES22-73 2'
	9:30		WES22-74 3'
	9:40		WES22-75 3'
	9:50		WES22-76 3'
	10:00		WES22-77 4'
Date:	Time:	Relinquished by:	Received by: <u> </u> Date: <u>3/16/22</u> Time: <u>10:35</u>
Date:	Time:	Relinquished by:	Received by: <u> </u> Date: <u>3/16/22</u> Time: <u>10:35</u>



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

BTX, MTBE / TMB's (8021) ☒
 TPH:8015D(GRO / DRO / MRO) ☒
 8081 Pesticides/8082 PCB's ☒
 EDB (Method 504.1) ☒
 PAHs by 8310 or 8270SIMS ☒
 RCRA 8 Metals ☒
 Cl, F, Br, NO₃, NO₂, PO₄, SO₄ ☒
 8260 (VOA) ☒
 8270 (Semi-VOA) ☒
 Total Coliform (Present/Absent) ☒

Remarks: CC: Chance Dixon, Mike MoffettDirect Bill EOG Resources



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

January 20, 2022

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX

RE: Allison CQ Federal 9

OrderNo.: 2201693

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 5 sample(s) on 1/19/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2201693

Date Reported: 1/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-20 11'

Project: Allison CQ Federal 9

Collection Date: 1/17/2022 10:00:00 AM

Lab ID: 2201693-001

Matrix: MEOH (SOIL)

Received Date: 1/19/2022 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	490	60		mg/Kg	20	1/19/2022 11:49:26 AM	65099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/19/2022 10:41:04 AM	65094
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/19/2022 10:41:04 AM	65094
Surr: DNOP	82.1	70-130		%Rec	1	1/19/2022 10:41:04 AM	65094
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/19/2022 9:36:00 AM	65070
Surr: BFB	86.6	70-130		%Rec	1	1/19/2022 9:36:00 AM	65070
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.017		mg/Kg	1	1/19/2022 9:36:00 AM	65070
Toluene	ND	0.034		mg/Kg	1	1/19/2022 9:36:00 AM	65070
Ethylbenzene	ND	0.034		mg/Kg	1	1/19/2022 9:36:00 AM	65070
Xylenes, Total	ND	0.068		mg/Kg	1	1/19/2022 9:36:00 AM	65070
Surr: 4-Bromofluorobenzene	89.9	70-130		%Rec	1	1/19/2022 9:36:00 AM	65070

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

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

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Analytical Report

Lab Order 2201693

Date Reported: 1/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-24 8'

Project: Allison CQ Federal 9

Collection Date: 1/17/2022 10:10:00 AM

Lab ID: 2201693-002

Matrix: MEOH (SOIL)

Received Date: 1/19/2022 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	870	60		mg/Kg	20	1/19/2022 12:01:51 PM	65099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/19/2022 10:53:16 AM	65094
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/19/2022 10:53:16 AM	65094
Surr: DNOP	83.3	70-130		%Rec	1	1/19/2022 10:53:16 AM	65094
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.2		mg/Kg	1	1/19/2022 9:56:00 AM	65070
Surr: BFB	86.6	70-130		%Rec	1	1/19/2022 9:56:00 AM	65070
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.021		mg/Kg	1	1/19/2022 9:56:00 AM	65070
Toluene	ND	0.042		mg/Kg	1	1/19/2022 9:56:00 AM	65070
Ethylbenzene	ND	0.042		mg/Kg	1	1/19/2022 9:56:00 AM	65070
Xylenes, Total	ND	0.084		mg/Kg	1	1/19/2022 9:56:00 AM	65070
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	1/19/2022 9:56:00 AM	65070

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

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

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Analytical Report

Lab Order 2201693

Date Reported: 1/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-25 8'

Project: Allison CQ Federal 9

Collection Date: 1/17/2022 10:20:00 AM

Lab ID: 2201693-003

Matrix: MEOH (SOIL)

Received Date: 1/19/2022 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	880	60		mg/Kg	20	1/19/2022 12:14:15 PM	65099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/19/2022 11:05:23 AM	65094
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/19/2022 11:05:23 AM	65094
Surr: DNOP	82.9	70-130		%Rec	1	1/19/2022 11:05:23 AM	65094
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	1/19/2022 10:55:00 AM	65070
Surr: BFB	86.7	70-130		%Rec	1	1/19/2022 10:55:00 AM	65070
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.020		mg/Kg	1	1/19/2022 10:55:00 AM	65070
Toluene	ND	0.040		mg/Kg	1	1/19/2022 10:55:00 AM	65070
Ethylbenzene	ND	0.040		mg/Kg	1	1/19/2022 10:55:00 AM	65070
Xylenes, Total	ND	0.079		mg/Kg	1	1/19/2022 10:55:00 AM	65070
Surr: 4-Bromofluorobenzene	88.5	70-130		%Rec	1	1/19/2022 10:55:00 AM	65070

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

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

Analytical Report

Lab Order 2201693

Date Reported: 1/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-80 4'

Project: Allison CQ Federal 9

Collection Date: 1/17/2022 2:00:00 PM

Lab ID: 2201693-004

Matrix: MEOH (SOIL)

Received Date: 1/19/2022 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	150	60		mg/Kg	20	1/19/2022 12:26:39 PM	65099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/19/2022 11:17:23 AM	65094
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/19/2022 11:17:23 AM	65094
Surr: DNOP	77.1	70-130		%Rec	1	1/19/2022 11:17:23 AM	65094
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.3		mg/Kg	1	1/19/2022 11:15:00 AM	65070
Surr: BFB	79.2	70-130		%Rec	1	1/19/2022 11:15:00 AM	65070
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.021		mg/Kg	1	1/19/2022 11:15:00 AM	65070
Toluene	ND	0.043		mg/Kg	1	1/19/2022 11:15:00 AM	65070
Ethylbenzene	ND	0.043		mg/Kg	1	1/19/2022 11:15:00 AM	65070
Xylenes, Total	ND	0.086		mg/Kg	1	1/19/2022 11:15:00 AM	65070
Surr: 4-Bromofluorobenzene	83.1	70-130		%Rec	1	1/19/2022 11:15:00 AM	65070

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

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

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Analytical Report

Lab Order 2201693

Date Reported: 1/20/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-81 4'

Project: Allison CQ Federal 9

Collection Date: 1/17/2022 2:10:00 PM

Lab ID: 2201693-005

Matrix: MEOH (SOIL)

Received Date: 1/19/2022 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LRN
Chloride	190	60		mg/Kg	20	1/19/2022 12:39:04 PM	65099
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/19/2022 11:29:38 AM	65094
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/19/2022 11:29:38 AM	65094
Surr: DNOP	79.5	51.1-141		%Rec	1	1/19/2022 11:29:38 AM	65094
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	1/19/2022 11:54:00 AM	65070
Surr: BFB	83.3	70-130		%Rec	1	1/19/2022 11:54:00 AM	65070
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.020		mg/Kg	1	1/19/2022 11:54:00 AM	65070
Toluene	ND	0.039		mg/Kg	1	1/19/2022 11:54:00 AM	65070
Ethylbenzene	ND	0.039		mg/Kg	1	1/19/2022 11:54:00 AM	65070
Xylenes, Total	ND	0.078		mg/Kg	1	1/19/2022 11:54:00 AM	65070
Surr: 4-Bromofluorobenzene	86.8	70-130		%Rec	1	1/19/2022 11:54:00 AM	65070

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

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

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

WO#: 2201693

20-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-65099		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 65099		RunNo: 85259						
Prep Date: 1/19/2022		Analysis Date: 1/19/2022		SeqNo: 3000107			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Nitrogen, Nitrate (As N)	ND	0.30								

Sample ID: LCS-65099		SampType: lcs		TestCode: EPA Method 300.0: Anions						
Client ID: LCSS		Batch ID: 65099		RunNo: 85259						
Prep Date: 1/19/2022		Analysis Date: 1/19/2022		SeqNo: 3000108			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.4	90	110			
Nitrogen, Nitrate (As N)	7.7	0.30	7.500	0	103	90	110			

Qualifiers:

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

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

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

WO#: 2201693

20-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-65094	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 65094		RunNo: 85256							
Prep Date: 1/19/2022	Analysis Date: 1/19/2022		SeqNo: 2999307		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	8.6		10.00		86.4	70	130			

Sample ID: LCS-65094	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 65094		RunNo: 85256							
Prep Date: 1/19/2022	Analysis Date: 1/19/2022		SeqNo: 2999308		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	88.1	68.9	135			
Surr: DNOP	4.1		5.000		82.9	70	130			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201693

20-Jan-22

Client: EOG

Project: Allison CQ Federal 9

Sample ID: mb-65070	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 65070	RunNo: 85249								
Prep Date: 1/18/2022	Analysis Date: 1/19/2022	SeqNo: 2999080	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	840		1000		84.4	70	130			

Sample ID: lcs-65070	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 65070	RunNo: 85249								
Prep Date: 1/18/2022	Analysis Date: 1/19/2022	SeqNo: 2999081	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.8	78.6	131			
Surr: BFB	980		1000		98.1	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 9

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

WO#: 2201693

20-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb-65070	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 65070	RunNo: 85249								
Prep Date: 1/18/2022	Analysis Date: 1/19/2022	SeqNo: 2999086	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		87.4	70	130			

Sample ID: lcs-65070	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 65070	RunNo: 85249								
Prep Date: 1/18/2022	Analysis Date: 1/19/2022	SeqNo: 2999087	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	104	80	120			
Toluene	1.0	0.050	1.000	0	99.9	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	100	80	120			
Surr: 4-Bromofluorobenzene	0.88		1.000		87.7	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2201693

RcptNo: 1

Received By: Desiree Dominguez 1/19/2022 8:00:00 AM

Completed By: Desiree Dominguez 1/19/2022 8:17:13 AM

Reviewed By: *am* 1/19/22*DP**DP*

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: *JD 1/19/22*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

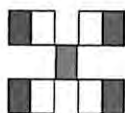
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good				

HALL ENVIRONMENTAL ANALYSIS LABORATORY



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record									
Client: <u>ECG</u>		Turn-Around Time: <u>1-100y</u>							
		<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush		Project Name: <u>Allison CQ Federal #9</u>					
Mailing Address: <u>On File</u>		Project #: <u>ZZE-00123-012</u>							
Phone #: <u>/</u>		Project Manager: <u>Mike Moffett</u>							
email or Fax#:									
QA/QC Package:									
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)									
Accreditation:		<input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other							
<input type="checkbox"/> EDD (Type)		Sampler: <u>CD</u> On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No # of Coolers: <u>1</u> Cooler Temp (including CF): <u>1.8 to 0.0 = 1.8 (°C)</u>							
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.			
1/17	10:00	Soil	BES22-20 11'	402	EC2	2201693	-001		
	10:10		BES22-24 8'				-002		
	10:20		BES22-25 8'				-003		
	2:00		WES22-80 41'				-004		
	2:10		WES22-81 41'				-005		
Date:	Time:	Relinquished by:		Received by:		Via:	Date	Time	F
1/17	1900	[Signature]		[Signature]		1182	1200		
Date:	Time:	Relinquished by:		Received by:		Via:	Date	Time	
1/17	1900	[Signature]		[Signature]		1182	1200		

Remarks: CC: Chance Dixon, Mike Moore
Direct Bill EOG Resources

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



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

January 26, 2022

Mike Moffitt

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX

RE: Allison CQ Federal 9

OrderNo.: 2201897

Dear Mike Moffitt:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/22/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2201897

Date Reported: 1/26/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-24 9'

Project: Allison CQ Federal 9

Collection Date: 1/21/2022 9:30:00 AM

Lab ID: 2201897-001

Matrix: SOIL

Received Date: 1/22/2022 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	690	60		mg/Kg	20	1/24/2022 10:22:40 AM	65165
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/24/2022 10:12:34 AM	65161
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/24/2022 10:12:34 AM	65161
Surr: DNOP	82.0	51.1-141		%Rec	1	1/24/2022 10:12:34 AM	65161
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/22/2022 1:21:00 PM	R85335
Surr: BFB	92.6	70-130		%Rec	1	1/22/2022 1:21:00 PM	R85335
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.018		mg/Kg	1	1/22/2022 1:21:00 PM	R85335
Toluene	ND	0.037		mg/Kg	1	1/22/2022 1:21:00 PM	R85335
Ethylbenzene	ND	0.037		mg/Kg	1	1/22/2022 1:21:00 PM	R85335
Xylenes, Total	ND	0.073		mg/Kg	1	1/22/2022 1:21:00 PM	R85335
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	1/22/2022 1:21:00 PM	R85335

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

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

Page 1 of 6

Analytical Report

Lab Order 2201897

Date Reported: 1/26/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BS22-25 9'

Project: Allison CQ Federal 9

Collection Date: 1/21/2022 9:40:00 AM

Lab ID: 2201897-002

Matrix: SOIL

Received Date: 1/22/2022 9:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	420	60		mg/Kg	20	1/24/2022 10:35:04 AM	65165
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/24/2022 10:23:03 AM	65161
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/24/2022 10:23:03 AM	65161
Surr: DNOP	80.5	51.1-141		%Rec	1	1/24/2022 10:23:03 AM	65161
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/22/2022 2:20:00 PM	R85335
Surr: BFB	89.1	70-130		%Rec	1	1/22/2022 2:20:00 PM	R85335
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	1/22/2022 2:20:00 PM	R85335
Toluene	ND	0.050		mg/Kg	1	1/22/2022 2:20:00 PM	R85335
Ethylbenzene	ND	0.050		mg/Kg	1	1/22/2022 2:20:00 PM	R85335
Xylenes, Total	ND	0.10		mg/Kg	1	1/22/2022 2:20:00 PM	R85335
Surr: 4-Bromofluorobenzene	91.1	70-130		%Rec	1	1/22/2022 2:20:00 PM	R85335

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

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

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

WO#: 2201897

26-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: MB-65165	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 65165	RunNo: 85353								
Prep Date: 1/24/2022	Analysis Date: 1/24/2022	SeqNo: 3004314	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-65165	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 65165	RunNo: 85353								
Prep Date: 1/24/2022	Analysis Date: 1/24/2022	SeqNo: 3004315	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.6	90	110			

Qualifiers:

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

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

WO#: 2201897

26-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: LCS-65161	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 65161			RunNo: 85338						
Prep Date: 1/24/2022	Analysis Date: 1/24/2022			SeqNo: 3003085	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.8	68.9	135			
Surr: DNOP	4.0		5.000		80.5	51.1	141			

Sample ID: MB-65161	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 65161			RunNo: 85338						
Prep Date: 1/24/2022	Analysis Date: 1/24/2022			SeqNo: 3003087	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		87.8	51.1	141			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201897

26-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb - Aq	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: R85335			RunNo: 85335						
Prep Date:	Analysis Date: 1/22/2022			SeqNo: 3002304		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	940		1000		94.1	70	130			

Sample ID: 2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: R85335			RunNo: 85335						
Prep Date:	Analysis Date: 1/22/2022			SeqNo: 3002305		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.5	78.6	131			
Surr: BFB	1100		1000		106	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 6

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

WO#: 2201897

26-Jan-22

Client: EOG
Project: Allison CQ Federal 9

Sample ID: mb - Aq	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: R85335	RunNo: 85335								
Prep Date:	Analysis Date: 1/22/2022	SeqNo: 3002322	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		98.8	70	130			

Sample ID: 100ng BTEX lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: R85335	RunNo: 85335								
Prep Date:	Analysis Date: 1/22/2022	SeqNo: 3002323	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	113	80	120			
Toluene	1.1	0.050	1.000	0	111	80	120			
Ethylbenzene	1.1	0.050	1.000	0	113	80	120			
Xylenes, Total	3.4	0.10	3.000	0	113	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		97.8	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2201897

RcptNo: 1

Received By: Juan Rojas

1/22/2022 9:45:00 AM

Juan Rojas

Completed By: Juan Rojas

1/22/2022 9:58:02 AM

*Juan Rojas*Reviewed By: *ni 01/22/2022*

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: *juv/22/22*

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good				



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

February 01, 2022

Monica Peppin

EOG

105 South Fourth Street

Artesia, NM 88210

TEL:

FAX

RE: Allison

OrderNo.: 2201A82

Dear Monica Peppin:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/28/2022 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,

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

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 2201A82

Date Reported: 2/1/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-24 9.5'

Project: Allison

Collection Date: 1/26/2022 4:30:00 AM

Lab ID: 2201A82-001

Matrix: MEOH (SOIL)

Received Date: 1/28/2022 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	220	60		mg/Kg	20	1/28/2022 2:54:35 PM	65263
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/28/2022 10:15:50 AM	65258
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/28/2022 10:15:50 AM	65258
Surr: DNOP	75.9	51.1-141		%Rec	1	1/28/2022 10:15:50 AM	65258
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/28/2022 9:59:03 AM	G85478
Surr: BFB	99.6	70-130		%Rec	1	1/28/2022 9:59:03 AM	G85478
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.018		mg/Kg	1	1/28/2022 9:59:03 AM	B85478
Toluene	ND	0.036		mg/Kg	1	1/28/2022 9:59:03 AM	B85478
Ethylbenzene	ND	0.036		mg/Kg	1	1/28/2022 9:59:03 AM	B85478
Xylenes, Total	ND	0.073		mg/Kg	1	1/28/2022 9:59:03 AM	B85478
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	1/28/2022 9:59:03 AM	B85478

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

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

Page 1 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201A82
01-Feb-22

Client: EOG
Project: Allison

Sample ID: MB-65263		SampType: mblk		TestCode: EPA Method 300.0: Anions						
Client ID: PBS		Batch ID: 65263		RunNo: 85489						
Prep Date: 1/28/2022		Analysis Date: 1/28/2022		SeqNo: 3009395			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								
Sulfate	ND	1.5								

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201A82
01-Feb-22

Client: EOG
Project: Allison

Sample ID: LCS-65258	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 65258	RunNo: 85479								
Prep Date: 1/28/2022	Analysis Date: 1/28/2022	SeqNo: 3008272	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	10	50.00	0	81.4	68.9	135			
Surr: DNOP	3.3		5.000		66.7	51.1	141			

Sample ID: MB-65258	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 65258	RunNo: 85479								
Prep Date: 1/28/2022	Analysis Date: 1/28/2022	SeqNo: 3008273	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	8.0		10.00		80.5	51.1	141			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 3 of 5

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201A82
01-Feb-22

Client: EOG
Project: Allison

Sample ID: mb	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: G85478			RunNo: 85478						
Prep Date:	Analysis Date: 1/28/2022			SeqNo: 3008909		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		102	70	130			

Sample ID: 2.5ug gro lcs	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: G85478			RunNo: 85478						
Prep Date:	Analysis Date: 1/28/2022			SeqNo: 3008910		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	97.3	78.6	131			
Surr: BFB	1100		1000		114	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 5

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

WO#: 2201A82

01-Feb-22

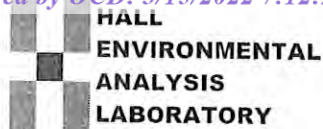
Client: EOG
Project: Allison

Sample ID: mb	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: B85478	RunNo: 85478								
Prep Date:	Analysis Date: 1/28/2022	SeqNo: 3008934	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	70	130			

Sample ID: 100ng btex lcs	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: B85478	RunNo: 85478								
Prep Date:	Analysis Date: 1/28/2022	SeqNo: 3008935	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	80	120			
Toluene	0.98	0.050	1.000	0	97.6	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.2	80	120			
Xylenes, Total	3.0	0.10	3.000	0	98.7	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2201A82

RcptNo: 1

Received By: Sean Livingston

1/28/2022 8:00:00 AM

Completed By: Sean Livingston

1/28/2022 8:07:12 AM

Reviewed By: 1/28/22

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: 1/28/22

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: _____

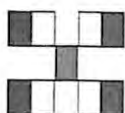
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good				

Chain-of-Custody Record					Turn-Around Time:	
Client: <u>EOG</u>					<input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush <u>Summary</u>	
Mailing Address: <u>Chase Gattler</u>					Project Name: <u>Allison</u>	
Phone #: <u>On file</u>					Project #: <u>NE-00103-012</u>	
email or Fax#: <u>/</u>					Project Manager: <u>Monica Pappin</u>	
QA/QC Package: <u>/</u>					Sampler: <u>CD</u>	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)					On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other					# of Coolers: <u>1</u>	
<input type="checkbox"/> EDD (Type) _____					Cooler Temp (including CF): <u>1.7 ± 0.1</u> (°C)	
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1/28/22	430	Soil	RES22-25 9.5' 24	40g jar	ice	7701A82
			50 28.24			001
			1" Nite MFG			
Date:	Time:	Relinquished by:		Received by:	Via:	Date Time
1/28/22	1900	Chase Gattler		Monica Pappin	Summary	1/28/22 900
Date:	Time:	Relinquished by:		Received by:	Via:	Date Time
1/28/22	1900	Chase Gattler		See below		1/28/22 8:00

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



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks:

CC: Chance Dixon, Monica Peppin

Direct Bill Eqg

Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-82

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:00:00 PM

Lab ID: 2201B30-001

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	89	61		mg/Kg	20	1/31/2022 11:26:05 AM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/31/2022 10:43:39 AM	65282
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2022 10:43:39 AM	65282
Surr: DNOP	87.8	51.1-141		%Rec	1	1/31/2022 10:43:39 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 9:16:47 AM	R85513
Surr: BFB	100	70-130		%Rec	1	1/31/2022 9:16:47 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 9:16:47 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 9:16:47 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 9:16:47 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 9:16:47 AM	R85513
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	1/31/2022 9:16:47 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-83

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:05:00 PM

Lab ID: 2201B30-002

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	520	60		mg/Kg	20	1/31/2022 11:38:25 AM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	10	9.4		mg/Kg	1	1/31/2022 11:07:27 AM	65282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2022 11:07:27 AM	65282
Surr: DNOP	84.1	51.1-141		%Rec	1	1/31/2022 11:07:27 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 9:40:34 AM	R85513
Surr: BFB	106	70-130		%Rec	1	1/31/2022 9:40:34 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 9:40:34 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 9:40:34 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 9:40:34 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 9:40:34 AM	R85513
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/31/2022 9:40:34 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-84

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:10:00 PM

Lab ID: 2201B30-003

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	160	60		mg/Kg	20	1/31/2022 11:50:45 AM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/31/2022 11:31:13 AM	65282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2022 11:31:13 AM	65282
Surr: DNOP	74.7	51.1-141		%Rec	1	1/31/2022 11:31:13 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 10:04:03 AM	R85513
Surr: BFB	103	70-130		%Rec	1	1/31/2022 10:04:03 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 10:04:03 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 10:04:03 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 10:04:03 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 10:04:03 AM	R85513
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	1/31/2022 10:04:03 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-85

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:15:00 PM

Lab ID: 2201B30-004

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	260	60		mg/Kg	20	1/31/2022 12:03:06 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/31/2022 10:06:11 AM	65282
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/31/2022 10:06:11 AM	65282
Surr: DNOP	88.4	51.1-141		%Rec	1	1/31/2022 10:06:11 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 10:27:35 AM	R85513
Surr: BFB	105	70-130		%Rec	1	1/31/2022 10:27:35 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 10:27:35 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 10:27:35 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 10:27:35 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 10:27:35 AM	R85513
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/31/2022 10:27:35 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-86

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:20:00 PM

Lab ID: 2201B30-005

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	69	60		mg/Kg	20	1/31/2022 12:15:28 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/31/2022 10:16:40 AM	65282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2022 10:16:40 AM	65282
Surr: DNOP	80.6	51.1-141		%Rec	1	1/31/2022 10:16:40 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 10:51:06 AM	R85513
Surr: BFB	104	70-130		%Rec	1	1/31/2022 10:51:06 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 10:51:06 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 10:51:06 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 10:51:06 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 10:51:06 AM	R85513
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	1/31/2022 10:51:06 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-87

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:25:00 PM

Lab ID: 2201B30-006

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	110	60		mg/Kg	20	1/31/2022 12:27:49 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/31/2022 10:27:09 AM	65282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2022 10:27:09 AM	65282
Surr: DNOP	80.5	51.1-141		%Rec	1	1/31/2022 10:27:09 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 11:14:37 AM	R85513
Surr: BFB	105	70-130		%Rec	1	1/31/2022 11:14:37 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 11:14:37 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 11:14:37 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 11:14:37 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 11:14:37 AM	R85513
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	1/31/2022 11:14:37 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-88

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:30:00 PM

Lab ID: 2201B30-007

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	100	59		mg/Kg	20	1/31/2022 12:40:10 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	1/31/2022 10:37:38 AM	65282
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2022 10:37:38 AM	65282
Surr: DNOP	80.6	51.1-141		%Rec	1	1/31/2022 10:37:38 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 11:38:06 AM	R85513
Surr: BFB	106	70-130		%Rec	1	1/31/2022 11:38:06 AM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 11:38:06 AM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 11:38:06 AM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 11:38:06 AM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 11:38:06 AM	R85513
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	1/31/2022 11:38:06 AM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-89

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:35:00 PM

Lab ID: 2201B30-008

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	93	60		mg/Kg	20	1/31/2022 1:17:12 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/31/2022 10:48:09 AM	65282
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2022 10:48:09 AM	65282
Surr: DNOP	83.4	51.1-141		%Rec	1	1/31/2022 10:48:09 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 12:01:46 PM	R85513
Surr: BFB	106	70-130		%Rec	1	1/31/2022 12:01:46 PM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 12:01:46 PM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 12:01:46 PM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 12:01:46 PM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 12:01:46 PM	R85513
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	1/31/2022 12:01:46 PM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-90

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:40:00 PM

Lab ID: 2201B30-009

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	310	60		mg/Kg	20	1/31/2022 1:29:31 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	11	9.9		mg/Kg	1	1/31/2022 10:58:39 AM	65282
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2022 10:58:39 AM	65282
Surr: DNOP	82.0	51.1-141		%Rec	1	1/31/2022 10:58:39 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 12:25:27 PM	R85513
Surr: BFB	105	70-130		%Rec	1	1/31/2022 12:25:27 PM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 12:25:27 PM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 12:25:27 PM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 12:25:27 PM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 12:25:27 PM	R85513
Surr: 4-Bromofluorobenzene	99.9	70-130		%Rec	1	1/31/2022 12:25:27 PM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-91

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:45:00 PM

Lab ID: 2201B30-010

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	96	60		mg/Kg	20	1/31/2022 1:41:52 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	11	9.8		mg/Kg	1	1/31/2022 11:09:10 AM	65282
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/31/2022 11:09:10 AM	65282
Surr: DNOP	80.7	51.1-141		%Rec	1	1/31/2022 11:09:10 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/31/2022 12:49:09 PM	R85513
Surr: BFB	109	70-130		%Rec	1	1/31/2022 12:49:09 PM	R85513
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	1/31/2022 12:49:09 PM	R85513
Toluene	ND	0.050		mg/Kg	1	1/31/2022 12:49:09 PM	R85513
Ethylbenzene	ND	0.050		mg/Kg	1	1/31/2022 12:49:09 PM	R85513
Xylenes, Total	ND	0.10		mg/Kg	1	1/31/2022 12:49:09 PM	R85513
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/31/2022 12:49:09 PM	R85513

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-92

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:50:00 PM

Lab ID: 2201B30-011

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	490	61		mg/Kg	20	1/31/2022 1:54:14 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	14	9.5		mg/Kg	1	1/31/2022 11:19:43 AM	65282
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/31/2022 11:19:43 AM	65282
Surr: DNOP	90.4	51.1-141		%Rec	1	1/31/2022 11:19:43 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/31/2022 9:35:00 AM	R85512
Surr: BFB	103	70-130		%Rec	1	1/31/2022 9:35:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.019		mg/Kg	1	1/31/2022 9:35:00 AM	R85512
Toluene	ND	0.037		mg/Kg	1	1/31/2022 9:35:00 AM	R85512
Ethylbenzene	ND	0.037		mg/Kg	1	1/31/2022 9:35:00 AM	R85512
Xylenes, Total	ND	0.075		mg/Kg	1	1/31/2022 9:35:00 AM	R85512
Surr: 4-Bromofluorobenzene	93.6	70-130		%Rec	1	1/31/2022 9:35:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-93

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 1:55:00 PM

Lab ID: 2201B30-012

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	ND	60		mg/Kg	20	1/31/2022 2:06:34 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	10	10		mg/Kg	1	1/31/2022 11:30:17 AM	65282
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2022 11:30:17 AM	65282
Surr: DNOP	79.9	51.1-141		%Rec	1	1/31/2022 11:30:17 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/31/2022 9:54:00 AM	R85512
Surr: BFB	102	70-130		%Rec	1	1/31/2022 9:54:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.017		mg/Kg	1	1/31/2022 9:54:00 AM	R85512
Toluene	ND	0.034		mg/Kg	1	1/31/2022 9:54:00 AM	R85512
Ethylbenzene	ND	0.034		mg/Kg	1	1/31/2022 9:54:00 AM	R85512
Xylenes, Total	ND	0.069		mg/Kg	1	1/31/2022 9:54:00 AM	R85512
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	1/31/2022 9:54:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: WES22-95

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:05:00 PM

Lab ID: 2201B30-013

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	180	61		mg/Kg	20	1/31/2022 2:18:54 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/31/2022 11:40:50 AM	65282
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/31/2022 11:40:50 AM	65282
Surr: DNOP	86.2	51.1-141		%Rec	1	1/31/2022 11:40:50 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	1/31/2022 10:14:00 AM	R85512
Surr: BFB	98.7	70-130		%Rec	1	1/31/2022 10:14:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.019		mg/Kg	1	1/31/2022 10:14:00 AM	R85512
Toluene	ND	0.038		mg/Kg	1	1/31/2022 10:14:00 AM	R85512
Ethylbenzene	ND	0.038		mg/Kg	1	1/31/2022 10:14:00 AM	R85512
Xylenes, Total	ND	0.077		mg/Kg	1	1/31/2022 10:14:00 AM	R85512
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	1/31/2022 10:14:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-26

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:10:00 PM

Lab ID: 2201B30-014

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	310	61		mg/Kg	20	1/31/2022 2:31:15 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/31/2022 11:51:26 AM	65282
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2022 11:51:26 AM	65282
Surr: DNOP	85.0	51.1-141		%Rec	1	1/31/2022 11:51:26 AM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	1/31/2022 10:34:00 AM	R85512
Surr: BFB	99.1	70-130		%Rec	1	1/31/2022 10:34:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.019		mg/Kg	1	1/31/2022 10:34:00 AM	R85512
Toluene	ND	0.037		mg/Kg	1	1/31/2022 10:34:00 AM	R85512
Ethylbenzene	ND	0.037		mg/Kg	1	1/31/2022 10:34:00 AM	R85512
Xylenes, Total	ND	0.074		mg/Kg	1	1/31/2022 10:34:00 AM	R85512
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	1/31/2022 10:34:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-27

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:15:00 PM

Lab ID: 2201B30-015

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	65	60		mg/Kg	20	1/31/2022 2:43:36 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	17	9.7		mg/Kg	1	1/31/2022 12:02:02 PM	65282
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/31/2022 12:02:02 PM	65282
Surr: DNOP	84.3	51.1-141		%Rec	1	1/31/2022 12:02:02 PM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	1/31/2022 10:54:00 AM	R85512
Surr: BFB	95.6	70-130		%Rec	1	1/31/2022 10:54:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.017		mg/Kg	1	1/31/2022 10:54:00 AM	R85512
Toluene	ND	0.033		mg/Kg	1	1/31/2022 10:54:00 AM	R85512
Ethylbenzene	ND	0.033		mg/Kg	1	1/31/2022 10:54:00 AM	R85512
Xylenes, Total	ND	0.066		mg/Kg	1	1/31/2022 10:54:00 AM	R85512
Surr: 4-Bromofluorobenzene	85.6	70-130		%Rec	1	1/31/2022 10:54:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-28

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:20:00 PM

Lab ID: 2201B30-016

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	110	60		mg/Kg	20	1/31/2022 2:55:57 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	1/31/2022 12:12:39 PM	65282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2022 12:12:39 PM	65282
Surr: DNOP	87.3	51.1-141		%Rec	1	1/31/2022 12:12:39 PM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	1/31/2022 11:13:00 AM	R85512
Surr: BFB	100	70-130		%Rec	1	1/31/2022 11:13:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.017		mg/Kg	1	1/31/2022 11:13:00 AM	R85512
Toluene	ND	0.033		mg/Kg	1	1/31/2022 11:13:00 AM	R85512
Ethylbenzene	ND	0.033		mg/Kg	1	1/31/2022 11:13:00 AM	R85512
Xylenes, Total	ND	0.067		mg/Kg	1	1/31/2022 11:13:00 AM	R85512
Surr: 4-Bromofluorobenzene	86.3	70-130		%Rec	1	1/31/2022 11:13:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-29

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:25:00 PM

Lab ID: 2201B30-017

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	270	60		mg/Kg	20	1/31/2022 3:08:18 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	9.5	9.3		mg/Kg	1	1/31/2022 12:23:16 PM	65282
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/31/2022 12:23:16 PM	65282
Surr: DNOP	99.6	51.1-141		%Rec	1	1/31/2022 12:23:16 PM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/31/2022 11:33:00 AM	R85512
Surr: BFB	95.0	70-130		%Rec	1	1/31/2022 11:33:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.018		mg/Kg	1	1/31/2022 11:33:00 AM	R85512
Toluene	ND	0.036		mg/Kg	1	1/31/2022 11:33:00 AM	R85512
Ethylbenzene	ND	0.036		mg/Kg	1	1/31/2022 11:33:00 AM	R85512
Xylenes, Total	ND	0.071		mg/Kg	1	1/31/2022 11:33:00 AM	R85512
Surr: 4-Bromofluorobenzene	86.6	70-130		%Rec	1	1/31/2022 11:33:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-30

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:30:00 PM

Lab ID: 2201B30-018

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	310	60		mg/Kg	20	1/31/2022 3:45:18 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	18	9.2		mg/Kg	1	1/31/2022 12:33:54 PM	65282
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	1/31/2022 12:33:54 PM	65282
Surr: DNOP	92.1	51.1-141		%Rec	1	1/31/2022 12:33:54 PM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	1/31/2022 11:52:00 AM	R85512
Surr: BFB	98.7	70-130		%Rec	1	1/31/2022 11:52:00 AM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.018		mg/Kg	1	1/31/2022 11:52:00 AM	R85512
Toluene	ND	0.036		mg/Kg	1	1/31/2022 11:52:00 AM	R85512
Ethylbenzene	ND	0.036		mg/Kg	1	1/31/2022 11:52:00 AM	R85512
Xylenes, Total	ND	0.072		mg/Kg	1	1/31/2022 11:52:00 AM	R85512
Surr: 4-Bromofluorobenzene	90.2	70-130		%Rec	1	1/31/2022 11:52:00 AM	R85512

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

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

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Analytical Report

Lab Order 2201B30

Date Reported:

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: BES22-31

Project: Allison CQ Federal 9

Collection Date: 1/28/2022 2:35:00 PM

Lab ID: 2201B30-019

Matrix: MEOH (SOIL)

Received Date: 1/29/2022 9:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	380	60		mg/Kg	20	1/31/2022 3:50:00 PM	65289
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	15	10		mg/Kg	1	1/31/2022 12:44:34 PM	65282
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/31/2022 12:44:34 PM	65282
Surr: DNOP	77.4	51.1-141		%Rec	1	1/31/2022 12:44:34 PM	65282
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	1/31/2022 12:12:00 PM	R85512
Surr: BFB	95.6	70-130		%Rec	1	1/31/2022 12:12:00 PM	R85512
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.017		mg/Kg	1	1/31/2022 12:12:00 PM	R85512
Toluene	ND	0.034		mg/Kg	1	1/31/2022 12:12:00 PM	R85512
Ethylbenzene	ND	0.034		mg/Kg	1	1/31/2022 12:12:00 PM	R85512
Xylenes, Total	ND	0.068		mg/Kg	1	1/31/2022 12:12:00 PM	R85512
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	1/31/2022 12:12:00 PM	R85512

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

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

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ATTACHMENT 8



PROPOSED ASSESSMENT AND RECLAMATION PLAN

ALLISON CQ FEDERAL #9
UNIT NWNW, SECTION 15, TOWNSHIP 19S, RANGE 24E
EDDY COUNTY, NEW MEXICO
32.665845, -104.580505

PREPARED FOR:

EOG RESOURCES, INC.
ARTESIA DIVISION
105 S 4TH STREET
ARTESIA, NEW MEXICO 88210

PREPARED BY:

RANGER ENVIRONMENTAL SERVICES, INC.
P.O. BOX 201179
AUSTIN, TEXAS 78720

AUGUST 27, 2021

Chad M. Copeland, P.G. (TX)
Project Geoscientist

William Kierdorf, REM
Project Manager

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BUREAU OF LAND MANAGEMENT NOTICE OF WRITTEN ORDER

FIGURES

- Topographic Map
- Area Map
- Site Map
- Proposed Assessment Map

ATTACHMENTS

- Attachment 1 – December 2020 EOG Sampling Data
- Attachment 2 – Site Photographs
- Attachment 3 – James H & Betty R Howell Revocable Trust Seed Mix



**PROPOSED ASSESSMENT AND RECLAMATION PLAN
ALLISON CQ FEDERAL #9
UNIT NWNW, SECTION 15, TOWNSHIP 19S, RANGE 24E
EDDY COUNTY, NEW MEXICO
32.665845, -104.580505**

1.0 SITE LOCATION AND BACKGROUND

The Allison CQ Federal #9 (Site) is located on private land, approximately 16 miles southwest of Artesia, within Eddy County, New Mexico. The facility is situated in Unit NWNW, Section 15, T19S-R24E at GPS coordinates 32.665845, -104.580505. The well was operated by EOG Resources, Inc. (EOG) prior its plugging and abandonment.

On June 10, 2021, a Bureau of Land Management (BLM) Notice of Written Order was received by EOG regarding the subject Site. The notice outlined surface contamination on the well pad and exposed plastic liner and potential surface contamination within the former reserve pit located north of the well pad. The notice also outlines remaining ROW equipment associated with a flowline adjacent to the location.

In December 2020, EOG personnel conducted assessment sampling of various locations on the facility pad. The assessment process included the collection of soil samples for laboratory analysis. A total of six sample locations were included with samples being collected from various depths at each location. The soil sample analytical results indicate that elevated chloride concentrations are present at the location. Additionally, several soil samples were documented to have elevated TPH concentrations.

EOG has engaged Ranger Environmental Services, Inc. (Ranger) to assist in addressing the outstanding issues at the Site. On June 24, 2021, Ranger and EOG personnel conducted an initial site inspection to document current conditions of the location and determine the appropriate course of action for the Site.

The following Proposed Assessment and Reclamation Plan has been prepared to return the area to pre-operation conditions.

A copy of the BLM Notice of Written Order is attached. A Topographic Map and Area Map noting the location of the subject property and surrounding areas as well as a Site Map illustrating the Site features are provided in the Figures section.

2.0 JUNE 24, 2021 – SITE INSPECTION

On June 24, 2021, Ranger and EOG personnel conducted a site inspection to assess site conditions and determine appropriate actions necessary to address the listed BLM concerns.

Upon inspection, the access road and well pad area are in need of reclamation efforts. Upon inspection of the former reserve pit location, the reported exposed plastic liner and surface contamination were observed.

During the inspection process, areas of concern were identified on the well pad location. Based on the conditions observed, assessment of the areas will be conducted.

At the time of the inspection the noted ROW equipment was observed along the eastern pad boundary. Upon further inspection, it is unclear whether EOG is the responsible party for the equipment.

3.0 PROPOSED ASSESSMENT PLAN

3.1 Areas of Concern Assessment

In order to assess BLM concerns listed in the June 10, 2021 correspondence as well as the areas of concern identified by Ranger on June 24, 2021, the following delineation sampling activities are proposed. To assess the presence and extent of impacts in the area, excavation test holes will be completed for the purpose of soil sample collection.

To assess the areas observed during the June 24, 2021 site inspection, initial sample locations will be located in the immediate vicinity of the observed areas of concern. Additionally, excavation test holes will be advanced in locations to assist in the horizontal delineation of the elevated soil concentrations documented by the December 2020 EOG sampling activities. During the excavation test hole installation process, soils will be analyzed by Ranger personnel at the surface and at approximate one foot intervals using an organic vapor monitor (OVM) and a field chloride titration kit to assist in evaluating soil conditions and/or levels of impacts in the area. The initial excavation test holes will be completed to depths where field reading indicate that soil concentrations are within the applicable NMAC Table 1 closure criteria or to the maximum extent of the available on-site equipment.

Dependent on the levels of impacts observed in the initial excavation test hole locations, additional locations will be completed as necessary to assist in the delineation of elevated soil concentrations. The location and depth of additional delineation excavation test holes will be determined based on the conditions observed within the initial assessment locations. If field readings indicate that elevated concentrations are present, additional excavation test holes will be completed moving outward from the initial sampling locations. Additional test excavations will be completed in this manner until field readings indicate concentrations are within the applicable NMAC Table 1 closure criteria. The completion of excavation test holes in the footprint of the former reserve pit area will not be completed as to not disturb and compromise the stability of the area.

Soil samples for laboratory analysis will be collected from each excavation test hole location. Upon collection, the soil samples will be submitted to a NELAC accredited laboratory for analysis of total petroleum hydrocarbons (TPH) using EPA Method 8015; benzene, toluene, ethylbenzene and xylenes (BTEX) using EPA Method 8021; and, total chloride using EPA Method 300.

3.2 ROW Equipment

Based on initial review, it is unclear who the correct responsible party is for the ROW equipment. Investigation into the appropriate ownership for the line and equipment will be completed. If the investigation results in the finding that EOG is the responsible party, the equipment and area will be addressed as necessary. In the event that finding concludes that an alternate operator is responsible, an update will be provided and the issue will be addressed by the identified responsible party.

3.3 Area Remediation

Based on the findings of the assessment process in the area, a site investigation and proposed remediation plan will be prepared. The plan will include details of the assessment process, the proposed remediation strategy, and confirmation sampling details. The plan will be prepared in order to bring the area into compliance with the standards outlined in NMAC 19.15.29.

4.0 PROPOSED RECLAMATION PLAN

Upon completion of the remedial process at the Site, the former well pad location will undergo reclamation to bring the site to BLM and NMOCD standards. To complete this process the following items are proposed.

4.1 Debris Removal

Any and all remaining equipment, trash, or debris associated with operation or remedial efforts at the Site will be removed from the location.

4.2 Former Pit Area

During the June 24, 2021 site inspection, surface contamination and exposed plastic pit liner material was observed in the area of the historic reserve pit location. To limit potential leaching, it is proposed to cap the area with a Bentomat Geosynthetic Clay Liner (GCL). Prior to placement, the former pit location will be prepared by removing any items that could potentially damage the liner. The GCL will be placed parallel to the areas natural contours and anchored as necessary to ensure stability of the liner. The area will be capped with two feet of top-soil for re-vegetation purposes and contoured to match the natural contours of the area. Upon completion of the liner and topsoil installation process, the area will be re-seeded in accordance with the Howell Ranch directed seed mixture and application rate.

4.3 Former Well Pad

Following the removal of all surface equipment and initial soils investigation, the caliche or non-native well pad will be removed from the location. Upon completion, additional ripping and seeding activities will be completed. The ripping will be conducted in an east to west direction to assist in limiting potential runoff from the area. The site will be re-seeded in accordance with the Howell Ranch directed seed mixture and application rate.

4.4 Access Road

Upon completion of the assessment, potential remediation, and well pad reclamation efforts at the site, the former well access road will undergo reclamation efforts. The area will undergo deep ripping and reseeding activities. The ripping will be conducted following the path of the access road as to not disturb adjacent areas. Upon completion of the ripping the road area will be re-seeded in accordance with the Howell Ranch directed seed mixture and application rate.

4.5 Site Security

To secure the reclaimed areas from adverse vehicular and/or livestock activity, the entirety of the reclamation areas (road, former pad, remediation area, and pit area) will be surrounded by fencing until reaching the target vegetative cover of approximately 80%. Based on preliminary review of the site location, erosion control berms do not appear necessary at the location. However, if efforts appear warranted as the reclamation process continues they will be installed as necessary.

5.0 SITE MONITORING AND CLOSURE

To monitor the progress of the reclamation efforts, site inspections will be conducted at six month intervals. During the site inspections, the reclaimed areas will be evaluated for vegetation growth, site security measures, and erosional controls. If any issues are observed, additional actions will be implemented to address the issues.

During the inspection process, if a vegetation cover of approximate 80% is believed to be achieved, Ranger will utilize Daubenmire Survey techniques to confirm that the area is in attainment of the target vegetative cover of 80%.

Upon successfully achieving the target re-vegetation level of approximately 80%, a Final Abandonment Notice (FAN) will be submitted. After receiving BLM FAN notice approval, the site security fencing and any other control measures will be removed.

**BUREAU OF LAND MANAGEMENT NOTICE OF
WRITTEN ORDER**

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NOTICE OF WRITTEN ORDER

Number 21MBH0021WPage 1 of 3

<input checked="" type="checkbox"/> Certified Mail-Return Receipt Requested	Identification	
<input type="checkbox"/> Hand Delivered, Received By and Date	Lease	NMNM14118
	Agreement	

Bureau of Land Management Office Carlsbad Field Office		Operator or Third Party EOG RESOURCES INCORPORATED
Address 620 E. Greene St. Carlsbad, NM 88220		Address
Telephone 5752345951	Inspector MELISSA HORN	Attention
Site Name ALLISON CQ FED	Well/Facility/FMP/Identification# 9	Legal Land Description (Include Lat./Long.) NWNW, 15-19S-24E
Site Name ALLISON CQ FED	Well/Facility/FMP/Identification# 9	Legal Land Description (Include Lat./Long.) NWNW, 15-19S-24E
Site Name	Well/Facility/FMP/Identification#	Legal Land Description (Include Lat./Long.)

THE FOLLOWING ISSUE(S) WERE FOUND BY BUREAU OF LAND MANAGEMENT INSPECTORS ON THE DATE AND AT THE SITE(S) LISTED.

Date	Time (24-hour Clock)	Corrective Action to be Completed By	Date Corrected	Authority Reference
06/10/2021	10:00	08/01/2021		43 CFR 3162.5-1(a)

Remarks:

This location was one of several visited during on onsite to address environmental concerns and problematic locations on the Howell Ranch with Cheryl Howell and Austin Weyent (a contractor with Atkins Engineering Associates). Inspection found the following environmental concerns which are required to be addressed in order to meet BLM reclamation objectives.

- Surface contamination is apparent on reclaimed pad location. In order to properly mitigate and/or lessen the probability of impact surface contamination, and in accordance with 43 CFR 3162.5-1 (c), all contaminated soils need to be excavated and hauled to an authorized land disposal facility and excavated soils replaced with clean material.

- A reserve pit exists to North of the location is required to be reclaimed. Surface contamination as well as exposed plastic liner is present in this location. Prior to commencing ground-disturbing work in this area a work plan must be submitted to BLM to ensure reclamation activities are in compliance with federal agencies and as well as private landowner.

- ROW equipment remains on location. Operator must remove the ROW equipment and reclaim the surrounding and underlying areas. If the service company intends to keep the equipment in place, Operator must provide BLM with a notice of contact to the service company stating that they will



When the Written Order is complied with, sign this notice and return to above address.

Company Representative Signature: _____ Print Name: _____ Date: _____

Company Comments:

In accordance with 43 CFR 3163.1(a), you must comply with the corrective actions for the identified issue(s) by the abatement date provided above. If you fail to comply within the time frames specified, you will be issued an Incident of Noncompliance (INC) in accordance with 43 CFR 3163.1(a), which may include an assessment or additional enforcement actions as deemed necessary to gain compliance.

WARNING

The Authorized Officer has authority to issue a Written Order in accordance with 43 CFR 3161.2. Per 43 CFR 3165.3, Written Order and reporting time frames begin upon receipt of the Notice, or seven business days after the date it is mailed, whichever is earlier. Each issue must be corrected by the "Action to be Completed By" date identified above. This form must be signed, dated, and postmarked no later than the next business day after the prescribed timeframe for correction and returned to the Bureau of Land Management office at the address shown above.

Section 109(d)(1) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at 43 CFR 3163.2(f)(1), provides that any person who "knowingly or willfully" prepares, maintains, or submits false, inaccurate, or misleading reports, notices, affidavits, records, data, or other written information required by this part shall be liable for a civil penalty per violation for each day such violation continues.

REVIEW AND APPEAL RIGHTS

A person contesting an Order of the Authorized Officer or violation must request a State Director Review of the Written Order or Incident of Noncompliance. This request must be filed within 20 business days of receipt of the Written Order with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, MS 300-QC, Arlington, Virginia 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

Signature of Bureau of Land Management Authorized Officer	Date	Time (24-hour Clock)
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Remarks:

This location was one of several visited during on onsite to address environmental concerns and problematic locations on the Howell Ranch with Cheryl Howell and Austin Weyent (a contractor with Atkins Engineering Associates). Inspection found the following environmental concerns which are required to be addressed in order to meet BLM reclamation objectives.

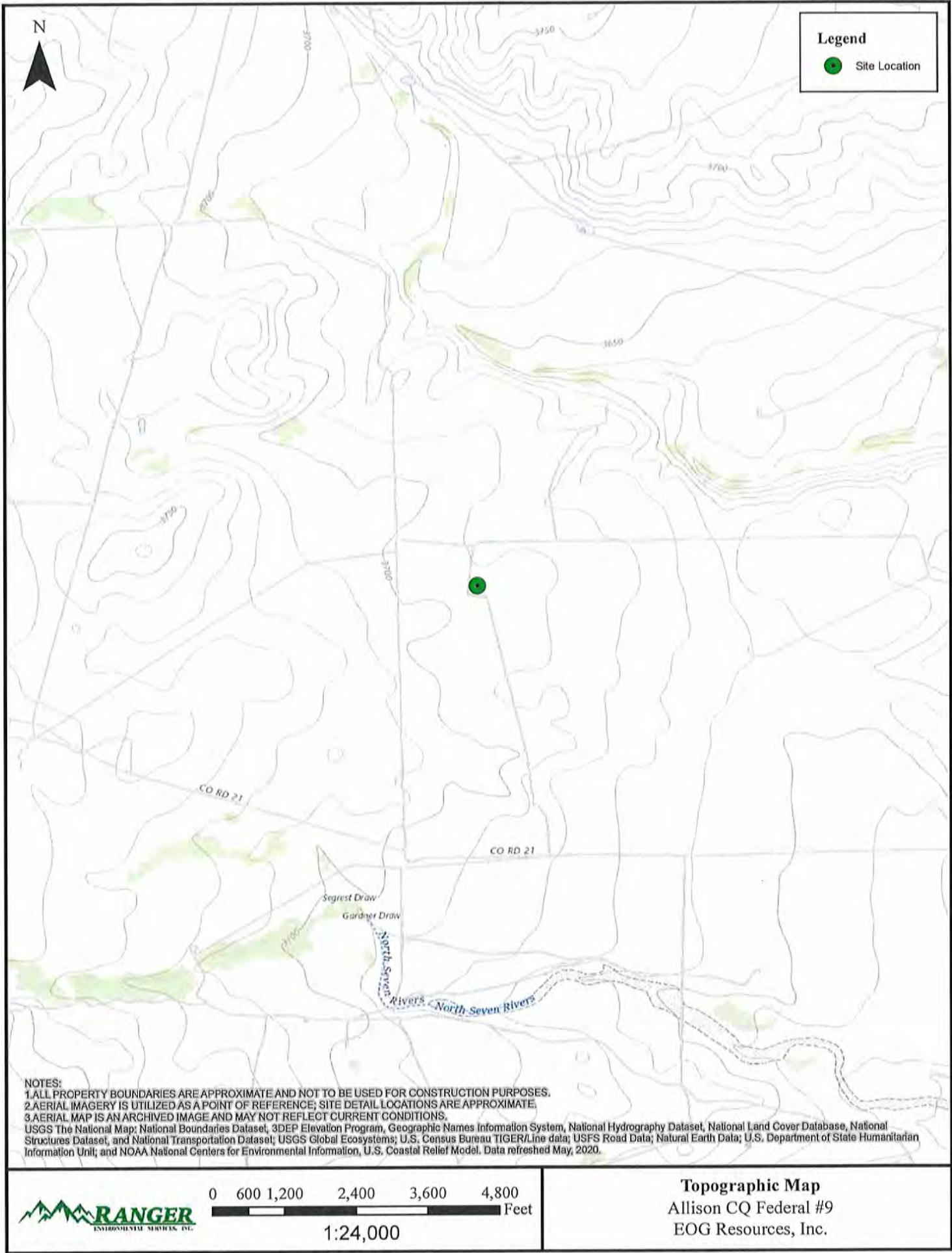
- Surface contamination is apparent on reclaimed pad location. In order to properly mitigate and/or lessen the probability of impact surface contamination, and in accordance with 43 CFR 3162.5-1 (c), all contaminated soils need to be excavated and hauled to an authorized land disposal facility and excavated soils replaced with clean material.
- A reserve pit exists to North of the location is required to be reclaimed. Surface contamination as well as exposed plastic liner is present in this location. Prior to commencing ground-disturbing work in this area a work plan must be submitted to BLM to ensure reclamation activities are in compliance with federal agencies and as well as private landowner.
- ROW equipment remains on location. Operator must remove the ROW equipment and reclaim the surrounding and underlying areas. If the service company intends to keep the equipment in place, Operator must provide BLM with a notice of contact to the service company stating that they will remove the equipment at a later date and take responsibility for the subsequent reclamation of the areas in need of additional reclamation work.

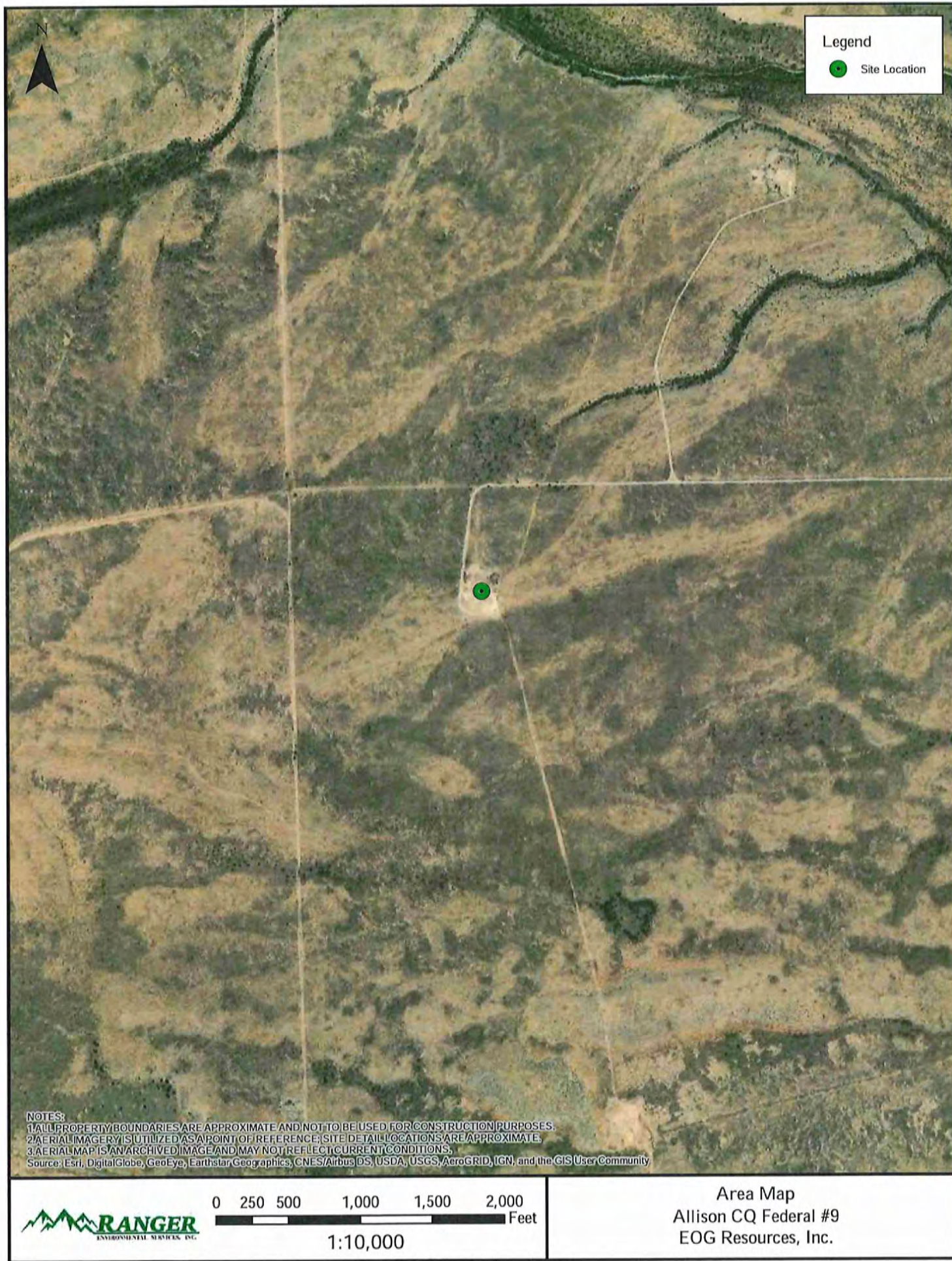
The above issues must be remedied prior to the specified abatement date in order to avoid further enforcement action. Return signed I&E Copy to the office via mail or email once completed. Feel free to contact me with any questions, concerns, onsite requests, or if you are unable to address these issues at this time.

Attn: Melissa Horn, Environmental Protection Specialist
620 E Greene Street
Carlsbad, NM 88220
Phone: (575) 988-5122
Email: mhorn@blm.gov

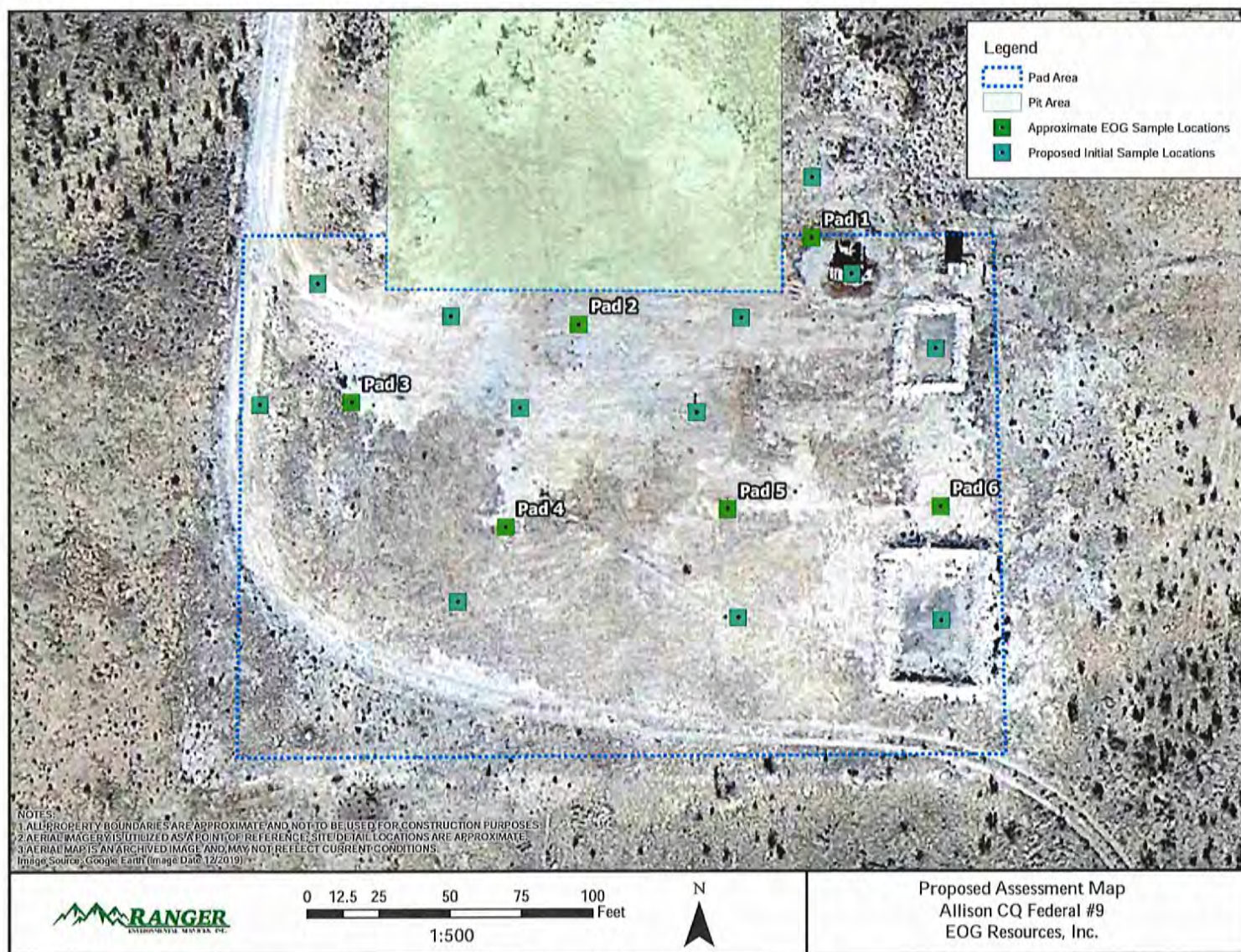
FIGURES

**TOPOGRAPHIC MAP
AREA MAP
SITE MAP
PROPOSED ASSESSMENT MAP**









ATTACHMENT 1 – December 2020 EOG Sampling Data



SOIL BTEX (EPA 8021B), TPH (EPA 8015) & CHLORIDE (EPA 306) ANALYTICAL DATA ALLISON CQ FEDERAL #9 EDDY COUNTY, NEW MEXICO												
All values presented in parts per million (mg/kg)												
SAMPLE ID	DATE	BENZENE	TOLUENE	ETHYL- BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C35	TPH (GRO+DRO)	TPH (GRO+DRO+ MRO)	CHLORIDE
December 2020 - EOG Collected Soil Samples												
Pad 1.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	19,500	47,200	19,500	68,700	155
Pad 1.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	14,400	32,400	14,400	46,800	166
Pad 1.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	38.1	87.5	38.1	124	27.2
Pad 1.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	22.9
Pad 2.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,862
Pad 2.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	2,690
Pad 2.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	776
Pad 2.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	292
Pad 3.0U	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	51.9	<45.0	51.9	185
Pad 3.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	2,790
Pad 3.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	3,330
Pad 3.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,880
Pad 3.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	6,220
Pad 4.0	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	250	<50.0	250	280	113
Pad 4.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	110	<50.0	110	140	227
Pad 4.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	78.4	<50.0	78.4	78.4	431
Pad 4.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	1,810
Pad 4.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	292
Pad 5.0U	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	140
Pad 5.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	121
Pad 5.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	410
Pad 5.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	630
Pad 5.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	330
Pad 6.0U	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	<20.0
Pad 6.1	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	<20.0
Pad 6.2	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	26.1
Pad 6.3	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	<20.0
Pad 6.4	12/11/2020	<0.025	<0.025	<0.025	<0.025	<0.1	<20.0	<25.0	<50.0	<45.0	<95.0	22.6
19.15.26.13 NMAC Reclamation Criteria (0-4' Soils Only)		10 ²		50 ²		100 ²		600				
Notes:												
1. Results exceeding the NMAC Restoration, Reclamation and re-vegetation chloride concentration requirements are presented in bold red type.												
2. Value derived from the State of New Mexico Energy, Minerals and Natural Resources Department document Procedures for the Implementation of the Spill Rule (19.15.29 NMAC) dated September 6, 2019.												

NA = Not Analyzed
TPH = Total Petroleum Hydrocarbons
mg/Kg = Milligrams per Kilogram

Report to:
Robert Asher



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources Inc. - Carlsbad

Project Name: Allison CQ Federal #9
Work Order: E012047
Job Number: 19034-0001
Received: 12/12/2020

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/15/20

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM009792018-1 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 12/15/20

Robert Asher
104 South 4th Street
Artesia, NM 88210



Project Name: Allison CQ Federal #9
Workorder: E012047
Date Received: 12/12/2020 10:45:00AM

Robert Asher,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/12/2020 10:45:00AM, under the Project Name: Allison CQ Federal #9.

The analytical test results summarized in this report with the Project Name: Allison CQ Federal #9 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name:	Allison CQ Federal #9	Reported: 12/15/20 12:20
	Project Number:	19034-0001	
	Project Manager:	Robert Asher	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Pad 5.2	E012047-01A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 5.3	E012047-02A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 5.4	E012047-03A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 6.SU	E012047-04A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 6.1	E012047-05A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 6.2	E012047-06A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 6.3	E012047-07A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 6.4	E012047-08A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 12:20:15PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 5.2

E012047-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: RKS		Batch: 2051002	
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	123 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2051002	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	94.1 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2051003	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	80.5 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: NE		Batch: 2051006	
Chloride	410	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 12:20:15PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 5.3

E012047-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		118 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.7 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		76.8 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051006
Chloride	680	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 12:20:15PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 5.4

E012047-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		117 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.5 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		95.1 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051006
Chloride	330	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 12:20:15PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 6.SU

E012047-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		117 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.1 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		102 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051006
Chloride	ND	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 12:20:15PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 6.1

E012047-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		119 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.6 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		91.7 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: NE		Batch: 2051006
Chloride	ND	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 12:20:15PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 6.2

E012047-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		117 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.9 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		91.9 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051006
Chloride	26.1	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 12:20:15PM
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Pad 6.3

E012047-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		124 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		93.2 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		95.5 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: NE		Batch: 2051006
Chloride	ND	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported:
104 South 4th Street	Project Number:	19034-0001	12/15/2020 12:20:15PM
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 6.4

E012047-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		118 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: RKS		Batch: 2051002
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.8 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051003
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		103 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051006
Chloride	22.6	20.0	1	12/14/20	12/14/20	



QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 12:20:15PM
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Volatile Organics by EPA 8021B

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051002-BLK1)

Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							

Surrogate: 4-Bromochlorobenzene-PID 9.99 8.00 125 70-130

LCS (2051002-BS1)

Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	4.97	0.0250	5.00		99.4	70-130			
Toluene	4.99	0.0250	5.00		99.7	70-130			
Ethylbenzene	4.93	0.0250	5.00		98.6	70-130			
p,m-Xylene	9.97	0.0500	10.0		99.7	70-130			
o-Xylene	5.00	0.0250	5.00		100	70-130			
Total Xylenes	15.0	0.0250	15.0		99.8	70-130			

Surrogate: 4-Bromochlorobenzene-PID 10.4 8.00 130 70-130

Matrix Spike (2051002-MS1)

Source: E012047-01 Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	5.13	0.0250	5.00	ND	103	54-133			
Toluene	5.13	0.0250	5.00	ND	103	61-130			
Ethylbenzene	5.05	0.0250	5.00	ND	101	61-133			
p,m-Xylene	10.2	0.0500	10.0	ND	102	63-131			
o-Xylene	5.13	0.0250	5.00	ND	103	63-131			
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131			

Surrogate: 4-Bromochlorobenzene-PID 10.4 8.00 130 70-130

Matrix Spike Dup (2051002-MSD1)

Source: E012047-01 Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	4.94	0.0250	5.00	ND	98.8	54-133	3.78	20	
Toluene	4.94	0.0250	5.00	ND	98.9	61-130	3.70	20	
Ethylbenzene	4.90	0.0250	5.00	ND	98.0	61-133	3.00	20	
p,m-Xylene	9.92	0.0500	10.0	ND	99.2	63-131	3.05	20	
o-Xylene	4.97	0.0250	5.00	ND	99.3	63-131	3.14	20	
Total Xylenes	14.9	0.0250	15.0	ND	99.2	63-131	3.08	20	

Surrogate: 4-Bromochlorobenzene-PID 10.5 8.00 132 70-130

.53



QC Summary Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	12/15/2020 12:20:15PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result	Reporting	Spike	Source	Rec	Rec	RPD	RPD	
	mg/kg	Limit	Level	Result	%	Limits	%	Limit	Notes
		mg/kg	mg/kg	mg/kg		%		%	

Blank (2051002-BLK1)

Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			

LCS (2051002-BS2)

Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0		92.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.77		8.00		97.2	70-130			

Matrix Spike (2051002-MS2)

Source: E012047-01 Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	44.8	20.0	50.0	ND	89.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.59		8.00		94.8	70-130			

Matrix Spike Dup (2051002-MSD2)

Source: E012047-01 Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	46.0	20.0	50.0	ND	92.0	70-130	2.56	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.63		8.00		95.4	70-130			



QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 12:20:15PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051003-BLK1)

Prepared: 12/14/20 Analyzed: 12/14/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	47.2		50.0		94.4	50-200			

LCS (2051003-BS1)

Prepared: 12/14/20 Analyzed: 12/14/20

Diesel Range Organics (C10-C28)	402	25.0	500		80.5	38-132			
Surrogate: n-Nonane	48.4		50.0		96.8	50-200			

Matrix Spike (2051003-MS1)

Source: E012047-01 Prepared: 12/14/20 Analyzed: 12/14/20

Diesel Range Organics (C10-C28)	435	25.0	500	ND	87.1	38-132			
Surrogate: n-Nonane	44.2		50.0		88.4	50-200			

Matrix Spike Dup (2051003-MSD1)

Source: E012047-01 Prepared: 12/14/20 Analyzed: 12/14/20

Diesel Range Organics (C10-C28)	509	25.0	500	ND	102	38-132	15.7	20	
Surrogate: n-Nonane	58.4		50.0		117	50-200			



QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 12:20:15PM
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Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051006-BLK1)

Prepared: 12/14/20 Analyzed: 12/14/20

Chloride ND 20.0

LCS (2051006-BS1)

Prepared: 12/14/20 Analyzed: 12/14/20

Chloride 254 20.0 250 102 90-110

Matrix Spike (2051006-MS1)

Source: E012047-01 Prepared: 12/14/20 Analyzed: 12/14/20

Chloride 647 20.0 250 410 95.0 80-120

Matrix Spike Dup (2051006-MSD1)

Source: E012047-01 Prepared: 12/14/20 Analyzed: 12/14/20

Chloride 625 20.0 250 410 86.0 80-120 3.54 20

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	12/15/20 12:20

- S3 Surrogate spike recovery was outside acceptance limits. LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information				Chain of Custody										Page 3 of 3			
Client: EOG Resources, Inc. Project: Allison CQ Federal #9 Project Manager: Robert Asher Address: 104 South 4th Street City, State, Zip: Artesia, NM 88210 Phone: (575) 748-4217 Email: robert.asher@eogresources.com				Report Attention Report due by: 12/14/2020 Attention: Robert Asher Address: 104 South 4th Street City, State, Zip: Artesia, NM 88210 Phone: (575) 748-4217 Email: robert.asher@eogresources.com				Lab Use Only Lab WO# RE012047 Job Number 190340001				TAT 1D X 3D		EPA Program RCRA CWA SDWA			
								Analysis and Method DRO/DRO by 8015 GAO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0				State NM CO UT AZ X					
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number											Remarks	
7:23 AM	12/11/20	S	1	Pad5.2	1	X	X	X			X					BGDOC	
7:25 AM	12/11/20	S	1	Pad5.3	2	X	X	X			X					BGDOC	
7:26 AM	12/11/20	S	1	Pad5.4	3	X	X	X			X					BGDOC	
7:27 AM	12/11/20	S	1	Pad6.SU	4	X	X	X			X					BGDOC	
7:28 AM	12/11/20	S	1	Pad6.1	5	X	X	X			X					BGDOC	
7:30 AM	12/11/20	S	1	Pad6.2	6	X	X	X			X					BGDOC	
7:31 AM	12/11/20	S	1	Pad6.3	7	X	X	X			X					BGDOC	
7:32 AM	12/11/20	S	1	Pad6.4	8	X	X	X			X					BGDOC	

Additional Instructions:
 PO# 205632
 I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: _____
 Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____
 Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Relinquished by: (Signature) _____ Date: 12/11/2020 Time: 11:53 AM		Received by: (Signature) _____ Date: 12/12/20 Time: 10:45		Lab Use Only Received on ice: Y N T1 _____ T2 _____ T3 _____ AVG Temp °C 4	
--	--	---	--	---	--

envirotech
Analytical Laboratory

5796 US Highway 64, Farmington, NM 87401
 24 hour Emergency Response Phone (800) 362-1879

Ph (505) 832-0815 FX (505) 832-1865
 labadmin@envirotech-inc.com

Envirotech Analytical Laboratory

Printed: 12/12/2020 12:37:37PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	BOG Resources Inc. - Carlsbad	Date Received:	12/12/20 10:45	Work Order ID:	E012047
Phone:	(575) 748-4217	Date Logged In:	12/12/20 12:00	Logged In By:	Alexa Michaels
Email:	robert_asher@bogresources.com	Due Date:	12/14/20 17:00 (0 day TAT)		

Chain of Custody (COC)

- | | |
|--|-----|
| 1. Does the sample ID match the COC? | Yes |
| 2. Does the number of samples per sampling site location match the COC? | Yes |
| 3. Were samples dropped off by client or carrier? | Yes |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | Yes |
| 5. Were all samples received within holding time? | Yes |
| Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion. | |

Carrier: Fed Ex

Sample Turn Around Time (TAT)

- | | |
|---|-----|
| 6. Did the COC indicate standard TAT, or Expedited TAT? | Yes |
|---|-----|

Sample Cooler

- | | |
|--|-----|
| 7. Was a sample cooler received? | Yes |
| 8. If yes, was cooler received in good condition? | Yes |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes |
| 10. Were custody/security seals present? | Yes |
| 11. If yes, were custody/security seals intact? | Yes |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C | Yes |
| Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling | |
| 13. If no visible ice, record the temperature. Actual sample temperature: 4°C | |

Sample Container

- | | |
|--|-----|
| 14. Are aqueous VOC samples present? | No |
| 15. Are VOC samples collected in VOA Vials? | NA |
| 16. Is the head space less than 6-8 mm (pea sized or less)? | NA |
| 17. Was a trip blank (TB) included for VOC analyses? | NA |
| 18. Are non-VOC samples collected in the correct containers? | Yes |
| 19. Is the appropriate volume/weight or number of sample containers collected? | Yes |

Field Label

- | | |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | No |

Sample Preservation

- | | |
|---|----|
| 21. Does the COC or field labels indicate the samples were preserved? | No |
| 22. Are sample(s) correctly preserved? | NA |
| 24. Is lab filtration required and/or requested for dissolved metals? | No |

Multiphase Sample Matrix

- | | |
|--|----|
| 26. Does the sample have more than one phase, i.e., multiphase? | No |
| 27. If yes, does the COC specify which phase(s) is to be analyzed? | NA |

Subcontract Laboratory

- | | |
|---|------------------------|
| 28. Are samples required to get sent to a subcontract laboratory? | No |
| 29. Was a subcontract laboratory specified by the client and if so who? | NA Subcontract Lab: NA |

Client Instruction

Comments/Resolution

Project samples have been split into two halves. This report will have samples Pad 5.2 to Pad 6.4. COC page 3 of 3. Total of 8 samples on this report.

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:

Robert Asher



5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources Inc. - Carlsbad

Project Name: Allison CQ Federal #9

Work Order: E012046

Job Number: 19034-0001

Received: 12/12/2020

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/15/20

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM009792018-1 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557-19-2 for data reported.

Date Reported: 12/15/20

Robert Asher
104 South 4th Street
Artesia, NM 88210



Project Name: Allison CQ Federal #9
Workorder: E012046
Date Received: 12/12/2020 10:45:00AM

Robert Asher,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/12/2020 10:45:00AM, under the Project Name: Allison CQ Federal #9.

The analytical test results summarized in this report with the Project Name: Allison CQ Federal #9 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/20 14:58
--	--	-----------------------------

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
Pad 1.1	E012046-01A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 1.2	E012046-02A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 1.3	E012046-03A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 1.4	E012046-04A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 2.1	E012046-05A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 2.2	E012046-06A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 2.3	E012046-07A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 2.4	E012046-08A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 3.SU	E012046-09A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 3.1	E012046-10A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 3.2	E012046-11A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 3.3	E012046-12A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 3.4	E012046-13A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 4.S	E012046-14A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 4.SU					
Pad 4.1	E012046-15A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 4.2	E012046-16A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 4.3	E012046-17A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 4.4	E012046-18A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 5.SU	E012046-19A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.
Pad 5.1	E012046-20A	Soil	12/11/20	12/12/20	Glass Jar, 4 oz.



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 1.1

E012046-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
Surrogate: 4-Bromochlorobenzene-PID	100 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	84.5 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	19500	500	20	12/14/20	12/15/20	
Oil Range Organics (C28-C35)	47200	5000	100	12/14/20	12/14/20	
Surrogate: n-Nonane	157 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	155	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 1.2

E012046-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
Surrogate: 4-Bromochlorobenzene-PID	98.8 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	84.0 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	14400	2500	100	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	32400	5000	100	12/14/20	12/14/20	
Surrogate: n-Nonane	161 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	166	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Allison CQ Federal #9
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
12/15/2020 2:58:57PM

Pad 1.3

E012046-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		99.9 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		83.6 %	70-130	12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	38.1	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	97.5	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		87.5 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: NE		Batch: 2051005
Chloride	27.2	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 1.4

E012046-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.0 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	83.6 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	87.6 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	22.9	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 2.1

E012046-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
Surrogate: 4-Bromochlorobenzene-PID	99.8 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	84.0 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
Surrogate: n-Nonane	89.5 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	1880	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 2.2

E012046-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<u>Volatile Organics by EPA 8021B</u>	mg/kg	mg/kg	Analyst: IY		Batch: 2051001	
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.0 %	70-130		12/13/20	12/13/20	
<u>Nonhalogenated Organics by EPA 8015D - GRO</u>	mg/kg	mg/kg	Analyst: IY		Batch: 2051001	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	83.6 %	70-130		12/13/20	12/13/20	
<u>Nonhalogenated Organics by EPA 8015D - DRO/ORO</u>	mg/kg	mg/kg	Analyst: JL		Batch: 2051004	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	95.7 %	50-200		12/14/20	12/14/20	
<u>Anions by EPA 300.0/9056A</u>	mg/kg	mg/kg	Analyst: NE		Batch: 2051005	
Chloride	2650	40.0	2	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 2.3

E012046-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.7 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	83.8 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	98.6 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	776	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 2.4

E012046-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/13/20	
Toluene	ND	0.0250	1	12/13/20	12/13/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/13/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/13/20	
o-Xylene	ND	0.0250	1	12/13/20	12/13/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/13/20	
Surrogate: 4-Bromochlorobenzene-PID	99.7 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/13/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	83.7 %	70-130		12/13/20	12/13/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
Surrogate: n-Nonane	92.1 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	793	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 3.SU

E012046-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.9 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	84.1 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	51.9	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	97.8 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	185	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 3.1

E012046-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.2 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	83.5 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	96.5 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	2780	40.0	2	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 3.2

E012046-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.7 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	84.5 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	98.3 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	3300	40.0	2	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad
104 South 4th Street
Artesia NM, 88210

Project Name: Allison CQ Federal #9
Project Number: 19034-0001
Project Manager: Robert Asher

Reported:
12/15/2020 2:58:57PM

Pad 3.3

E012046-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
Surrogate: 4-Bromochlorobenzene-PID	99.9 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	82.9 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
Surrogate: n-Nonane	95.4 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	1680	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 3.4

E012046-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<u>Volatile Organics by EPA 8021B</u>	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.8 %	70-130		12/13/20	12/14/20	
<u>Nonhalogenated Organics by EPA 8015D - GRO</u>	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	83.4 %	70-130		12/13/20	12/14/20	
<u>Nonhalogenated Organics by EPA 8015D - DRO/ORO</u>	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	84.9 %	50-200		12/14/20	12/14/20	
<u>Anions by EPA 300.0/9056A</u>	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	1230	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 4.S

E012046-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	99.4 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	84.3 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	250	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	110 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	113	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 4.1

E012046-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.8 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	82.2 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	110	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	87.1 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	227	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 4.2

E012046-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	100 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	83.0 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	78.4	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	83.7 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	431	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 4.3

E012046-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		99.9 %	70-130	12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		83.2 %	70-130	12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		74.9 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: NE		Batch: 2051005
Chloride	1010	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 4.4

E012046-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	98.9 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	82.8 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	84.3 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	982	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 5.SU

E012046-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		83.7 %	70-130	12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>		89.3 %	50-200	12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	140	20.0	1	12/14/20	12/14/20	



Sample Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported: 12/15/2020 2:58:57PM
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	

Pad 5.1

E012046-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Benzene	ND	0.0250	1	12/13/20	12/14/20	
Toluene	ND	0.0250	1	12/13/20	12/14/20	
Ethylbenzene	ND	0.0250	1	12/13/20	12/14/20	
p,m-Xylene	ND	0.0500	1	12/13/20	12/14/20	
o-Xylene	ND	0.0250	1	12/13/20	12/14/20	
Total Xylenes	ND	0.0250	1	12/13/20	12/14/20	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	100 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: IY		Batch: 2051001
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/13/20	12/14/20	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	82.2 %	70-130		12/13/20	12/14/20	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: JL		Batch: 2051004
Diesel Range Organics (C10-C28)	ND	25.0	1	12/14/20	12/14/20	
Oil Range Organics (C28-C35)	ND	50.0	1	12/14/20	12/14/20	
<i>Surrogate: n-Nonane</i>	92.9 %	50-200		12/14/20	12/14/20	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: NE		Batch: 2051005
Chloride	121	20.0	1	12/14/20	12/14/20	



QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 2:58:57PM
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Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051001-BLK1)

Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	ND	0.0250							
Toluene	ND	0.0250							
Ethylbenzene	ND	0.0250							
p,m-Xylene	ND	0.0500							
o-Xylene	ND	0.0250							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.10		8.00		101	70-130			

LCS (2051001-BS1)

Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	5.11	0.0250	5.00		102	70-130			
Toluene	5.22	0.0250	5.00		104	70-130			
Ethylbenzene	5.17	0.0250	5.00		103	70-130			
p,m-Xylene	10.2	0.0500	10.0		102	70-130			
o-Xylene	5.13	0.0250	5.00		103	70-130			
Total Xylenes	15.3	0.0250	15.0		102	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.23		8.00		103	70-130			

Matrix Spike (2051001-MS1)

Source: E012046-01 Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	5.00	0.0250	5.00	ND	99.9	54-133			
Toluene	5.13	0.0250	5.00	ND	103	61-130			
Ethylbenzene	5.07	0.0250	5.00	ND	101	61-133			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
o-Xylene	5.02	0.0250	5.00	ND	100	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	100	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.05		8.00		101	70-130			

Matrix Spike Dup (2051001-MSD1)

Source: E012046-01 Prepared: 12/13/20 Analyzed: 12/14/20

Benzene	5.26	0.0250	5.00	ND	105	54-133	5.06	20	
Toluene	5.35	0.0250	5.00	ND	107	61-130	4.08	20	
Ethylbenzene	5.29	0.0250	5.00	ND	106	61-133	4.32	20	
p,m-Xylene	10.4	0.0500	10.0	ND	104	63-131	3.77	20	
o-Xylene	5.17	0.0250	5.00	ND	103	63-131	2.83	20	
Total Xylenes	15.6	0.0250	15.0	ND	104	63-131	3.46	20	
Surrogate: 4-Bromochlorobenzene-PID	8.05		8.00		101	70-130			



QC Summary Data

EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Robert Asher	12/15/2020 2:58:57PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051001-BLK1)

Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.80		8.00		85.0	70-130			

LCS (2051001-BS2)

Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	45.4	20.0	50.0		90.7	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.86		8.00		85.7	70-130			

Matrix Spike (2051001-MS2)

Source: E012046-01 Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	46.0	20.0	50.0	ND	92.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.79		8.00		84.9	70-130			

Matrix Spike Dup (2051001-MSD2)

Source: E012046-01 Prepared: 12/13/20 Analyzed: 12/14/20

Gasoline Range Organics (C6-C10)	46.2	20.0	50.0	ND	92.4	70-130	0.393	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.90		8.00		86.3	70-130			



QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 2:58:57PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051004-BLK1)

Prepared: 12/14/20 Analyzed: 12/14/20

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C35)	ND	50.0							
Surrogate: n-Nonane	46.4		50.0		92.8	50-200			

LCS (2051004-BS1)

Prepared: 12/14/20 Analyzed: 12/14/20

Diesel Range Organics (C10-C28)	424	25.0	500		84.8	38-132			
Surrogate: n-Nonane	47.0		50.0		94.0	50-200			

Matrix Spike (2051004-MS1)

Source: E012046-01 Prepared: 12/14/20 Analyzed: 12/15/20

Diesel Range Organics (C10-C28)	21000	500	500	19500	293	38-132			M4
Surrogate: n-Nonane	43.0		50.0		85.9	50-200			

Matrix Spike Dup (2051004-MSD1)

Source: E012046-01 Prepared: 12/14/20 Analyzed: 12/15/20

Diesel Range Organics (C10-C28)	20900	500	500	19500	277	38-132	0.383	20	M4
Surrogate: n-Nonane	45.5		50.0		90.9	50-200			



QC Summary Data

EOG Resources Inc. - Carlsbad 104 South 4th Street Artesia NM, 88210	Project Name: Allison CQ Federal #9 Project Number: 19034-0001 Project Manager: Robert Asher	Reported: 12/15/2020 2:58:57PM
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Anions by EPA 300.0/9056A

Analyst: NE

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2051005-BLK1)

Prepared: 12/14/20 Analyzed: 12/14/20

Chloride	ND	20.0				
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LCS (2051005-BS1)

Prepared: 12/14/20 Analyzed: 12/14/20

Chloride	253	20.0	250	101	90-110
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Matrix Spike (2051005-MS1)

Source: E012046-01 Prepared: 12/14/20 Analyzed: 12/14/20

Chloride	413	20.0	250	155	103 80-120
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Matrix Spike Dup (2051005-MSD1)

Source: E012046-01 Prepared: 12/14/20 Analyzed: 12/14/20

Chloride	407	20.0	250	155	101 80-120 1.52 20
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QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes


EOG Resources Inc. - Carlsbad	Project Name:	Allison CQ Federal #9	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Robert Asher	12/15/20 14:58


- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information					Chain of Custody										Page 1 of 3				
Client: EOG Resources, Inc. Project: Allison CQ Federal #9 Project Manager: Robert Asher Address: 104 South 4th Street City, State, Zip: Artesia, NM 88210 Phone: (575) 748-4217 Email: robert.asher@eogresources.com					Report Attention Report due by: 12/14/2020 Attention: Robert Asher Address: 104 South 4th Street City, State, Zip: Artesia, NM 88210 Phone: (575) 748-4217 Email: robert.asher@eogresources.com					Lab Use Only Lab WO#: RE0120460 Job Number: 100340001 Analysis and Method:					TAT 1D 3D RCRA CWA SDWA State: NM CO UT AZ				
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8250	Metals 6010	Chloride 100.0							Remarks	
6:53 AM	12/11/20	S	1	Pad1.1	1	X	X	X		X								BGDOC	
6:54 AM	12/11/20	S	1	Pad1.2	2	X	X	X		X								BGDOC	
6:56 AM	12/11/20	S	1	Pad1.3	3	X	X	X		X								BGDOC	
6:58 AM	12/11/20	S	1	Pad1.4	4	X	X	X		X								BGDOC	
7:01 AM	12/11/20	S	1	Pad2.1	5	X	X	X		X								BGDOC	
7:02 AM	12/11/20	S	1	Pad2.2	6	X	X	X		X								BGDOC	
7:04 AM	12/11/20	S	1	Pad2.3	7	X	X	X		X								BGDOC	
7:05 AM	12/11/20	S	1	Pad2.4	8	X	X	X		X								BGDOC	
7:06 AM	12/11/20	S	1	Pad3.SU	9	X	X	X		X								BGDOC	
7:07 AM	12/11/20	S	1	Pad3.1	10	X	X	X		X								BGDOC	
Additional Instructions: PO# 205632 I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: <u>[Signature]</u> Relinquished by: (Signature) <u>[Signature]</u> Date: 12/11/2020 Time: 11:53 AM Received by: (Signature) <u>[Signature]</u> Date: 12/12/2020 Time: 10:45 Relinquished by: (Signature) <u>[Signature]</u> Date: _____ Time: _____ Received by: (Signature) _____ Date: _____ Time: _____ Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																			
						5796 US Highway 64, Farmington, NM 87401 24 hour Emergency Response Phone (800) 362-1879						Ph (505) 632-0615 FX (505) 632-1865 envirotechinc.com labadmin@envirotech-inc.com							

Project Information				Chain of Custody				Page 2 of 3							
Client: EOG Resources, Inc. Project: Allison CQ Federal #9 Project Manager: Robert Asher Address: 104 South 4th Street City, State, Zip: Artesia, NM 88210 Phone: (575) 748-4217 Email: robert.asher@egresources.com				Report Attention Report due by: 12/14/2020 Attention: Robert Asher Address: 104 South 4th Street City, State, Zip: Artesia, NM 88210 Phone: (575) 748-4217 Email: robert.asher@egresources.com				Lab Use Only Lab WO# RE020416190340001 Job Number 1D 3D RCRA CWA SDWA Analysis and Method DRO/DHO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0				TAT EPA Program NM CO UT AZ X			
Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/DHO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks			
7:09 AM	12/11/20	S	1	Pad3.2	11	X	X	X		X		BGDOC			
7:10 AM	12/11/20	S	1	Pad3.3	12	X	X	X		X		BGDOC			
7:12 AM	12/11/20	S	1	Pad3.4	13	X	X	X		X		BGDOC			
7:13 AM	12/11/20	S	1	Pad4.SU	14	X	X	X		X		BGDOC			
7:15 AM	12/11/20	S	1	Pad4.1	15	X	X	X		X		BGDOC			
7:16 AM	12/11/20	S	1	Pad4.2	16	X	X	X		X		BGDOC			
7:17 AM	12/11/20	S	1	Pad4.3	17	X	X	X		X		BGDOC			
7:19 AM	12/11/20	S	1	Pad4.4	18	X	X	X		X		BGDOC			
7:20 AM	12/11/20	S	1	Pad5.SU	19	X	X	X		X		BGDOC			
7:21 AM	12/11/20	S	1	Pad5.1	20	X	X	X		X		BGDOC			
Additional Instructions: PO# 205632 I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: _____ Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5 °C on subsequent days. Relinquished by: (Signature) _____ Date 12/11/2020 Time 11:53 AM Received by: (Signature) _____ Date _____ Time _____ Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date 12/12/20 Time 10:45 Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.															
				5795 US Highway 64, Farmington, NM 87401 24 hour Emergency Response Phone (800) 362-1879				Ph (505) 632-0615 FX (505) 632-1865 envirotech-inc.com labadmin@envirotech-inc.com							

Envirotech Analytical Laboratory

Printed: 12/12/2020 12:40:14PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	EOG Resources Inc. - Carlsbad	Date Received:	12/12/20 10:45	Work Order ID:	E012046
Phone:	(575) 748-4217	Date Logged In:	12/12/20 11:55	Logged In By:	Alexa Michaels
Email:	robert_asher@eogresources.com	Due Date:	12/14/20 17:00 (0 day TAT)		

Chain of Custody (COC)

- | | |
|---|-----|
| 1. Does the sample ID match the COC? | Yes |
| 2. Does the number of samples per sampling site location match the COC | Yes |
| 3. Were samples dropped off by client or carrier? | Yes |
| 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? | Yes |
| 5. Were all samples received within holding time? | Yes |

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Fed ExSample Turn Around Time (TAT)

- | | |
|---|-----|
| 6. Did the COC indicate standard TAT, or Expedited TAT? | Yes |
|---|-----|

Sample Cooler

- | | |
|---|-----|
| 7. Was a sample cooler received? | Yes |
| 8. If yes, was cooler received in good condition? | Yes |
| 9. Was the sample(s) received intact, i.e., not broken? | Yes |
| 10. Were custody/security seals present? | Yes |
| 11. If yes, were custody/security seals intact? | Yes |
| 12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6±2°C | Yes |

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

- | |
|--|
| 13. If no visible ice, record the temperature. Actual sample temperature: <u>4°C</u> |
|--|

Sample Container

- | | |
|--|-----|
| 14. Are aqueous VOC samples present? | No |
| 15. Are VOC samples collected in VOA Vials? | NA |
| 16. Is the head space less than 6-8 mm (pea sized or less)? | NA |
| 17. Was a trip blank (TB) included for VOC analyses? | NA |
| 18. Are non-VOC samples collected in the correct containers? | Yes |
| 19. Is the appropriate volume/weight or number of sample containers collected? | Yes |

Field Label

- | | |
|---|-----|
| 20. Were field sample labels filled out with the minimum information: | |
| Sample ID? | Yes |
| Date/Time Collected? | Yes |
| Collectors name? | No |

Sample Preservation

- | | |
|---|----|
| 21. Does the COC or field labels indicate the samples were preserved? | No |
| 22. Are sample(s) correctly preserved? | NA |
| 24. Is lab filtration required and/or requested for dissolved metals? | No |

Multiphase Sample Matrix

- | | |
|--|----|
| 26. Does the sample have more than one phase, i.e., multiphase? | No |
| 27. If yes, does the COC specify which phase(s) is to be analyzed? | NA |

Subcontract Laboratory

- | | |
|---|------------------------|
| 28. Are samples required to get sent to a subcontract laboratory? | No |
| 29. Was a subcontract laboratory specified by the client and if so who? | NA Subcontract Lab: NA |

Client InstructionComments/Resolution

Project samples have been split into two halves. This report will have samples Pad 1.1 to Pad 5.1. COC page 1 and 2 of 3. Total of 20 samples on this report.

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

ATTACHMENT 2 – Site Photographs



PHOTOGRAPH NO. 1 – A view of the well pad area during the June 24, 2021 site visit. The view is towards the northwest.



PHOTOGRAPH NO. 2 – A view of the pit area during the June 24, 2021 site visit. The view is towards the northeast.



PHOTOGRAPH NO. 3 – A view of the former well head location. The view is towards the south.



PHOTOGRAPH NO. 4 – A view of the northeastern corner of the pad containing ROW equipment. The view is towards the northeast.

**ATTACHMENT 2 – James H & Betty R Howell
Revocable Trust Seed Mix**

James H & Betty R Howell Revocable Trust Seed Mix

1lb per acre of Plains Bristlegrass

2lbs per acre of Green Sprangletop

3lbs per acre of Side Oats Gramma

2lbs per acre of Blue Gramma

Increase to 16lbs per acre if broadcast.

Add Reclamation Mix

40% Ryegrass (Annual)

10% Millet

7.5% Kleingrass

5.7% Sideoats

5% Green Sprangletop

7.5% Bristlegrass

10% Western Wheatgrass

10% Buffalograss

2.5% Blue Grama

PLANTING RATE 20 lbs. per acre

Updated 5/23/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
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 90252

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 90252
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	None	3/16/2022