



October 31, 2022

New Mexico Oil Conservation Division

New Mexico Energy, Minerals, and Natural Resources Department
1220 South Street, Francis Drive
Santa Fe, New Mexico 87505

**Re: Closure Report
Brown SWD #1 Tank Battery
EOG Resources, Inc.
Incident Number nAPP2222956138
Lea County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum) on behalf of EOG Resources, Inc. (EOG), has prepared this *Closure Report* to document assessment, excavation, and soil sampling activities performed at the Brown SWD #1 Tank Battery Area (Site). The purpose of this work was to remediate historical soil impacts discovered during the decommissioning of the Site tank battery. Based on the excavation activities and analytical results from the soil sampling events, EOG is submitting this *Closure Report* describing remediation and sampling activities that have occurred for closure of Incident Number nAPP2222956138.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site (Figure 1) is located in Unit H, Section 26, Township 16 South, Range 37 East, in Lea County, New Mexico (32.8949471 °N, 103.2138824 °W) and is associated with oil and gas exploration and production operations on private land owned by Brand West Farms LLC.

Historical soil impacts were discovered during the decommissioning and removal of the Site tank battery. Analytical results from delineation samples collected on July 7, 2022, and August 29, 2022 confirmed the presence of elevated total petroleum hydrocarbon (TPH) and chloride concentrations, indicating a historical release to the subsurface from the tank battery. Although the volume of released fluids is unknown, the quantity of crude oil and produced water released at the Site likely exceeded the reportable volume threshold of 5 barrels (bbls) based on field observations of the area exhibiting stained soil and analytical results. EOG reported the release to the New Mexico Oil Conservation Division (NMOCD) on a *Release Notification Form C-141* (Form C-141) on August 18, 2022, and the release was assigned Incident Number nAPP2222956138. The historical release extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to *Table I, Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from

the characterization desktop review are summarized below, with potential site receptors identified on Figure 1.

Depth to groundwater at the Site is between 50 feet below ground surface (bgs) and 100 feet bgs based on a recent soil boring drilled for determination of regional groundwater depth. On October 27, 2015, a shallow domestic well (L-14025-POD1) was drilled 0.2 miles southeast of the Site. Soil boring L-14025-POD1 was drilled to a depth of 170 feet bgs by Roy Allen Taylor drilling company. Groundwater was encountered at the depth of 98 feet bgs. As such, groundwater at the Site is estimated to be between 50 and 100 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Appendix A.

The closest waterbody is a freshwater pond located approximately 0.5 miles northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a continuously flowing or significant watercourse, freshwater well, or spring, and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply to the Site:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

Due to the Sites decommission status, a reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet, per NMAC 19.15.29.13.D (1) for all remediation areas.

DELINEATION SOIL SAMPLING ACTIVITIES

On July 7, 2022, Ensolum conducted delineation activities to evaluate the release extent based on previous sampling results and current visual observations. Specifically, samples were collected from two potholes (PH01 and PH02) and testpits (TP09 through TP16) within depths ranging from 0.5 feet to 4 feet bgs. Soil samples were field screened for volatile aromatic hydrocarbons (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Hall Environmental Analysis Laboratories (HEAL) in Albuquerque, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-motor oil range organics (MRO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for delineation soil samples, PH01 and PH02, and TP09 through TP12, TP14 and TP15 at depths ranging from 0.5 feet bgs to 5 feet bgs indicate TPH and/or chloride concentrations exceed the Closure Criteria or reclamation requirement, where applicable. Based on visible staining in the release area, elevated field screening and laboratory analytical results, excavation activities appeared to be warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between September 28, 2022 through October 13, 2022, Ensolum returned to the Site to oversee excavation activities. Excavation activities were performed using track-mounted backhoe and transport vehicles. To direct excavation activities, soil was screened for VOCs and chloride. The excavation was completed to depths ranging from 1 foot bgs to 6 feet bgs.

Following removal of the impacted soil, 5-point composite soil samples were collected at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite floor samples FS01 through FS21 were collected from the floor of the excavation at depths ranging from 1-foot bgs to 6 feet bgs. Composite sidewall samples SW01 through SW06 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. Laboratory analytical results for floor samples FS19 and FS20 collected at 1 foot bgs indicated TPH concentrations exceeded the applied reclamation requirement. Additional excavation was completed in these areas to approximately 2 feet bgs. The soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3. Photographic documentation of the excavation is presented in Appendix B.

Laboratory analytical results for all final floor and sidewall samples indicated all COCs concentration were compliant with the Closure Criteria or reclamation requirement, where applicable. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C. NMOCD notifications for the sampling events are included in Appendix D.

The final excavation area measured approximately 4,075 square feet in areal extent and extends to a maximum depth of 6 feet bgs. A total of approximately 600 cubic yards of impacted soil was removed. The impacted soil was transported and properly disposed of at Lea Land landfill in Carlsbad, New Mexico.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the historical impacts discovered during the decommissioning process. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement, where applicable. Based on the soil sample analytical results, no further remediation was required. EOG will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. Excavation of impacted soil has mitigated impacts at this Site. As such, EOG respectfully requests closure for Incident Number nAPP2222956138.

EOG Resources, Inc.
Closure Report
Brown SWD #1 Tank Battery



If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely,
Ensolum, LLC

A handwritten signature in black ink, appearing to read 'Anita Thapalia'.

Anita Thapalia, P.G.
Project Geologist

A handwritten signature in black ink, appearing to read 'Ashley L. Ager'.

Ashley Ager, P.G.
Program Director

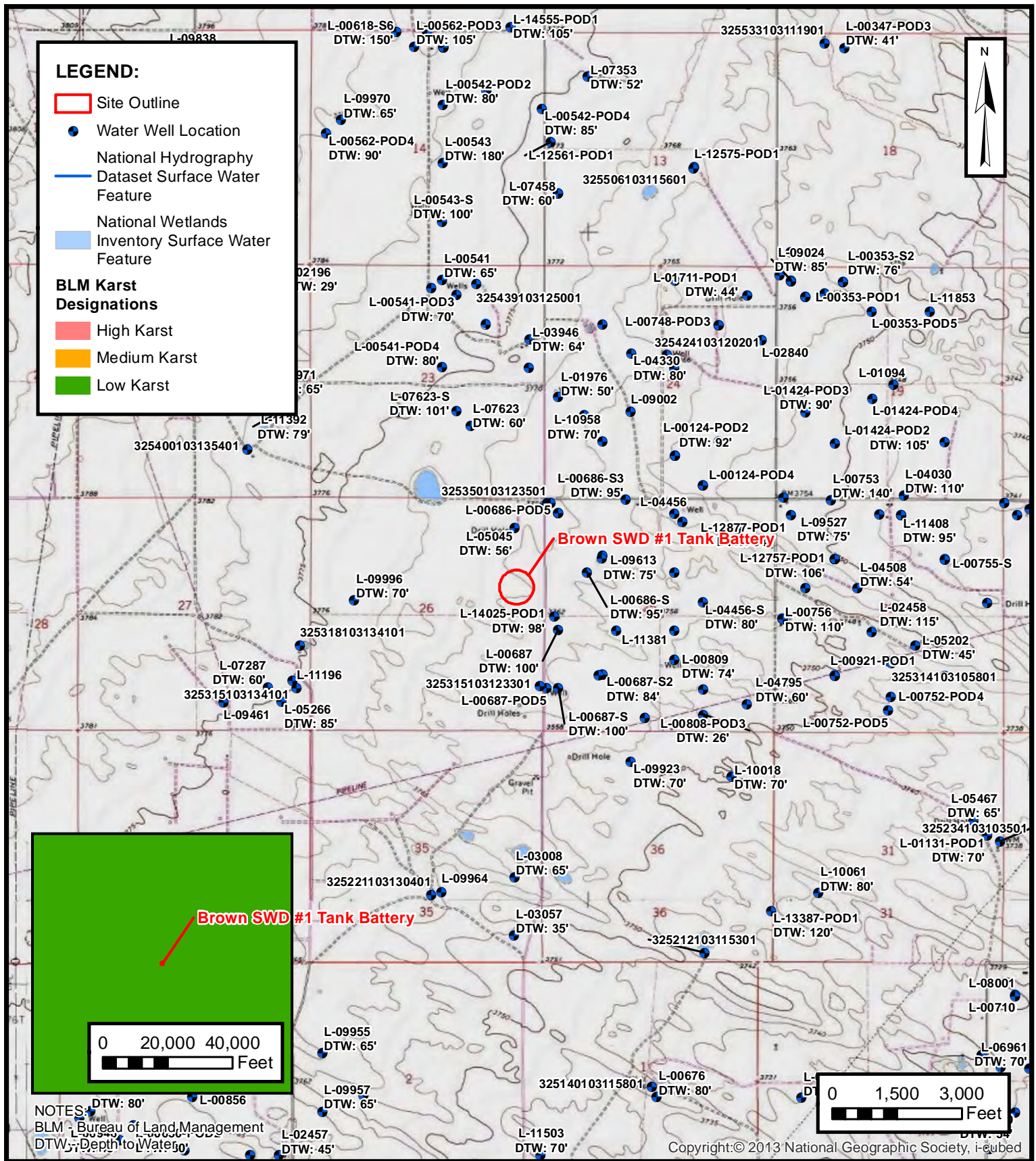
cc: Chase Settle, EOG
Amber Griffin, EOG
Brand West Farms LLC

Appendices:

Figure 1	Site Location Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	NMOCD Notifications
Appendix E	Final Form C-141



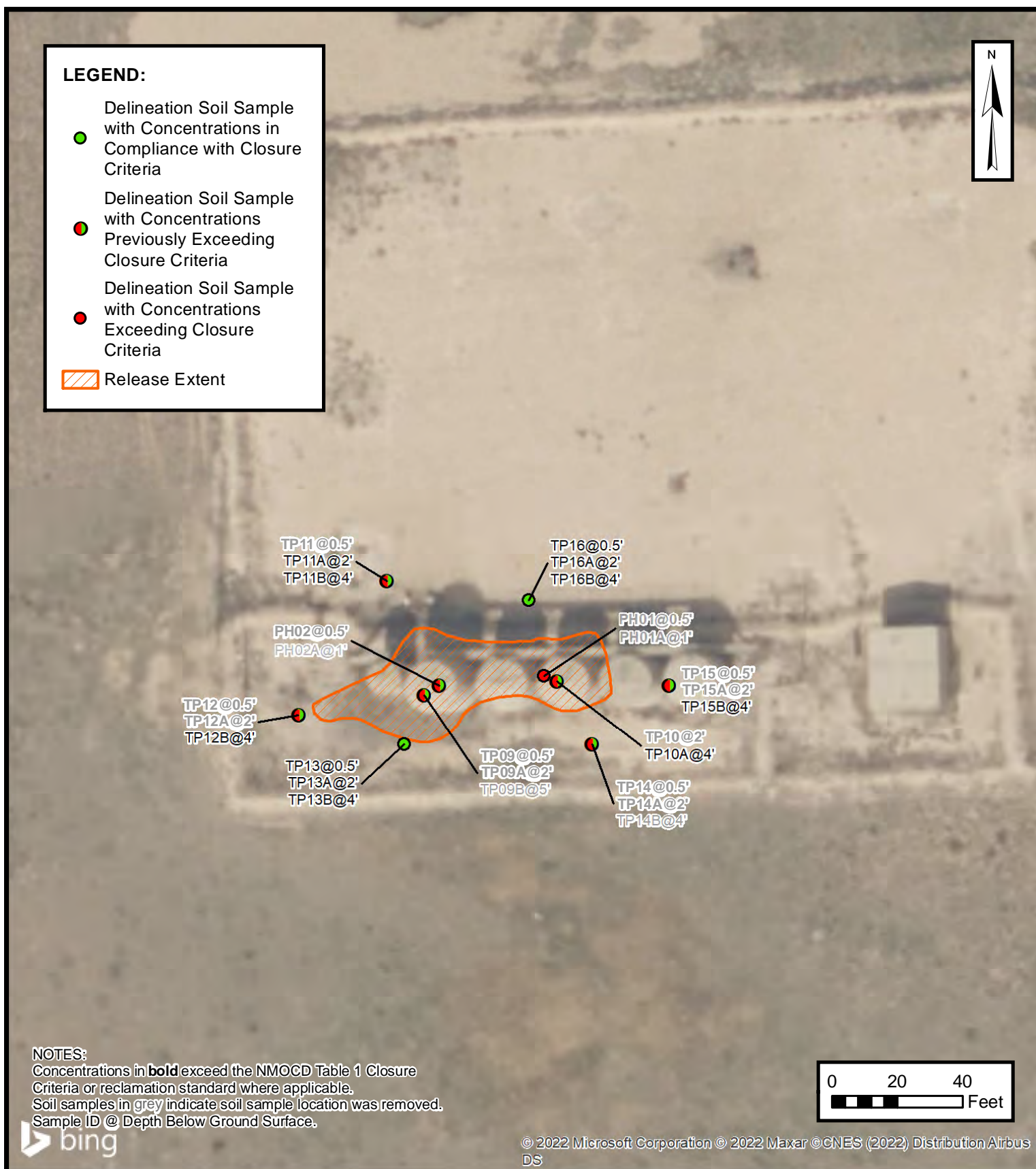
FIGURES



SITE RECEPTOR MAP
 EOG RESOURCES, INC
 BROWN SWD #1 TANK BATTERY
 INCIDENT NUMBER nAPP222956138

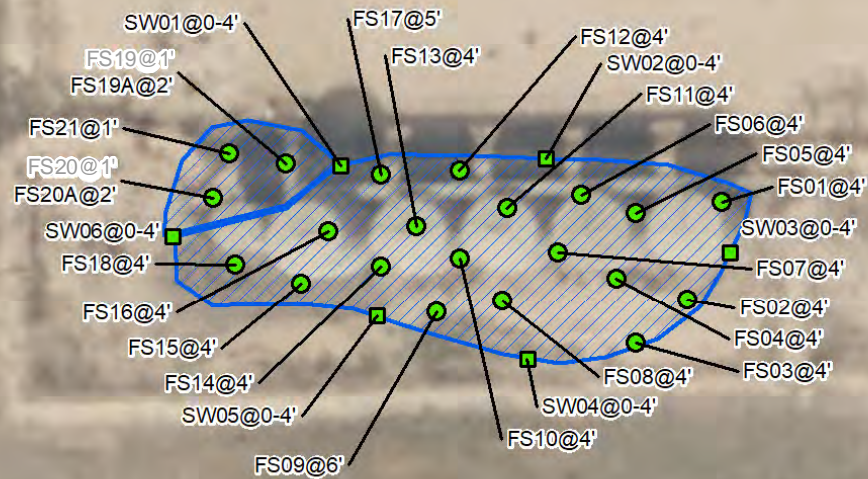
Unit H, Sec 26, T16S, R37E
 Lea County, New Mexico

FIGURE
1

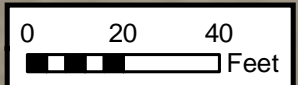
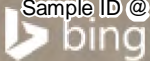


LEGEND:

- Excavation Floor Sample
in Compliance with
Closure Criteria
- Excavation Sidewall
Sample in Compliance
with Closure Criteria
- ▨ Extent of Excavation

**NOTES:**

Soil samples in grey indicate soil sample location was removed.
Sample ID @ Depth Below Ground Surface.



© 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS

EXCAVATION SOIL SAMPLE LOCATIONS

EOG RESOURCES, INC
BROWN SWD #1 TANK BATTERY
INCIDENT NUMBER nAPP2222956138
Unit H, Sec 26 T16S R37E
Lea County, New Mexico

FIGURE**3**



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Brown SWD #1 Tank Battery
EOG Resources
Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Soil Samples										
PH01	07/07/2022	0.5	<0.025	<0.10	<5.0	220	210	220	430	2,900
PH01A	07/07/2022	1	<0.025	<0.10	<5.0	260	180	260	440	300
PH02	07/07/2022	0.5	<0.025	<0.10	<4.9	290	570	290	860	330
PH02A	07/07/2022	1	<0.025	<0.10	<5.0	15	<49	15	15	<60
TP09	08/29/2022	2	<0.024	<0.096	<4.8	140	240	140	380	300
TP09A	08/29/2022	4	<0.024	<0.097	57	820	<490	877	877	<60
TP09B	08/29/2022	5	<0.025	0	150	3,300	1,100	3,450	4,550	<60
TP10	08/29/2022	2	<0.024	<0.097	<4.9	50	160	50	210	650
TP10A	08/29/2022	4	<0.025	<0.10	<5.0	25	98	25	123	1,100
TP11	08/29/2022	0.5	<0.024	<0.098	<4.9	61	230	61	291	96
TP11A	08/29/2022	2	<0.025	<0.099	<4.9	<14	50	<14	50	<60
TP11B	08/29/2022	4	<0.025	<0.099	<5.0	<15	<50	<15	<50	<60
TP12	08/29/2022	0.5	<0.025	<0.10	<5.0	<13	<43	<13	<43	350
TP12A	08/29/2022	2	<0.025	<0.10	<5.0	<14	<46	<14	<46	1,800
TP12B	08/29/2022	4	<0.024	<0.097	<4.8	<14	<48	<14	<48	2,900
TP13	08/29/2022	0.5	<0.025	<0.099	<4.9	<14	<46	<14	<46	220
TP13A	08/29/2022	2	<0.025	<0.10	<5.0	<14	<48	<14	<48	300
TP13B	08/29/2022	4	<0.024	<0.098	<4.9	<14	<48	<14	<48	2,600
TP14	08/29/2022	0.5	<0.025	<0.099	<4.9	<15	<49	<15	<49	210
TP14A	08/29/2022	2	<0.025	<0.099	<5.0	<14	<47	<14	<47	400
TP14B	08/29/2022	4	<0.025	<0.099	<5.0	2,200	1,800	2,200	4,000	930
TP15	08/29/2022	0.5	<0.025	<0.099	<5.0	<14	84	<14	84	<60
TP15A	08/29/2022	2	<0.025	<0.098	<4.9	20	140	20	160	<60
TP15B	08/29/2022	4	<0.025	<0.10	<5.0	<13	<44	<13	<44	<60
TP16	08/29/2022	0.5	<0.024	<0.098	<4.9	<15	<49	<15	<49	310
TP16A	08/29/2022	2	<0.025	<0.099	<4.9	<14	<47	<14	<47	500
TP16B	08/29/2022	4	<0.024	<0.095	<4.8	<15	<49	<15	<49	320
Confirmation Soil Samples										
FS01	09/28/2022	4	<0.024	<0.09	<4.7	<14	<47	<14	<47	<60
FS02	09/28/2022	4	<0.025	<0.10	<4.9	<15	<49	<15	<49	640
FS03	09/28/2022	4	<0.024	<0.10	<4.8	<15	<49	<15	<49	120
FS04	09/28/2022	4	<0.023	<0.09	<4.6	<14	<47	<14	<47	93
FS05	09/28/2022	4	<0.025	<0.10	<4.9	<14	<48	<14	<48	71
FS06	09/28/2022	4	<0.025	<0.10	<5.0	<75	<250	<75	<250	220



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Brown SWD #1 Tank Battery
 EOG Resources
 Lea County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	10,000
FS07	09/28/2022	4	<0.024	<0.09	<4.7	85	82	85	170	530
FS08	09/28/2022	4	<0.025	<0.10	<5.0	<14	<47	<14	<47	250
FS09	09/28/2022	6	<0.024	<0.09	<4.7	19	<50	19	19	260
FS10	09/28/2022	4	<0.023	<0.09	<4.6	<15	<50	<15	<50	<60
FS11	09/28/2022	4	<0.024	<0.10	<4.8	<14	<46	<14	<46	430
FS12	09/28/2022	4	<0.025	<0.10	<4.9	<14	<47	<14	<47	190
FS13	09/28/2022	4	<0.023	<0.09	<4.7	<14	<47	<14	<47	<60
FS14	09/28/2022	4	<0.025	<0.10	<4.9	38	53	38	91	400
FS15	09/28/2022	4	<0.023	<0.09	<4.7	<15	<49	<15	<49	670
FS16	09/28/2022	4	<0.024	<0.10	<4.8	<15	<49	<15	<49	<60
FS17	09/28/2022	5	<0.025	<0.10	<4.9	<14	<46	<14	<46	160
FS18	09/28/2022	4	<0.024	<0.10	<4.8	<14	<47	<14	<47	<60
FS19	09/28/2022	4	<0.023	<0.09	<4.7	43	43	43	173	140
FS19A	10/13/2022	2	<0.025	<0.025	<20	<25	<50	<25	<50	268
FS20	09/28/2022	4	<0.024	<0.10	<4.8	46	87	46	103	67
FS20A	10/13/2022	2	<0.025	<0.025	<20	<25	<50	<25	<50	83
FS21	09/28/2022	1	<0.024	<0.10	<4.9	<14	60	<14	60	<60
SW01	09/28/2022	0-4	<0.025	<0.10	<4.9	<15	<49	<15	<49	<60
SW02	09/28/2022	0-4	<0.024	<0.10	<4.8	<14	<46	<14	<46	83
SW03	09/28/2022	0-4	<0.025	<0.10	<5.0	<13	<45	<13	<45	<60
SW04	09/28/2022	0-4	<0.023	<0.09	<4.6	<15	<50	<15	<50	150
SW05	09/28/2022	0-4	<0.024	<0.10	<4.8	<14	<46	<14	<46	<60
SW06	09/28/2022	0-4	<0.023	<0.09	<4.6	<13	<43	<13	<43	62

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



APPENDIX A

Referenced Well Records



New Mexico Office of the State Engineer

Water Right Summary



get image list

WR File Number: L 14025 **Subbasin:** L **Cross Reference:** -
Primary Purpose: DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
Primary Status: PMT PERMIT
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 1 **Cause/Case:** -
Owner: ROY TAYLOR
Owner: LINDA WESTALL TAYLOR

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/ To	Acres	Diversion	Consumptive
			1	2					
577661	72121	2015-10-22	PMT	LOG	L 14025 POD1	T		1	

Current Points of Diversion

(NAD83 UTM in meters)											
POD Number	Well Tag	Source	Q					X	Y	Other Location Desc	
			64	Q16	Q4	Sec	Tws				Rng
L 14025 POD1		Shallow	1	1	3	25	16S	37E	667298	3640818	

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


6/21/22 1:29 PM

WATER RIGHT SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng	X	Y
L	14025 POD1	1	1	3	25	16S	37E	667298	3640818 

Driller License: 1626 **Driller Company:** TAYLOR, ROY ALLEN

Driller Name: ROY TAYLOR

Drill Start Date: 10/27/2015 **Drill Finish Date:** 10/28/2015 **Plug Date:**

Log File Date: 11/02/2015 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:**

Casing Size: 5.00 **Depth Well:** 170 feet **Depth Water:** 98 feet

Water Bearing Stratifications:

Top	Bottom	Description
39	165	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
130	170

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

10/19/22 10:08 AM

POINT OF DIVERSION SUMMARY



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#) 

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

site_no list =

- 325350103123501

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 325350103123501 16S.37E.25.111113

Available data for this site

Groundwater: Field measurements



GO

Lea County, New Mexico

Hydrologic Unit Code 12080003

Latitude 32°53'59.0", Longitude 103°12'43.0" NAD83

Land-surface elevation 3,767.00 feet above NGVD29

This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

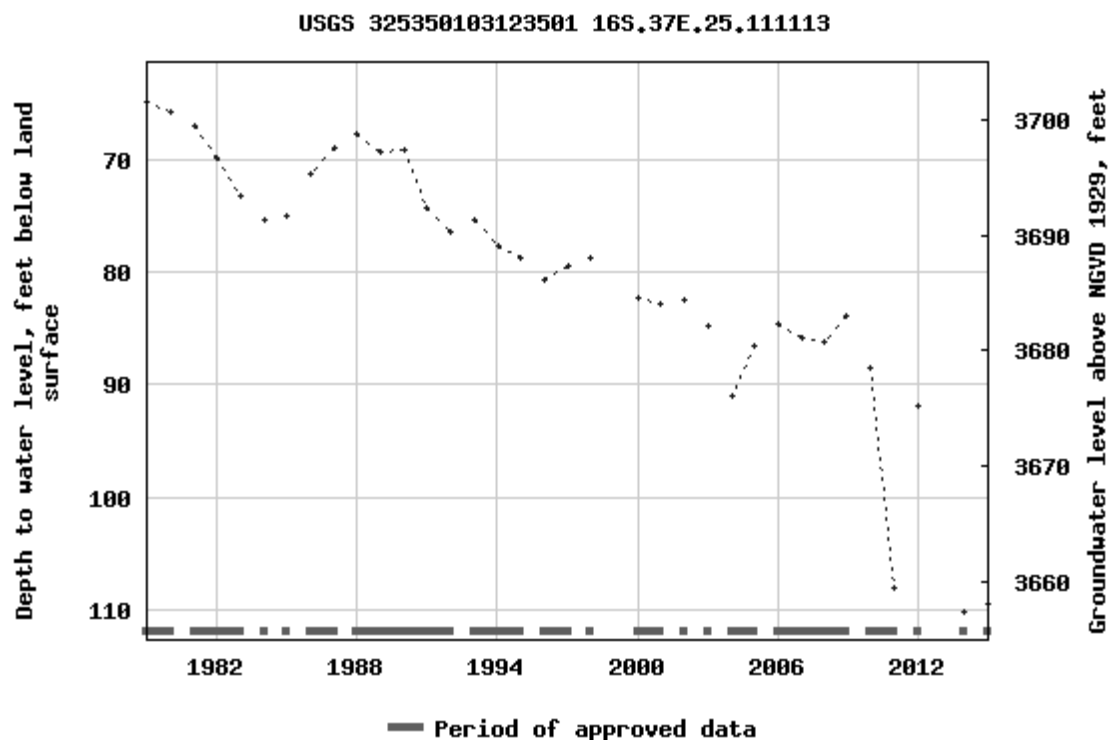
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



Breaks in the plot represent a gap of at least one year between field measurements.
[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

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



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

Page Last Modified: 2022-06-21 15:54:59 EDT

0.56 0.46 nadww02



APPENDIX B

Photographic Log



Photographic Log
EOG Resources, Inc
Brown SWD #1 Tank Battery
Incident Number nAPP2222956552



Photograph: 1 Date: 6/21/2022
Description: Staining following tank battery removal.
View: West



Photograph: 2 Date: 8/29/2022
Description: Test pits delineation on site.
View: Southeast



Photograph: 3 Date: 9/28/2022
Description: View of final excavation extent.
View: Northeast



Photograph: 4 Date: 9/28/2022
Description: View of final excavation extent.
View: Southeast



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



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

July 19, 2022

Tacoma Morrissey
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Brown SWD 001

OrderNo.: 2207350

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/9/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2207350

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SS01 @ 0.5'

Project: Brown SWD 001

Collection Date: 7/7/2022 11:15:00 AM

Lab ID: 2207350-001

Matrix: SOIL

Received Date: 7/9/2022 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	7/15/2022 4:19:08 PM	68808
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 1:21:46 AM	68750
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 1:21:46 AM	68750
Surr: DNOP	81.5	51.1-141		%Rec	1	7/16/2022 1:21:46 AM	68750
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/14/2022 8:07:00 PM	68721
Surr: BFB	81.8	37.7-212		%Rec	1	7/14/2022 8:07:00 PM	68721
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/14/2022 8:07:00 PM	68721
Toluene	ND	0.050		mg/Kg	1	7/14/2022 8:07:00 PM	68721
Ethylbenzene	ND	0.050		mg/Kg	1	7/14/2022 8:07:00 PM	68721
Xylenes, Total	ND	0.099		mg/Kg	1	7/14/2022 8:07:00 PM	68721
Surr: 4-Bromofluorobenzene	81.5	70-130		%Rec	1	7/14/2022 8:07:00 PM	68721

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

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

Page 1 of 8

Analytical Report

Lab Order 2207350

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SS02 @ 0.5'

Project: Brown SWD 001

Collection Date: 7/7/2022 11:20:00 AM

Lab ID: 2207350-002

Matrix: SOIL

Received Date: 7/9/2022 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	320	60		mg/Kg	20	7/15/2022 5:21:11 PM	68808
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	7/16/2022 2:09:09 AM	68750
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	7/16/2022 2:09:09 AM	68750
Surr: DNOP	63.3	51.1-141		%Rec	1	7/16/2022 2:09:09 AM	68750
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/14/2022 8:27:00 PM	68721
Surr: BFB	81.7	37.7-212		%Rec	1	7/14/2022 8:27:00 PM	68721
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	7/14/2022 8:27:00 PM	68721
Toluene	ND	0.049		mg/Kg	1	7/14/2022 8:27:00 PM	68721
Ethylbenzene	ND	0.049		mg/Kg	1	7/14/2022 8:27:00 PM	68721
Xylenes, Total	ND	0.098		mg/Kg	1	7/14/2022 8:27:00 PM	68721
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	7/14/2022 8:27:00 PM	68721

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

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

Page 2 of 8

Analytical Report

Lab Order 2207350

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SS03 @ 0.5'

Project: Brown SWD 001

Collection Date: 7/7/2022 11:25:00 AM

Lab ID: 2207350-003

Matrix: SOIL

Received Date: 7/9/2022 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	290	60		mg/Kg	20	7/15/2022 5:33:36 PM	68808
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/16/2022 2:32:50 AM	68750
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 2:32:50 AM	68750
Surr: DNOP	90.1	51.1-141		%Rec	1	7/16/2022 2:32:50 AM	68750
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/14/2022 8:47:00 PM	68721
Surr: BFB	81.8	37.7-212		%Rec	1	7/14/2022 8:47:00 PM	68721
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/14/2022 8:47:00 PM	68721
Toluene	ND	0.049		mg/Kg	1	7/14/2022 8:47:00 PM	68721
Ethylbenzene	ND	0.049		mg/Kg	1	7/14/2022 8:47:00 PM	68721
Xylenes, Total	ND	0.099		mg/Kg	1	7/14/2022 8:47:00 PM	68721
Surr: 4-Bromofluorobenzene	80.2	70-130		%Rec	1	7/14/2022 8:47:00 PM	68721

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

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

Page 3 of 8

Analytical Report

Lab Order 2207350

Date Reported: 7/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SS04 @ 0.5'

Project: Brown SWD 001

Collection Date: 7/7/2022 11:30:00 AM

Lab ID: 2207350-004

Matrix: SOIL

Received Date: 7/9/2022 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	77	60		mg/Kg	20	7/15/2022 5:46:01 PM	68808
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: SB
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	7/16/2022 2:56:32 AM	68750
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	7/16/2022 2:56:32 AM	68750
Surr: DNOP	106	51.1-141		%Rec	1	7/16/2022 2:56:32 AM	68750
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/14/2022 9:06:00 PM	68721
Surr: BFB	80.1	37.7-212		%Rec	1	7/14/2022 9:06:00 PM	68721
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	7/14/2022 9:06:00 PM	68721
Toluene	ND	0.050		mg/Kg	1	7/14/2022 9:06:00 PM	68721
Ethylbenzene	ND	0.050		mg/Kg	1	7/14/2022 9:06:00 PM	68721
Xylenes, Total	ND	0.099		mg/Kg	1	7/14/2022 9:06:00 PM	68721
Surr: 4-Bromofluorobenzene	80.9	70-130		%Rec	1	7/14/2022 9:06:00 PM	68721

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

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

Page 4 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2207350
19-Jul-22

Client: EOG
Project: Brown SWD 001

Sample ID: MB-68808	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 68808	RunNo: 89522
Prep Date: 7/15/2022	Analysis Date: 7/15/2022	SeqNo: 3188544 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-68808	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 68808	RunNo: 89522
Prep Date: 7/15/2022	Analysis Date: 7/15/2022	SeqNo: 3188545 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 92.5 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 8

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

WO#: 2207350

19-Jul-22

Client: EOG
Project: Brown SWD 001

Sample ID: MB-68750	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 68750	RunNo: 89483								
Prep Date: 7/13/2022	Analysis Date: 7/15/2022	SeqNo: 3186687 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		118	51.1	141			

Sample ID: LCS-68750	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 68750	RunNo: 89483								
Prep Date: 7/13/2022	Analysis Date: 7/15/2022	SeqNo: 3186688 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	58	15	50.00	0	116	64.4	127			
Surr: DNOP	5.8		5.000		116	51.1	141			

Qualifiers:

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

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

WO#: 2207350

19-Jul-22

Client: EOG**Project:** Brown SWD 001

Sample ID: lcs-68721	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68721		RunNo: 89504							
Prep Date: 7/12/2022	Analysis Date: 7/14/2022		SeqNo: 3184960		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.9	72.3	137			
Surr: BFB	1800		1000		180	37.7	212			

Sample ID: mb-68721	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68721		RunNo: 89504							
Prep Date: 7/12/2022	Analysis Date: 7/14/2022		SeqNo: 3184961		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	820		1000		82.4	37.7	212			

Sample ID: lcs-68726	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68726		RunNo: 89504							
Prep Date: 7/12/2022	Analysis Date: 7/15/2022		SeqNo: 3184981		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1800		1000		180	37.7	212			

Sample ID: mb-68726	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68726		RunNo: 89504							
Prep Date: 7/12/2022	Analysis Date: 7/15/2022		SeqNo: 3184982		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	830		1000		83.2	37.7	212			

Qualifiers:

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

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

WO#: 2207350

19-Jul-22

Client: EOG**Project:** Brown SWD 001

Sample ID: ics-68721	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 68721			RunNo: 89504						
Prep Date: 7/12/2022	Analysis Date: 7/14/2022			SeqNo: 3185011		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.025	1.000	0	81.7	80	120			
Toluene	0.83	0.050	1.000	0	82.9	80	120			
Ethylbenzene	0.82	0.050	1.000	0	81.7	80	120			
Xylenes, Total	2.4	0.10	3.000	0	80.7	80	120			
Surr: 4-Bromofluorobenzene	0.83		1.000		83.5	70	130			

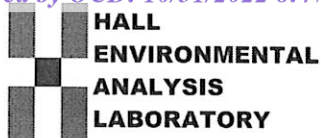
Sample ID: mb-68721	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 68721			RunNo: 89504						
Prep Date: 7/12/2022	Analysis Date: 7/14/2022			SeqNo: 3185012		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.82		1.000		81.9	70	130			

Sample ID: ics-68726	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 68726			RunNo: 89504						
Prep Date: 7/12/2022	Analysis Date: 7/15/2022			SeqNo: 3185032		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.83		1.000		83.2	70	130			

Sample ID: mb-68726	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 68726			RunNo: 89504						
Prep Date: 7/12/2022	Analysis Date: 7/15/2022			SeqNo: 3185033		Units: %Rec				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.83		1.000		82.7	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2207350

RcptNo: 1

Received By: Sean Livingston

7/9/2022 9:30:00 AM

Completed By: Sean Livingston

7/9/2022 12:12:26 PM

Reviewed By: CMC

7/11/22

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: jn 7/11/22

Special Handling (if applicable)

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

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

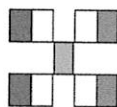
16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.1	Good				
2	3.6	Good				
3	3.9	Good				

[illegible]

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



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks: Amber_Griffin@eogresources.com

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
7/8/22	1115	<i>[Signature]</i>	<i>[Signature]</i>		7/8/22	1115
7/8/22	1100	<i>[Signature]</i>	See cover		7/8/22	1130



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

September 29, 2022

Tacoma Morrissey
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Brown SWD 1

OrderNo.: 2209A57

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 3 sample(s) on 9/21/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2209A57

Date Reported: 9/29/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW04@0-4'

Project: Brown SWD 1

Collection Date: 9/16/2022 4:05:00 PM

Lab ID: 2209A57-001

Matrix: SOIL

Received Date: 9/21/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	990	60		mg/Kg	20	9/28/2022 1:04:16 AM	70444
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	9/23/2022 4:05:27 PM	70355
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	9/23/2022 4:05:27 PM	70355
Surr: DNOP	123	21-129		%Rec	1	9/23/2022 4:05:27 PM	70355
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/22/2022 5:31:28 PM	70327
Surr: BFB	95.1	37.7-212		%Rec	1	9/22/2022 5:31:28 PM	70327
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	9/22/2022 5:31:28 PM	70327
Toluene	ND	0.048		mg/Kg	1	9/22/2022 5:31:28 PM	70327
Ethylbenzene	ND	0.048		mg/Kg	1	9/22/2022 5:31:28 PM	70327
Xylenes, Total	ND	0.095		mg/Kg	1	9/22/2022 5:31:28 PM	70327
Surr: 4-Bromofluorobenzene	96.8	70-130		%Rec	1	9/22/2022 5:31:28 PM	70327

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

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

Page 1 of 7

Analytical Report

Lab Order 2209A57

Date Reported: 9/29/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW03@0-4'

Project: Brown SWD 1

Collection Date: 9/16/2022 2:50:00 PM

Lab ID: 2209A57-002

Matrix: SOIL

Received Date: 9/21/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	710	60		mg/Kg	20	9/28/2022 1:16:37 AM	70444
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/23/2022 4:16:05 PM	70355
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	9/23/2022 4:16:05 PM	70355
Surr: DNOP	115	21-129		%Rec	1	9/23/2022 4:16:05 PM	70355
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	9/22/2022 5:55:02 PM	70327
Surr: BFB	96.0	37.7-212		%Rec	1	9/22/2022 5:55:02 PM	70327
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	9/22/2022 5:55:02 PM	70327
Toluene	ND	0.048		mg/Kg	1	9/22/2022 5:55:02 PM	70327
Ethylbenzene	ND	0.048		mg/Kg	1	9/22/2022 5:55:02 PM	70327
Xylenes, Total	ND	0.096		mg/Kg	1	9/22/2022 5:55:02 PM	70327
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	9/22/2022 5:55:02 PM	70327

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

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

Page 2 of 7

Analytical Report

Lab Order 2209A57

Date Reported: 9/29/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW02@0-4'

Project: Brown SWD 1

Collection Date: 9/16/2022 1:35:00 PM

Lab ID: 2209A57-003

Matrix: SOIL

Received Date: 9/21/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	990	60		mg/Kg	20	9/28/2022 1:53:38 AM	70444
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	9/23/2022 4:53:10 PM	70355
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	9/23/2022 4:53:10 PM	70355
Surr: DNOP	126	21-129		%Rec	1	9/23/2022 4:53:10 PM	70355
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	9/22/2022 6:18:34 PM	70327
Surr: BFB	98.4	37.7-212		%Rec	1	9/22/2022 6:18:34 PM	70327
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	9/22/2022 6:18:34 PM	70327
Toluene	ND	0.050		mg/Kg	1	9/22/2022 6:18:34 PM	70327
Ethylbenzene	ND	0.050		mg/Kg	1	9/22/2022 6:18:34 PM	70327
Xylenes, Total	ND	0.10		mg/Kg	1	9/22/2022 6:18:34 PM	70327
Surr: 4-Bromofluorobenzene	99.6	70-130		%Rec	1	9/22/2022 6:18:34 PM	70327

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

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

Page 3 of 7

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2209A57
29-Sep-22

Client: EOG
Project: Brown SWD 1

Sample ID: MB-70444	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 70444	RunNo: 91365
Prep Date: 9/27/2022	Analysis Date: 9/27/2022	SeqNo: 3270700 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-70444	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 70444	RunNo: 91365
Prep Date: 9/27/2022	Analysis Date: 9/27/2022	SeqNo: 3270701 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.0 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix interference

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 7

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

WO#: 2209A57

29-Sep-22

Client: EOG
Project: Brown SWD 1

Sample ID: LCS-70355	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 70355		RunNo: 91268							
Prep Date: 9/22/2022	Analysis Date: 9/23/2022		SeqNo: 3266106		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41	15	50.00	0	81.1	64.4	127			
Surr: DNOP	4.2		5.000		83.0	21	129			

Sample ID: MB-70355	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 70355		RunNo: 91268							
Prep Date: 9/22/2022	Analysis Date: 9/23/2022		SeqNo: 3266107		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	12		10.00		123	21	129			

Qualifiers:

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

Page 5 of 7

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

WO#: 2209A57

29-Sep-22

Client: EOG
Project: Brown SWD 1

Sample ID: ics-70327	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Batch ID: 70327			RunNo: 91225						
Prep Date: 9/21/2022	Analysis Date: 9/22/2022			SeqNo: 3265220		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	102	72.3	137			
Surr: BFB	2000		1000		198	37.7	212			

Sample ID: mb-70327	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: PBS	Batch ID: 70327			RunNo: 91225						
Prep Date: 9/21/2022	Analysis Date: 9/22/2022			SeqNo: 3265222		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		96.4	37.7	212			

Qualifiers:

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

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

WO#: 2209A57

29-Sep-22

Client: EOG
Project: Brown SWD 1

Sample ID: LCS-70327	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 70327			RunNo: 91225						
Prep Date: 9/21/2022	Analysis Date: 9/22/2022			SeqNo: 3265259		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.97	0.025	1.000	0	96.8	80	120			
Toluene	0.99	0.050	1.000	0	99.4	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: mb-70327	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 70327			RunNo: 91225						
Prep Date: 9/21/2022	Analysis Date: 9/22/2022			SeqNo: 3265261		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		100	70	130			

Qualifiers:

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

Page 7 of 7



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: 2209A57

RcptNo: 1

Received By: Juan Rojas

9/21/2022 7:30:00 AM

Juan Rojas

Completed By: Tracy Casarrubias

9/21/2022 10:07:54 AM

Reviewed By:

in 9/21/22

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.6	Good	Yes			



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

October 19, 2022

Tacoma Morrissey
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX:

RE: Brown SWD 1 Tank Battery

OrderNo.: 2209H05

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 27 sample(s) on 9/30/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW01

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 8:30:00 AM

Lab ID: 2209H05-001

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	10/5/2022 12:45:06 AM	70594
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/4/2022 10:53:09 PM	70564
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/4/2022 10:53:09 PM	70564
Surr: DNOP	75.9	21-129		%Rec	1	10/4/2022 10:53:09 PM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/3/2022 5:46:24 PM	70525
Surr: BFB	91.7	37.7-212		%Rec	1	10/3/2022 5:46:24 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	10/3/2022 5:46:24 PM	70525
Toluene	ND	0.049		mg/Kg	1	10/3/2022 5:46:24 PM	70525
Ethylbenzene	ND	0.049		mg/Kg	1	10/3/2022 5:46:24 PM	70525
Xylenes, Total	ND	0.099		mg/Kg	1	10/3/2022 5:46:24 PM	70525
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	10/3/2022 5:46:24 PM	70525

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

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

Page 1 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW02

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 8:35:00 AM

Lab ID: 2209H05-002

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	83	60		mg/Kg	20	10/5/2022 12:57:30 AM	70594
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/4/2022 11:14:29 PM	70564
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/4/2022 11:14:29 PM	70564
Surr: DNOP	98.2	21-129		%Rec	1	10/4/2022 11:14:29 PM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/3/2022 6:09:50 PM	70525
Surr: BFB	92.6	37.7-212		%Rec	1	10/3/2022 6:09:50 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	10/3/2022 6:09:50 PM	70525
Toluene	ND	0.048		mg/Kg	1	10/3/2022 6:09:50 PM	70525
Ethylbenzene	ND	0.048		mg/Kg	1	10/3/2022 6:09:50 PM	70525
Xylenes, Total	ND	0.096		mg/Kg	1	10/3/2022 6:09:50 PM	70525
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	10/3/2022 6:09:50 PM	70525

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

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

Page 2 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW03

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 8:40:00 AM

Lab ID: 2209H05-003

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	ND	60		mg/Kg	20	10/5/2022 1:09:55 AM	70594
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	10/4/2022 11:25:13 PM	70564
Motor Oil Range Organics (MRO)	ND	45		mg/Kg	1	10/4/2022 11:25:13 PM	70564
Surr: DNOP	99.8	21-129		%Rec	1	10/4/2022 11:25:13 PM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/3/2022 6:33:15 PM	70525
Surr: BFB	91.1	37.7-212		%Rec	1	10/3/2022 6:33:15 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	10/3/2022 6:33:15 PM	70525
Toluene	ND	0.050		mg/Kg	1	10/3/2022 6:33:15 PM	70525
Ethylbenzene	ND	0.050		mg/Kg	1	10/3/2022 6:33:15 PM	70525
Xylenes, Total	ND	0.10		mg/Kg	1	10/3/2022 6:33:15 PM	70525
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	10/3/2022 6:33:15 PM	70525

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

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

Page 3 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW04

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 8:45:00 AM

Lab ID: 2209H05-004

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JTT
Chloride	150	60		mg/Kg	20	10/5/2022 1:22:20 AM	70594
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/4/2022 11:57:11 PM	70564
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/4/2022 11:57:11 PM	70564
Surr: DNOP	87.6	21-129		%Rec	1	10/4/2022 11:57:11 PM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/3/2022 6:56:48 PM	70525
Surr: BFB	92.8	37.7-212		%Rec	1	10/3/2022 6:56:48 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	10/3/2022 6:56:48 PM	70525
Toluene	ND	0.046		mg/Kg	1	10/3/2022 6:56:48 PM	70525
Ethylbenzene	ND	0.046		mg/Kg	1	10/3/2022 6:56:48 PM	70525
Xylenes, Total	ND	0.093		mg/Kg	1	10/3/2022 6:56:48 PM	70525
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	10/3/2022 6:56:48 PM	70525

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

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

Page 4 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW05

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 8:50:00 AM

Lab ID: 2209H05-005

Matrix: SOIL

Received Date: 9/30/2022 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	10/5/2022 8:50:08 AM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/5/2022 12:07:56 AM	70564
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/5/2022 12:07:56 AM	70564
Surr: DNOP	75.8	21-129		%Rec	1	10/5/2022 12:07:56 AM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/3/2022 7:20:19 PM	70525
Surr: BFB	90.1	37.7-212		%Rec	1	10/3/2022 7:20:19 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	10/3/2022 7:20:19 PM	70525
Toluene	ND	0.048		mg/Kg	1	10/3/2022 7:20:19 PM	70525
Ethylbenzene	ND	0.048		mg/Kg	1	10/3/2022 7:20:19 PM	70525
Xylenes, Total	ND	0.095		mg/Kg	1	10/3/2022 7:20:19 PM	70525
Surr: 4-Bromofluorobenzene	95.0	70-130		%Rec	1	10/3/2022 7:20:19 PM	70525

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

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

Page 5 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW06

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 8:55:00 AM

Lab ID: 2209H05-006

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	62	60		mg/Kg	20	10/5/2022 9:27:22 AM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	13		mg/Kg	1	10/5/2022 12:18:40 AM	70564
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	10/5/2022 12:18:40 AM	70564
Surr: DNOP	81.8	21-129		%Rec	1	10/5/2022 12:18:40 AM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/3/2022 7:43:49 PM	70525
Surr: BFB	91.3	37.7-212		%Rec	1	10/3/2022 7:43:49 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	10/3/2022 7:43:49 PM	70525
Toluene	ND	0.046		mg/Kg	1	10/3/2022 7:43:49 PM	70525
Ethylbenzene	ND	0.046		mg/Kg	1	10/3/2022 7:43:49 PM	70525
Xylenes, Total	ND	0.092		mg/Kg	1	10/3/2022 7:43:49 PM	70525
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	10/3/2022 7:43:49 PM	70525

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

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

Page 6 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS01

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:00:00 AM

Lab ID: 2209H05-007

Matrix: SOIL

Received Date: 9/30/2022 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	10/5/2022 12:45:58 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/5/2022 12:50:47 AM	70564
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/5/2022 12:50:47 AM	70564
Surr: DNOP	78.2	21-129		%Rec	1	10/5/2022 12:50:47 AM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/3/2022 8:07:21 PM	70525
Surr: BFB	92.2	37.7-212		%Rec	1	10/3/2022 8:07:21 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	10/3/2022 8:07:21 PM	70525
Toluene	ND	0.047		mg/Kg	1	10/3/2022 8:07:21 PM	70525
Ethylbenzene	ND	0.047		mg/Kg	1	10/3/2022 8:07:21 PM	70525
Xylenes, Total	ND	0.094		mg/Kg	1	10/3/2022 8:07:21 PM	70525
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	10/3/2022 8:07:21 PM	70525

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

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

Page 7 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS02

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:05:00 AM

Lab ID: 2209H05-008

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	640	60		mg/Kg	20	10/5/2022 1:23:12 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/5/2022 1:22:52 AM	70564
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/5/2022 1:22:52 AM	70564
Surr: DNOP	75.9	21-129		%Rec	1	10/5/2022 1:22:52 AM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/3/2022 8:30:53 PM	70525
Surr: BFB	91.8	37.7-212		%Rec	1	10/3/2022 8:30:53 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.025		mg/Kg	1	10/3/2022 8:30:53 PM	70525
Toluene	ND	0.049		mg/Kg	1	10/3/2022 8:30:53 PM	70525
Ethylbenzene	ND	0.049		mg/Kg	1	10/3/2022 8:30:53 PM	70525
Xylenes, Total	ND	0.099		mg/Kg	1	10/3/2022 8:30:53 PM	70525
Surr: 4-Bromofluorobenzene	97.2	70-130		%Rec	1	10/3/2022 8:30:53 PM	70525

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

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

Page 8 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS03

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:10:00 AM

Lab ID: 2209H05-009

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	120	60		mg/Kg	20	10/5/2022 1:35:37 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/5/2022 2:05:45 AM	70564
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/5/2022 2:05:45 AM	70564
Surr: DNOP	75.9	21-129		%Rec	1	10/5/2022 2:05:45 AM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/3/2022 8:54:28 PM	70525
Surr: BFB	94.2	37.7-212		%Rec	1	10/3/2022 8:54:28 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.024		mg/Kg	1	10/3/2022 8:54:28 PM	70525
Toluene	ND	0.048		mg/Kg	1	10/3/2022 8:54:28 PM	70525
Ethylbenzene	ND	0.048		mg/Kg	1	10/3/2022 8:54:28 PM	70525
Xylenes, Total	ND	0.097		mg/Kg	1	10/3/2022 8:54:28 PM	70525
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	10/3/2022 8:54:28 PM	70525

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

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

Page 9 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS04

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:15:00 AM

Lab ID: 2209H05-010

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	93	60		mg/Kg	20	10/5/2022 1:48:02 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/5/2022 1:33:43 AM	70564
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/5/2022 1:33:43 AM	70564
Surr: DNOP	91.4	21-129		%Rec	1	10/5/2022 1:33:43 AM	70564
EPA METHOD 8015D: GASOLINE RANGE							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/3/2022 9:17:58 PM	70525
Surr: BFB	90.1	37.7-212		%Rec	1	10/3/2022 9:17:58 PM	70525
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Benzene	ND	0.023		mg/Kg	1	10/3/2022 9:17:58 PM	70525
Toluene	ND	0.046		mg/Kg	1	10/3/2022 9:17:58 PM	70525
Ethylbenzene	ND	0.046		mg/Kg	1	10/3/2022 9:17:58 PM	70525
Xylenes, Total	ND	0.092		mg/Kg	1	10/3/2022 9:17:58 PM	70525
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	10/3/2022 9:17:58 PM	70525

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

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

Page 10 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS05

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:20:00 AM

Lab ID: 2209H05-011

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	71	59		mg/Kg	20	10/5/2022 2:00:27 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/5/2022 9:59:35 PM	70602
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/5/2022 9:59:35 PM	70602
Surr: DNOP	85.9	21-129		%Rec	1	10/5/2022 9:59:35 PM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/4/2022 9:53:00 AM	70549
Surr: BFB	108	37.7-212		%Rec	1	10/4/2022 9:53:00 AM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	10/4/2022 9:53:00 AM	70549
Toluene	ND	0.049		mg/Kg	1	10/4/2022 9:53:00 AM	70549
Ethylbenzene	ND	0.049		mg/Kg	1	10/4/2022 9:53:00 AM	70549
Xylenes, Total	ND	0.098		mg/Kg	1	10/4/2022 9:53:00 AM	70549
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	10/4/2022 9:53:00 AM	70549

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

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

Page 11 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS06

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:25:00 AM

Lab ID: 2209H05-012

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	220	60		mg/Kg	20	10/5/2022 2:12:52 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	75		mg/Kg	5	10/5/2022 10:42:09 PM	70602
Motor Oil Range Organics (MRO)	ND	250		mg/Kg	5	10/5/2022 10:42:09 PM	70602
Surr: DNOP	35.4	21-129		%Rec	5	10/5/2022 10:42:09 PM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/4/2022 10:52:00 AM	70549
Surr: BFB	108	37.7-212		%Rec	1	10/4/2022 10:52:00 AM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	10/4/2022 10:52:00 AM	70549
Toluene	ND	0.050		mg/Kg	1	10/4/2022 10:52:00 AM	70549
Ethylbenzene	ND	0.050		mg/Kg	1	10/4/2022 10:52:00 AM	70549
Xylenes, Total	ND	0.10		mg/Kg	1	10/4/2022 10:52:00 AM	70549
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	10/4/2022 10:52:00 AM	70549

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

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

Page 12 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS07

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:30:00 AM

Lab ID: 2209H05-013

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	530	60		mg/Kg	20	10/5/2022 2:25:17 PM	70607
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	85	15		mg/Kg	1	10/5/2022 10:52:56 PM	70602
Motor Oil Range Organics (MRO)	82	49		mg/Kg	1	10/5/2022 10:52:56 PM	70602
Surr: DNOP	86.3	21-129		%Rec	1	10/5/2022 10:52:56 PM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/4/2022 11:51:00 AM	70549
Surr: BFB	107	37.7-212		%Rec	1	10/4/2022 11:51:00 AM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 11:51:00 AM	70549
Toluene	ND	0.047		mg/Kg	1	10/4/2022 11:51:00 AM	70549
Ethylbenzene	ND	0.047		mg/Kg	1	10/4/2022 11:51:00 AM	70549
Xylenes, Total	ND	0.095		mg/Kg	1	10/4/2022 11:51:00 AM	70549
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	10/4/2022 11:51:00 AM	70549

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

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

Page 13 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS08

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:35:00 AM

Lab ID: 2209H05-014

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	250	59		mg/Kg	20	10/5/2022 7:35:35 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/5/2022 11:24:42 PM	70602
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/5/2022 11:24:42 PM	70602
Surr: DNOP	101	21-129		%Rec	1	10/5/2022 11:24:42 PM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	10/4/2022 12:11:00 PM	70549
Surr: BFB	106	37.7-212		%Rec	1	10/4/2022 12:11:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	10/4/2022 12:11:00 PM	70549
Toluene	ND	0.050		mg/Kg	1	10/4/2022 12:11:00 PM	70549
Ethylbenzene	ND	0.050		mg/Kg	1	10/4/2022 12:11:00 PM	70549
Xylenes, Total	ND	0.10		mg/Kg	1	10/4/2022 12:11:00 PM	70549
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	10/4/2022 12:11:00 PM	70549

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

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

Page 14 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS09

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:40:00 AM

Lab ID: 2209H05-015

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	260	60		mg/Kg	20	10/5/2022 7:48:00 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	19	15		mg/Kg	1	10/7/2022 1:28:31 AM	70602
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/7/2022 1:28:31 AM	70602
Surr: DNOP	101	21-129		%Rec	1	10/7/2022 1:28:31 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/4/2022 12:30:00 PM	70549
Surr: BFB	110	37.7-212		%Rec	1	10/4/2022 12:30:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 12:30:00 PM	70549
Toluene	ND	0.047		mg/Kg	1	10/4/2022 12:30:00 PM	70549
Ethylbenzene	ND	0.047		mg/Kg	1	10/4/2022 12:30:00 PM	70549
Xylenes, Total	ND	0.095		mg/Kg	1	10/4/2022 12:30:00 PM	70549
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	10/4/2022 12:30:00 PM	70549

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

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

Page 15 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS10

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:45:00 AM

Lab ID: 2209H05-016

Matrix: SOIL

Received Date: 9/30/2022 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	10/5/2022 8:00:25 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/5/2022 11:46:12 PM	70602
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/5/2022 11:46:12 PM	70602
Surr: DNOP	87.7	21-129		%Rec	1	10/5/2022 11:46:12 PM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	10/4/2022 12:50:00 PM	70549
Surr: BFB	107	37.7-212		%Rec	1	10/4/2022 12:50:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	10/4/2022 12:50:00 PM	70549
Toluene	ND	0.046		mg/Kg	1	10/4/2022 12:50:00 PM	70549
Ethylbenzene	ND	0.046		mg/Kg	1	10/4/2022 12:50:00 PM	70549
Xylenes, Total	ND	0.093		mg/Kg	1	10/4/2022 12:50:00 PM	70549
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	10/4/2022 12:50:00 PM	70549

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

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

Page 16 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS11

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:50:00 AM

Lab ID: 2209H05-017

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	430	60		mg/Kg	20	10/5/2022 8:12:49 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/7/2022 2:00:20 AM	70602
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/7/2022 2:00:20 AM	70602
Surr: DNOP	78.2	21-129		%Rec	1	10/7/2022 2:00:20 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/4/2022 1:10:00 PM	70549
Surr: BFB	111	37.7-212		%Rec	1	10/4/2022 1:10:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 1:10:00 PM	70549
Toluene	ND	0.048		mg/Kg	1	10/4/2022 1:10:00 PM	70549
Ethylbenzene	ND	0.048		mg/Kg	1	10/4/2022 1:10:00 PM	70549
Xylenes, Total	ND	0.095		mg/Kg	1	10/4/2022 1:10:00 PM	70549
Surr: 4-Bromofluorobenzene	99.3	70-130		%Rec	1	10/4/2022 1:10:00 PM	70549

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

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

Page 17 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS12

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 9:55:00 AM

Lab ID: 2209H05-018

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	190	61		mg/Kg	20	10/5/2022 9:14:53 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/7/2022 2:32:07 AM	70602
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/7/2022 2:32:07 AM	70602
Surr: DNOP	80.1	21-129		%Rec	1	10/7/2022 2:32:07 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/4/2022 1:29:00 PM	70549
Surr: BFB	108	37.7-212		%Rec	1	10/4/2022 1:29:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	10/4/2022 1:29:00 PM	70549
Toluene	ND	0.049		mg/Kg	1	10/4/2022 1:29:00 PM	70549
Ethylbenzene	ND	0.049		mg/Kg	1	10/4/2022 1:29:00 PM	70549
Xylenes, Total	ND	0.098		mg/Kg	1	10/4/2022 1:29:00 PM	70549
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	10/4/2022 1:29:00 PM	70549

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

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

Page 18 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS13

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:00:00 AM

Lab ID: 2209H05-019

Matrix: SOIL

Received Date: 9/30/2022 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	10/5/2022 9:27:17 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/6/2022 12:18:07 AM	70602
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/6/2022 12:18:07 AM	70602
Surr: DNOP	92.4	21-129		%Rec	1	10/6/2022 12:18:07 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/4/2022 1:49:00 PM	70549
Surr: BFB	109	37.7-212		%Rec	1	10/4/2022 1:49:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	10/4/2022 1:49:00 PM	70549
Toluene	ND	0.047		mg/Kg	1	10/4/2022 1:49:00 PM	70549
Ethylbenzene	ND	0.047		mg/Kg	1	10/4/2022 1:49:00 PM	70549
Xylenes, Total	ND	0.093		mg/Kg	1	10/4/2022 1:49:00 PM	70549
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	10/4/2022 1:49:00 PM	70549

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

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

Page 19 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS14

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:05:00 AM

Lab ID: 2209H05-020

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	400	60		mg/Kg	20	10/5/2022 9:39:42 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	38	13		mg/Kg	1	10/7/2022 3:03:53 AM	70602
Motor Oil Range Organics (MRO)	53	45		mg/Kg	1	10/7/2022 3:03:53 AM	70602
Surr: DNOP	88.9	21-129		%Rec	1	10/7/2022 3:03:53 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/4/2022 2:09:00 PM	70549
Surr: BFB	106	37.7-212		%Rec	1	10/4/2022 2:09:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	10/4/2022 2:09:00 PM	70549
Toluene	ND	0.049		mg/Kg	1	10/4/2022 2:09:00 PM	70549
Ethylbenzene	ND	0.049		mg/Kg	1	10/4/2022 2:09:00 PM	70549
Xylenes, Total	ND	0.099		mg/Kg	1	10/4/2022 2:09:00 PM	70549
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	10/4/2022 2:09:00 PM	70549

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

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

Page 20 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS15

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:10:00 AM

Lab ID: 2209H05-021

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	670	60		mg/Kg	20	10/5/2022 9:52:06 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/6/2022 12:39:09 AM	70602
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/6/2022 12:39:09 AM	70602
Surr: DNOP	96.7	21-129		%Rec	1	10/6/2022 12:39:09 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/4/2022 2:48:00 PM	70549
Surr: BFB	107	37.7-212		%Rec	1	10/4/2022 2:48:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	10/4/2022 2:48:00 PM	70549
Toluene	ND	0.047		mg/Kg	1	10/4/2022 2:48:00 PM	70549
Ethylbenzene	ND	0.047		mg/Kg	1	10/4/2022 2:48:00 PM	70549
Xylenes, Total	ND	0.093		mg/Kg	1	10/4/2022 2:48:00 PM	70549
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	10/4/2022 2:48:00 PM	70549

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

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

Page 21 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS16

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:15:00 AM

Lab ID: 2209H05-022

Matrix: SOIL

Received Date: 9/30/2022 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	10/5/2022 10:04:30 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	15		mg/Kg	1	10/6/2022 12:49:41 AM	70602
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	10/6/2022 12:49:41 AM	70602
Surr: DNOP	78.9	21-129		%Rec	1	10/6/2022 12:49:41 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/4/2022 3:08:00 PM	70549
Surr: BFB	105	37.7-212		%Rec	1	10/4/2022 3:08:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 3:08:00 PM	70549
Toluene	ND	0.048		mg/Kg	1	10/4/2022 3:08:00 PM	70549
Ethylbenzene	ND	0.048		mg/Kg	1	10/4/2022 3:08:00 PM	70549
Xylenes, Total	ND	0.096		mg/Kg	1	10/4/2022 3:08:00 PM	70549
Surr: 4-Bromofluorobenzene	99.7	70-130		%Rec	1	10/4/2022 3:08:00 PM	70549

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

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

Page 22 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS17

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:20:00 AM

Lab ID: 2209H05-023

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	160	60		mg/Kg	20	10/5/2022 10:16:55 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/6/2022 1:00:13 AM	70602
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	10/6/2022 1:00:13 AM	70602
Surr: DNOP	81.4	21-129		%Rec	1	10/6/2022 1:00:13 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/4/2022 3:27:00 PM	70549
Surr: BFB	107	37.7-212		%Rec	1	10/4/2022 3:27:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	10/4/2022 3:27:00 PM	70549
Toluene	ND	0.049		mg/Kg	1	10/4/2022 3:27:00 PM	70549
Ethylbenzene	ND	0.049		mg/Kg	1	10/4/2022 3:27:00 PM	70549
Xylenes, Total	ND	0.099		mg/Kg	1	10/4/2022 3:27:00 PM	70549
Surr: 4-Bromofluorobenzene	98.8	70-130		%Rec	1	10/4/2022 3:27:00 PM	70549

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

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

Page 23 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS18

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:25:00 AM

Lab ID: 2209H05-024

Matrix: SOIL

Received Date: 9/30/2022 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	10/5/2022 10:29:20 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/6/2022 1:10:46 AM	70602
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	10/6/2022 1:10:46 AM	70602
Surr: DNOP	84.7	21-129		%Rec	1	10/6/2022 1:10:46 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/4/2022 3:47:00 PM	70549
Surr: BFB	102	37.7-212		%Rec	1	10/4/2022 3:47:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 3:47:00 PM	70549
Toluene	ND	0.048		mg/Kg	1	10/4/2022 3:47:00 PM	70549
Ethylbenzene	ND	0.048		mg/Kg	1	10/4/2022 3:47:00 PM	70549
Xylenes, Total	ND	0.097		mg/Kg	1	10/4/2022 3:47:00 PM	70549
Surr: 4-Bromofluorobenzene	98.2	70-130		%Rec	1	10/4/2022 3:47:00 PM	70549

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

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

Page 24 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS19

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:30:00 AM

Lab ID: 2209H05-025

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	140	59		mg/Kg	20	10/5/2022 10:41:44 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	43	13		mg/Kg	1	10/7/2022 3:35:36 AM	70602
Motor Oil Range Organics (MRO)	130	43		mg/Kg	1	10/7/2022 3:35:36 AM	70602
Surr: DNOP	79.3	21-129		%Rec	1	10/7/2022 3:35:36 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/4/2022 4:06:00 PM	70549
Surr: BFB	111	37.7-212		%Rec	1	10/4/2022 4:06:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	10/4/2022 4:06:00 PM	70549
Toluene	ND	0.047		mg/Kg	1	10/4/2022 4:06:00 PM	70549
Ethylbenzene	ND	0.047		mg/Kg	1	10/4/2022 4:06:00 PM	70549
Xylenes, Total	ND	0.093		mg/Kg	1	10/4/2022 4:06:00 PM	70549
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	10/4/2022 4:06:00 PM	70549

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

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

Page 25 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS20

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:35:00 AM

Lab ID: 2209H05-026

Matrix: SOIL

Received Date: 9/30/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	67	60		mg/Kg	20	10/5/2022 11:18:59 PM	70616
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	16	14		mg/Kg	1	10/7/2022 4:07:16 AM	70602
Motor Oil Range Organics (MRO)	87	48		mg/Kg	1	10/7/2022 4:07:16 AM	70602
Surr: DNOP	83.0	21-129		%Rec	1	10/7/2022 4:07:16 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/4/2022 4:26:00 PM	70549
Surr: BFB	108	37.7-212		%Rec	1	10/4/2022 4:26:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 4:26:00 PM	70549
Toluene	ND	0.048		mg/Kg	1	10/4/2022 4:26:00 PM	70549
Ethylbenzene	ND	0.048		mg/Kg	1	10/4/2022 4:26:00 PM	70549
Xylenes, Total	ND	0.097		mg/Kg	1	10/4/2022 4:26:00 PM	70549
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	10/4/2022 4:26:00 PM	70549

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

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

Page 26 of 32

Analytical Report

Lab Order 2209H05

Date Reported: 10/19/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS21

Project: Brown SWD 1 Tank Battery

Collection Date: 9/28/2022 10:40:00 AM

Lab ID: 2209H05-027

Matrix: SOIL

Received Date: 9/30/2022 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	10/6/2022 1:10:42 AM	70636
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	10/6/2022 1:42:33 AM	70602
Motor Oil Range Organics (MRO)	60	48		mg/Kg	1	10/6/2022 1:42:33 AM	70602
Surr: DNOP	88.3	21-129		%Rec	1	10/6/2022 1:42:33 AM	70602
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	10/4/2022 4:46:00 PM	70549
Surr: BFB	112	37.7-212		%Rec	1	10/4/2022 4:46:00 PM	70549
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	10/4/2022 4:46:00 PM	70549
Toluene	ND	0.049		mg/Kg	1	10/4/2022 4:46:00 PM	70549
Ethylbenzene	ND	0.049		mg/Kg	1	10/4/2022 4:46:00 PM	70549
Xylenes, Total	ND	0.097		mg/Kg	1	10/4/2022 4:46:00 PM	70549
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	10/4/2022 4:46:00 PM	70549

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

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

Page 27 of 32

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

WO#: 2209H05

19-Oct-22

Client: EOG**Project:** Brown SWD 1 Tank Battery

Sample ID: MB-70594	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70594	RunNo: 91529								
Prep Date: 10/4/2022	Analysis Date: 10/4/2022	SeqNo: 3278485 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70594	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70594	RunNo: 91529								
Prep Date: 10/4/2022	Analysis Date: 10/4/2022	SeqNo: 3278486 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.0	90	110			

Sample ID: MB-70607	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70607	RunNo: 91550								
Prep Date: 10/5/2022	Analysis Date: 10/5/2022	SeqNo: 3280992 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70607	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70607	RunNo: 91550								
Prep Date: 10/5/2022	Analysis Date: 10/5/2022	SeqNo: 3280993 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

Sample ID: MB-70616	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70616	RunNo: 91550								
Prep Date: 10/5/2022	Analysis Date: 10/5/2022	SeqNo: 3281024 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70616	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70616	RunNo: 91550								
Prep Date: 10/5/2022	Analysis Date: 10/5/2022	SeqNo: 3281025 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.6	90	110			

Qualifiers:

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

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

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

WO#: 2209H05

19-Oct-22

Client: EOG**Project:** Brown SWD 1 Tank Battery

Sample ID: MB-70636	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 70636	RunNo: 91550								
Prep Date: 10/5/2022	Analysis Date: 10/5/2022	SeqNo: 3281065	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-70636	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 70636	RunNo: 91550								
Prep Date: 10/5/2022	Analysis Date: 10/5/2022	SeqNo: 3281066	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	96.6	90	110			

Qualifiers:

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

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

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

WO#: 2209H05

19-Oct-22

Client: EOG
Project: Brown SWD 1 Tank Battery

Sample ID: LCS-70564	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 70564			RunNo: 91482						
Prep Date: 10/3/2022	Analysis Date: 10/4/2022			SeqNo: 3281532		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	15	50.00	0	78.1	64.4	127			
Surr: DNOP	4.0		5.000		79.7	21	129			

Sample ID: MB-70564	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 70564			RunNo: 91482						
Prep Date: 10/3/2022	Analysis Date: 10/4/2022			SeqNo: 3281533		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	11		10.00		107	21	129			

Sample ID: LCS-70602	SampType: LCS			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: LCSS	Batch ID: 70602			RunNo: 91556						
Prep Date: 10/4/2022	Analysis Date: 10/5/2022			SeqNo: 3281599		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	39	15	50.00	0	77.3	64.4	127			
Surr: DNOP	3.9		5.000		77.2	21	129			

Sample ID: MB-70602	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID: PBS	Batch ID: 70602			RunNo: 91556						
Prep Date: 10/4/2022	Analysis Date: 10/5/2022			SeqNo: 3281600		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	15								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.0	21	129			

Qualifiers:

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

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

WO#: 2209H05

19-Oct-22

Client: EOG**Project:** Brown SWD 1 Tank Battery

Sample ID: LCS-70525	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 70525		RunNo: 91503							
Prep Date: 9/30/2022	Analysis Date: 10/3/2022		SeqNo: 3277543		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	102	72.3	137			
Surr: BFB	1900		1000		193	37.7	212			

Sample ID: mb-70525	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 70525		RunNo: 91503							
Prep Date: 9/30/2022	Analysis Date: 10/3/2022		SeqNo: 3277544		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	910		1000		90.6	37.7	212			

Sample ID: lcs-70549	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 70549		RunNo: 91527							
Prep Date: 10/3/2022	Analysis Date: 10/4/2022		SeqNo: 3278368		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	115	72.3	137			
Surr: BFB	2400		1000		241	37.7	212			S

Sample ID: mb-70549	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 70549		RunNo: 91527							
Prep Date: 10/3/2022	Analysis Date: 10/4/2022		SeqNo: 3278369		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		112	37.7	212			

Qualifiers:

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

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

WO#: 2209H05

19-Oct-22

Client: EOG**Project:** Brown SWD 1 Tank Battery

Sample ID: ics-70525	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 70525			RunNo: 91503						
Prep Date: 9/30/2022	Analysis Date: 10/3/2022			SeqNo: 3277588			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.7	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.2	0.10	3.000	0	105	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	70	130			

Sample ID: mb-70525	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 70525			RunNo: 91503						
Prep Date: 9/30/2022	Analysis Date: 10/3/2022			SeqNo: 3277589			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	70	130			

Sample ID: ics-70549	SampType: LCS			TestCode: EPA Method 8021B: Volatiles						
Client ID: LCSS	Batch ID: 70549			RunNo: 91527						
Prep Date: 10/3/2022	Analysis Date: 10/4/2022			SeqNo: 3278392			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	99.6	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.1	0.050	1.000	0	105	80	120			
Xylenes, Total	3.1	0.10	3.000	0	104	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			

Sample ID: mb-70549	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles						
Client ID: PBS	Batch ID: 70549			RunNo: 91527						
Prep Date: 10/3/2022	Analysis Date: 10/4/2022			SeqNo: 3278393			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	70	130			

Qualifiers:

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



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: 2209H05

RcptNo: 1

Received By: Juan Rojas 9/30/2022 7:30:00 AM

Completed By: Cheyenne Cason 9/30/2022 8:22:02 AM

Reviewed By: KRC 9.30.22

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

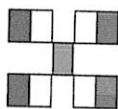
Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.5	Good	Not Present			



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

Remarks: Amber_Griffin@eogresources.com

shyde@ensolum.com

[illegible]

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

Report to:
Stuart Hyde



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources

Project Name: Brown SWD #1 Tank Battery

Work Order: E210077

Job Number: 19034-0001

Received: 10/14/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/20/22

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.
Envirotech Inc. holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 10/20/22

Stuart Hyde
104 South 4th Street
Artesia, NM 88210



Project Name: Brown SWD #1 Tank Battery
Workorder: E210077
Date Received: 10/14/2022 2:20:00PM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/14/2022 2:20:00PM, under the Project Name: Brown SWD #1 Tank Battery.

The analytical test results summarized in this report with the Project Name: Brown SWD #1 Tank Battery apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS19A	5
FS20A	6
QC Summary Data	7
QC - Volatile Organic Compounds by EPA 8260B	7
QC - Nonhalogenated Organics by EPA 8015D - GRO	8
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	9
QC - Anions by EPA 300.0/9056A	10
Definitions and Notes	11
Chain of Custody etc.	12

Sample Summary

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/22 17:08

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS19A	E210077-01A	Soil	10/13/22	10/14/22	Glass Jar, 4 oz.
FS20A	E210077-02A	Soil	10/13/22	10/14/22	Glass Jar, 4 oz.



Sample Data

EOG Resources 104 South 4th Street Artesia NM, 88210	Project Name: Brown SWD #1 Tank Battery Project Number: 19034-0001 Project Manager: Stuart Hyde	Reported: 10/20/2022 5:08:11PM
--	---	-----------------------------------

FS19A

E210077-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
---------	--------	-----------------	----------	----------	----------	-------

Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS		Batch: 2243006	
Benzene	ND	0.0250	1	10/17/22	10/17/22	
Ethylbenzene	ND	0.0250	1	10/17/22	10/17/22	
Toluene	ND	0.0250	1	10/17/22	10/17/22	
o-Xylene	ND	0.0250	1	10/17/22	10/17/22	
p,m-Xylene	ND	0.0500	1	10/17/22	10/17/22	
Total Xylenes	ND	0.0250	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	98.5 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	95.7 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	103 %	70-130		10/17/22	10/17/22	

Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2243006	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	98.5 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	95.7 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	103 %	70-130		10/17/22	10/17/22	

Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2243013	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/22	10/18/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/22	10/18/22	
Surrogate: n-Nonane	105 %	50-200		10/17/22	10/18/22	

Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS		Batch: 2243056	
Chloride	268	20.0	1	10/18/22	10/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Brown SWD #1 Tank Battery
Project Number: 19034-0001
Project Manager: Stuart Hyde

Reported:
10/20/2022 5:08:11PM

FS20A

E210077-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243006
Benzene	ND	0.0250	1	10/17/22	10/17/22	
Ethylbenzene	ND	0.0250	1	10/17/22	10/17/22	
Toluene	ND	0.0250	1	10/17/22	10/17/22	
o-Xylene	ND	0.0250	1	10/17/22	10/17/22	
p,m-Xylene	ND	0.0500	1	10/17/22	10/17/22	
Total Xylenes	ND	0.0250	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	99.8 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	102 %	70-130		10/17/22	10/17/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243006
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	99.8 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	102 %	70-130		10/17/22	10/17/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2243013
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/22	10/18/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/22	10/18/22	
Surrogate: n-Nonane	110 %	50-200		10/17/22	10/18/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2243056
Chloride	82.9	20.0	1	10/18/22	10/20/22	



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2243006-BLK1)

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			

LCS (2243006-BS1)

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	2.56	0.0250	2.50		103	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.52	0.0250	2.50		101	70-130			
o-Xylene	2.42	0.0250	2.50		96.9	70-130			
p,m-Xylene	4.82	0.0500	5.00		96.4	70-130			
Total Xylenes	7.24	0.0250	7.50		96.6	70-130			
Surrogate: Bromofluorobenzene	0.494		0.500		98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike (2243006-MS1)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	2.13	0.0250	2.50	ND	85.1	48-131			
Ethylbenzene	2.17	0.0250	2.50	ND	86.9	45-135			
Toluene	2.11	0.0250	2.50	ND	84.4	48-130			
o-Xylene	2.08	0.0250	2.50	ND	83.2	43-135			
p,m-Xylene	4.07	0.0500	5.00	ND	81.4	43-135			
Total Xylenes	6.15	0.0250	7.50	ND	82.0	43-135			
Surrogate: Bromofluorobenzene	0.506		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.3	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike Dup (2243006-MSD1)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	2.48	0.0250	2.50	ND	99.0	48-131	15.1	23	
Ethylbenzene	2.54	0.0250	2.50	ND	102	45-135	15.6	27	
Toluene	2.51	0.0250	2.50	ND	101	48-130	17.5	24	
o-Xylene	2.33	0.0250	2.50	ND	93.3	43-135	11.5	27	
p,m-Xylene	4.74	0.0500	5.00	ND	94.9	43-135	15.3	27	
Total Xylenes	7.08	0.0250	7.50	ND	94.4	43-135	14.0	27	
Surrogate: Bromofluorobenzene	0.468		0.500		93.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.443		0.500		88.5	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2243006-BLK1)

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			

LCS (2243006-BS2)

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	58.2	20.0	50.0		116	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.4	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			

Matrix Spike (2243006-MS2)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	54.0	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.490		0.500		97.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

Matrix Spike Dup (2243006-MSD2)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	52.1	20.0	50.0	ND	104	70-130	3.68	20	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2243013-BLK1)

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.5		50.0		107	50-200			

LCS (2243013-BS1)

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	262	25.0	250		105	38-132			
Surrogate: n-Nonane	52.2		50.0		104	50-200			

Matrix Spike (2243013-MS1)

Source: E210078-03

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	47.5		50.0		95.1	50-200			

Matrix Spike Dup (2243013-MSD1)

Source: E210078-03

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	255	25.0	250	ND	102	38-132	0.814	20	
Surrogate: n-Nonane	46.2		50.0		92.4	50-200			



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2243056-BLK1)					Prepared: 10/18/22 Analyzed: 10/18/22				
Chloride	ND	20.0							
LCS (2243056-BS1)					Prepared: 10/18/22 Analyzed: 10/20/22				
Chloride	252	20.0	250		101	90-110			
LCS Dup (2243056-BSD1)					Prepared: 10/18/22 Analyzed: 10/18/22				
Chloride	267	20.0	250		107	90-110	6.11	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.

Definitions and Notes

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/22 17:08

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.





envirotech

Envirotech Analytical Laboratory

Printed: 10/14/2022 2:45:42PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	EOG Resources	Date Received:	10/14/22 14:20	Work Order ID:	E210077
Phone:	(575) 748-4217	Date Logged In:	10/14/22 14:41	Logged In By:	Alexa Michaels
Email:	shyde@ensolum.com	Due Date:	10/20/22 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution****Sample Turn Around Time (TAT)**

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Stuart Hyde



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources

Project Name: Brown SWD #1 Tank Battery

Work Order: E210077

Job Number: 19034-0001

Received: 10/14/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/20/22

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.
Envirotech Inc. holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 10/20/22

Stuart Hyde
104 South 4th Street
Artesia, NM 88210



Project Name: Brown SWD #1 Tank Battery
Workorder: E210077
Date Received: 10/14/2022 2:20:00PM

Stuart Hyde,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/14/2022 2:20:00PM, under the Project Name: Brown SWD #1 Tank Battery.

The analytical test results summarized in this report with the Project Name: Brown SWD #1 Tank Battery apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
Office: 505-632-1881
rainaschwanz@envirotech-inc.com

Alexa Michaels
Sample Custody Officer
Office: 505-632-1881
labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	4
Sample Data	5
FS19A	5
FS20A	6
QC Summary Data	7
QC - Volatile Organic Compounds by EPA 8260B	7
QC - Nonhalogenated Organics by EPA 8015D - GRO	8
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	9
QC - Anions by EPA 300.0/9056A	10
Definitions and Notes	11
Chain of Custody etc.	12

Sample Summary

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/22 17:08

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
FS19A	E210077-01A	Soil	10/13/22	10/14/22	Glass Jar, 4 oz.
FS20A	E210077-02A	Soil	10/13/22	10/14/22	Glass Jar, 4 oz.



Sample Data

EOG Resources 104 South 4th Street Artesia NM, 88210	Project Name: Brown SWD #1 Tank Battery Project Number: 19034-0001 Project Manager: Stuart Hyde	Reported: 10/20/2022 5:08:11PM
--	---	-----------------------------------

FS19A

E210077-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
---------	--------	-----------------	----------	----------	----------	-------

Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: RKS		Batch: 2243006	
Benzene	ND	0.0250	1	10/17/22	10/17/22	
Ethylbenzene	ND	0.0250	1	10/17/22	10/17/22	
Toluene	ND	0.0250	1	10/17/22	10/17/22	
o-Xylene	ND	0.0250	1	10/17/22	10/17/22	
p,m-Xylene	ND	0.0500	1	10/17/22	10/17/22	
Total Xylenes	ND	0.0250	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	98.5 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	95.7 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	103 %	70-130		10/17/22	10/17/22	

Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: RKS		Batch: 2243006	
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	98.5 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	95.7 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	103 %	70-130		10/17/22	10/17/22	

Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2243013	
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/22	10/18/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/22	10/18/22	
Surrogate: n-Nonane	105 %	50-200		10/17/22	10/18/22	

Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS		Batch: 2243056	
Chloride	268	20.0	1	10/18/22	10/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Brown SWD #1 Tank Battery
Project Number: 19034-0001
Project Manager: Stuart Hyde

Reported:
10/20/2022 5:08:11PM

FS20A

E210077-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243006
Benzene	ND	0.0250	1	10/17/22	10/17/22	
Ethylbenzene	ND	0.0250	1	10/17/22	10/17/22	
Toluene	ND	0.0250	1	10/17/22	10/17/22	
o-Xylene	ND	0.0250	1	10/17/22	10/17/22	
p,m-Xylene	ND	0.0500	1	10/17/22	10/17/22	
Total Xylenes	ND	0.0250	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	99.8 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	102 %	70-130		10/17/22	10/17/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243006
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/17/22	10/17/22	
Surrogate: Bromofluorobenzene	99.8 %	70-130		10/17/22	10/17/22	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		10/17/22	10/17/22	
Surrogate: Toluene-d8	102 %	70-130		10/17/22	10/17/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2243013
Diesel Range Organics (C10-C28)	ND	25.0	1	10/17/22	10/18/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/17/22	10/18/22	
Surrogate: n-Nonane	110 %	50-200		10/17/22	10/18/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2243056
Chloride	82.9	20.0	1	10/18/22	10/20/22	



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2243006-BLK1)

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			

LCS (2243006-BS1)

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	2.56	0.0250	2.50		103	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.52	0.0250	2.50		101	70-130			
o-Xylene	2.42	0.0250	2.50		96.9	70-130			
p,m-Xylene	4.82	0.0500	5.00		96.4	70-130			
Total Xylenes	7.24	0.0250	7.50		96.6	70-130			
Surrogate: Bromofluorobenzene	0.494		0.500		98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike (2243006-MS1)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	2.13	0.0250	2.50	ND	85.1	48-131			
Ethylbenzene	2.17	0.0250	2.50	ND	86.9	45-135			
Toluene	2.11	0.0250	2.50	ND	84.4	48-130			
o-Xylene	2.08	0.0250	2.50	ND	83.2	43-135			
p,m-Xylene	4.07	0.0500	5.00	ND	81.4	43-135			
Total Xylenes	6.15	0.0250	7.50	ND	82.0	43-135			
Surrogate: Bromofluorobenzene	0.506		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.457		0.500		91.3	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike Dup (2243006-MSD1)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Benzene	2.48	0.0250	2.50	ND	99.0	48-131	15.1	23	
Ethylbenzene	2.54	0.0250	2.50	ND	102	45-135	15.6	27	
Toluene	2.51	0.0250	2.50	ND	101	48-130	17.5	24	
o-Xylene	2.33	0.0250	2.50	ND	93.3	43-135	11.5	27	
p,m-Xylene	4.74	0.0500	5.00	ND	94.9	43-135	15.3	27	
Total Xylenes	7.08	0.0250	7.50	ND	94.4	43-135	14.0	27	
Surrogate: Bromofluorobenzene	0.468		0.500		93.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.443		0.500		88.5	70-130			
Surrogate: Toluene-d8	0.523		0.500		105	70-130			



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2243006-BLK1)

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.491		0.500		98.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.6	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			

LCS (2243006-BS2)

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	58.2	20.0	50.0		116	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.4	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			

Matrix Spike (2243006-MS2)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	54.0	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.490		0.500		97.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

Matrix Spike Dup (2243006-MSD2)

Source: E210077-02

Prepared: 10/17/22 Analyzed: 10/17/22

Gasoline Range Organics (C6-C10)	52.1	20.0	50.0	ND	104	70-130	3.68	20	
Surrogate: Bromofluorobenzene	0.503		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.466		0.500		93.1	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2243013-BLK1)

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	53.5		50.0		107	50-200			

LCS (2243013-BS1)

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	262	25.0	250		105	38-132			
Surrogate: n-Nonane	52.2		50.0		104	50-200			

Matrix Spike (2243013-MS1)

Source: E210078-03

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	258	25.0	250	ND	103	38-132			
Surrogate: n-Nonane	47.5		50.0		95.1	50-200			

Matrix Spike Dup (2243013-MSD1)

Source: E210078-03

Prepared: 10/17/22 Analyzed: 10/18/22

Diesel Range Organics (C10-C28)	255	25.0	250	ND	102	38-132	0.814	20	
Surrogate: n-Nonane	46.2		50.0		92.4	50-200			



QC Summary Data

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	Reported:
104 South 4th Street	Project Number:	19034-0001	
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/2022 5:08:11PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

Blank (2243056-BLK1)

Prepared: 10/18/22 Analyzed: 10/18/22

Chloride	ND	20.0							
----------	----	------	--	--	--	--	--	--	--

LCS (2243056-BS1)

Prepared: 10/18/22 Analyzed: 10/20/22

Chloride	252	20.0	250		101	90-110			
----------	-----	------	-----	--	-----	--------	--	--	--

LCS Dup (2243056-BSD1)

Prepared: 10/18/22 Analyzed: 10/18/22

Chloride	267	20.0	250		107	90-110	6.11	20	
----------	-----	------	-----	--	-----	--------	------	----	--

QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

EOG Resources	Project Name:	Brown SWD #1 Tank Battery	
104 South 4th Street	Project Number:	19034-0001	Reported:
Artesia NM, 88210	Project Manager:	Stuart Hyde	10/20/22 17:08

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Project Information

Chain of Custody

Page 1 of 1

Client: EOG					Bill To					Lab Use Only					TAT					EPA Program																								
Project: Brown SWD #1 Tank Battery					Attention: Chase Settle					Lab WO# E210077					Job Number 19034-0001					1D 2D 3D Standard					CWA SDWA																			
Project Manager: Stuart Hyde					Address: 105 S. 4th					Analysis and Method					RCRA					State																								
Address: 3122 National Parks Highway					City, State, Zip: Carlsbad, NM 88220																																							
City, State, Zip: Carlsbad, NM 88220					Phone:					TPH GRO/DRO/ORO by 8015					BTEX by 8021					VOC by 8260					Metals 6010					Chloride 300.0					BGDOC NM					TX GDOC				
Phone: 970-903-1607					Email: Chase.Settle@eogresources.com					Removal					NM					CO					UT					AZ					TX									
Email: shyde@ensolum.com					Email: Amber.Griffin@eogresources.com					Remarks					napp2222956552																													
Report due by:					tmorrissey@ensolum.com																																							

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Removal	BGDOC NM	TX GDOC	Remarks															
10:15	10/13/2022	S	1	FS19A	1	X	X			X																			
10:20	10/13/2022	S	1	FS20A	2	X	X			X																			
Kp																													

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: _____

Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____

Relinquished by: (Signature) _____ Date 10-13-22 Time 5:50 PM Received by: (Signature) _____ Date 10-14-22 Time 14:20

Relinquished by: (Signature) _____ Date _____ Time _____ Received by: (Signature) _____ Date _____ Time _____

Lab Use Only
Received on ice: Y N
T1 _____ T2 _____ T3 _____
AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.


envirotech

Envirotech Analytical Laboratory

Printed: 10/14/2022 2:45:42PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	EOG Resources	Date Received:	10/14/22 14:20	Work Order ID:	E210077
Phone:	(575) 748-4217	Date Logged In:	10/14/22 14:41	Logged In By:	Alexa Michaels
Email:	shyde@ensolum.com	Due Date:	10/20/22 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: Courier**Comments/Resolution****Sample Turn Around Time (TAT)**

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



APPENDIX D

NMOCD Notifications

From: [Amber Griffin](#)
To: [Tacoma Morrissey](#); [Stuart Hyde](#)
Subject: FW: [EXTERNAL] Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification
Date: Thursday, October 6, 2022 1:34:11 PM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL **]

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, October 6, 2022 11:04 AM
To: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>
Cc: Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: FW: [EXTERNAL] Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification

FYI

From: Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Sent: Thursday, October 6, 2022 9:25 AM
To: Tina Huerta <Tina_Huerta@eogresources.com>
Subject: FW: [EXTERNAL] Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification

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

Tina

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

Thanks,
Jennifer Nobui

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, October 6, 2022 8:22 AM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>

Subject: Fw: [EXTERNAL] Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification

From: Tina Huerta <Tina_Huerta@eogresources.com>

Sent: Thursday, October 6, 2022 8:15 AM

To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>

Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>

Subject: [EXTERNAL] Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification

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

Good Morning,

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

Brown SWD 1
H-26-16S-37E
Lea County, NM
nAPP2222956138 & nAPP2222956552

Sampling will begin at 8:30 a.m. on Thursday, October 13, 2022 and continue through Friday, October 14, 2022.

Thank you,

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



From: [Amber Griffin](#)
To: [Tacoma Morrissey](#); [Stuart Hyde](#)
Subject: FW: Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification
Date: Thursday, October 6, 2022 9:18:59 AM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, October 6, 2022 8:16 AM
To: ocd.enviro@emnrd.nm.gov
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification

Good Morning,

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

Brown SWD 1
H-26-16S-37E
Lea County, NM
nAPP2222956138 & nAPP2222956552

Sampling will begin at 8:30 a.m. on Thursday, October 13, 2022 and continue through Friday, October 14, 2022.

Thank you,

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



Good Morning,

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

Brown SWD 1 - Wellhead
H-26-16S-37E
Lea County, NM
nAPP2222956552

Sampling will begin at 8:30 a.m. on Wednesday, September 14, 2022.

Thank you,

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



From: [Amber Griffin](#)
To: [Tacoma Morrissey](#)
Subject: FW: Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification
Date: Thursday, August 25, 2022 10:08:25 AM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Thursday, August 25, 2022 7:09 AM
To: emnrd-ocd-district1spills@state.nm.us
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Brown SWD 1 (nAPP2222956138 & nAPP2222956552) Sampling Notification

Good Morning,

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

Brown SWD 1
H-26-16S-37E
Lea County, NM
nAPP2222956138 & nAPP2222956552

Sampling will begin at 8:30 a.m. on Monday, August 29, 2022.

Thank you,

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



From: [Amber Griffin](#)
To: [Tacoma Morrissey](#)
Subject: FW: Brown SWD 1 Sampling Notification
Date: Wednesday, June 29, 2022 4:02:01 PM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, June 29, 2022 2:48 PM
To: emnrd-ocd-district1spills@state.nm.us
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Brown SWD 1 Sampling Notification

Good Afternoon,

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

Brown SWD 1
H-26-16S-37E
Lea County, NM

Sampling will begin at 9:00 a.m. on Thursday, July 7, 2022.

Thank you,

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



Artesia Division

From: [Amber Griffin](#)
To: [Tacoma Morrissey](#)
Subject: FW: Brown SWD 1 Sampling Notification
Date: Wednesday, June 29, 2022 4:02:01 PM
Attachments: [image001.png](#)

[**EXTERNAL EMAIL**]

Thank you,
Amber Griffin

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, June 29, 2022 2:48 PM
To: emnrd-ocd-district1spills@state.nm.us
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Brown SWD 1 Sampling Notification

Good Afternoon,

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

Brown SWD 1
H-26-16S-37E
Lea County, NM

Sampling will begin at 9:00 a.m. on Thursday, July 7, 2022.

Thank you,

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



Artesia Division



APPENDIX D

Final Form C-141

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2222956138
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc	OGRID 7377
Contact Name Amber Griffin	Contact Telephone 575-748-1471
Contact email amber_griffin@eogresources.com	Incident #nAPP2222956138
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.8949471 Longitude -103.2138824
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Brown SWD #1	Site Type Tank Battery Area
Date Release Discovered 8/17/2022	API# (if applicable) 30-025-29842

Unit Letter	Section	Township	Range	County
H	26	16S	37E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Brand West Farms LLC)

Nature and Volume of Release

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

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


Cause of Release Historical impacts were discovered during the decommissioning of the location. The environmental consultant contracted to investigate the area determined on 8/17/2022, based on impacted area footprint, that the release more than likely breached the reportable volume threshold.

Incident ID	NAPP2222956138
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Amber Griffin</u>	Title: <u>Rep Safety & Environmental Sr</u>
Signature: <u></u>	Date: <u>8/17/2022</u>
email: <u>amber_griffin@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>08/18/2022</u>

Incident ID	nAPP2222956138
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	98 ft (bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

Incident ID	nAPP2222956138
District RP	
Facility ID	
Application ID	

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

Printed Name: Amber Griffin Title: Rep Safety & Environmental Sr

Signature: *Amber Griffin* Date: 10/31/2022

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

OCD Only

Received by: Jocelyn Harimon Date: 10/31/2022

Incident ID	nAPP2222956138
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Amber Griffin Title: Rep Safety & Environmental Sr
Signature: Amber Griffin Date: 10/31/2022
email: amber_griffin@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: Jocelyn Harimon Date: 10/31/2022

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

Closure Approved by: Jennifer Nobui Date: 11/23/2022
Printed Name: Jennifer Nobui Title: Environmental Specialist A

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 154866

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 154866
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	11/23/2022