RANGER
ENVIRONMENTAL SERVICES, LLC

SITE REMEDIATION AND CLOSURE REPORT

JOHN AGU #1 BATTERY
UNIT C, SECTION 14, TOWNSHIP 20S, RANGE 24E
EDDY COUNTY, NEW MEXICO
32.57897, -104.56104
RANGER REFERENCE NO. 5375

PREPARED FOR:

EOG RESOURCES, INC.
ARTESIA DIVISION
105 S 4TH STREET
ARTESIA, NEW MEXICO 88210

PREPARED BY:

RANGER ENVIRONMENTAL SERVICES, LLC.
P.O. BOX 201179
AUSTIN, TEXAS 78720

SEPTEMBER 11, 2023

Max Cook, CAPM (TX)
Senior Project Manager

William Kierdorf, REM
Project Manager

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1.0 SITE LOCATION AND BACKGROUND

The John AGU #1 Battery (Site) is located on private land, approximately 20.5 miles southwest of Artesia, within Eddy County, New Mexico. The Site is situated in Unit C, Section 14, T20S-R24E at GPS coordinates 32.57897, -104.56104. The Site was utilized for oil and gas production and historically contained a tank battery with an earthen berm and the John AGU #1 well. Production activities at the site have been concluded, the on-site well has been plugged and abandoned, and all production equipment has been removed from the Site.

On March 22, 2018, a release was discovered within the tank battery area at the Site. A failure along a water pump discharge line resulted in the release of approximately 14 barrels (bbls) of produced water. The released fluids were noted to be contained to the bermed tank battery area. Upon discovery, representatives of EOG Resources, Inc. (EOG) took immediate action to stop the release. During the initial response activities, emergency vacuum trucks were dispatched to the location and were successful in the recovery of approximately 12 bbls of released fluids. Due to the nature and volume of the release, the incident was reported to the New Mexico Oil Conservation Division (NMOCD) within the required timeframe (NMOCD Incident # fAB1810139472/2RP-4694).

To assist in the assessment and remediation at the Site, EOG retained Souder, Miller & Associates (SMA). In order to assess the impacts at the Site, representatives of SMA conducted site assessment activities in March and July of 2018. Based on the findings of the assessment activities, an SMA prepared *Remediation Plan for the John AGU #1 Battery Release (2RP-4694), Eddy County, New Mexico*, dated September 10, 2018 was submitted to the NMOCD. The plan included the findings of the assessment activities and proposed remedial efforts at the Site that included limited excavation and the installation of a clay liner in the excavation base area. On November 14, 2018, the NMOCD responded in denial of the proposed remediation plan, stating that further delineation was necessary at the Site. In December 2018, representatives for SMA completed additional assessment activities at the Site to further delineate impacts associated with the release. Based on the findings of the additional assessment activities, SMA prepared and submitted an updated *Remediation Plan for the John AGU #1 Battery Release (2RP-4694), Eddy County, New Mexico*, dated January 7, 2019 (Remediation Plan). The updated plan re-proposed the remediation strategy of limited excavation, utilization of a clay liner at the Site, as well as proposing to limit confirmation samples to the excavation side walls. On November 18, 2019, the NMOCD approved the remediation plan with the condition of approval that excavation sidewalls be completed to boundaries where soil chloride concentrations are “less than 600 mg/kg”. A copy of the Remediation Plan, dated January 7, 2019, and NMOCD approval correspondence are attached.

In July of 2023, EOG engaged Ranger Environmental Services, Inc. (Ranger) to assist in the completion of remediation and closure at the Site in accordance with the NMOCD approved Remediation Plan.

The following *Site Remediation and Closure Report* has been prepared to document the completed remediation and cleanup confirmation soil sampling activities.

A copy of the previously submitted Form C-141 Release Notification section is attached. A recent Form C-141 Closure section is also attached. A Topographic Map and Area Map noting the location of the subject Site and surrounding areas as well as a site map illustrating the Site features and sampling locations are provided in the Figures section.

2.0 SITE REMEDIATION

2.1 Soil Removal, Confirmation Soil Sampling, and Sample Results

On August 7, 2023, remedial soil removal operations in accordance with the NMOCD approved Remediation Plan were initiated at the Site. Upon completing the excavation to the proposed boundaries as detailed in the approved Remediation Plan, Ranger personnel collected field readings utilizing an organic vapor monitor (OVM) and field chloride titration kit to assess the boundaries of the excavated area. In areas of elevated field readings, additional excavation activities were completed in an attempt to complete the excavation to boundaries within the applicable NMAC 19.15.29.12 Table 1 Criteria. It should be noted that due to the hard rock lithology encountered in the eastern portion of the excavation, removal to the target depth of four feet below ground surface (bgs) was not achievable in a limited area and the excavation was completed to a depth of approximately one-foot bgs.

To confirm that the excavated areas had been completed to appropriate boundaries, cleanup confirmation soil samples were collected in accordance with the methods detailed in the NMOCD approved Remediation Plan. On August 21, 2023, Ranger personnel collected a total of 11 five-part composite soil samples from the excavation side walls. Additionally, in the eastern excavation area where excavation was limited to a depth of one-foot bgs, one five-part composite soil sample (EB-1) was collected from the excavation base area and one five-part composite soil sample (W-12) was collected from the internal excavation side wall area. The confirmation soil samples were collected as five-part composite samples in accordance with NMAC 19.15.29.12 with each sample representing less than 200 square feet.

Upon collection, all cleanup confirmation soil samples were submitted to Hall Environmental in Albuquerque, New Mexico 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. The samples were collected and managed using standard QA/QC and chain-of-custody procedures.

Upon review of the laboratory analytical report for the samples collected on August 21, 2023, all 13 samples collected were documented to have BTEX and TPH concentrations below the NMAC 19.15.29.12 Table 1 Criteria. Additionally, 11 of the 13 samples were also documented to have chloride concentrations below the NMAC 19.15.29.12 Table 1 Criteria of 600 mg/Kg. However, two samples (“W-6” and “W-12”) were noted to have chloride concentrations in exceedance of the applicable 600 mg/Kg Table 1 criteria for chloride.

To address the elevated chloride concentration in the sample "W-6" and "W-12" areas, additional soil removal activities were conducted on August 30, 2023. Upon completion of the additional removal activities, Ranger personnel collected additional cleanup confirmation soil samples from the over-excavated areas. The cleanup confirmation soil samples were once again collected as five-part composite samples in accordance with NMAC 19.15.29.12 with each sample representing less than 200 square feet.

Upon collection, the soil samples were submitted to Hall Environmental in Albuquerque, New Mexico for analysis of TPH, BTEX, and chloride using the afore-mentioned laboratory methods. The samples were collected and managed using standard QA/QC and chain-of-custody procedures. Upon review of the laboratory analytical results for the samples collected on August 30, 2023, both samples were documented to contain BTEX, TPH and chloride concentrations below the applicable NMAC 19.15.29.12 Table 1 Criteria.

A comprehensive summary of the analytical results for the cleanup confirmation soil samples is attached. Copies of the laboratory analytical reports and chain-of-custody documentation are attached. It should be noted that prior to the cleanup confirmation sampling events, notice was provided to the NMOCD in accordance with NMAC 19.15.29.12(D). Copies of the notifications are attached.

2.2 Clay Liner Installation

Upon confirmation that the horizontal extent of the excavation had achieved cleanup to concentrations below the applicable NMAC 19.15.29.12 Table 1 Criteria. A geosynthetic clay liner (GCL) was installed in the base of excavation area completed to four feet bgs.

The final extent of the excavation was noted to have maximum dimensions of approximately 210 feet by 58 feet. A *Site Map* depicting the final excavation boundaries and the extent of the installed liner is attached.

2.3 Waste Disposal

All soils generated during the excavation activities were disposed of at Lea Land disposal facility in Lea County, New Mexico.

3.0 SITE CLOSURE

3.1 Site Backfill and Re-Vegetation

Upon completion of the excavation activities and liner installation, the excavated area was backfilled with clean fill material.

Re-vegetation efforts at the Site will be completed in conjunction with the remaining decommissioning and reclamation efforts of the former John AGU Battery and John AGU #1 well pad.

3.2 Closure Request

Based on the results of the cleanup confirmation soil sampling activities and the excavation base liner installation, the site has been properly addressed pursuant to the NMOCD approved Remediation Plan and as such EOG respectfully requests closure of the incident. A final C-141 form is attached.

FORM C-141

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 06 2018
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

fAB1810139472
nAB1810139509

Release Notification and Corrective Action
OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	OGRID Number	Contact
EOG Y Resources, Inc.	25575	Chase Settle
Address		Telephone No.
104 S. 4th Street Artesia NM 88210		575-748-1471
Facility Name		Facility Type
John AGU #1 Battery		Battery

Surface Owner	Mineral Owner	API No.
Private	Fee	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	14	20S	24E	660	North	1980	West	Eddy

Latitude 32.57897 **Longitude** -104.56104 NAD83

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Produced Water	14 B/PW	12 B/PW
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Discharge Line	03/22/2018; 3:30 PM	03/22/2018; PM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
Discharge line on water pump had a failure.

Describe Area Affected and Cleanup Action Taken.*
The impacted area was approximately 230 feet by 10 feet within the berm of the battery.

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

Signature: Chase Settle	OIL CONSERVATION DIVISION
Printed Name: Chase Settle	Approved by Environmental Specialist: Crystal Weaver
Title: Rep Safety & Environmental II	Approval Date: 4/10/18 Expiration Date: N/A
E-mail Address: chase_settle@eogresources.com	Conditions of Approval: See attached Attached ☒ SRP-4194
Date: April 5, 2018 Phone:575-748-4171	

* Attach Additional Sheets If Necessary

4/9/18 AB

State of New Mexico
Oil Conservation Division

Incident ID	nAB1810139599
District RP	2RP-4694
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

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

Signature: Chase Settle Date: 09/13/2023

email: Chase_Settle@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

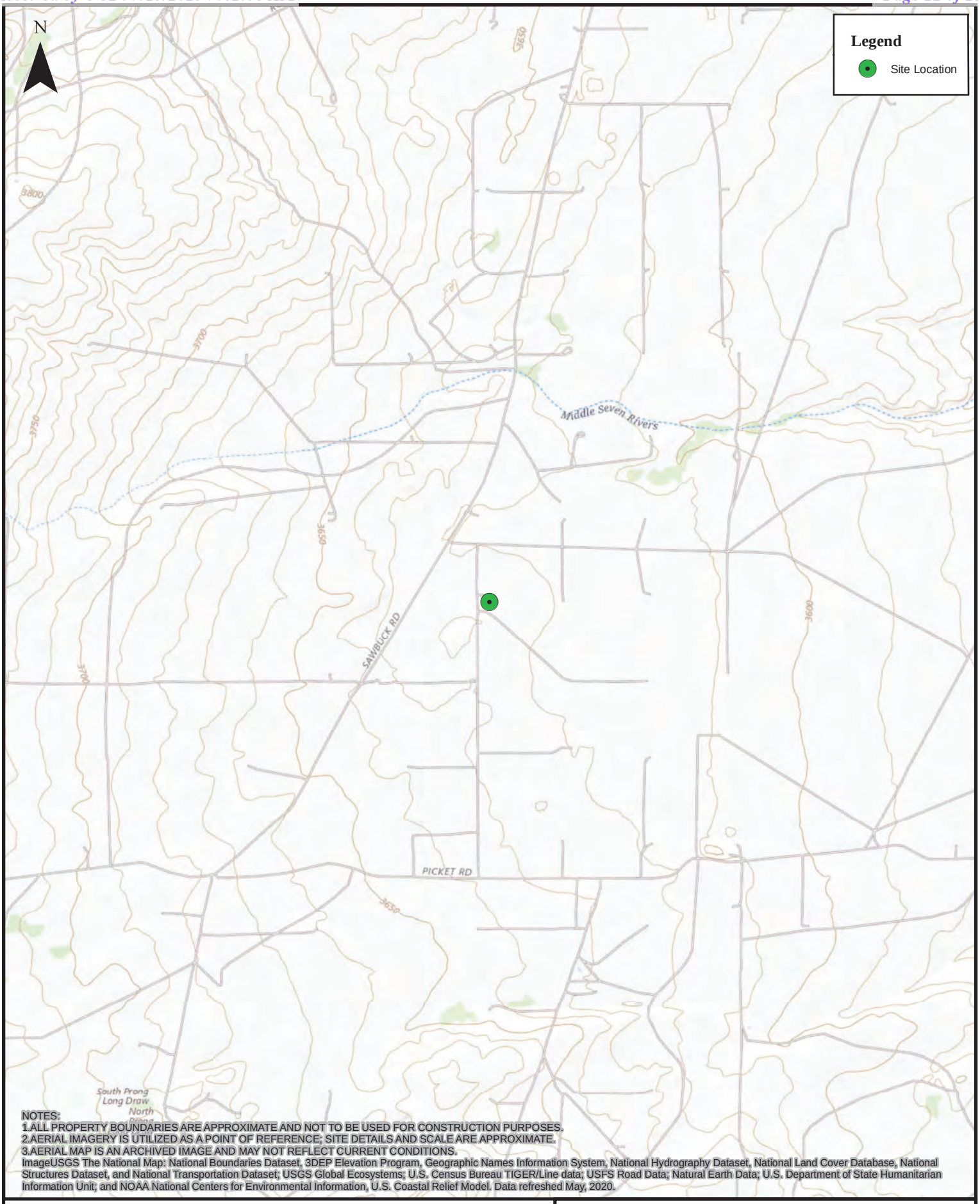
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance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

Closure Approved by: Ashley Maxwell Date: 9/26/2023

Printed Name: Ashley Maxwell Title: Environmental Specialist

FIGURES

Topographic Map
Area Map
Final Excavation Area and Confirmation Sample Location Map



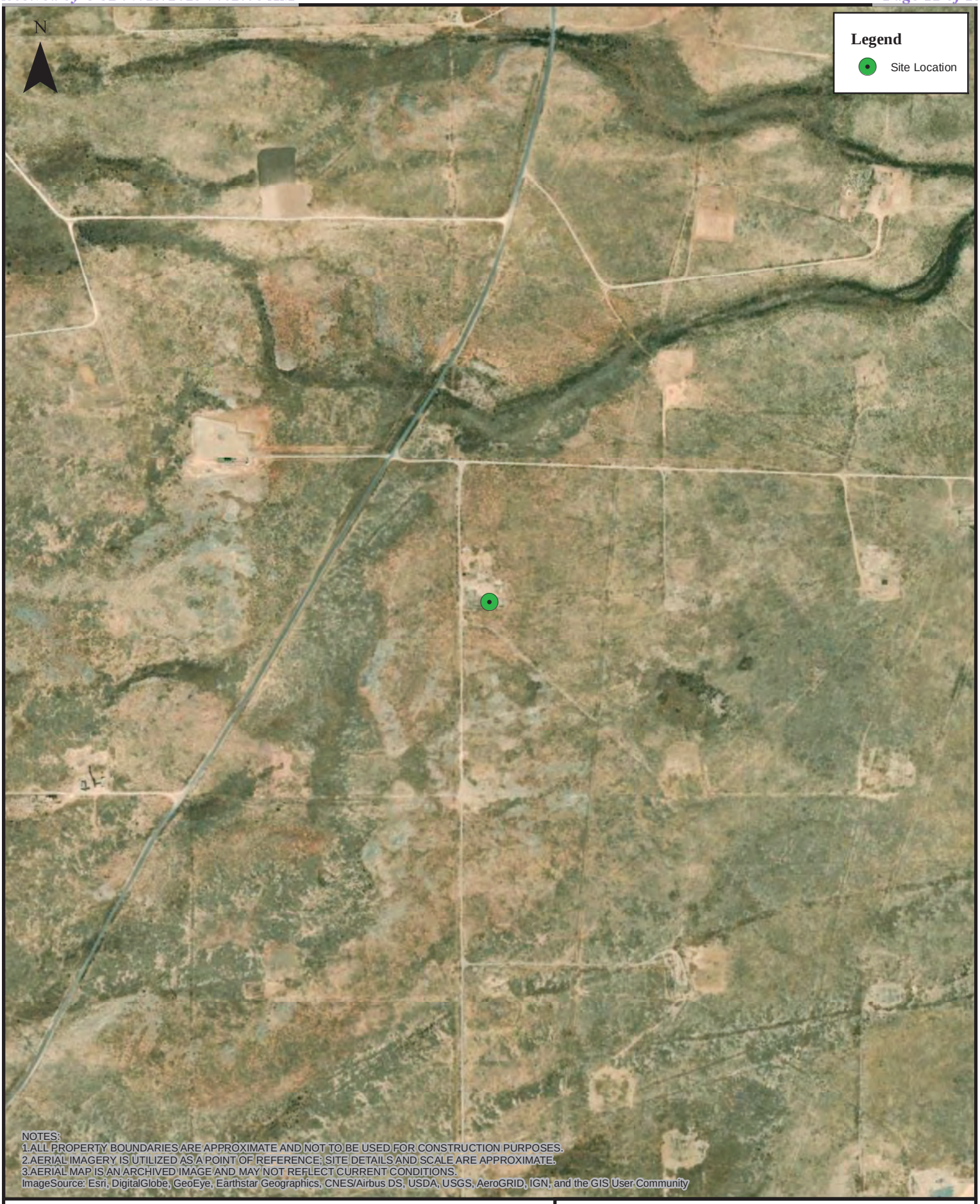
NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAILS AND SCALE ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
ImageUSGS The National Map: National Boundaries 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. Department of State Humanitarian Information Unit; and NOAA National Centers for Environmental Information, U.S. Coastal Relief Model. Data refreshed May, 2020.

RANGER ENVIRONMENTAL SERVICES, LLC

0 600 1,200 2,400 3,600 4,800 Feet

1:24,000

Topographic Map
John AGU #1 Battery
EOG Resources, Inc.



RANGER ENVIRONMENTAL SERVICES, LLC

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

1:10,000

Area Map
John AGU #1 Battery
EOG Resources, Inc.

NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.AERIAL IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAIL LOCATIONS ARE APPROXIMATE.
3.AERIAL MAP IS AN ARCHIVED IMAGE AND MAY NOT REFLECT CURRENT CONDITIONS.
Image Source: Google Earth (Date: 12/2019)

RANGER ENVIRONMENTAL SERVICES, LLC

0 5 10 20 30 40 Feet

1:300

N

Final Excavation Area and Confirmaiton Sample Location Map
John AGU Battery
EOG Resources, Inc.

TABLES

Confirmation Soil Sample BTEX (EPA 8260), TPH (EPA 8015) & Chloride (EPA 300) Analytical Data

CONFIRMATION SOIL SAMPLE BTEX (EPA 8021), TPH (SW 8015) & CHLORIDE (EPA 300) ANALYTICAL DATA
EOG RESOURCES, INC.
JOHN AGU #1 BATTERY

All values presented in parts per million (mg/Kg)

SAMPLE ID	DATE	DEPTH (FT)	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	TOTAL BTEX	TPH GRO C6-C10	TPH DRO C10-C28	TPH MRO C28-C36	TPH (GRO+DRO)	TPH (GRO+DRO+MRO)	CHLORIDE
Sidewall Samples													
W-1	8/21/2023	0-4'	<0.019	<0.039	<0.039	<0.078	<0.08	<3.9	<9.2	<46	<9.2	<46	240
W-2	8/21/2023	0-4'	<0.017	<0.034	<0.034	<0.068	<0.07	<3.4	<8.8	<44	<8.8	<44	<60
W-3	8/21/2023	0-4'	<0.018	<0.037	<0.037	<0.073	<0.07	<3.7	<9.7	<48	<9.7	<48	200
W-4	8/21/2023	0-4'	<0.017	<0.033	<0.033	<0.067	<0.07	<3.3	<9.2	<46	<9.2	<46	69
W-5	8/21/2023	0'-4'	<0.021	<0.041	<0.041	<0.083	<0.08	<4.1	<9.2	<46	<9.2	<46	68
W-6	8/21/2023	0-4'	~~<0.020~~	~~<0.039~~	~~<0.039~~	~~<0.079~~	~~<0.08~~	~~<3.9~~	~~<9.6~~	~~<48~~	~~<9.6~~	~~<48~~	~~**1,000**~~
W-6A	8/30/2023	0'-4'	<0.023	<0.045	<0.045	<0.091	<0.091	<4.5	<9.1	<46	<9.1	<46	130
W-7	8/21/2023	0-4'	<0.018	<0.035	<0.035	<0.071	<0.07	<3.5	<9.6	<48	<9.6	<48	240
W-8	8/21/2023	0-4'	<0.020	<0.040	<0.040	<0.079	<0.08	<4.0	<9.3	<46	<9.3	<46	<60
W-9	8/21/2023	0-4'	<0.018	<0.036	<0.036	<0.072	<0.07	<3.6	<9.1	<45	<9.1	<45	<60
W-10	8/21/2023	0-4'	<0.018	<0.036	<0.036	<0.073	<0.07	<3.6	<8.8	<44	<8.8	<44	180
W-11	8/21/2023	0-4'	<0.017	<0.035	<0.035	<0.069	<0.07	<3.5	<10	<50	<10	<50	<60
W-12	8/21/2023	1-4'	~~<0.019~~	~~<0.038~~	~~<0.038~~	~~<0.076~~	~~<0.08~~	~~<3.8~~	~~<9.5~~	~~<48~~	~~<9.5~~	~~<48~~	~~**660**~~
W-12A	8/30/2023	1-4'	<0.015	<0.030	<0.030	<0.060	<0.06	<3.0	<9.4	<47	<9.4	<47	110
Excavation Base Sample													
EB-1	8/21/2023	1'	<0.019	<0.037	<0.037	<0.074	<0.07	<3.7	18	<45	18	18	87
19.15.29.12 NMAC Table 1 Closure Criteria for Soils Impacted by a Release (GW ≤ 50') & 19.15.29.13 NMAC Reclamation Criteria (0'-4' Soils Only)			**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.

ATTACHMENT 1 – SMA REMEDIATION PLAN & NMOCD APPROVAL CORRESPONDENCE

Souder, Miller & Associates♦201 S. Halagueno St.♦Carlsbad, NM 88220

January 7, 2019

#5E25868-BG42

NMOCD District II
Robert Hamlet
811 S. First St.
Artesia, NM 88210

SUBJECT: Remediation Plan for the John AGU #1 Battery Release (2RP-4694), Eddy County, New Mexico

Dear Mr. Hamlet:

On behalf of EOG Resources (EOG), Souder, Miller & Associates (SMA) has prepared this Remediation Plan that describes the delineation and proposed remediation for a release of liquids related to oil and gas production activities at the John AGU#1 Battery site. The site is in Unit C, Section 14, Township 20S, Range 24E, Eddy County, New Mexico, on private land. Figure 1 illustrates the vicinity and site location on an USGS 7.5 minute quadrangle map.

Table 1 summarizes information regarding the release.

Table 1: Release Information and Closure Criteria			
Name	John AGU #1 Battery	Company	EOG Resources
API Number	fAB1810139472	Location	32.57897° -104.56104°
Incident Number	2RP-4694		
Estimated Date of Release	3/22/2018	Date Reported to NMOCD	4/6/2018
Land Owner	Private	Reported To	NMOCD District II
Source of Release	Discharge Line		
Released Volume	14 bbls	Released Material	Produced Water
Recovered Volume	12 bbls	Net Release	2 bbls
NMOCD Closure Criteria	<50 feet to groundwater		
SMA Response Dates	7/3/2018,10/17/2018, 12/18/2018, 12/20/2018		

1.0 Background

On March 22, 2018, a release was discovered at the John AGU #1 Battery site due to a failure in the discharge line on the water pump. Initial response activities were conducted by EOG, and included the recovery of twelve (12) bbls of the released produced water. Figure 1 illustrates the site vicinity and wellhead protection area, Figure 2 illustrates surface water and other ranking criteria within a 300-foot radius in the vicinity, and Figure 3 illustrates the site and sample locations. The initial C-141 form is included in Appendix A.

2.0 Site Information and Closure Criteria

The John AGU #1 Battery is located approximately twenty-two (22) miles northwest of Carlsbad, New Mexico on privately-owned land.

As summarized in Table 2 and illustrated in Figure 1, depth to groundwater in the area is estimated to be ninety (90) feet below grade surface (bgs). There is one (1) known water source within ½-mile of the location, according to the New Mexico Office of the State Engineer (NMOSE) online water well database (https://gis.ose.state.nm.us/gisapps/ose_pod_locations/; accessed 7/2/2018). The nearest significant watercourse is a finger of the Middle Seven Rivers, located approximately 1,026 feet to the north

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for groundwater depth of less than 50 feet bgs because of high karst. Table 2 demonstrates the Closure Criteria applicable to this location. Pertinent well data is attached in Appendix B.

3.0 Release Characterization Activities and Findings

An initial sampling event was conducted by EOG on March 27, 2018. A total of 6 sample locations (V1-V6) were investigated around the release site and throughout the visibly stained area to a maximum depth of 4 feet bgs.

On July 3, 2018, SMA personnel arrived onsite to continue the vertical delineation by collecting soil samples to a maximum depth of 10 feet bgs. A minimum of two samples were collected at each sampling location. A total of thirty-five (35) samples were collected for laboratory analysis for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D. Table 3 itemizes the sample results as well as identifying any variances from the typical specification of two samples per boring. Locations for all samples are depicted on Figure 3. Samples were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico (Appendix D).

Results indicate that all sample locations have met the Closure Criteria listed in Table 2; however, in order to achieve the reclamation requirements of 19.15.29.13 NMAC, chloride concentrations must be less than 600 mg/kg in the top four feet. None of the sample locations meet these criteria at this time.

After submission of this workplan SMA received a verbal request from NMOCD District II to completely delineate the chlorides at all sample locations to 600 mg/kg as the site is in an area of high karst potential. SMA returned to the location on October 1, 2018 and December 18 and 20, 2018 to complete the request after a 48 hour sampling notice was submitted. Table 3 itemizes the additional sample results.

4.0 Proposed Soil Remediation Work Plan

In order to achieve the reclamation requirements noted above, SMA proposes excavation and the installation of a clay liner, in the area illustrated in Figure 3. The impacted area will be excavated to approximately four (4) feet bgs for reclamation. Approximately 850 cubic yards of contaminated soil are projected to be removed and replaced with clean backfill material in order to return the surface to previous

contours. Before liner placement and backfill, we propose the collection of confirmation samples comprised of representative wall 5-point samples based on SW-846, 2002. This would require the collection of two sidewall samples on the both the north and south boundaries of the excavation and one sidewall sample on west and east boundaries. This also meets the requirements of NMOCD's alternative method for closure sampling as there is no area of linear sidewall collected that represent over 200 square feet. The contaminated soil will be transported for disposal at Lea Land, in Eddy County, NM, an NMOCD permitted disposal facility. Upon approval by NMOCD, the projected timeline for completion of remediation activities is approximately three to five days.

5.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization, regulatory liaison, and preparing this remediation plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Melodie Sanjari
Staff Scientist

Reviewed by:

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Site Vicinity and Wellhead Protection Map
Figure 2: Surface Water Map
Figure 3: Site and Sample Location Map

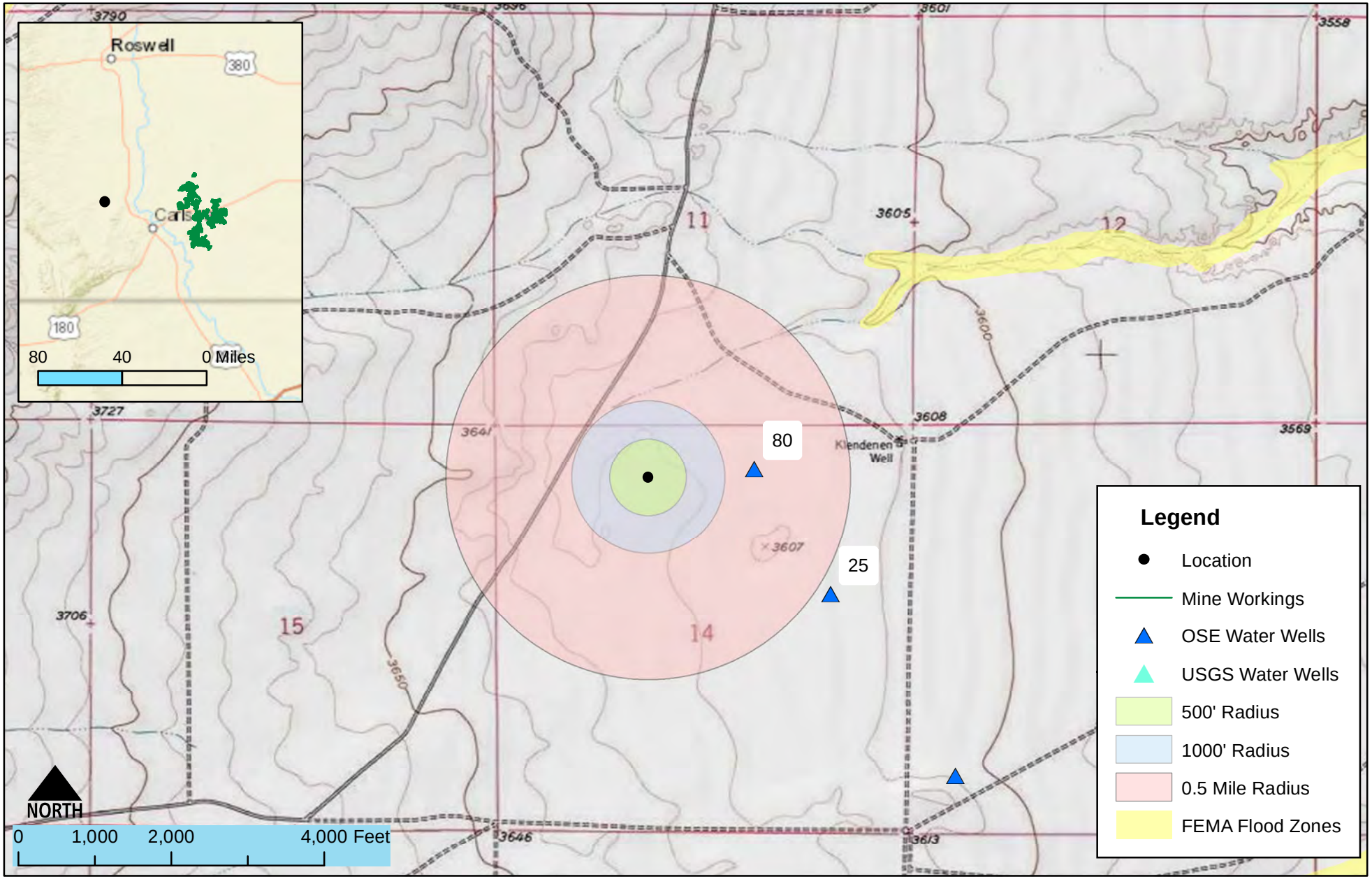
Tables:

Table 2: NMOCD Closure Criteria Justification Table 3: Summary of Sample Results

Appendices:

Appendix A: Form C141 Initial
Appendix B: NMOSE Wells Report
Appendix C: Laboratory Analytical Reports

FIGURES



Vicinity & Wellhead Protection Map
John AGU #1 Battery - EOG Resources Sec. 14,
T20S, R24E Eddy County, New Mexico

Figure 1

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Melodie Sanjari
Checked
Approved

201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689.7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

Date Saved: 9/7/2018

Document: C:\Users\mrs.SMA\Documents\GISdata\Maps\John AGU #1 Battery.mxd

Surface Water Map
John AGU #1 Battery - EOG Resources
Sec. 14, T20S, R24E Eddy County, New Mexico

Figure 2

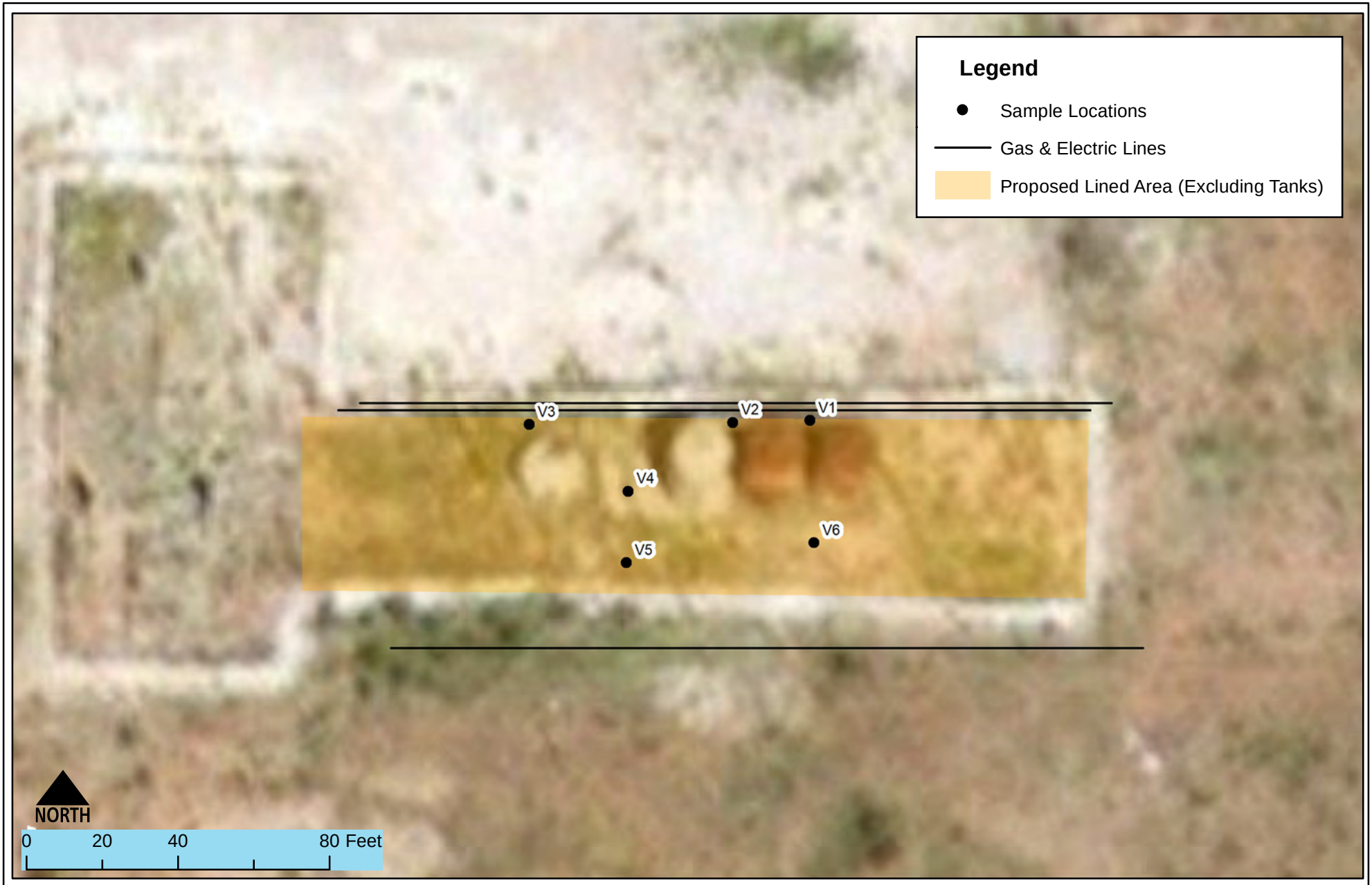
Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Melodie Sanjari
Checked
Approved

201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689.7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

Date Saved: 9/7/2018

Document: C:\Users\mrs.SMA\Documents\GISdataMaps\John AGU #1 Battery.mxd



Site and Sample Location Map
John AGU #1 Battery - EOG Resources
Sec. 14, T20S, R24E Eddy County, New Mexico

Figure 3

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Melodie Sanjari
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Approved

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Document: C:\Users\mrs.SMA\Documents\GISdata\Maps\John AGU #1 Battery.mxd

TABLES

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)		Source/Notes
Depth to Groundwater (feet bgs)	89	OSE
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	1,026 & 1,318	USGS 7.5 minute quadrangle map & OSE, respectively
Hortizontal Distance to Nearest Significant Watercourse (ft)	1,026	USGS 7.5 minute quadrangle map

Closure Criteria (19.15.29.12.B(4) and Table 1 NMAC)						
Depth to Groundwater		**Closure Criteria (units in mg/kg)**				
		Chloride *numerical limit or background, whichever is greater	**TPH**	**GRO + DRO**	**BTEX**	**Benzene**
< 50' BGS	x	600	100		50	10
51' to 100'		10000	2500	1000	50	10
>100'		20000	2500	1000	50	10
Surface Water	**yes or no**	**if yes, then**				
<300' from continuously flowing watercourse or other significant watercourse?	no	600	100		50	10
<200' from lakebed, sinkhole or playa lake?	no					
Water Well or Water Source						
<500 feet from spring or a private, domestic fresh water well used by less than 5 households for domestic or stock watering purposes?	no					
<1000' from fresh water well or spring?	no					
Human and Other Areas						
<300' from an occupied permanent residence, school, hospital, institution or church?	no					
within incorporated municipal boundaries or within a defined municipal fresh water well field?	no					
<100' from wetland?	no					
within area overlying a subsurface mine	no					
within an unstable area?	high karst potential					
within a 100-year floodplain?	no					

SMA #

Table 3: John AGU #1 Battery Sample Summary

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	**Total TPH** mg/Kg	Cl- Lab mg/Kg
				50 mg/Kg	10 mg/Kg				100 mg/Kg	600 mg/kg
V1	3/27/2018	1	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	7460
	3/27/2018	2	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	5330
	3/27/2018	3	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	7730
	3/27/2018	4	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	1920
	7/3/2018	6	in-situ	--	--	--	--	--	--	720
	7/3/2018	8	in-situ	--	--	--	--	--	--	1500
	7/3/2018	8.5	in-situ	<0.207	<0.023	<4.6	<10	<50	<64.6	300
V2	3/27/2018	1	excavate	3.42	0.151	<10.0	<10.0	<10.0	<30.0	8000
	7/3/2018	2	excavate	--	--	--	--	--	--	6000
	7/3/2018	4	excavate	--	--	--	--	--	--	4300
	7/3/2018	6	in-situ	--	--	--	--	--	--	4000
	7/3/2018	8	in-situ	<0.207	<0.023	<4.6	9.9	<49	9.9	2400
	10/17/2018	23	in-situ	--	--	--	--	--	--	80
V3	3/27/2018	1	excavate	4.34	0.874	<10.0	<10.0	<10.0	<30.0	8260
	7/3/2018	2	excavate	--	--	--	--	--	--	8700
	7/3/2018	3	excavate	--	--	--	--	--	--	8700
	7/3/2018	4	excavate	<0.216	<0.024	<4.8	73	120	193	8600
V4	3/27/2018	1	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	8000
	3/27/2018	2	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<10.0	4160
	3/27/2018	3	excavate	0.731	0.353	<10.0	64.8	<10.0	64.8	9200
	7/3/2018	6	in-situ	--	--	--	--	--	--	6600
	7/3/2018	8	in-situ	--	--	--	--	--	--	2300
	7/3/2018	10	in-situ	<0.216	<0.024	<4.8	160	250	410	2400
	12/18/2018	18	in-situ	--	--	<10.0	<10.0	<10.0	<30	--
	12/18/2018	29	in-situ	--	--	<10.0	<10.0	<10.0	<30	1310
	12/18/2018	45	in-situ	--	--	--	--	--	--	448
V5	3/27/2018	1	excavate	<0.300	<0.050	<10.0	18.0	10.1	28.1	3040
	3/27/2018	2	excavate	<0.300	<0.050	<10.0	<10.0	<10.0	<30.0	8530
	7/3/2018	4	excavate	--	--	--	--	--	--	5700
	7/3/2018	6	in-situ	--	--	--	--	--	--	5100
	7/3/2018	8	in-situ	--	--	--	--	--	--	6700
	7/3/2018	9	in-situ	<0.219	<0.024	<4.9	<9.0	<45	<58.9	1100
	10/17/2018	23	in-situ	--	--	--	--	--	--	96
V6	3/27/2018	1	excavate	0.665	0.251	<10.0	<10.0	<10.0	<30.0	11600
	3/27/2018	2	excavate	0.454	0.286	<10.0	17.7	16.2	33.9	5920
	3/27/2018	3	excavate	<0.300	<0.050	<10.0	12.3	<10	12.3	7600
	7/3/2018	4	excavate	--	--	--	--	--	--	4300
	7/3/2018	6	in-situ	--	--	--	--	--	--	4300
	7/3/2018	8	in-situ	--	--	--	--	--	--	2200
	7/3/2018	8.5	in-situ	<0.213	<0.024	<4.7	<9.1	<45	<58.8	2800
	12/20/2018	19	in-situ	--	--	--	--	--	--	112
	12/20/2018	29	in-situ	--	--	--	--	--	--	48

to be excavated

"--" = Not Analyzed

orange line denotes liner placement

APPENDIX A
FORM C141 INITIAL

NM OIL CONSERVATION
ARTESIA DISTRICT
APR 06 2018
RECEIVED

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised April 3, 2017

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

fAB1810139472
nAB1810139509

Release Notification and Corrective Action
OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	OGRID Number	Contact
EOG Y Resources, Inc.	25575	Chase Settle
Address		Telephone No.
104 S. 4th Street Artesia NM 88210		575-748-1471
Facility Name		Facility Type
John AGU #1 Battery		Battery

Surface Owner	Mineral Owner	API No.
Private	Fee	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
C	14	20S	24E	660	North	1980	West	Eddy

Latitude 32.57897 **Longitude** -104.56104 NAD83

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Produced Water	14 B/PW	12 B/PW
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Discharge Line	03/22/2018; 3:30 PM	03/22/2018; PM
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

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

Describe Cause of Problem and Remedial Action Taken.*
Discharge line on water pump had a failure.

Describe Area Affected and Cleanup Action Taken.*
The impacted area was approximately 230 feet by 10 feet within the berm of the battery.

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

Signature: Chase Settle	OIL CONSERVATION DIVISION
Printed Name: Chase Settle	Approved by Environmental Specialist: Crystal Weaver
Title: Rep Safety & Environmental II	Approval Date: 4/10/18 Expiration Date: N/A
E-mail Address: chase_settle@eogresources.com	Conditions of Approval: See attached Attached ☒ SRP-4194
Date: April 5, 2018 Phone:575-748-4171	

* Attach Additional Sheets If Necessary

4/9/18 AB

Operator/Responsible Party,

The OCD has received the form C-141 you provided on **4/6/18** regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-4694 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District II office in Artesia on or before 5/6/18. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

•Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

• If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

• Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Weaver, Crystal, EMNRD

From: Yvette Moore <Yvette_Moore@eogresources.com>
Sent: Friday, April 6, 2018 12:11 PM
To: Weaver, Crystal, EMNRD; Bratcher, Mike, EMNRD
Cc: Bob Asher; Chase Settle
Subject: John AGU Battery C-141
Attachments: John AGU Battery_032618_Initial.pdf

Please find the attached C-141 Initial for the location listed below:

John AGU #1 Battery
660' FNL & 1980' FWL
Section 14, T20S-R24E
Eddy County, New Mexico

Thanks,

eog resources
Yvette Moore
Rep Safety & Environmental II
Safety & Environmental Department
Artesia Division
(575)748-4223
yvette_moore@eogresources.com

APPENDIX B
NMOSE WELLS REPORT

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	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
RA 05146		ED		1	2	14	20S	24E	541600	3604734*	401	300	80	220
RA 02906 CLW		CH	3	4	2	14	20S	24E	541907	3604238*	843	145	25	120
RA 04742		ED		3	3	13	20S	24E	542408	3603517*	1689	300		
RA 07771		ED	4	1	4	22	20S	24E	540073	3602194*	2745			
RA 05424		ED	4	2	3	22	20S	24E	539669	3602194*	2934	1000	400	600
RA 03085		CH			1	01	20S	24E	542613	3607799*	3407	465	300	165
RA 03084		ED			1	03	20S	24E	539366	3607752*	3562	330	268	62
RA 10139		ED	3	3	2	21	20S	24E	538285	3602597*	3592	308		
RA 04245		ED		4	4	35	19S	24E	542005	3608363*	3752	300		
RA 05284		ED		1	2	01	20S	24E	543220	3607973*	3847	282	273	9
RA 04956		ED		1	1	21	20S	24E	537605	3603101*	3933	1013		
RA 04502		ED		2	2	25	20S	24E	543656	3601480*	4048	300	268	32
RA 04502 REPAR		ED		2	2	25	20S	24E	543656	3601480*	4048	275	268	7
RA 05723		ED		3	3	34	19S	24E	539170	3608353*	4180	310	270	40
RA 02775		CH	1	4	3	21	20S	24E	537899	3601986*	4271	140	31	109
RA 10140		ED	2	1	1	35	20S	24E	540938	3599981*	4724	295		
RA 03265		ED	1	2	3	08	20S	25E	545972	3605636*	4863	150		
RA 05478		ED	3	2	3	08	20S	24E	536272	3605389*	4975	550	500	50

Average Depth to Water: **243 feet**

Minimum Depth: **25 feet**

Maximum Depth: **500 feet**

Record Count: 18

UTMNAD83 Radius Search (in meters):

Easting (X): 541199.63 **Northing (Y):** 3604698 **Radius:** 5000

***UTM location was derived from PLSS - see Help**

APPENDIX C

LABORATORY ANALYTICAL REPORTS

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

April 06, 2018

CHASE SETTLE

EOG Y RESOURCES, INC

105 SOUTH 4TH STREET

ARTESIA, NM 88210

RE: JOHN AGU BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 03/28/18 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V1 - 1' (H800879-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	<0.050	0.050	04/02/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	<0.150	0.150	04/02/2018	ND	6.04	101	6.00	0.461	
Total BTEX	<0.300	0.300	04/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7460**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2018	ND	198	99.0	200	2.19	
DRO >C10-C28*	<10.0	10.0	04/04/2018	ND	208	104	200	2.23	
EXT DRO >C28-C36	<10.0	10.0	04/04/2018	ND					

Surrogate: 1-Chlorooctane *88.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *72.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V1 - 2' (H800879-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	<0.050	0.050	04/02/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	<0.150	0.150	04/02/2018	ND	6.04	101	6.00	0.461	
Total BTEX	<0.300	0.300	04/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5330**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2018	ND	198	99.0	200	2.19	
DRO >C10-C28*	<10.0	10.0	04/04/2018	ND	208	104	200	2.23	
EXT DRO >C28-C36	<10.0	10.0	04/04/2018	ND					

Surrogate: 1-Chlorooctane *94.0 %* *41-142*

Surrogate: 1-Chlorooctadecane *82.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V1 - 3' (H800879-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	<0.050	0.050	04/02/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	<0.150	0.150	04/02/2018	ND	6.04	101	6.00	0.461	
Total BTEX	<0.300	0.300	04/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7730**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *84.7 %* *41-142*

Surrogate: 1-Chlorooctadecane *76.4 %* *37.6-147*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V1 - 4' (H800879-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	<0.050	0.050	04/02/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	<0.050	0.050	04/02/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	<0.150	0.150	04/02/2018	ND	6.04	101	6.00	0.461	
Total BTEX	<0.300	0.300	04/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1920**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *89.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.8 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V2 - 1' (H800879-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.151**	0.100	04/03/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	**0.938**	0.100	04/03/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	**0.323**	0.100	04/03/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	**2.01**	0.300	04/03/2018	ND	6.04	101	6.00	0.461	
Total BTEX	**3.42**	0.600	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8000**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *84.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *83.7 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V3 - 1' (H800879-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.874**	0.500	04/03/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	**3.46**	0.500	04/03/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	<0.500	0.500	04/03/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	<1.50	1.50	04/03/2018	ND	6.04	101	6.00	0.461	
Total BTEX	**4.34**	3.00	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.9 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8260**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *76.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *75.1 %* *37.6-147*

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CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V4 - 1' (H800879-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2018	ND	1.98	98.9	2.00	1.09	
Toluene*	**0.052**	0.050	04/03/2018	ND	1.98	98.9	2.00	0.657	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	1.95	97.7	2.00	0.566	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.04	101	6.00	0.461	
Total BTEX	<0.300	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8000**	16.0	04/02/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *88.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *81.0 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V4 - 2' (H800879-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	<0.300	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4160**	16.0	04/03/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *86.9 %* *41-142*

Surrogate: 1-Chlorooctadecane *85.0 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V4 - 3' (H800879-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.353**	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	**0.378**	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	**0.731**	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.4 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**9200**	16.0	04/03/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	**64.8**	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *81.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *87.4 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V4 - 4' (H800879-10)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	<0.300	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7120**	16.0	04/03/2018	ND	432	108	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	**229**	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	**74.1**	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *81.5 %* *41-142*

Surrogate: 1-Chlorooctadecane *92.5 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V5 - 1' (H800879-11)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	<0.300	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	04/03/2018	ND	448	112	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	**18.0**	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	**10.1**	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *81.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *83.2 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V5 - 2' (H800879-12)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	<0.300	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**8530**	16.0	04/03/2018	ND	448	112	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *82.1 %* *41-142*

Surrogate: 1-Chlorooctadecane *75.8 %* *37.6-147*

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Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V6 - 1' (H800879-13)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.251**	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	**0.414**	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	**0.665**	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**11600**	16.0	04/03/2018	ND	448	112	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	<10.0	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *86.3 %* *41-142*

Surrogate: 1-Chlorooctadecane *84.6 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V6 - 2' (H800879-14)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	**0.286**	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	**0.168**	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	**0.454**	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.7 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5920**	16.0	04/03/2018	ND	448	112	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	**17.7**	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	**16.2**	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *83.2 %* *41-142*

Surrogate: 1-Chlorooctadecane *82.8 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

EOG Y RESOURCES, INC
CHASE SETTLE
105 SOUTH 4TH STREET
ARTESIA NM, 88210
Fax To: (575) 748-4131

Received:	03/28/2018	Sampling Date:	03/27/2018
Reported:	04/06/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	JOHN AGU BATTERY		

Sample ID: V6 - 3' (H800879-15)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.98	
Toluene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	3.12	
Ethylbenzene*	<0.050	0.050	04/03/2018	ND	2.04	102	2.00	2.49	
Total Xylenes*	<0.150	0.150	04/03/2018	ND	6.34	106	6.00	2.24	
Total BTEX	<0.300	0.300	04/03/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID *101 %* *72-148*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7600**	16.0	04/03/2018	ND	448	112	400	0.00	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/06/2018	ND	236	118	200	4.81	
DRO >C10-C28*	**12.3**	10.0	04/06/2018	ND	211	105	200	5.19	
EXT DRO >C28-C36	<10.0	10.0	04/06/2018	ND					

Surrogate: 1-Chlorooctane *80.6 %* *41-142*

Surrogate: 1-Chlorooctadecane *80.3 %* *37.6-147*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 105 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-4171 Fax No:
Sampler Signature: e-mail: Chase_Settle@eogresources.com

Project Name: John AGU Battery
Project #:
Project Loc: John AGU Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H800879 -

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid NP=Non-Potable Specify Other	Analyze For: TCLP: TOTAL: TPH: 8015B EXTENDED	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
1	V1-1'			3/27/2018	12:57 PM		1	X								S	X									X			X				X
2	V1-2'			3/27/2018	1:00 PM		1	X								S	X									X			X				X
3	V1-3'			3/27/2018	1:03 PM		1	X								S	X									X			X				X
4	V1-4'			3/27/2018	1:06 PM		1	X								S	X									X			X				X
5	V2-1'			3/27/2018	1:12 PM		1	X								S	X									X			X				X
6	V3-1'			3/27/2018	1:15 PM		1	X								S	X									X			X				X
7	V4-1'			3/27/2018	1:20 PM		1	X								S	X									X			X				X
8	V4-2'			3/27/2018	1:22 PM		1	X								S	X									X			X				X
9	V4-3'			3/27/2018	1:27 PM		1	X								S	X									X			X				X
10	V4-4'			3/27/2018	1:29 PM		1	X								S	X									X			X				X

Special Instructions: TPH EXTENDED NEEDED!

Relinquished by:	Date	Time	Received by:	Date	Time
	3/28/18	11:30	Tamara Oldaker	3-28-18	2:10
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:
Sample Containers Intact? (Y) N
VOCs Free of Headspace? (Y) N
Labels on container(s) (Y) N
Custody seals on container(s) (Y) N
Custody seals on cooler(s) Y N
Sample Hand Delivered (Y) N
by Sampler/Client Rep. ? (Y) N
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt: 4.0° Corrected 3.9°C #75

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

ARDINAL LABORATORIES
101 East Marland, Hobbs, NM 88240
(505) 393-2326 FAX (505) 393-2476

Project Manager: Chase Settle
Company Name: EOG Y Resources Inc.
Company Address: 105 South 4th Street
City/State/Zip: Artesia, NM 88210
Telephone No: 575-748-4171 Fax No:
Sampler Signature:
e-mail: Chase_Settle@eogresources.com

Project Name: John AGU Battery
Project #:
Project Loc: John AGU Battery
PO #: 205-0750
Report Format: [x] Standard [ ] TRRP [ ] NPDES

(lab use only)
ORDER #: H800879

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total # of Containers	Preservation & # of Containers: Ice	HNO_3	HCl	H_2SO_4	NaOH	$Na_2S_2O_3$	None	Other (Specify)	Matrix: DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	Analyze For: TPH: 8015B EXTENDED	TPH: TX 1005	TX 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, Alkalinity)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX: 8021B	RCI	N.O.R.M.	Chlorides	SAR		RUSH TAT (Pre-Schedule) 24, 48, 72 hrs	Standard TAT
11	V5-1'			3/27/2018	1:35 PM		1	X								S			X									X			X				X
12	V5-2'			3/27/2018	1:37 PM		1	X								S			X									X			X				X
13	V6-1'			3/27/2018	1:41 PM		1	X								S			X									X			X				X
14	V6-2'			3/27/2018	1:43 PM		1	X								S			X									X			X				X
15	V6-3'			3/27/2018	1:45 PM		1	X								S			X									X			X				X

Special Instructions: TPH EXTENDED NEEDED!

Relinquished by:	Date	Time	Received by:	Date	Time
	3/29/18	11:30	Tamara Oldaker	3-28-18	2:10
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by ELOT:	Date	Time

Laboratory Comments:

Sample Containers Intact?	(Y)	N
VOCs Free of Headspace?	(Y)	N
Labels on container(s)	(Y)	N
Custody seals on container(s)	(Y)	N
Custody seals on cooler(s)	(Y)	N
Sample Hand Delivered	(Y)	N
by Sampler/Client Rep. ?	(Y)	N

by Courier? UPS DHL FedEx Lone Star

Temperature Upon Receipt: 4.0° Corrected 3.9°C °C

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

July 25, 2018

Austin Weyant

Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: John AGU Battery OrderNo.: 1807276

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 21 sample(s) on 7/7/2018 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued July 18, 2018.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V1-6
Project: John AGU Battery
Collection Date: 7/3/2018 10:57:00 AM
Lab ID: 1807276-001 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	720	30		mg/Kg	20	7/13/2018 4:28:57 PM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V1-8
Project: John AGU Battery
Collection Date: 7/3/2018 11:03:00 AM
Lab ID: 1807276-002 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1500	75		mg/Kg	50	7/16/2018 7:01:25 AM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Project: John AGU Battery
Lab ID: 1807276-003 **Matrix:** SOLID

Client Sample ID: V1-8.5
Collection Date: 7/3/2018 11:15:00 AM
Received Date: 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	300	30		mg/Kg	20	7/13/2018 4:53:45 PM	39196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/11/2018 12:12:12 PM	39125
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	7/11/2018 12:12:12 PM	39125
Surr: DNOP	89.2	70-130		%Rec	1	7/11/2018 12:12:12 PM	39125
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/10/2018 5:48:26 PM	39103
Surr: BFB	95.7	15-316		%Rec	1	7/10/2018 5:48:26 PM	39103
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	7/10/2018 5:48:26 PM	39103
Benzene	ND	0.023		mg/Kg	1	7/10/2018 5:48:26 PM	39103
Toluene	ND	0.046		mg/Kg	1	7/10/2018 5:48:26 PM	39103
Ethylbenzene	ND	0.046		mg/Kg	1	7/10/2018 5:48:26 PM	39103
Xylenes, Total	ND	0.092		mg/Kg	1	7/10/2018 5:48:26 PM	39103
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	7/10/2018 5:48:26 PM	39103

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

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V2-2
Project: John AGU Battery
Collection Date: 7/3/2018 11:31:00 AM
Lab ID: 1807276-004 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	6000	300		mg/Kg	200	7/16/2018 7:13:49 AM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V2-4
Project: John AGU Battery
Collection Date: 7/3/2018 11:38:00 AM
Lab ID: 1807276-005 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	4300	300		mg/Kg	200	7/16/2018 7:26:13 AM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V2-6
Project: John AGU Battery
Collection Date: 7/3/2018 11:47:00 AM
Lab ID: 1807276-006 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	4000	150		mg/Kg	100	7/16/2018 7:38:37 AM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V2-8
Project: John AGU Battery
Collection Date: 7/3/2018 11:59:00 AM
Lab ID: 1807276-007 **Matrix:** SOLID **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	2400	75		mg/Kg	50	7/16/2018 7:51:02 AM	39196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	9.9	9.8		mg/Kg	1	7/11/2018 1:26:21 PM	39125
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/11/2018 1:26:21 PM	39125
Surr: DNOP	93.0	70-130		%Rec	1	7/11/2018 1:26:21 PM	39125
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	7/10/2018 6:12:02 PM	39103
Surr: BFB	97.2	15-316		%Rec	1	7/10/2018 6:12:02 PM	39103
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	0.092		mg/Kg	1	7/10/2018 6:12:02 PM	39103
Benzene	ND	0.023		mg/Kg	1	7/10/2018 6:12:02 PM	39103
Toluene	ND	0.046		mg/Kg	1	7/10/2018 6:12:02 PM	39103
Ethylbenzene	ND	0.046		mg/Kg	1	7/10/2018 6:12:02 PM	39103
Xylenes, Total	ND	0.092		mg/Kg	1	7/10/2018 6:12:02 PM	39103
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	7/10/2018 6:12:02 PM	39103

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V3-2
Project: John AGU Battery
Collection Date: 7/3/2018 1:30:00 PM
Lab ID: 1807276-008 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	8700	300		mg/Kg	200	7/16/2018 8:03:27 AM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V3-3
Project: John AGU Battery
Collection Date: 7/3/2018 1:45:00 PM
Lab ID: 1807276-009 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	8700	750		mg/Kg	500	7/16/2018 8:15:51 AM	39196

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V3-4
Project: John AGU Battery
Collection Date: 7/3/2018 1:55:00 PM
Lab ID: 1807276-010 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Chloride	8600	750		mg/Kg	500	7/16/2018 8:28:16 AM	39196
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst:	**lrm**
Diesel Range Organics (DRO)	73	10		mg/Kg	1	7/11/2018 1:51:14 PM	39125
Motor Oil Range Organics (MRO)	120	50		mg/Kg	1	7/11/2018 1:51:14 PM	39125
Surr: DNOP	106	70-130		%Rec	1	7/11/2018 1:51:14 PM	39125
EPA METHOD 8015D: GASOLINE RANGE						Analyst:	**NSB**
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/10/2018 6:35:42 PM	39103
Surr: BFB	97.5	15-316		%Rec	1	7/10/2018 6:35:42 PM	39103
EPA METHOD 8021B: VOLATILES						Analyst:	**NSB**
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	7/10/2018 6:35:42 PM	39103
Benzene	ND	0.024		mg/Kg	1	7/10/2018 6:35:42 PM	39103
Toluene	ND	0.048		mg/Kg	1	7/10/2018 6:35:42 PM	39103
Ethylbenzene	ND	0.048		mg/Kg	1	7/10/2018 6:35:42 PM	39103
Xylenes, Total	ND	0.096		mg/Kg	1	7/10/2018 6:35:42 PM	39103
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	7/10/2018 6:35:42 PM	39103

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V4-6
Project: John AGU Battery
Collection Date: 7/3/2018 7:36:00 AM
Lab ID: 1807276-011 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	6600	300		mg/Kg	200	7/17/2018 7:56:37 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V4-8
Project: John AGU Battery
Collection Date: 7/3/2018 7:54:00 AM
Lab ID: 1807276-012 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	2300	75		mg/Kg	50	7/17/2018 8:09:02 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V4-10
Project: John AGU Battery
Collection Date: 7/3/2018 8:15:00 AM
Lab ID: 1807276-013 **Matrix:** SOLID **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	2400	75		mg/Kg	50	7/17/2018 8:21:26 AM	39208
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	160	9.4	H	mg/Kg	1	7/23/2018 11:19:31 AM	39336
Motor Oil Range Organics (MRO)	250	47	H	mg/Kg	1	7/23/2018 11:19:31 AM	39336
Surr: DNOP	100	70-130	H	%Rec	1	7/23/2018 11:19:31 AM	39336
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8	H	mg/Kg	1	7/24/2018 11:54:21 AM	39352
Surr: BFB	93.7	15-316	H	%Rec	1	7/24/2018 11:54:21 AM	39352
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024	H	mg/Kg	1	7/24/2018 11:54:21 AM	39352
Toluene	ND	0.048	H	mg/Kg	1	7/24/2018 11:54:21 AM	39352
Ethylbenzene	ND	0.048	H	mg/Kg	1	7/24/2018 11:54:21 AM	39352
Xylenes, Total	ND	0.096	H	mg/Kg	1	7/24/2018 11:54:21 AM	39352
Surr: 4-Bromofluorobenzene	103	80-120	H	%Rec	1	7/24/2018 11:54:21 AM	39352

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V5-4
Project: John AGU Battery
Collection Date: 7/3/2018 8:44:00 AM
Lab ID: 1807276-014 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	5700	300		mg/Kg	200	7/17/2018 8:33:51 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V5-6
Project: John AGU Battery
Collection Date: 7/3/2018 8:57:00 AM
Lab ID: 1807276-015 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	5100	300		mg/Kg	200	7/17/2018 8:46:16 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V5-8
Project: John AGU Battery
Collection Date: 7/3/2018 9:08:00 AM
Lab ID: 1807276-016 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	6700	300		mg/Kg	200	7/17/2018 8:58:40 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V5-9
Project: John AGU Battery
Collection Date: 7/3/2018 9:20:00 AM
Lab ID: 1807276-017 **Matrix:** SOLID **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	1100	30		mg/Kg	20	7/16/2018 2:16:01 AM	39208
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.0	H	mg/Kg	1	7/23/2018 10:35:20 AM	39336
Motor Oil Range Organics (MRO)	ND	45	H	mg/Kg	1	7/23/2018 10:35:20 AM	39336
Surr: DNOP	92.8	70-130	H	%Rec	1	7/23/2018 10:35:20 AM	39336
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9	H	mg/Kg	1	7/24/2018 12:17:48 PM	39352
Surr: BFB	89.7	15-316	H	%Rec	1	7/24/2018 12:17:48 PM	39352
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024	H	mg/Kg	1	7/24/2018 12:17:48 PM	39352
Toluene	ND	0.049	H	mg/Kg	1	7/24/2018 12:17:48 PM	39352
Ethylbenzene	ND	0.049	H	mg/Kg	1	7/24/2018 12:17:48 PM	39352
Xylenes, Total	ND	0.097	H	mg/Kg	1	7/24/2018 12:17:48 PM	39352
Surr: 4-Bromofluorobenzene	99.3	80-120	H	%Rec	1	7/24/2018 12:17:48 PM	39352

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V6-4
Project: John AGU Battery
Collection Date: 7/3/2018 9:42:00 AM
Lab ID: 1807276-018 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	4300	150		mg/Kg	100	7/17/2018 9:35:54 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V6-6
Project: John AGU Battery
Collection Date: 7/3/2018 9:54:00 AM
Lab ID: 1807276-019 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	4300	150		mg/Kg	100	7/17/2018 9:48:19 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V6-8
Project: John AGU Battery
Collection Date: 7/3/2018 10:06:00 AM
Lab ID: 1807276-020 **Matrix:** SOIL **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	2200	150		mg/Kg	100	7/17/2018 10:00:44 AM	39208

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

Qualifiers:

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

Analytical Report
Lab Order **1807276**
Date Reported: **7/25/2018**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: V6-8.5
Project: John AGU Battery
Collection Date: 7/3/2018 10:17:00 AM
Lab ID: 1807276-021 **Matrix:** SOLID **Received Date:** 7/7/2018 10:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **CJS**	
Chloride	2800	150		mg/Kg	100	7/17/2018 10:13:09 AM	39208
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.1	H	mg/Kg	1	7/23/2018 10:13:25 AM	39336
Motor Oil Range Organics (MRO)	ND	45	H	mg/Kg	1	7/23/2018 10:13:25 AM	39336
Surr: DNOP	91.1	70-130	H	%Rec	1	7/23/2018 10:13:25 AM	39336
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7	H	mg/Kg	1	7/24/2018 12:41:20 PM	39352
Surr: BFB	92.5	15-316	H	%Rec	1	7/24/2018 12:41:20 PM	39352
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024	H	mg/Kg	1	7/24/2018 12:41:20 PM	39352
Toluene	ND	0.047	H	mg/Kg	1	7/24/2018 12:41:20 PM	39352
Ethylbenzene	ND	0.047	H	mg/Kg	1	7/24/2018 12:41:20 PM	39352
Xylenes, Total	ND	0.095	H	mg/Kg	1	7/24/2018 12:41:20 PM	39352
Surr: 4-Bromofluorobenzene	102	80-120	H	%Rec	1	7/24/2018 12:41:20 PM	39352

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807276**

25-Jul-18

Client: Souder, Miller & Associates

Project: John AGU Battery

Sample ID	**MB-39196**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**39196**	RunNo:	**52688**					
Prep Date:	**7/13/2018**	Analysis Date:	**7/13/2018**	SeqNo:	**1729903**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-39196**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**39196**	RunNo:	**52688**					
Prep Date:	**7/13/2018**	Analysis Date:	**7/13/2018**	SeqNo:	**1729904**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.2	90	110			

Sample ID	**MB-39208**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**39208**	RunNo:	**52708**					
Prep Date:	**7/15/2018**	Analysis Date:	**7/16/2018**	SeqNo:	**1730611**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-39208**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**39208**	RunNo:	**52708**					
Prep Date:	**7/15/2018**	Analysis Date:	**7/16/2018**	SeqNo:	**1730612**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807276**

25-Jul-18

Client: Souder, Miller & Associates

Project: John AGU Battery

Sample ID	**MB-39125**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**39125**	RunNo:	**52618**					
Prep Date:	**7/10/2018**	Analysis Date:	**7/11/2018**	SeqNo:	**1726901**	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		86.0	70	130			

Sample ID	**LCS-39125**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**39125**	RunNo:	**52618**					
Prep Date:	**7/10/2018**	Analysis Date:	**7/11/2018**	SeqNo:	**1726902**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	103	70	130			
Surr: DNOP	4.1		5.000		82.3	70	130			

Sample ID	**1807276-003AMS**	SampType:	**MS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**V1-8.5**	Batch ID:	**39125**	RunNo:	**52618**					
Prep Date:	**7/10/2018**	Analysis Date:	**7/11/2018**	SeqNo:	**1727034**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.8	49.16	4.611	98.5	62	120			
Surr: DNOP	4.3		4.916		86.7	70	130			

Sample ID	**1807276-003AMSD**	SampType:	**MSD**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**V1-8.5**	Batch ID:	**39125**	RunNo:	**52618**					
Prep Date:	**7/10/2018**	Analysis Date:	**7/11/2018**	SeqNo:	**1727035**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	9.9	49.36	4.611	98.6	62	120	0.459	20	
Surr: DNOP	4.3		4.936		87.8	70	130	0	0	

Sample ID	**LCS-39336**	SampType:	**LCS**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**LCSS**	Batch ID:	**39336**	RunNo:	**52903**					
Prep Date:	**7/23/2018**	Analysis Date:	**7/23/2018**	SeqNo:	**1738189**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	70	130			
Surr: DNOP	4.3		5.000		86.2	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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **1807276**
25-Jul-18

Client: Souder, Miller & Associates
Project: John AGU Battery

Sample ID	**MB-39336**	SampType:	**MBLK**	TestCode:	**EPA Method 8015M/D: Diesel Range Organics**					
Client ID:	**PBS**	Batch ID:	**39336**	RunNo:	**52903**					
Prep Date:	**7/23/2018**	Analysis Date:	**7/23/2018**	SeqNo:	**1738190**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		88.0	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 Quanitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807276**

25-Jul-18

Client: Souder, Miller & Associates

Project: John AGU Battery

Sample ID	**MB-39103**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**39103**	RunNo:	**52591**					
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725737**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	930		1000		93.0	15	316			

Sample ID	**LCS-39103**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**39103**	RunNo:	**52591**					
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725738**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	110	75.9	131			
Surr: BFB	1000		1000		102	15	316			

Sample ID	**MB-39352**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**PBS**	Batch ID:	**39352**	RunNo:	**52947**					
Prep Date:	**7/23/2018**	Analysis Date:	**7/24/2018**	SeqNo:	**1740075**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.3	15	316			

Sample ID	**LCS-39352**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**					
Client ID:	**LCSS**	Batch ID:	**39352**	RunNo:	**52947**					
Prep Date:	**7/23/2018**	Analysis Date:	**7/24/2018**	SeqNo:	**1740076**	Units:	**mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	112	75.9	131			
Surr: BFB	1000		1000		103	15	316			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1807276**

25-Jul-18

Client: Souder, Miller & Associates

Project: John AGU Battery

Sample ID	**MB-39103**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**39103**	RunNo:	**52591**					
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725764**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	**LCS-39103**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**39103**	RunNo:	**52591**					
Prep Date:	**7/9/2018**	Analysis Date:	**7/10/2018**	SeqNo:	**1725765**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.10	1.000	0	90.4	70.1	121			
Benzene	0.97	0.025	1.000	0	96.8	77.3	128			
Toluene	1.0	0.050	1.000	0	100	79.2	125			
Ethylbenzene	0.98	0.050	1.000	0	98.0	80.7	127			
Xylenes, Total	3.0	0.10	3.000	0	100	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	**MB-39352**	SampType:	**MBLK**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**PBS**	Batch ID:	**39352**	RunNo:	**52947**					
Prep Date:	**7/23/2018**	Analysis Date:	**7/24/2018**	SeqNo:	**1740124**	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		108	80	120			

Sample ID	**LCS-39352**	SampType:	**LCS**	TestCode:	**EPA Method 8021B: Volatiles**					
Client ID:	**LCSS**	Batch ID:	**39352**	RunNo:	**52947**					
Prep Date:	**7/23/2018**	Analysis Date:	**7/24/2018**	SeqNo:	**1740125**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.8	77.3	128			
Toluene	0.97	0.050	1.000	0	97.2	79.2	125			
Ethylbenzene	0.95	0.050	1.000	0	94.6	80.7	127			
Xylenes, Total	2.9	0.10	3.000	0	97.1	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: SMA-CARLSBAD Work Order Number: 1807276 RcptNo: 1

Received By: **Anne Thorne** 7/7/2018 10:50:00 AM

Completed By: **Isaiah Ortiz** 7/9/2018 9:50:19 AM

Reviewed By: IO 7/9/18

CB: ENM 7/9/18

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☑
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: _____
ENM 7/9/18

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	5.8	Good	Yes			
2	13.1	Good	Yes			

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 5 day

Project Name: John AGU Battery

Project #:

Project Manager: Austin Weyant

Sampler: MRS

On Ice: ☒ Yes ☐ No #1

Sample Temperature: 6.8 CF-1.0 = 5.8

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1807276	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F^-, Cl^-, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)				
7/3/18	10:57	soil	V1-6'	4oz.		001								X							
	11:03	soil	V1 8'			002								Y							
	11:15	ROCK	V1-8.5	BAGGY		003	X		X					X							
	11:31	soil	V2-2'			004								X							
	11:38	soil	V2-4'			005								X							
	11:47	soil	V2-6'			006								Y							
	11:59	ROCK	V2-8'	BAGGY		007	X		X					X							
	1:30	soil	V3-2'			008								X							
	1:45	soil	V3-3'			009								X							
	1:55	soil	V3-4'			010	X		X					X							
	7:36	soil	V4-6'			011								X							
	7:54	soil	V4-8'			012								X							

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/5/18	0900	M. Sanjani		7/5/18	0900
7/5/18	1900			07/07/18	1050

Remarks:
EOG
Page 1 of 2
07/07/18 1050
Coder #2 14.1 CF-1.0=13.1

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

Chain-of-Custody Record

Client: SMA Carlsbad

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☐ Standard ☒ Rush 5 day

Project Name: John AGU Battery

Project #:

Project Manager: Austin Weyant

Sampler: MRJ

On Ice: ☒ Yes ☐ No

Sample Temperature: 68°F-1.0=5.8

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1807276	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)
7/3/18	8:15	Rock	V4-10'	Baggy		013	X		X					X			
7/3/18	8:44	soil	V5-4'	402		014								X			
	8:57	soil	V5-6'			015								X			
	9:08	soil	V5-8'			016								X			
	9:20	Rock	V5-9'	Baggy		017	X		X					X			
	9:42	soil	V6-4'			018								X			
	9:54	soil	V6-6'			019								X			
	10:06	soil	V6-8'			020								X			
	10:17	Rock	V6-8.5	Baggy		021	X		X					X			

Date	Time	Relinquished by:	Received by:	Date	Time
7/5/18	0900			7/5/18	0900
7/6/18	1900			07/07/18	1050

Remarks: EDG

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.

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 24, 2018

AUSTIN WEYANT

SOUDER MILLER AND ASSOCIATES

201 S. HALAGUENO

CARLSBAD, NM 88220

RE: JOHN AGU BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 10/22/18 13:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES
AUSTIN WEYANT
201 S. HALAGUENO
CARLSBAD NM, 88220
Fax To: NONE

Received:	10/22/2018	Sampling Date:	10/17/2018
Reported:	10/24/2018	Sampling Type:	Soil
Project Name:	JOHN AGU BATTERY	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EOG -Y		

Sample ID: V5 - 23' (H803023-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	10/24/2018	ND	416	104	400	3.77	

Sample ID: V2 - 23' (H803023-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	10/24/2018	ND	416	104	400	3.77	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	SMA-Carlsbad
Project Manager:	Austin Weyant
Address:	207 S. Halagueno
City:	Carlsbad State: Zip:
Phone #:	574 370 9782 Fax #:
Project #:	Project Owner:
Project Name:	John AGU Battery
Project Location:	" "
Sampler Name:	MRS

BILL TO

P.O. #:	
Company:	EOG
Attn:	Chase Settle.
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	SM 4500 (Chloride)
H803023															
1	V5-23'	-	-			✓							10/17/18	1:42	✓
2	V2-23'	-	1			✓							"	4:57	✓

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 10-22-18 Time: 13:30	Received By:	
Relinquished By:	Date: Time:	Received By:	

Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 9.8° C #97

Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) TO.

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 07, 2019

AUSTIN WEYANT

SOUDER MILLER AND ASSOCIATES

201 S. HALAGUENO

CARLSBAD, NM 88220

RE: JOHN AGU BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 12/28/18 10:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
V6 - 19'	H803801-01	Soil	20-Dec-18 12:30	28-Dec-18 10:40
V6 - 29'	H803801-02	Soil	20-Dec-18 13:25	28-Dec-18 10:40
V4 - 18'	H803801-03	Soil	18-Dec-18 11:30	28-Dec-18 10:40
V4 - 29'	H803801-04	Soil	18-Dec-18 12:47	28-Dec-18 10:40
V4 - 45'	H803801-05	Soil	18-Dec-18 14:59	28-Dec-18 10:40

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

V6 - 19'

H803801-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**112**		16.0	mg/kg	4	8123109	JH	03-Jan-19	4500-Cl-B	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

V6 - 29'

H803801-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	8123109	JH	03-Jan-19	4500-Cl-B	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

V4 - 18'

H803801-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8123107	MS	31-Dec-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8123107	MS	31-Dec-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8123107	MS	31-Dec-18	8015B	
Surrogate: 1-Chlorooctane			*84.3 %*	*41-142*		*8123107*	MS	*31-Dec-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*79.5 %*	*37.6-147*		*8123107*	MS	*31-Dec-18*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

V4 - 29'

H803801-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1310**		16.0	mg/kg	4	8123109	JH	03-Jan-19	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8123107	MS	31-Dec-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8123107	MS	31-Dec-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8123107	MS	31-Dec-18	8015B	
Surrogate: 1-Chlorooctane			*83.6 %*	*41-142*		*8123107*	MS	*31-Dec-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*79.7 %*	*37.6-147*		*8123107*	MS	*31-Dec-18*	*8015B*	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

V4 - 45'

H803801-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**448**		16.0	mg/kg	4	8123109	JH	03-Jan-19	4500-Cl-B	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8123109 - General Prep - Wet Chem										
Blank (8123109-BLK1)				Prepared & Analyzed: 31-Dec-18						
Chloride	ND	16.0	mg/kg							
LCS (8123109-BS1)				Prepared & Analyzed: 31-Dec-18						
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (8123109-BSD1)				Prepared & Analyzed: 31-Dec-18						
Chloride	416	16.0	mg/kg	400		104	80-120	3.77	20	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

SOUDER MILLER AND ASSOCIATES 201 S. HALAGUENO CARLSBAD NM, 88220	Project: JOHN AGU BATTERY Project Number: NONE GIVEN Project Manager: AUSTIN WEYANT Fax To: NONE	Reported: 07-Jan-19 10:44

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8123107 - General Prep - Organics										
Blank (8123107-BLK1)				Prepared & Analyzed: 31-Dec-18						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Total TPH C6-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*44.6*		mg/kg	*50.0*		*89.2*	*41-142*			
Surrogate: 1-Chlorooctadecane	*45.4*		mg/kg	*50.0*		*90.9*	*37.6-147*			
LCS (8123107-BS1)				Prepared & Analyzed: 31-Dec-18						
GRO C6-C10	217	10.0	mg/kg	200		108	76.5-133			
DRO >C10-C28	192	10.0	mg/kg	200		96.1	72.9-138			
Total TPH C6-C28	409	10.0	mg/kg	400		102	78-132			
Surrogate: 1-Chlorooctane	*48.3*		mg/kg	*50.0*		*96.6*	*41-142*			
Surrogate: 1-Chlorooctadecane	*46.8*		mg/kg	*50.0*		*93.6*	*37.6-147*			
LCS Dup (8123107-BSD1)				Prepared & Analyzed: 31-Dec-18						
GRO C6-C10	203	10.0	mg/kg	200		101	76.5-133	6.81	20.6	
DRO >C10-C28	184	10.0	mg/kg	200		92.0	72.9-138	4.34	20.6	
Total TPH C6-C28	387	10.0	mg/kg	400		96.6	78-132	5.64	18	
Surrogate: 1-Chlorooctane	*47.5*		mg/kg	*50.0*		*95.1*	*41-142*			
Surrogate: 1-Chlorooctadecane	*46.4*		mg/kg	*50.0*		*92.9*	*37.6-147*			

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: SMA - Carlsbad
Project Manager: Austin Weyant
Address: 201 S. Halaguena
City: Carlsbad State: NM Zip: 88220
Phone #: 574-370-9782 Fax #:
Project #: Project Owner:
Project Name: John AGU
Project Location: Artesia
Sampler Name: MRS

BILL TO

P.O. #:
Company: EOG Resources
Attn: Chase Settle.
Address: 105 S. 4th St.
City: Artesia.
State: NM Zip: 88210
Phone #: 575-748-1471
Fax #:

ANALYSIS REQUEST

TPH 8015M
Chloride SM4500 Cl-B

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH 8015M	Chloride SM4500 Cl-B
H803801																
1	V6-19'					✓							12/20/18	12:30	✓	✓
2	V6-29'					✓							12/20/18	1:25	✓	✓
3	V4-18'					✓							12/18/18	11:30	✓	
4	V4-29'					✓							12/18/18	12:47	✓	
5	V4-45'					✓							12/18/18	2:57		✓

Relinquished By: M Sanjani Date: Time: Received By: S Watson 12.28.18 9:00
Relinquished By: Samantha Watson Date: 12.28.18 Time: 10:40 Received By: Jodi Henson
Delivered By: (Circle One)
Sampler - UPS - Bus - Other: 4.4°C / #97
Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No
CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:
REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

From: Eads, Cristina, EMNRD
To: Chase Settle
Cc: Billings, Bradford, EMNRD; austin.weyant@soudermiller.com
Subject: John AGU #1 Battery Remediation Plan (2RP-4694)
Date: Monday, November 18, 2019 2:12:58 PM

November 18, 2019

RE: John AGU #1 Battery Remediation Plan (2RP-4694)
Eddy County, New Mexico

Chase Settle
Rep Safety & Environmental II
EOG Y Resources, Inc.

Dear Mr. Settle,

The remediation plan for the above referenced site is approved with the following:

- Request a variance to leave the remainder of contaminated soil in place.
- Sidewall confirmation samples should show concentrations of chloride less than 600 mg/kg.

Installation of a 20 mil poly liner is recommended instead of a clay liner.

Thank you for your completed efforts. Please contact me if you have any questions or comments.

Thank you,
Cristina Eads

Cristina Eads
Environmental Bureau
EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3084
email: Cristina.Eads@state.nm.us

ATTACHMENT 2 – PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPH NO. 1 – A view of the Site during the remedial excavation activities in. The view is towards the west.

(Approximate GPS: 32.578936, -104.560635)

PHOTOGRAPH NO. 2 – A view of the eastern excavation area where due to the encountered lithology, excavation was limited to a depth of one foot below ground surface. The view is towards the southeast.

(Approximate GPS: 32.579054, -104.560916)

PHOTOGRAPH NO. 3 – A view of the over-excavation activities in the "W-6" sample area on August 30, 2023. The view is towards the southeast. excavated area during the August 4, 2022 confirmation sampling activities. The view is towards the northeast.

(Approximate GPS: 32.579054, -104.560912)

PHOTOGRAPH NO. 4 – A view of final excavation extent on August 30. 2023. The view is towards the southwest.

(Approximate GPS: 32.579041, -104.560635)

ATTACHMENT 3 – LABORATORY ANALYTICAL REPORTS

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

August 28, 2023

Will Kierdorf
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: John AGU 1 BATT OrderNo.: 2308C18

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 13 sample(s) on 8/23/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-1
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 10:30:00 AM
Lab ID: 2308C18-001 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	240	60		mg/Kg	20	8/23/2023 10:20:22 PM	77043
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/25/2023 12:00:12 PM	77025
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/25/2023 12:00:12 PM	77025
Surr: DNOP	98.2	69-147		%Rec	1	8/25/2023 12:00:12 PM	77025
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	8/23/2023 11:53:00 AM	GS99197
Surr: BFB	95.4	15-244		%Rec	1	8/23/2023 11:53:00 AM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	8/23/2023 11:53:00 AM	BS99197
Toluene	ND	0.039		mg/Kg	1	8/23/2023 11:53:00 AM	BS99197
Ethylbenzene	ND	0.039		mg/Kg	1	8/23/2023 11:53:00 AM	BS99197
Xylenes, Total	ND	0.078		mg/Kg	1	8/23/2023 11:53:00 AM	BS99197
Surr: 4-Bromofluorobenzene	91.2	39.1-146		%Rec	1	8/23/2023 11:53:00 AM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-2
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 10:32:00 AM
Lab ID: 2308C18-002 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/23/2023 10:57:36 PM	77043
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	8/24/2023 1:34:15 AM	77025
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/24/2023 1:34:15 AM	77025
Surr: DNOP	52.8	69-147	S	%Rec	1	8/24/2023 1:34:15 AM	77025
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.4		mg/Kg	1	8/23/2023 12:15:00 PM	GS99197
Surr: BFB	100	15-244		%Rec	1	8/23/2023 12:15:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	8/23/2023 12:15:00 PM	BS99197
Toluene	ND	0.034		mg/Kg	1	8/23/2023 12:15:00 PM	BS99197
Ethylbenzene	ND	0.034		mg/Kg	1	8/23/2023 12:15:00 PM	BS99197
Xylenes, Total	ND	0.068		mg/Kg	1	8/23/2023 12:15:00 PM	BS99197
Surr: 4-Bromofluorobenzene	94.3	39.1-146		%Rec	1	8/23/2023 12:15:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-3
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 10:34:00 AM
Lab ID: 2308C18-003 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	200	60		mg/Kg	20	8/23/2023 11:10:01 PM	77043
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	8/24/2023 1:53:11 AM	77025
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/24/2023 1:53:11 AM	77025
Surr: DNOP	58.3	69-147	S	%Rec	1	8/24/2023 1:53:11 AM	77025
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	8/23/2023 12:37:00 PM	GS99197
Surr: BFB	101	15-244		%Rec	1	8/23/2023 12:37:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	8/23/2023 12:37:00 PM	BS99197
Toluene	ND	0.037		mg/Kg	1	8/23/2023 12:37:00 PM	BS99197
Ethylbenzene	ND	0.037		mg/Kg	1	8/23/2023 12:37:00 PM	BS99197
Xylenes, Total	ND	0.073		mg/Kg	1	8/23/2023 12:37:00 PM	BS99197
Surr: 4-Bromofluorobenzene	94.7	39.1-146		%Rec	1	8/23/2023 12:37:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-4
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 10:36:00 AM
Lab ID: 2308C18-004 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	69	60		mg/Kg	20	8/23/2023 11:22:26 PM	77043
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/24/2023 2:12:07 AM	77025
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/24/2023 2:12:07 AM	77025
Surr: DNOP	55.6	69-147	S	%Rec	1	8/24/2023 2:12:07 AM	77025
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.3		mg/Kg	1	8/23/2023 12:59:00 PM	GS99197
Surr: BFB	100	15-244		%Rec	1	8/23/2023 12:59:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	8/23/2023 12:59:00 PM	BS99197
Toluene	ND	0.033		mg/Kg	1	8/23/2023 12:59:00 PM	BS99197
Ethylbenzene	ND	0.033		mg/Kg	1	8/23/2023 12:59:00 PM	BS99197
Xylenes, Total	ND	0.067		mg/Kg	1	8/23/2023 12:59:00 PM	BS99197
Surr: 4-Bromofluorobenzene	93.2	39.1-146		%Rec	1	8/23/2023 12:59:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-5
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 10:38:00 AM
Lab ID: 2308C18-005 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	66	60		mg/Kg	20	8/23/2023 11:34:50 PM	77043
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **DGH**	
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	8/24/2023 2:30:49 AM	77025
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/24/2023 2:30:49 AM	77025
Surr: DNOP	52.9	69-147	S	%Rec	1	8/24/2023 2:30:49 AM	77025
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.1		mg/Kg	1	8/23/2023 1:20:00 PM	GS99197
Surr: BFB	100	15-244		%Rec	1	8/23/2023 1:20:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.021		mg/Kg	1	8/23/2023 1:20:00 PM	BS99197
Toluene	ND	0.041		mg/Kg	1	8/23/2023 1:20:00 PM	BS99197
Ethylbenzene	ND	0.041		mg/Kg	1	8/23/2023 1:20:00 PM	BS99197
Xylenes, Total	ND	0.083		mg/Kg	1	8/23/2023 1:20:00 PM	BS99197
Surr: 4-Bromofluorobenzene	94.2	39.1-146		%Rec	1	8/23/2023 1:20:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-6
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 10:40:00 AM
Lab ID: 2308C18-006 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	1000	60		mg/Kg	20	8/24/2023 12:36:52 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/23/2023 6:47:31 PM	77026
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/23/2023 6:47:31 PM	77026
Surr: DNOP	75.0	69-147		%Rec	1	8/23/2023 6:47:31 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	8/23/2023 1:42:00 PM	GS99197
Surr: BFB	98.9	15-244		%Rec	1	8/23/2023 1:42:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.020		mg/Kg	1	8/23/2023 1:42:00 PM	BS99197
Toluene	ND	0.039		mg/Kg	1	8/23/2023 1:42:00 PM	BS99197
Ethylbenzene	ND	0.039		mg/Kg	1	8/23/2023 1:42:00 PM	BS99197
Xylenes, Total	ND	0.079		mg/Kg	1	8/23/2023 1:42:00 PM	BS99197
Surr: 4-Bromofluorobenzene	91.6	39.1-146		%Rec	1	8/23/2023 1:42:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-7
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 11:00:00 AM
Lab ID: 2308C18-007 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	240	60		mg/Kg	20	8/24/2023 12:49:16 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	8/23/2023 7:11:24 PM	77026
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/23/2023 7:11:24 PM	77026
Surr: DNOP	84.0	69-147		%Rec	1	8/23/2023 7:11:24 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/23/2023 2:04:00 PM	GS99197
Surr: BFB	98.3	15-244		%Rec	1	8/23/2023 2:04:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	8/23/2023 2:04:00 PM	BS99197
Toluene	ND	0.035		mg/Kg	1	8/23/2023 2:04:00 PM	BS99197
Ethylbenzene	ND	0.035		mg/Kg	1	8/23/2023 2:04:00 PM	BS99197
Xylenes, Total	ND	0.071		mg/Kg	1	8/23/2023 2:04:00 PM	BS99197
Surr: 4-Bromofluorobenzene	92.1	39.1-146		%Rec	1	8/23/2023 2:04:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-8
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 11:02:00 AM
Lab ID: 2308C18-008 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/24/2023 2:16:08 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	8/23/2023 7:35:15 PM	77026
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	8/23/2023 7:35:15 PM	77026
Surr: DNOP	80.2	69-147		%Rec	1	8/23/2023 7:35:15 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	4.0		mg/Kg	1	8/23/2023 2:25:00 PM	GS99197
Surr: BFB	99.8	15-244		%Rec	1	8/23/2023 2:25:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.020		mg/Kg	1	8/23/2023 2:25:00 PM	BS99197
Toluene	ND	0.040		mg/Kg	1	8/23/2023 2:25:00 PM	BS99197
Ethylbenzene	ND	0.040		mg/Kg	1	8/23/2023 2:25:00 PM	BS99197
Xylenes, Total	ND	0.079		mg/Kg	1	8/23/2023 2:25:00 PM	BS99197
Surr: 4-Bromofluorobenzene	92.4	39.1-146		%Rec	1	8/23/2023 2:25:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-9
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 11:04:00 AM
Lab ID: 2308C18-009 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/24/2023 2:28:32 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	8/23/2023 7:59:07 PM	77026
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/23/2023 7:59:07 PM	77026
Surr: DNOP	82.7	69-147		%Rec	1	8/23/2023 7:59:07 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/23/2023 2:47:00 PM	GS99197
Surr: BFB	98.5	15-244		%Rec	1	8/23/2023 2:47:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	8/23/2023 2:47:00 PM	BS99197
Toluene	ND	0.036		mg/Kg	1	8/23/2023 2:47:00 PM	BS99197
Ethylbenzene	ND	0.036		mg/Kg	1	8/23/2023 2:47:00 PM	BS99197
Xylenes, Total	ND	0.072		mg/Kg	1	8/23/2023 2:47:00 PM	BS99197
Surr: 4-Bromofluorobenzene	91.7	39.1-146		%Rec	1	8/23/2023 2:47:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-10
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 11:06:00 AM
Lab ID: 2308C18-010 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	180	60		mg/Kg	20	8/24/2023 2:40:57 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	8.8		mg/Kg	1	8/23/2023 8:22:58 PM	77026
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	8/23/2023 8:22:58 PM	77026
Surr: DNOP	81.3	69-147		%Rec	1	8/23/2023 8:22:58 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.6		mg/Kg	1	8/23/2023 3:09:00 PM	GS99197
Surr: BFB	95.7	15-244		%Rec	1	8/23/2023 3:09:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.018		mg/Kg	1	8/23/2023 3:09:00 PM	BS99197
Toluene	ND	0.036		mg/Kg	1	8/23/2023 3:09:00 PM	BS99197
Ethylbenzene	ND	0.036		mg/Kg	1	8/23/2023 3:09:00 PM	BS99197
Xylenes, Total	ND	0.073		mg/Kg	1	8/23/2023 3:09:00 PM	BS99197
Surr: 4-Bromofluorobenzene	90.9	39.1-146		%Rec	1	8/23/2023 3:09:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-11
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 11:08:00 AM
Lab ID: 2308C18-011 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **JMT**	
Chloride	ND	60		mg/Kg	20	8/24/2023 2:53:22 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/23/2023 8:46:50 PM	77026
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/23/2023 8:46:50 PM	77026
Surr: DNOP	81.8	69-147		%Rec	1	8/23/2023 8:46:50 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.5		mg/Kg	1	8/23/2023 3:52:00 PM	GS99197
Surr: BFB	99.3	15-244		%Rec	1	8/23/2023 3:52:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.017		mg/Kg	1	8/23/2023 3:52:00 PM	BS99197
Toluene	ND	0.035		mg/Kg	1	8/23/2023 3:52:00 PM	BS99197
Ethylbenzene	ND	0.035		mg/Kg	1	8/23/2023 3:52:00 PM	BS99197
Xylenes, Total	ND	0.069		mg/Kg	1	8/23/2023 3:52:00 PM	BS99197
Surr: 4-Bromofluorobenzene	91.5	39.1-146		%Rec	1	8/23/2023 3:52:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-12
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 11:10:00 AM
Lab ID: 2308C18-012 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	660	60		mg/Kg	20	8/24/2023 3:23:27 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	8/23/2023 9:10:41 PM	77026
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	8/23/2023 9:10:41 PM	77026
Surr: DNOP	79.8	69-147		%Rec	1	8/23/2023 9:10:41 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.8		mg/Kg	1	8/23/2023 4:14:00 PM	GS99197
Surr: BFB	102	15-244		%Rec	1	8/23/2023 4:14:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	8/23/2023 4:14:00 PM	BS99197
Toluene	ND	0.038		mg/Kg	1	8/23/2023 4:14:00 PM	BS99197
Ethylbenzene	ND	0.038		mg/Kg	1	8/23/2023 4:14:00 PM	BS99197
Xylenes, Total	ND	0.076		mg/Kg	1	8/23/2023 4:14:00 PM	BS99197
Surr: 4-Bromofluorobenzene	94.6	39.1-146		%Rec	1	8/23/2023 4:14:00 PM	BS99197

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

Qualifiers:

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

Analytical Report
Lab Order **2308C18**
Date Reported: **8/28/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** EB-1
Project: John AGU 1 BATT **Collection Date:** 8/21/2023 3:42:00 PM
Lab ID: 2308C18-013 **Matrix:** MEOH (SOIL) **Received Date:** 8/23/2023 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	87	60		mg/Kg	20	8/24/2023 3:35:52 AM	77044
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	18	9.0		mg/Kg	1	8/23/2023 9:34:32 PM	77026
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	8/23/2023 9:34:32 PM	77026
Surr: DNOP	79.7	69-147		%Rec	1	8/23/2023 9:34:32 PM	77026
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **CCM**	
Gasoline Range Organics (GRO)	ND	3.7		mg/Kg	1	8/23/2023 4:36:00 PM	GS99197
Surr: BFB	98.3	15-244		%Rec	1	8/23/2023 4:36:00 PM	GS99197
EPA METHOD 8021B: VOLATILES						Analyst: **CCM**	
Benzene	ND	0.019		mg/Kg	1	8/23/2023 4:36:00 PM	BS99197
Toluene	ND	0.037		mg/Kg	1	8/23/2023 4:36:00 PM	BS99197
Ethylbenzene	ND	0.037		mg/Kg	1	8/23/2023 4:36:00 PM	BS99197
Xylenes, Total	ND	0.074		mg/Kg	1	8/23/2023 4:36:00 PM	BS99197
Surr: 4-Bromofluorobenzene	93.6	39.1-146		%Rec	1	8/23/2023 4:36:00 PM	BS99197

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C18**

28-Aug-23

Client: EOG

Project: John AGU 1 BATT

Sample ID: **MB-77043**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **77043**	RunNo: **99168**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3617090** Units: **mg/Kg**

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

Sample ID: **LCS-77043**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **77043**	RunNo: **99168**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3617091** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.2	90	110			

Sample ID: **MB-77044**	SampType: **mblk**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **77044**	RunNo: **99168**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3617092** Units: **mg/Kg**

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

Sample ID: **LCS-77044**	SampType: **lcs**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **77044**	RunNo: **99168**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3617093** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.1	90	110			

Sample ID: **MB-77044**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **77044**	RunNo: **99202**
Prep Date: **8/23/2023**	Analysis Date: **8/24/2023**	SeqNo: **3617267** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	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 Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C18**

28-Aug-23

Client: EOG

Project: John AGU 1 BATT

Sample ID: **LCS-77025**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **77025**	RunNo: **99200**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3616870** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	61.9	130			
Surr: DNOP	1.5		5.000		29.9	69	147			S

Sample ID: **MB-77026**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **77026**	RunNo: **99211**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3617543** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.7		10.00		77.2	69	147			

Sample ID: **LCS-77026**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **77026**	RunNo: **99211**
Prep Date: **8/23/2023**	Analysis Date: **8/23/2023**	SeqNo: **3617544** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	94.8	61.9	130			
Surr: DNOP	3.5		5.000		70.6	69	147			

Sample ID: **MB-77025**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **77025**	RunNo: **99211**
Prep Date: **8/23/2023**	Analysis Date: **8/24/2023**	SeqNo: **3619116** 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	8.1		10.00		80.9	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C18**

28-Aug-23

Client: EOG

Project: John AGU 1 BATT

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS99197**	RunNo: **99197**
Prep Date:	Analysis Date: **8/23/2023**	SeqNo: **3616748** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	87.0	70	130			
Surr: BFB	2100		1000		213	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS99197**	RunNo: **99197**
Prep Date:	Analysis Date: **8/23/2023**	SeqNo: **3616749** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		103	15	244			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C18**

28-Aug-23

Client: EOG

Project: John AGU 1 BATT

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS99197**	RunNo: **99197**
Prep Date:	Analysis Date: **8/23/2023**	SeqNo: **3616803** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.6	70	130			
Toluene	0.94	0.050	1.000	0	94.0	70	130			
Ethylbenzene	0.96	0.050	1.000	0	95.9	70	130			
Xylenes, Total	2.9	0.10	3.000	0	96.0	70	130			
Surr: 4-Bromofluorobenzene	0.99		1.000		98.5	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS99197**	RunNo: **99197**
Prep Date:	Analysis Date: **8/23/2023**	SeqNo: **3616804** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.3	39.1	146			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: EOG | Work Order Number: 2308C18 | RcptNo: 1

Received By: **Tracy Casarrubias** 8/23/2023 7:30:00 AM

Completed By: **Tracy Casarrubias** 8/23/2023 8:13:41 AM

Reviewed By: CM 8/23/23

Chain of Custody

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

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA?	Yes ☐	No ☐	NA ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: / (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? 8/23/23
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: SCM 8/23 SCM 8/23/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.9	Good	Yes	Yogi		

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 24 hr

Project Name: John AGU #1 BATT

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 5.9 - 0 = 5.9 °C

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

1 of 2

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2308C18	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
8-21-23	1030	Soil	W-1	1x4oz Jar	ICE	001	X	X	X
	1032		W-2			002			
	1034		W-3			003			
	1036		W-4			004			
	1038		W-5			005			
	1040		W-6			006			
	1100		W-7			007			
	1102		W-8			008			
	1104		W-9			009			
	1106		W-10			010			
	1108		W-11			011			
	1110		W-12			012			

Analysis Request

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
8-22-23	0820	J. Martinez			8/22/23	820
8/23/23	1900			courier	8/23/23	7:30

Remarks: Bill to EOG Artesia

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 repo

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 24 hr

Project Name: John AGU #1 BATT

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez
On Ice: ☒ Yes ☐ No 4oo
# of Coolers: 1
Cooler Temp(including CF): 5.9 - 0 = 5.9°

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

2 of 2

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2308C18	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
8-21-23	1542	Soil	~~Duplicate~~ EB-1	1x4oz Jar	ICE	003	X	X	X

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8-22-23	0820	J. Martinez			8/22/23	820
8/22/23	1900			courier	8/23/23	7:30

Remarks: Bill to EOG Artesia

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 repo

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

September 11, 2023

Will Kierdorf
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: John AGU 1 Batt OrderNo.: 2309007

Dear Will Kierdorf:

Hall Environmental Analysis Laboratory received 2 sample(s) on 9/1/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2309007**
Date Reported: **9/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-6A
Project: John AGU 1 Batt **Collection Date:** 8/30/2023 1:15:00 PM
Lab ID: 2309007-001 **Matrix:** MEOH (SOIL) **Received Date:** 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	130	60		mg/Kg	20	9/1/2023 3:19:46 PM	77260
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	9/1/2023 1:03:50 PM	77248
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/1/2023 1:03:50 PM	77248
Surr: DNOP	90.6	69-147		%Rec	1	9/1/2023 1:03:50 PM	77248
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	4.5		mg/Kg	1	9/3/2023 11:03:46 PM	GS99436
Surr: BFB	96.5	15-244		%Rec	1	9/3/2023 11:03:46 PM	GS99436
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.023		mg/Kg	1	9/3/2023 11:03:46 PM	BS99436
Toluene	ND	0.045		mg/Kg	1	9/3/2023 11:03:46 PM	BS99436
Ethylbenzene	ND	0.045		mg/Kg	1	9/3/2023 11:03:46 PM	BS99436
Xylenes, Total	ND	0.091		mg/Kg	1	9/3/2023 11:03:46 PM	BS99436
Surr: 4-Bromofluorobenzene	106	39.1-146		%Rec	1	9/3/2023 11:03:46 PM	BS99436

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

Qualifiers:

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

Analytical Report
Lab Order **2309007**
Date Reported: **9/11/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG **Client Sample ID:** W-12A
Project: John AGU 1 Batt **Collection Date:** 8/30/2023 12:20:00 PM
Lab ID: 2309007-002 **Matrix:** MEOH (SOIL) **Received Date:** 9/1/2023 7:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **SNS**	
Chloride	110	60		mg/Kg	20	9/1/2023 3:32:10 PM	77260
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **PRD**	
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	9/1/2023 1:14:31 PM	77248
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	9/1/2023 1:14:31 PM	77248
Surr: DNOP	89.1	69-147		%Rec	1	9/1/2023 1:14:31 PM	77248
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **JJP**	
Gasoline Range Organics (GRO)	ND	3.0		mg/Kg	1	9/3/2023 11:27:12 PM	GS99436
Surr: BFB	98.9	15-244		%Rec	1	9/3/2023 11:27:12 PM	GS99436
EPA METHOD 8021B: VOLATILES						Analyst: **JJP**	
Benzene	ND	0.015		mg/Kg	1	9/3/2023 11:27:12 PM	BS99436
Toluene	ND	0.030		mg/Kg	1	9/3/2023 11:27:12 PM	BS99436
Ethylbenzene	ND	0.030		mg/Kg	1	9/3/2023 11:27:12 PM	BS99436
Xylenes, Total	ND	0.060		mg/Kg	1	9/3/2023 11:27:12 PM	BS99436
Surr: 4-Bromofluorobenzene	109	39.1-146		%Rec	1	9/3/2023 11:27:12 PM	BS99436

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

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309007**

11-Sep-23

Client: EOG

Project: John AGU 1 Batt

Sample ID: **MB-77260**	SampType: **MBLK**	TestCode: **EPA Method 300.0: Anions**
Client ID: **PBS**	Batch ID: **77260**	RunNo: **99442**
Prep Date: **9/1/2023**	Analysis Date: **9/1/2023**	SeqNo: **3630002** Units: **mg/Kg**

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

Sample ID: **LCS-77260**	SampType: **LCS**	TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSS**	Batch ID: **77260**	RunNo: **99442**
Prep Date: **9/1/2023**	Analysis Date: **9/1/2023**	SeqNo: **3630003** 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 Quanitative Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.
B	Analyte detected in the associated Method Blank
E	Above Quantitation Range/Estimated Value
J	Analyte detected below quantitation limits
P	Sample pH Not In Range
RL	Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309007**

11-Sep-23

Client: EOG

Project: John AGU 1 Batt

Sample ID: **LCS-77248**	SampType: **LCS**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **LCSS**	Batch ID: **77248**	RunNo: **99417**
Prep Date: **9/1/2023**	Analysis Date: **9/1/2023**	SeqNo: **3628404** 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	85.3	61.9	130			
Surr: DNOP	4.4		5.000		87.6	69	147			

Sample ID: **MB-77248**	SampType: **MBLK**	TestCode: **EPA Method 8015M/D: Diesel Range Organics**
Client ID: **PBS**	Batch ID: **77248**	RunNo: **99417**
Prep Date: **9/1/2023**	Analysis Date: **9/1/2023**	SeqNo: **3628405** 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		86.3	69	147			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309007**

11-Sep-23

Client: EOG

Project: John AGU 1 Batt

Sample ID: **2.5ug gro lcs**	SampType: **LCS**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **LCSS**	Batch ID: **GS99436**	RunNo: **99436**
Prep Date:	Analysis Date: **9/3/2023**	SeqNo: **3629275** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.6	70	130			
Surr: BFB	2000		1000		201	15	244			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8015D: Gasoline Range**
Client ID: **PBS**	Batch ID: **GS99436**	RunNo: **99436**
Prep Date:	Analysis Date: **9/3/2023**	SeqNo: **3629279** 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	15	244			

Qualifiers:

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **2309007**

11-Sep-23

Client: EOG

Project: John AGU 1 Batt

Sample ID: **100ng btex lcs**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **BS99436**	RunNo: **99436**
Prep Date:	Analysis Date: **9/3/2023**	SeqNo: **3629355** 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	108	70	130			
Toluene	1.1	0.050	1.000	0	109	70	130			
Ethylbenzene	1.1	0.050	1.000	0	110	70	130			
Xylenes, Total	3.3	0.10	3.000	0	111	70	130			
Surr: 4-Bromofluorobenzene	1.1		1.000		113	39.1	146			

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **BS99436**	RunNo: **99436**
Prep Date:	Analysis Date: **9/3/2023**	SeqNo: **3629359** 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		111	39.1	146			

Qualifiers:

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

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: EOG | Work Order Number: 2309007 | RcptNo: 1

Received By: **Steve McQuiston** 9/1/2023 7:35:00 AM

Completed By: **Desiree Dominguez** 9/1/2023 8:30:52 AM

Reviewed By: SCM 9/1/23

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	~~No~~ ☑ NR 9/1/23	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

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

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

Adjusted? _____

Checked by: NR 9/1/23

Special Handling (if applicable)

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

Person Notified: _____ Date: _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

~~-client phone, e-mail, and fax not provided on COC. -DAD 9/1/23~~ NR 9/1/23

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.9	Good	Not Present	Yogi		

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 24 hr

Project Name: John AGU #1 Batt

Project #: 5375

Project Manager: W. Kierdorf

Sampler: J. Martinez

On Ice: ☑ Yes ☐ No

# of Coolers: 1 (VOG1)

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

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

1 of 1

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2309007	BTEX (8021)	TPH:8015D(GRO / DRO / MRO)	Chloride (EPA 300)
8-30-23	1315	Soil	W-6A	1y 4oz Jar	ICE	-001	X	X	X
"	1220	"	W-12A	1x4oz Jar	ICE	-002	X	X	X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
8-31-23	945				8/31/23	945
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
			SCM	COURIER	9/1/23	0735

Remarks: Bill to EOG Artesia

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 repo

ATTACHMENT 4 – 2023 CONFIRMATION SAMPLING NOTIFICATIONS

Gmail Will Kierdorf <will@rangerenv.com>

FW: John AGU 1 Battery (fAB1810139472 / 2RP-4694) Sampling Notification

Chase Settle <Chase_Settle@eogresources.com> Wed, Aug 16, 2023 at 1:49 PM
To: Will Kierdorf <will@rangerenv.com>

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, August 16, 2023 12:47 PM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: John AGU 1 Battery (fAB1810139472 / 2RP-4694) Sampling Notification

Good afternoon,

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

John AGU 1 Battery

C-14-20S-24E

Eddy County, NM

fAB1810139472 / 2RP-4694

Sampling will begin at 8:00 a.m. on Monday, August 21, 2023.

Thank you,

Tina Huerta

Regulatory Specialist

Direct: 575.748.4168

Cell: 575.703.3121

Email: tina_huerta@eogresources.com

eog resources

Artesia Division

Gmail Will Kierdorf <will@rangerenv.com>

FW: John AGU 1 Battery (fAB1810139472 / 2RP-4694) Sampling Notification

Chase Settle <Chase_Settle@eogresources.com> Mon, Aug 28, 2023 at 8:44 AM
To: Will Kierdorf <will@rangerenv.com>

From: Miriam Morales <Miriam_Morales@eogresources.com>
Sent: Friday, August 25, 2023 8:28 AM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>; Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Subject: John AGU 1 Battery (fAB1810139472 / 2RP-4694) Sampling Notification

Good afternoon,

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

John AGU 1 Battery

C-14-20S-24E

Eddy County, NM

fAB1810139472 / 2RP-4694

Sampling will begin at 8:00 a.m. on Tuesday, August 29, 2023 and continue through Friday, September 1st, 2023.

Thank you,

Miriam Morales

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 264793

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 264793
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/26/2023