

August 15, 2022

District II New Mexico Oil Conservation Division 811 S. First Street Artesia. New Mexico 88210

Re: Remediation Work Plan

Federal FC Com #2H Tank Battery Incident Number NAPP2213935679 Eddy County, New Mexico

To Whom it May Concern:

Ensolum, LLC (Ensolum) on behalf of EOG Resources, Inc. (EOG), has prepared this Remediation Work Plan to document site assessment activities performed to date and propose a work plan to address the impacted soil identified at the Federal FC Com #2H Tank Battery (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address unknown historical impacts to soil at the Site, which were discovered during the decommissioning process.

#### SITE DESCRIPTION AND RELEASE SUMMARY

The Site (Figure 1) is located in Unit M, Section 24, Township 20 South, Range 24 East, in Eddy County, New Mexico (32.5538864° N, 104.5482407°W) and is associated with oil and gas exploration and production operations on land under the stewardship of the Bureau of Land Management (BLM).

On May 18, 2022, historical impacts were discovered during decommissioning of aboveground storage tanks at the Site. An unknown quantity of crude oil and produced water appears to have been released to the facility well pad based on observations of soil staining and preliminary sampling results. EOG reported the release to the NMOCD on a Release Notification Form C-141 (Form C-141) on May 19, 2022. The release was assigned Incident Number NAPP2213935679.

#### SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 323341104330401, located approximately 0.49 miles northwest of the Site. The groundwater well has a reported depth to groundwater of 236 feet bgs and a total depth of 272 feet bgs. Ground surface elevation at the groundwater well location is 3,621 feet above mean sea level (amsl), which is approximately 19 feet lower in elevation than the Site. All wells used for

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants
601 North Marienfield Suite 400 | Midland, TX 78209 | ensolum.com
Texas PG Firm No. 50588 | Texas PE Firm No. F-21843



depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 575 feet south 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 freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is underlain by unstable geology (high potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

Benzene: 10 milligrams per kilogram (mg/kg)

Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg

Total petroleum hydrocarbons (TPH): 100 mg/kg

Chloride: 600 mg/kg

#### SITE ASSESSMENT AND DELINEATION SOIL SAMPLING ACTIVITIES

On May 16, 2022, Ensolum personnel completed a Site visit to evaluate the historical release extent, which was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

Delineation activities were conducted to assess the vertical extent of impacted soil. Boreholes BH01 through BH03 were advanced via hand auger within the historical release extent on pad. The delineation boreholes were advanced to a maximum depth of 1 foot bgs before encountering auger refusal. Discrete delineation soil samples were collected from each borehole at depths of 0.5 feet bgs and from 1 foot bgs in BH01 and BH03. Soil from the boreholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the borehole were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations are depicted on Figure 2.

The delineation 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 (COC) procedures to Hall Environmental Analysis Laboratory (HEAL) in Albuquerque, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Field screening and laboratory analytical results from the borehole samples indicated excavation of impacted soil was warranted. Ensolum personnel oversaw the preliminary excavation of impacted soil beginning May 31, 2022; however, field screening results from composite excavation confirmation samples, suggested additional excavation was necessary. As such, on June 22, 2022 and July 19, 2022, Ensolum personnel conducted supplemental delineation activities to determine the vertical extent of impacted soil. Potholes PH01 and PH02 were advanced via track-mounted backhoe within the historical release extent to a maximum depth of 20 feet bgs. Discrete soil samples were collected from each pothole at depths ranging from 7 feet bgs to 20 feet bgs based on field screening results with the goal



of identifying the terminal extent of impacted soil. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and lithologic observations are included in Appendix C. The delineation soil samples were handled and analyzed as described above. The delineation soil sample locations are depicted on Figure 2.

#### LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples indicated chloride was not detected at concentrations exceeding 600 mg/kg. No benzene was detected in any soil sample and BTEX was only detected in the sample from PH02 collected at 18 feet bgs at a minimal concentration of 0.870 mg/kg. Soil samples collected from near surface and 1-foot bgs in BH01 did not contain detectable concentrations of TPH or chloride. Concentrations of TPH exceeding 100 mg/kg were identified in soil samples collected from near ground surface in BH02 and BH03. Subsurface samples collected from potholes indicated the elevated TPH concentrations in soil extended 14 feet bgs in PH01 and 18 feet bgs in PH02. Delineation potholes PH01 and PH02 each contained terminal samples in compliance with the Closure Criteria providing vertical delineation of the hydrocarbon impacts. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

#### PROPOSED REMEDIATION WORK PLAN

Ensolum, on behalf of EOG, proposes to continue excavating TPH-impacted soil to below the established Site Closure Criteria of 100 mg/kg. Based on the delineation soil sample analytical results and the area of the release extent, an estimated 4,000 cubic yards of impacted soil will be excavated from the well pad and transported for disposal at a permitted landfarm. Depth of the excavation is expected to range from 14 feet to 18 feet bgs. Once field screening results indicate impacted soil has been removed, confirmation samples will be collected at least every 200 square feet from the floor and sidewalls of the excavation. The samples will be analyzed for TPH only since delineation soil sample results excluded chloride, benzene, and BTEX as contaminants of concern. Once sampling results document concentrations of TPH less than 100 mg/kg, a closure report will be submitted to NMOCD requesting site closure. The excavation will be backfilled with locally procured material and recontoured to match Site conditions.

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

Sincerely,

**Ensolum, LLC** 

**Tacoma Morrissey** Senior Geologist

Chase Settle, EOG CC: Amber Griffin, EOG

Bureau of Land Management

Ashley Ager

Program Director, M.S., P.G.

ashley L. ager



#### Appendices:

Figure 1 Site Receptor Map

Figure 2 Delineation Soil Sample Locations
Table 1 Soil Sample Analytical Results
Appendix A Referenced Well Records

Appendix B Photographic Log

Appendix C Lithologic Soil Sampling Logs

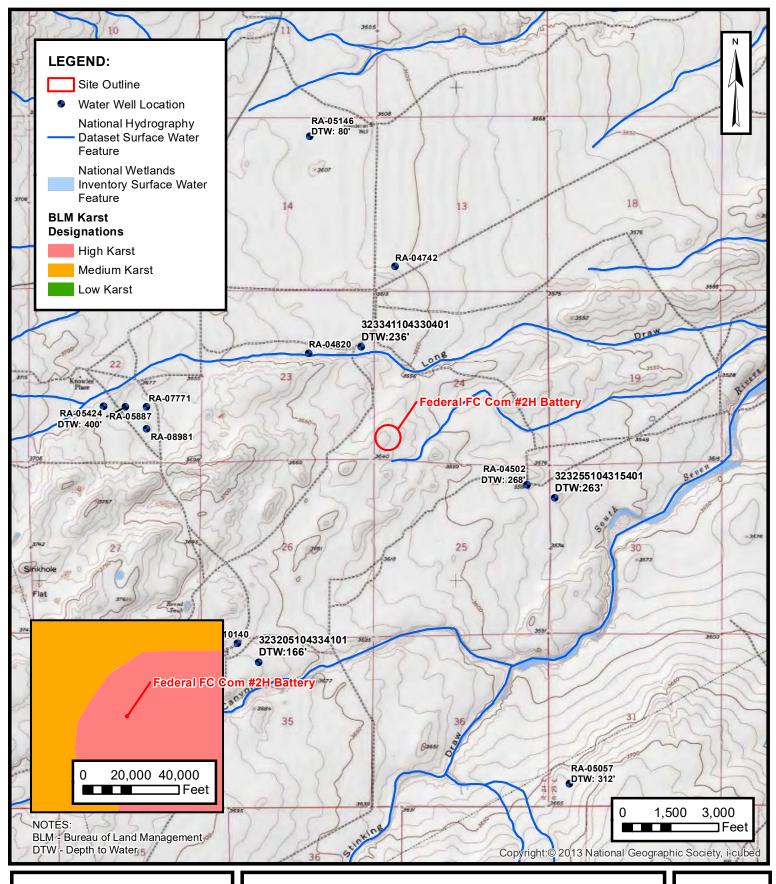
Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix E NMOCD Notifications

Appendix F Form C-141



**FIGURES** 





#### SITE RECEPTOR MAP

EOG RESOURCES, INC. FEDERAL FC COM #2H BATTERY NAPP2213935679 Unit M, Sec 24 T20S R24E Eddy County, New Mexico **FIGURE** 

1





#### **DELINEATION SOIL SAMPLE LOCATIONS**

EOG RESOURCES, INC.
FEDERAL FC COM #2H BATTERY
NAPP2213935679
Unit M, Sec 24 T20S R24E
Eddy County, New Mexico

**FIGURE** 

2



**TABLES** 

Received by OCD: 8/15/2022 3:31:51 PM Page 9 of 67



### TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS** Federal FC Com #2H Battery **EOG Resources, Inc. Eddy 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 Crit 19.15.29)	eria (NMAC	10	50	NE	NE	NE	NE	100	600		
Delineation Soil Samples												
BH01	05/16/2022	0.5	<0.0240	<0.100	<4.80	<9.70	<48.0	<9.70	<48.0	<60.0		
BH01A	05/16/2022	1	<0.0250	<0.100	<5.00	<9.60	<48.0	<9.60	<48.0	<60.0		
BH02	05/16/2022	0.5	<0.120	<0.500	<25.0	8,300	9,700	8,300	18,000	190		
BH03	05/16/2022	0.5	<0.0240	<0.100	<4.80	1,700	2,300	1,700	4,000	<60.0		
BH03A	05/16/2022	1	<0.0250	<0.100	<5.00	480	1,100	480	1,600	<60.0		
PH01	06/22/2022	7	<0.120	<0.490	31.0	3,000	1,400	3,100	4,500	<60.0		
PH01A	06/22/2022	10	<0.120	<0.470	<24.0	2,500	1,100	2,500	3,600	<60.0		
PH01B	06/22/2022	14	<0.0240	<0.0900	<4.70	66.0	50.0	66.0	120	<60.0		
PH01C	06/22/2022	16	<0.0240	<0.0900	<4.70	<15.0	<49.0	<15.0	<49.0	<60.0		
PH02	07/19/2022	18	<0.120	0.870	<24.0	1,400	750	1,400	2,200	<60.0		
PH02A	07/19/2022	20	<0.0230	<0.0900	<4.60	40.0	<48.0	40.0	40.0	<60.0		

#### 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

Text indicates soil was excavated

1 of 1 Ensolum



APPENDIX A

Referenced Well Records



USGS Home Contact USGS Search USGS

### **National Water Information System: Web Interface**

<b>USGS</b> Water	Resources
-------------------	-----------

Data Category:		Geographic Area:		
Groundwater	~	United States	~	GO

#### Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access realtime water data from over 13,500 stations nationwide.
- Full News

#### Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

#### Search Results -- 1 sites found

site\_no list =

• 323341104330401

#### Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 323341104330401 20S.24E.23.21444

Available data for this site Groundwater: Field measurements 

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°33'41", Longitude 104°33'04" NAD27

Land-surface elevation 3,617 feet above NAVD88

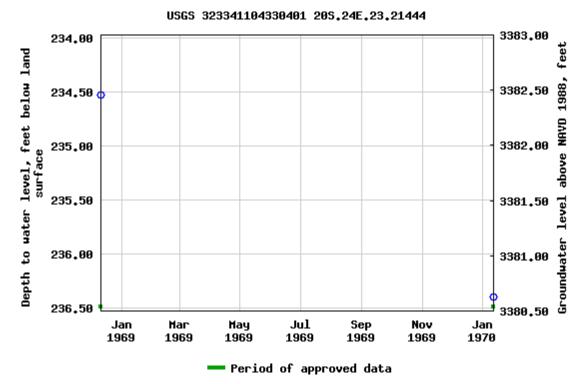
The depth of the well is 272 feet below land surface.

This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.

This well is completed in the Rustler Formation (312RSLR) 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 Policies and Notices Privacy

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: <u>USGS Water Data Support Team</u>

Page Last Modified: 2022-05-16 11:00:33 EDT

0.58 0.51 nadww01





# 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

X

RA 04820

**Q64 Q16 Q4 Sec Tws Rng**3 2 23 20S 24E

541596 3602701\*

Driller License:

Driller Company:

**Driller Name:** 

Drill Start Date: Plug Date:
Log File Date: PCW Rcv Date: Source:

Pump Type: Pipe Discharge Size: Estimated Yield: Casing Size: Depth Well: Depth Water:

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.

5/16/22 9:09 AM

POINT OF DIVERSION SUMMARY

<sup>\*</sup>UTM location was derived from PLSS - see Help



APPENDIX B

Photographic Log

# **ENSOLUM**

#### **Photographic Log**

EOG Resources, Inc.
Federal FC Com #2H Battery
Incident Number NAPP2213935679
Eddy County, New Mexico





Photograph 1 Date: 18-May-22 Description: View of staining following tank remoal, facing west.

Photograph 2 Date: 18-May-22 Description: View of staining observed following tank removal facing south.



Photograph 3 Date: 28-Apr-22 Description: View of containment showing all tanks removed, facing south.



Photograph 4 Date: 26-May-22 Description: Beginning of excavation facing north.



APPENDIX C

Lithologic Soil Sampling Logs

							Compale Name - DUO1	Data: 5/16/22			
							Sample Name: BH01	Date: 5/16/22			
		N	5	OL			Site Name: Federal FC Com #2H	70			
							Incident Number: nAPP22139356	79			
							Job Number: 03C2000006				
			_	SAMPLING	LOG		Logged By: Gilbert Moreno Hole Diameter: 4"	Method: Hand Auger			
Coordinates: 3						Total Depth: 1'					
							PID for chloride and vapor, respect actors included.	ively. Chloride test			
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Samble Debty (tt pgs) Debty (tt pgs) Symbol				Lithologic Descriptions				
<168 <168	1.5	ZZ	BH01 BH01A	0.5'	. 0.5' - 1' 		SW with gravel, brown, fine CCHE, tan, silty, fine-course	-course			

	100							Sample Name: BH02	Date: 5/16/22
			N	S	OL		M	Site Name: Federal FC Com #2H	
تا	10						1	Incident Number: nAPP22139356	679
								Job Number: 03C2000006	
					SAMPLING	LOG		Logged By: Gilbert Moreno	Method: Hand Auger
		2.5538, -1						Hole Diameter: 4"	Total Depth: 0.5'
								PID for chloride and vapor, respec factors included.	tively. Chloride test
Moisture	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	escriptions
	201.6		S	BH02	0.5'	0.5' - 0.5' - 1'	sn sn	SW with gravel, L. brown, f	ine-course
					-	- - -			

	1							Sample Name: BH03	Date: 5/16/22
		E	N	S	OL			Site Name: Federal FC Com #2H	
								Incident Number: nAPP22139356	579
								Job Number: 03C2000006	
					AMPLING	LOG		Logged By: Gilbert Moreno	Method: Hand Auger
Coordina								Hole Diameter: 4"	Total Depth: 1'
								PID for chloride and vapor, respectactors included.	tively. Chloride test
Moisture Content	(mdd)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	scriptions
	<168 <168	0.7	Y	BH03 BH03A	0.5' -	0.5' - 1'		SW with gravel, L. brown, fi	ne-course ne-course

							Cample Name: DIIO1	Data: 6/22/22
								Date: 6/22/22
		N	5	OL	U	V		70
								, ,
1	IITHOU	OGI	^ / SOII S	ΔMDI ING	LOG			Method: Excavator
				AIVIFLING	100			Total Depth: 16'
								·
		_						
Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions
ND ND ND ND ND ND	206 53 204 498 251 114 5.7	YNYYYY	PH01A PH01B PH01C	10' - 12' - 16' - - -	L 2' - 4' - 6' - 10' - 14' - 16'		Silty, well graded sand Silty, well graded sand	
r	ates: 32 nts: Fiel hed with Chloride ON D ON D ND	LITHOL     ates: 32.5538, -1     nts: Field screening     nted with 1:4 dilute     lod with 1:4 dilu	LITHOLOGIC ates: 32.5538, -104.5c nts: Field screening co ned with 1:4 dilution for about 1	LITHOLOGIC / SOIL Sates: 32.5538, -104.5482 Ints: Field screening conducted water with 1:4 dilution factor of soil by Carlon Car	LITHOLOGIC / SOIL SAMPLING ates: 32.5538, -104.5482  Ints: Field screening conducted with HACH Charled with 1:4 dilution factor of soil to distilled  Depth (Fit bgs)  ND 206 Y PH01 7' ND 53 N ND 204 Y ND 498 Y PH01A 10' ND 251 Y PH01B 14'  ND 114 Y PH01B 14'	LITHOLOGIC / SOIL SAMPLING LOG  ates: 32.5538, -104.5482  Ints: Field screening conducted with HACH Chloride Test Solid with 1:4 dilution factor of soil to distilled water. No cological solid spin soil soil to distilled water. No cological solid spin soil soil soil soil soil soil soil soil	LITHOLOGIC / SOIL SAMPLING LOG  ates: 32.5538, -104.5482  Ints: Field screening conducted with HACH Chloride Test Strips and ned with 1:4 dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction for the dilution factor of soil to distilled water. No correction factor o	Job Number: 03C2000006

								Carrala Nama - BUO2	D-+ C/22/22
	500							Sample Name: PH02	Date: 6/22/22
			N	5	OL		M	Site Name: Federal FC Com #2H	70
	7							Incident Number: nAPP221393567	79
			00:	. / sa:: s		100		Job Number: 03C2000006	
Cara'					SAMPLING	LUG		Logged By: Kase Parker	Method: Excavator Total Depth: 22'
		2.5538, -1			i+h UACU Ch	Jarida Tast 9	tring and	Hole Diameter: ~4' PID for chloride and vapor, respecti	· ·
			_					factors included.	very. Chiloride test
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions
	ND	>E 000	V		16'	L - 16'		Woll graded cand	
	ND ND	>5,000 2,436	Y	PH02	18'	18'		Well graded sand Silty, brown, fine sand	
	ND	364	N	PH02A	20'	20'		Silty, brown, fine sand	
	ND	16.8	N		22'	22'		Silty, brown, fine sand	
					-	- -			
					-	-			
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## APPENDIX D

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

May 27, 2022

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

RE: Federal FC Com 2H Tank Battery OrderNo.: 2205808

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/18/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andel

4901 Hawkins NE

Albuquerque, NM 87109

**CLIENT: EOG** 

### **Analytical Report**

Lab Order **2205808**Date Reported: **5/27/2022** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH01 0.5'

**Project:** Federal FC Com 2H Tank Battery **Collection Date:** 5/16/2022 9:30:00 AM

**Lab ID:** 2205808-001 **Matrix:** SOIL **Received Date:** 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>NAI</b>
Chloride	ND	60	mg/Kg	20	5/20/2022 4:50:27 PM	67596
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analys	t: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	5/23/2022 2:45:53 PM	67548
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/23/2022 2:45:53 PM	67548
Surr: DNOP	100	51.1-141	%Rec	1	5/23/2022 2:45:53 PM	67548
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: BRM
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	5/20/2022 3:21:00 AM	67545
Surr: BFB	89.1	37.7-212	%Rec	1	5/20/2022 3:21:00 AM	67545
EPA METHOD 8021B: VOLATILES					Analys	t: BRM
Benzene	ND	0.024	mg/Kg	1	5/20/2022 3:21:00 AM	67545
Toluene	ND	0.048	mg/Kg	1	5/20/2022 3:21:00 AM	67545
Ethylbenzene	ND	0.048	mg/Kg	1	5/20/2022 3:21:00 AM	67545
Xylenes, Total	ND	0.096	mg/Kg	1	5/20/2022 3:21:00 AM	67545
Surr: 4-Bromofluorobenzene	90.2	70-130	%Rec	1	5/20/2022 3:21:00 AM	67545

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix 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 1 of 9

### **Analytical Report**

Lab Order **2205808**Date Reported: **5/27/2022** 

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: BH01 1'

 Project:
 Federal FC Com 2H Tank Battery
 Collection Date: 5/16/2022 9:35:00 AM

 Lab ID:
 2205808-002
 Matrix: SOIL
 Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	t: <b>CAS</b>
Chloride	ND	60	mg/Kg	20	5/23/2022 1:56:50 PM	67621
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analys	t: <b>SB</b>
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	5/23/2022 2:56:44 PM	67548
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	5/23/2022 2:56:44 PM	67548
Surr: DNOP	98.6	51.1-141	%Rec	1	5/23/2022 2:56:44 PM	67548
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: <b>BRM</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	5/20/2022 3:41:00 AM	67545
Surr: BFB	90.6	37.7-212	%Rec	1	5/20/2022 3:41:00 AM	67545
EPA METHOD 8021B: VOLATILES					Analys	t: <b>BRM</b>
Benzene	ND	0.025	mg/Kg	1	5/20/2022 3:41:00 AM	67545
Toluene	ND	0.050	mg/Kg	1	5/20/2022 3:41:00 AM	67545
Ethylbenzene	ND	0.050	mg/Kg	1	5/20/2022 3:41:00 AM	67545
Xylenes, Total	ND	0.099	mg/Kg	1	5/20/2022 3:41:00 AM	67545
Surr: 4-Bromofluorobenzene	91.6	70-130	%Rec	1	5/20/2022 3:41:00 AM	67545

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

Qualifiers:

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

Page 2 of 9

**CLIENT: EOG** 

### **Analytical Report**

Lab Order **2205808**Date Reported: **5/27/2022** 

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH02 0.5'

 Project:
 Federal FC Com 2H Tank Battery
 Collection Date: 5/16/2022 9:40:00 AM

 Lab ID:
 2205808-003
 Matrix: SOIL
 Received Date: 5/18/2022 8:27:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride 190 60 mg/Kg 20 5/23/2022 2:09:15 PM 67621 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 8300 500 mg/Kg 50 5/23/2022 4:33:35 PM 67548 Motor Oil Range Organics (MRO) 9700 2500 mg/Kg 50 5/23/2022 4:33:35 PM 67548 Surr: DNOP 51.1-141 0 S %Rec 5/23/2022 4:33:35 PM 67548 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 5 5/20/2022 4:00:00 AM 67545 25 mg/Kg Surr: BFB 95.8 37.7-212 %Rec 5/20/2022 4:00:00 AM 67545 **EPA METHOD 8021B: VOLATILES** Analyst: BRM ND 5/20/2022 4:00:00 AM 67545 Benzene 0.12 mg/Kg 5 Toluene ND 0.25 mg/Kg 5/20/2022 4:00:00 AM 67545 Ethylbenzene ND 0.25 mg/Kg 5 5/20/2022 4:00:00 AM 67545 Xylenes, Total ND 0.50 mg/Kg 5 5/20/2022 4:00:00 AM 67545 Surr: 4-Bromofluorobenzene 70-130 96.8 %Rec 5/20/2022 4:00:00 AM 67545

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

Qualifiers:

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

Page 3 of 9

**CLIENT: EOG** 

Benzene

Toluene

Ethylbenzene

Xylenes, Total

Surr: 4-Bromofluorobenzene

### **Analytical Report**

Lab Order 2205808 Date Reported: 5/27/2022

5/20/2022 4:20:00 AM

5/20/2022 4:20:00 AM

5/20/2022 4:20:00 AM

5/20/2022 4:20:00 AM

67545

67545

67545

67545

### Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: BH03 0.5'

mg/Kg

mg/Kg

mg/Kg

mg/Kg

%Rec

1

**Project:** Federal FC Com 2H Tank Battery Collection Date: 5/16/2022 9:45:00 AM Lab ID: 2205808-004 Matrix: SOIL Received Date: 5/18/2022 8:27:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: CAS Chloride ND 60 mg/Kg 20 5/23/2022 2:21:39 PM 67621 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: SB Diesel Range Organics (DRO) 1700 440 mg/Kg 50 5/25/2022 2:22:29 PM 67548 Motor Oil Range Organics (MRO) 2300 2200 mg/Kg 50 5/25/2022 2:22:29 PM 67548 Surr: DNOP 0 51.1-141 S %Rec 5/25/2022 2:22:29 PM 67548 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 5/20/2022 4:20:00 AM 67545 4.8 mg/Kg 1 Surr: BFB 85.8 37.7-212 %Rec 5/20/2022 4:20:00 AM 67545 **EPA METHOD 8021B: VOLATILES** Analyst: BRM ND 0.024 5/20/2022 4:20:00 AM 67545

ND

ND

ND

89.9

0.048

0.048

0.095

70-130

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference
- Analyte detected in the associated Method Blank
- Е Estimated value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 4 of 9

### **Analytical Report**

Lab Order 2205808

# Hall Environmental Analysis Laboratory, Inc. Date Reported: 5/27/2022

CLIENT: EOG Client Sample ID: BH03 1'

 Project:
 Federal FC Com 2H Tank Battery
 Collection Date: 5/16/2022 9:50:00 AM

 Lab ID:
 2205808-005
 Matrix: SOIL
 Received Date: 5/18/2022 8:27:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: CAS
Chloride	ND	60		mg/Kg	20	5/23/2022 2:34:04 PM	67621
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analys	:: SB
Diesel Range Organics (DRO)	480	100		mg/Kg	10	5/25/2022 2:50:00 PM	67548
Motor Oil Range Organics (MRO)	1100	500		mg/Kg	10	5/25/2022 2:50:00 PM	67548
Surr: DNOP	0	51.1-141	S	%Rec	10	5/25/2022 2:50:00 PM	67548
EPA METHOD 8015D: GASOLINE RANGE						Analys	BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/20/2022 4:40:00 AM	67545
Surr: BFB	87.5	37.7-212		%Rec	1	5/20/2022 4:40:00 AM	67545
EPA METHOD 8021B: VOLATILES						Analys	: BRM
Benzene	ND	0.025		mg/Kg	1	5/20/2022 4:40:00 AM	67545
Toluene	ND	0.050		mg/Kg	1	5/20/2022 4:40:00 AM	67545
Ethylbenzene	ND	0.050		mg/Kg	1	5/20/2022 4:40:00 AM	67545
Xylenes, Total	ND	0.099		mg/Kg	1	5/20/2022 4:40:00 AM	67545
Surr: 4-Bromofluorobenzene	88.2	70-130		%Rec	1	5/20/2022 4:40:00 AM	67545

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix 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 9

### **OC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: 2205808

27-May-22

**Client: EOG** 

**Project:** Federal FC Com 2H Tank Battery

Sample ID: MB-67596 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 67596 RunNo: 88190

Prep Date: Analysis Date: 5/20/2022 SeqNo: 3126542 5/20/2022 Units: mq/Kq

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

Chloride ND 1.5

Sample ID: LCS-67596 TestCode: EPA Method 300.0: Anions SampType: Ics Client ID: LCSS Batch ID: 67596 RunNo: 88190

Prep Date: 5/20/2022 Analysis Date: 5/20/2022 SeqNo: 3126543 Units: mg/Kg

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

Chloride 14 1.5 15.00 90.7 110

Sample ID: MB-67621 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 67621 RunNo: 88218

Analysis Date: 5/23/2022 Prep Date: 5/23/2022 SeqNo: 3127932 Units: mg/Kg

Result POI SPK value SPK Ref Val %REC %RPD **RPDLimit** Qual Analyte I owl imit HighLimit

Chloride ND

Sample ID: LCS-67621 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 67621 RunNo: 88218

Prep Date: Analysis Date: 5/23/2022 SeqNo: 3127933 5/23/2022 Units: mg/Kg

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

Chloride 14 1.5 15.00 94.6 90

Sample ID: MB-67621 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: Batch ID: 67621 RunNo: 88201 PRS

Prep Date: 5/23/2022 Analysis Date: 5/23/2022 SeqNo: 3128092 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-67621 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 67621 RunNo: 88201

Prep Date: 5/23/2022 Analysis Date: 5/23/2022 SeqNo: 3128093 Units: mg/Kg

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

Chloride 14 1.5

#### Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix interference

Analyte detected in the associated Method Blank

Estimated value

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 6 of 9

# **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2205808** 

27-May-22

Client: EOG

**Project:** Federal FC Com 2H Tank Battery

Project:	1 cacrar i	FC Com 2H												
Sample ID:	LCS-67548	SampTy	/pe: <b>LC</b>	s	TestCode: EPA Method 8015M/D: Diesel Range Organics									
Client ID:	LCSS	Batch	ID: 675	548	RunNo: <b>88170</b>									
Prep Date:	5/19/2022	Analysis Da	ate: <b>5/</b> 2	20/2022	8	SeqNo: 31	126893	Units: mg/K	(g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
_	Organics (DRO)	43	10	50.00	0	85.8	64.4	127						
Surr: DNOP		5.0		5.000		101	51.1	141						
Sample ID:	MB-67548	SampTy	/pe: <b>ME</b>	BLK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	sel Range	Organics				
Client ID:	PBS	Batch	ID: 675	548	F	RunNo: 88	3170							
Prep Date:	5/19/2022	Analysis Da	ate: <b>5/</b> 2	20/2022	5	SeqNo: 31	126897	Units: mg/K	(g					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
_	Organics (DRO)	ND	10											
Motor Oil Rang Surr: DNOP	ge Organics (MRO)	ND 11	50	10.00		112	51.1	141						
						112	31.1	141						
	LCS-67607	SampTy						8015M/D: Die	sel Range	Organics				
Client ID:	LCSS		ID: <b>676</b>			RunNo: 88								
Prep Date:	5/20/2022	Analysis Da	ate: <b>5/</b> 2	23/2022	5	SeqNo: 31	127567	Units: %Red	•					
Analyte		Result	PQL		SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Analyte Surr: DNOP		Result 6.4	PQL	SPK value 5.000	SPK Ref Val	%REC 127	LowLimit 51.1	HighLimit 141	%RPD	RPDLimit	Qual			
				5.000		127	51.1				Qual			
Surr: DNOP		6.4 SampTy		5.000	Tes	127	51.1 PA Method	141			Qual			
Surr: DNOP Sample ID:	MB-67607	6.4 SampTy	/pe: <b>ME</b> ID: <b>67</b> 6	5.000 BLK 607	Tes F	127 tCode: <b>EF</b>	51.1 PA Method 3200	141	sel Range		Qual			
Surr: DNOP  Sample ID: Client ID:	MB-67607 PBS	6.4 SampTy Batch	/pe: <b>ME</b> ID: <b>67</b> 6	5.000 BLK 607 23/2022	Tes F	127 tCode: <b>EF</b> RunNo: <b>88</b>	51.1 PA Method 3200	141 8015M/D: Die	sel Range		Qual			
Surr: DNOP  Sample ID: Client ID: Prep Date:	MB-67607 PBS 5/20/2022	6.4  SampTy  Batch  Analysis Da	/pe: <b>ME</b> ID: <b>676</b> ate: <b>5/</b> 2	5.000 BLK 607 23/2022	Tes F	tCode: EFRunNo: 88	51.1 PA Method 3200 127570	141 8015M/D: Die Units: %Rec	esel Range	Organics				
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte	MB-67607 PBS 5/20/2022	6.4  SampTy  Batch  Analysis Da	/pe: <b>ME</b> ID: <b>676</b> ate: <b>5</b> //	5.000  BLK  607  23/2022  SPK value  10.00	Tes F S SPK Ref Val	tCode: EF RunNo: 88 SeqNo: 3' %REC 132	51.1 PA Method 3200 127570 LowLimit 51.1	141 8015M/D: Die Units: %Rec	sel Range  %RPD	Organics  RPDLimit				
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP	MB-67607 PBS 5/20/2022	SampTy Batch Analysis Da Result 13	/pe: <b>ME</b> ID: <b>676</b> ate: <b>5</b> //	5.000  BLK  607  23/2022  SPK value  10.00  BLK	Tes F S SPK Ref Val	tCode: EF RunNo: 88 SeqNo: 3' %REC 132	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method	141  8015M/D: Die  Units: %Rec  HighLimit  141	sel Range  %RPD	Organics  RPDLimit				
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID:	MB-67607 PBS 5/20/2022 MB-67666	SampTy Batch Analysis Da Result 13	/pe: ME ID: 676 ate: 5/2 PQL /pe: ME	5.000  BLK 607 23/2022  SPK value 10.00  BLK 666	Tes F SPK Ref Val Tes	tCode: EFRunNo: 88 SeqNo: 3° %REC 132 tCode: EF	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263	141  8015M/D: Die  Units: %Rec  HighLimit  141	%RPD	Organics  RPDLimit				
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID:	MB-67607 PBS 5/20/2022 MB-67666 PBS	SampTy Batch Analysis Da Result 13 SampTy Batch	/pe: ME ID: 676 ate: 5/2 PQL /pe: ME	5.000  BLK  607  23/2022  SPK value  10.00  BLK  666  26/2022	Tes F SPK Ref Val Tes	tCode: EFRunNo: 88 SeqNo: 3' %REC 132 tCode: EFRunNo: 88	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263	141  8015M/D: Die  Units: %Rec  HighLimit 141  8015M/D: Die	%RPD	Organics  RPDLimit				
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID: Prep Date:	MB-67607 PBS 5/20/2022 MB-67666 PBS 5/24/2022	SampTy Batch Analysis Da Result 13 SampTy Batch Analysis Da	/pe: ME ID: 676 PQL /pe: ME ID: 676 ate: 5/2	5.000  BLK  607  23/2022  SPK value  10.00  BLK  666  26/2022	Tes F SPK Ref Val Tes F	tCode: EFRunNo: 88 SeqNo: 3' %REC 132 tCode: EFRunNo: 88 SeqNo: 3'	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263 131422	141  8015M/D: Die  Units: %Rec  HighLimit  141  8015M/D: Die  Units: %Rec	%RPD	Organics  RPDLimit  Organics	Qual			
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP	MB-67607 PBS 5/20/2022 MB-67666 PBS 5/24/2022	SampTy Batch Analysis Da Result 13 SampTy Batch Analysis Da	/pe: ME ID: 676 ate: 5/2 PQL /pe: ME ID: 676 ate: 5/2	5.000  BLK 607 23/2022  SPK value 10.00  BLK 666 26/2022  SPK value 10.00	Tes F SPK Ref Val  Tes F SSPK Ref Val	tCode: EF RunNo: 88 SeqNo: 3*  %REC 132  tCode: EF RunNo: 88 SeqNo: 3*  %REC 101	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263 131422 LowLimit 51.1	141  8015M/D: Die  Units: %Rec  HighLimit 141  8015M/D: Die  Units: %Rec  HighLimit	%RPD	Organics  RPDLimit  Organics  RPDLimit	Qual			
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP	MB-67607 PBS 5/20/2022 MB-67666 PBS 5/24/2022	SampTy Batch Analysis Da Result 13  SampTy Batch Analysis Da Result 10  SampTy	/pe: ME ID: 676 ate: 5/2 PQL /pe: ME ID: 676 ate: 5/2	5.000  BLK  607  23/2022  SPK value  10.00  BLK  666  26/2022  SPK value  10.00	Tes SPK Ref Val  Tes SPK Ref Val  Tes	tCode: EF RunNo: 88 SeqNo: 3*  %REC 132 tCode: EF RunNo: 88 SeqNo: 3*  %REC 101	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263 131422 LowLimit 51.1 PA Method	141  8015M/D: Die  Units: %Rec  HighLimit 141  8015M/D: Die  Units: %Rec  HighLimit 141	%RPD	Organics  RPDLimit  Organics  RPDLimit	Qual			
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Sample ID: Surr: DNOP	MB-67607 PBS 5/20/2022 MB-67666 PBS 5/24/2022	SampTy Batch Analysis Da Result 13  SampTy Batch Analysis Da Result 10  SampTy	/pe: ME ID: 676 ate: 5/2 PQL /pe: ME ID: 676 ate: 5/2 PQL	5.000  BLK 607 23/2022 SPK value 10.00  BLK 666 26/2022 SPK value 10.00	Tes  SPK Ref Val  Tes  SPK Ref Val  Tes  F	tCode: EF RunNo: 88 SeqNo: 3*  %REC 132 tCode: EF RunNo: 88 SeqNo: 3*  %REC 101 tCode: EF	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263 131422 LowLimit 51.1 PA Method 3263	141  8015M/D: Die  Units: %Rec  HighLimit 141  8015M/D: Die  Units: %Rec  HighLimit 141	%RPD sel Range %RPD	Organics  RPDLimit  Organics  RPDLimit	Qual			
Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP  Sample ID: Client ID: Prep Date: Analyte Surr: DNOP	MB-67607 PBS 5/20/2022 MB-67666 PBS 5/24/2022	SampTy Batch Analysis Da Result 13 SampTy Batch Analysis Da Result 10 SampTy Batch	/pe: ME ID: 676 ate: 5/2 PQL /pe: ME ID: 676 ate: 5/2 PQL	5.000  BLK 607 23/2022  SPK value 10.00  BLK 666 26/2022  SPK value 10.00  S 666 26/2022	Tes  SPK Ref Val  Tes  SPK Ref Val  Tes  F	tCode: EF RunNo: 88 SeqNo: 3*  %REC 132 tCode: EF RunNo: 88 SeqNo: 3*  %REC 101 tCode: EF RunNo: 88	51.1 PA Method 3200 127570 LowLimit 51.1 PA Method 3263 131422 LowLimit 51.1 PA Method 3263	141  8015M/D: Die  Units: %Rec HighLimit 141  8015M/D: Die  Units: %Rec HighLimit 141  8015M/D: Die	%RPD sel Range %RPD	Organics  RPDLimit  Organics  RPDLimit	Qual			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- 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 7 of 9

### **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

2205808 27-May-22

WO#:

**Client: EOG** 

**Project:** Federal FC Com 2H Tank Battery

Sample ID: Ics-67545 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: 67545 RunNo: 88144 Units: mg/Kg Prep Date: 5/18/2022 Analysis Date: 5/19/2022 SeqNo: 3124750 **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Analyte Result Qual Gasoline Range Organics (GRO) 25 5.0 25.00 0 100 72.3 137

Surr: BFB 1900 1000 191 37.7 212

Sample ID: mb-67545 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 67545 RunNo: 88144

Prep Date: 5/18/2022 Analysis Date: 5/19/2022 SeqNo: 3124752 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

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference
- Analyte detected in the associated Method Blank
- Estimated value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RLReporting Limit

Page 8 of 9

# **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#: **2205808 27-May-22** 

Client: EOG

**Project:** Federal FC Com 2H Tank Battery

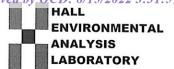
Sample ID: Ics-67545	Samp	Гуре: <b>LC</b>	s	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batc	h ID: <b>675</b>	545	F	RunNo: 8	3144						
Prep Date: 5/18/2022	Analysis [	Date: <b>5/</b>	19/2022	5	SeqNo: 3	124827	Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	0.96	0.025	1.000	0	96.1	80	120					
Toluene	0.97	0.050	1.000	0	96.9	80	120					
Ethylbenzene	0.96	0.050	1.000	0	96.2	80	120					
Xylenes, Total	2.9	0.10	3.000	0	95.2	80	120					
Surr: 4-Bromofluorobenzene	0.89		1.000		89.4	70	130					

Sample ID: mb-67545	Samp <sup>1</sup>	Гуре: МЕ	BLK	TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batc	h ID: <b>67</b>	545	F	RunNo: 8						
Prep Date: 5/18/2022	Analysis [	Date: <b>5/</b>	19/2022	9	SeqNo: 3	124828	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	0.025									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.10									
Surr: 4-Bromofluorobenzene	0.90		1.000		89.7	70	130				

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix 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 9 of 9



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107

### Sample Log-In Check List

Website: www.hallenvironmental.com Client Name: **EOG** Work Order Number: 2205808 RcptNo: 1 Received By: Joseph Alderette 5/18/2022 8:27:00 AM Completed By: **Desiree Dominguez** 5/18/2022 10:03:54 AM ma 5/18/22 Reviewed By: Chain of Custody 1. Is Chain of Custody complete? Yes 🗸 No 🗌 Not Present 2. How was the sample delivered? Courier Log In 3. Was an attempt made to cool the samples? Yes 🗸 No 🗌 NA 🗌 4. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 NA 🗌 Yes 🗸 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 V No  $\square$ 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 🗸 Yes 🗌 10. Were any sample containers received broken? No V # of preserved bottles checked 11. Does paperwork match bottle labels? No 🗌 Yes 🗸 for pH: (Note discrepancies on chain of custody) (<2 or >12 unless noted) 12. Are matrices correctly identified on Chain of Custody? Adjusted? Yes 🗸 No 🗌 13. Is it clear what analyses were requested? Yes 🗸 No 🗌 14. Were all holding times able to be met? Yes 🗸 No 🗌 Checked by: (If no, notify customer for authorization.) Special Handling (if applicable) 15. Was client notified of all discrepancies with this order? Yes No 🗌 NA V Person Notified: Date: By Whom: Via: eMail Phone Fax ☐ In Person Regarding: Client Instructions: 16. Additional remarks: 17. Cooler Information Cooler No Temp °C Condition Seal Intact Seal No Seal Date Signed By 5.5 Good

HALL ENVIRONMENTAL ANALYSIS LABORATORY  Many hallenvironmental som	87109	505-345-4107 Regines*	ţu:			əsə		-ime	8260 (V6 8270 (Se Total Co											125				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.	67
HALL EI ANALYS	4901 Hawkins NE - Alb	505-345-3975 Fax		SMI	S02	28	ıo or	· 83 teM	РАНs by В СКА 8 Сl, F, B		×	×	×	×									4	ontracted data will b	
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8	90000000000	34289	ن ا	sey		Gilbert Moreno	■ Yes	uding CF): 5.5 - 1	Preservativ e Type	N/A	N/A	N/A	N/A	N/A							9	6	ia: rc S:I	credited laboratories	
Turn-Around Time:  ☐ Standard Project Name: Fe	Tank Battery Project #:	UNC: NAB1821234289	Project Manager:	Tacoma Morrissey		Sampler:	On Ice:	Cooler Temp(including CF): 5.5	Container Type and #	1, 2 oz,	1, 2 oz,	1, 2 oz,	1, 2 oz,	1, 2 oz,				9° 8				OMMINIMAN	Received by: Via:	ibcontracted to other ac	
y Record	Artesia, NM 88210	ces.com	og resources		□ Level 4 (Full Validation)	Φ			Sample Name herm and #	BH01 0.5'	BH01	BH02 0.5'	BH03 0.5'	BH03		6						'n		Hall Environmental may be &	
Chain-of-Custody Record Chase Settle, Amber Griffin	105 S. 4th St.	Amber.griffin@eogresources.com	Chase.settle@eog resources		□ Lev€	☐ Az Compliance	□ Other		Matrix	9:30 S	9:35 S	9:40 S	9:45 S	20 8		/					Dolinouile Polinouile		Relinquished by:	sary, samples submitted to	
Client: Chas	Mailing Address:	Phone #:	email or F		Standard	Accreditation:	M   NELAC     EDD (Type)		Date Time	5.16.22 9:3	5.16.22	5.16.22 9:4	5.16.22 9:4	5.16.22 9:50	2.5	A	2 ° .		\B.		Date:	72	Date: Time:	If neces	

Hall Environmental Analysis Laboratory

TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com

4901 Hawkins NE

Albuquerque, NM 87109



July 27, 2022

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

RE: Federal FC Com 2H OrderNo.: 2207A15

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/21/2022 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,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

### **Analytical Report**

Lab Order **2207A15** 

Date Reported: 7/27/2022

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: PH02 @ 18'

 Project:
 Federal FC Com 2H
 Collection Date: 7/19/2022 10:15:00 AM

 Lab ID:
 2207A15-001
 Matrix: SOIL
 Received Date: 7/21/2022 6:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: JMT
Chloride	ND	60		mg/Kg	20	7/25/2022 9:33:55 PM	69047
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: JME
Diesel Range Organics (DRO)	1400	150		mg/Kg	10	7/22/2022 6:47:40 PM	68975
Motor Oil Range Organics (MRO)	750	480		mg/Kg	10	7/22/2022 6:47:40 PM	68975
Surr: DNOP	0	21-129	S	%Rec	10	7/22/2022 6:47:40 PM	68975
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	7/22/2022 6:03:42 PM	68966
Surr: BFB	123	37.7-212		%Rec	5	7/22/2022 6:03:42 PM	68966
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12		mg/Kg	5	7/22/2022 6:03:42 PM	68966
Toluene	ND	0.24		mg/Kg	5	7/22/2022 6:03:42 PM	68966
Ethylbenzene	0.27	0.24		mg/Kg	5	7/22/2022 6:03:42 PM	68966
Xylenes, Total	0.60	0.48		mg/Kg	5	7/22/2022 6:03:42 PM	68966
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	5	7/22/2022 6:03:42 PM	68966

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix 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 1 of 6

**CLIENT: EOG** 

## **Analytical Report**

Lab Order **2207A15** 

Date Reported: 7/27/2022

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: PH02A @ 20'

 Project:
 Federal FC Com 2H
 Collection Date: 7/19/2022 10:20:00 AM

 Lab ID:
 2207A15-002
 Matrix: SOIL
 Received Date: 7/21/2022 6:55:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: JMT
Chloride	ND	60	mg/Kg	20	7/25/2022 9:46:19 PM	69047
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst	: JME
Diesel Range Organics (DRO)	40	14	mg/Kg	1	7/22/2022 1:32:26 PM	68975
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	7/22/2022 1:32:26 PM	68975
Surr: DNOP	86.3	21-129	%Rec	1	7/22/2022 1:32:26 PM	68975
EPA METHOD 8015D: GASOLINE RANGE					Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.6	mg/Kg	1	7/22/2022 7:15:36 PM	68966
Surr: BFB	93.5	37.7-212	%Rec	1	7/22/2022 7:15:36 PM	68966
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Benzene	ND	0.023	mg/Kg	1	7/22/2022 7:15:36 PM	68966
Toluene	ND	0.046	mg/Kg	1	7/22/2022 7:15:36 PM	68966
Ethylbenzene	ND	0.046	mg/Kg	1	7/22/2022 7:15:36 PM	68966
Xylenes, Total	ND	0.092	mg/Kg	1	7/22/2022 7:15:36 PM	68966
Surr: 4-Bromofluorobenzene	106	70-130	%Rec	1	7/22/2022 7:15:36 PM	68966

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

Qualifiers:

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

pple pH Not In Range Page 2 of 6

## Hall Environmental Analysis Laboratory, Inc.

2207A15 27-Jul-22

WO#:

Client: EOG

**Project:** Federal FC Com 2H

Sample ID: MB-69047 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 69047 RunNo: 89782

Prep Date: 7/25/2022 Analysis Date: 7/25/2022 SeqNo: 3197101 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-69047 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 69047 RunNo: 89782

Prep Date: 7/25/2022 Analysis Date: 7/25/2022 SeqNo: 3197102 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.5 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 3 of 6

## Hall Environmental Analysis Laboratory, Inc.

2207A15 27-Jul-22

WO#:

Client: EOG

**Project:** Federal FC Com 2H

Sample ID: MB-68975 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS Batch ID: 68975 RunNo: 89747

Prep Date: 7/21/2022 Analysis Date: 7/22/2022 SeqNo: 3195780 Units: mg/Kg

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

Diesel Range Organics (DRO) ND 15
Motor Oil Range Organics (MRO) ND 50

Surr: DNOP 8.3 10.00 82.6 21 129

Sample ID: LCS-68975 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS Batch ID: 68975 RunNo: 89747

Prep Date: 7/21/2022 Analysis Date: 7/22/2022 SeqNo: 3195781 Units: mg/Kg

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

 Diesel Range Organics (DRO)
 51
 15
 50.00
 0
 102
 64.4
 127

 Surr: DNOP
 5.4
 5.000
 108
 21
 129

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of 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 6

## Hall Environmental Analysis Laboratory, Inc.

2207A15 27-Jul-22

WO#:

Client: EOG

Surr: BFB

**Project:** Federal FC Com 2H

Sample ID: mb-68966 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 68966 RunNo: 89719

Prep Date: 7/21/2022 Analysis Date: 7/22/2022 SeqNo: 3194996 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 940 1000 93.9 37.7 212

Sample ID: Ics-68966 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 68966 RunNo: 89719

1800

Prep Date: 7/21/2022 Analysis Date: 7/22/2022 SeqNo: 3194997 Units: mg/Kg

1000

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 72.3 Gasoline Range Organics (GRO) 22 5.0 25.00 0 88.5 137

175

37.7

212

## Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

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

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 6

## Hall Environmental Analysis Laboratory, Inc.

2207A15 27-Jul-22

WO#:

Client: EOG

**Project:** Federal FC Com 2H

Sample ID: mb-68966 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 68966 RunNo: 89719

Prep Date: 7/21/2022 Analysis Date: 7/22/2022 SeqNo: 3195069 Units: mg/Kg

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

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

Surr: 4-Bromofluorobenzene 1.1 1.000 107 70 130

Sample ID: LCS-68966 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 68966 RunNo: 89719

Prep Date: 7/21/2022 Analysis Date: 7/22/2022 SeqNo: 3195070 Units: mg/Kg

Prep Date. 7/21/2022	Analysis Date. 1122/2022			Seq100. 3193070			Office. Ing/h	.g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	95.2	80	120			
Toluene	1.0	0.050	1.000	0	99.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		110	70	130			

#### Qualifiers:

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

Page 6 of 6



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 Orde	er Number: 2207A15		RcptNo: 1
Received By: Juan Rojas 7/21/2022 6	:55:00 AM	Huan Eng	
Completed By: Cheyenne Cason 7/21/2022 7	:22:04 AM	General	
Reviewed By: WOG 7.2172		34	
Chain of Custody			
1. Is Chain of Custody complete?	Yes 🗸	No 🗌	Not Present
2. How was the sample delivered?	Courier		
Log In  3. Was an attempt made to cool the samples?	Yes 🗹	No 🗌	NA 🗆
4. Were all samples received at a temperature of >0° C to 6.0	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 🗸	# of preserved
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes 🗸	No 🗆	bottles checked for pH: (<2 or >12 unless noted)
2. Are matrices correctly identified on Chain of Custody?	Yes 🗸	No 🗌	Adjusted?
3. Is it clear what analyses were requested?	Yes 🗸	No 🗌	1 100
4. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes 🗹	No 🗆	Checked by: 4/21/22
Special Handling (if applicable)			
15. Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🗹
Person Notified:	Date:	MANUFACTURE ACCRECATION AND AND ASSESSMENT	
By Whom:	Via: eMail l	Phone  Fax	☐ In Person
Regarding: Client Instructions:		Territorio de la manda de la companya de la company	
16. Additional remarks:			
17. <u>Cooler Information</u>			
The state of the s	al No Seal Date	Signed By	
1 0.9 Good Not Present		3	

Chain-of-Custody Record Client: Chase Settle, Amber Griffin Mailing Address: 105 S. 4th St. Artesia, NM 88210 Phone #: email or Fax#: Chase_Settle@eogresources.com OA/QC Package:  Standard Accreditation:
S S Settle@essettle@e



Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

Hall Environmental Analysis Laboratory

4901 Hawkins NE

July 07, 2022

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

RE: Federal FC Com 2H OrderNo.: 2206D66

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/24/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 7/7/2022

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: PH01 @ 7'

 Project:
 Federal FC Com 2H
 Collection Date: 6/22/2022 9:05:00 AM

 Lab ID:
 2206D66-001
 Matrix: SOIL
 Received Date: 6/24/2022 8:16:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: ЈМТ
Chloride	ND	60		mg/Kg	20	6/30/2022 12:58:09 PM	68460
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: TOM
Diesel Range Organics (DRO)	3000	150		mg/Kg	10	7/1/2022 2:03:58 AM	68418
Motor Oil Range Organics (MRO)	1400	480		mg/Kg	10	7/1/2022 2:03:58 AM	68418
Surr: DNOP	0	51.1-141	S	%Rec	10	7/1/2022 2:03:58 AM	68418
EPA METHOD 8015D: GASOLINE RANGE						Analyst	BRM
Gasoline Range Organics (GRO)	31	25		mg/Kg	5	6/28/2022 7:49:00 PM	68388
Surr: BFB	168	37.7-212		%Rec	5	6/28/2022 7:49:00 PM	68388
EPA METHOD 8021B: VOLATILES						Analyst	BRM
Benzene	ND	0.12		mg/Kg	5	6/28/2022 7:49:00 PM	68388
Toluene	ND	0.25		mg/Kg	5	6/28/2022 7:49:00 PM	68388
Ethylbenzene	ND	0.25		mg/Kg	5	6/28/2022 7:49:00 PM	68388
Xylenes, Total	ND	0.49		mg/Kg	5	6/28/2022 7:49:00 PM	68388
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	5	6/28/2022 7:49:00 PM	68388

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix 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 1 of 8

Date Reported: 7/7/2022

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: PH01A @ 10'

**Project:** Federal FC Com 2H **Collection Date:** 6/22/2022 9:20:00 AM

**Lab ID:** 2206D66-002 **Matrix:** SOIL **Received Date:** 6/24/2022 8:16:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	: JMT
Chloride	ND	60		mg/Kg	20	6/30/2022 1:10:33 PM	68460
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analys	: TOM
Diesel Range Organics (DRO)	2500	150		mg/Kg	10	7/1/2022 2:17:55 AM	68418
Motor Oil Range Organics (MRO)	1100	490		mg/Kg	10	7/1/2022 2:17:55 AM	68418
Surr: DNOP	0	51.1-141	S	%Rec	10	7/1/2022 2:17:55 AM	68418
EPA METHOD 8015D: GASOLINE RANGE						Analys	: BRM
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	6/28/2022 8:09:00 PM	68388
Surr: BFB	145	37.7-212		%Rec	5	6/28/2022 8:09:00 PM	68388
EPA METHOD 8021B: VOLATILES						Analys	: BRM
Benzene	ND	0.12		mg/Kg	5	6/28/2022 8:09:00 PM	68388
Toluene	ND	0.24		mg/Kg	5	6/28/2022 8:09:00 PM	68388
Ethylbenzene	ND	0.24		mg/Kg	5	6/28/2022 8:09:00 PM	68388
Xylenes, Total	ND	0.47		mg/Kg	5	6/28/2022 8:09:00 PM	68388
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	5	6/28/2022 8:09:00 PM	68388

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

Qualifiers:

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

Page 2 of 8

Date Reported: 7/7/2022

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** Client Sample ID: PH01B @ 14'

**Project:** Federal FC Com 2H Collection Date: 6/22/2022 9:30:00 AM Lab ID: 2206D66-003 Matrix: SOIL Received Date: 6/24/2022 8:16:00 AM

Result **RL Oual Units DF** Date Analyzed **Batch** Analyses **EPA METHOD 300.0: ANIONS** Analyst: JMT Chloride ND 60 mg/Kg 20 6/30/2022 1:22:58 PM 68460 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: TOM Diesel Range Organics (DRO) 66 14 mg/Kg 7/1/2022 2:31:53 AM 68418 Motor Oil Range Organics (MRO) 50 46 mg/Kg 1 7/1/2022 2:31:53 AM 68418 Surr: DNOP 90.5 51.1-141 %Rec 7/1/2022 2:31:53 AM 68418 **EPA METHOD 8015D: GASOLINE RANGE** Analyst: BRM Gasoline Range Organics (GRO) ND 6/28/2022 8:29:00 PM 68388 4.7 mg/Kg 1 Surr: BFB 89.4 37.7-212 %Rec 6/28/2022 8:29:00 PM 68388 **EPA METHOD 8021B: VOLATILES** Analyst: BRM ND 0.024 6/28/2022 8:29:00 PM 68388 Benzene mg/Kg Toluene ND 0.047 mg/Kg 6/28/2022 8:29:00 PM 68388 Ethylbenzene ND 0.047 mg/Kg 1 6/28/2022 8:29:00 PM 68388 Xylenes, Total ND 0.095 mg/Kg 6/28/2022 8:29:00 PM 68388 Surr: 4-Bromofluorobenzene 70-130 84.8 %Rec 6/28/2022 8:29:00 PM 68388

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

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix interference
- Analyte detected in the associated Method Blank
- Е Estimated value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 3 of 8

Date Reported: 7/7/2022

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: PH01C @ 16'

 Project:
 Federal FC Com 2H
 Collection Date: 6/22/2022 9:35:00 AM

 Lab ID:
 2206D66-004
 Matrix: SOIL
 Received Date: 6/24/2022 8:16:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	: JMT
Chloride	ND	60	mg/Kg	20	6/30/2022 1:35:23 PM	68460
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analys	t: TOM
Diesel Range Organics (DRO)	ND	15	mg/Kg	1	7/1/2022 2:45:54 AM	68418
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	7/1/2022 2:45:54 AM	68418
Surr: DNOP	96.4	51.1-141	%Rec	1	7/1/2022 2:45:54 AM	68418
EPA METHOD 8015D: GASOLINE RANGE					Analys	t: BRM
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	6/28/2022 8:48:00 PM	68388
Surr: BFB	88.2	37.7-212	%Rec	1	6/28/2022 8:48:00 PM	68388
EPA METHOD 8021B: VOLATILES					Analys	t: BRM
Benzene	ND	0.024	mg/Kg	1	6/28/2022 8:48:00 PM	68388
Toluene	ND	0.047	mg/Kg	1	6/28/2022 8:48:00 PM	68388
Ethylbenzene	ND	0.047	mg/Kg	1	6/28/2022 8:48:00 PM	68388
Xylenes, Total	ND	0.095	mg/Kg	1	6/28/2022 8:48:00 PM	68388
Surr: 4-Bromofluorobenzene	83.9	70-130	%Rec	1	6/28/2022 8:48:00 PM	68388

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

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of range due to dilution or matrix 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 8

## Hall Environmental Analysis Laboratory, Inc.

2206D66

WO#:

07-Jul-22

Client: EOG

**Project:** Federal FC Com 2H

Sample ID: MB-68460 SampType: mblk TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 68460 RunNo: 89182

Prep Date: 6/29/2022 Analysis Date: 6/30/2022 SeqNo: 3170091 Units: mg/Kg

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

Chloride ND 1.5

Sample ID: LCS-68460 SampType: Ics TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 68460 RunNo: 89182

Prep Date: 6/29/2022 Analysis Date: 6/30/2022 SeqNo: 3170092 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 91.8 90 110

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative 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

# Hall Environmental Analysis Laboratory, Inc.

2206D66 07-Jul-22

WO#:

Client: EOG

**Project:** Federal FC Com 2H

Sample ID: MB-68418								
	SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68418	RunNo: 89166						
Prep Date: 6/28/2022	Analysis Date: 7/1/2022	SeqNo: 3169229	Units: mg/Kg					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual					
Diesel Range Organics (DRO)	ND 15							
Motor Oil Range Organics (MRO)	ND 50							
Surr: DNOP	9.4 10.00	94.3 51.1	141					
Sample ID: <b>MB-68456</b>	68456 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68456	RunNo: 89166						
Prep Date: 6/29/2022	Analysis Date: 6/30/2022	SeqNo: 3169231	Units: %Rec					
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual					
Surr: DNOP	9.4 10.00	93.6 51.1	141					
Sample ID: LCS-68418	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics					
Client ID: LCSS	Batch ID: 68418	RunNo: 89166						
Prep Date: 6/28/2022	Analysis Date: 7/1/2022	SeqNo: 3169232	Units: mg/Kg					
	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual					
Analyte								
Analyte Diesel Range Organics (DRO)	40 15 50.00	0 79.9 64.4	127					
Analyte Surr: DNOP Sample ID: LCS-68418	Result PQL SPK value 9.4 10.00  SampType: LCS	SPK Ref Val %REC LowLimit 93.6 51.1  TestCode: EPA Method	HighLimit %RPD RPDLimit Qu					

Sample ID: LCS-68456	SampType: <b>LCS</b>	TestCode: EPA Method 8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 68456	RunNo: 89166
Prep Date: 6/29/2022	Analysis Date: 6/30/2022	SeqNo: <b>3169234</b> Units: <b>%Rec</b>
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Surr: DNOP	4.7 5.000	94.7 51.1 141

### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative 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 6 of 8

## Hall Environmental Analysis Laboratory, Inc.

2000

WO#: **2206D66** *07-Jul-22* 

Client: EOG

Surr: BFB

**Project:** Federal FC Com 2H

Sample ID: Ics-68381 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 68381 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3164760 Units: %Rec

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

196

37.7

212

Sample ID: mb-68381 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

1000

Client ID: PBS Batch ID: 68381 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3164761 Units: %Rec

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

Surr: BFB 870 1000 87.5 37.7 212

Sample ID: Ics-68388 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 68388 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3165078 Units: mg/Kg

Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Analyte Gasoline Range Organics (GRO) 24 5.0 0 97.2 72.3 25.00 137

Surr: BFB 2000 1000 195 37.7 212

Sample ID: MB-68388 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 68388 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3165150 Units: mg/Kg

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

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 900 1000 90.0 37.7 212

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative 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 7 of 8

## Hall Environmental Analysis Laboratory, Inc.

2206D66 07-Jul-22

WO#:

Client: EOG

**Project:** Federal FC Com 2H

Sample ID: Ics-68381 SampType: LCS TestCode: EPA Method 8021B: Volatiles

Client ID: LCSS Batch ID: 68381 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3164770 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.86 1.000 85.6 70 130

Sample ID: mb-68381 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 68381 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3164771 Units: %Rec

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

Surr: 4-Bromofluorobenzene 0.85 1.000 85.2 70 130

Sample ID: LCS-68388 SampType: LCS TestCode: EPA Method 8021B: Volatiles Client ID: LCSS Batch ID: 68388 RunNo: 89080 Prep Date: Analysis Date: 6/28/2022 SeqNo: 3165120 Units: mg/Kg 6/27/2022 PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Analyte Result I owl imit 0.025 90.6 Benzene 0.91 1.000 0 80 Toluene 0.92 0.050 1.000 0 91.9 80 120 Ethylbenzene 0.91 0.050 1.000 0 91.4 80 120 0 Xylenes, Total 2.7 0.10 3.000 90.2 80 120 Surr: 4-Bromofluorobenzene 0.87 1.000 86.9 70 130

Sample ID: MB-68388 SampType: MBLK TestCode: EPA Method 8021B: Volatiles

Client ID: PBS Batch ID: 68388 RunNo: 89080

Prep Date: 6/27/2022 Analysis Date: 6/28/2022 SeqNo: 3165152 Units: mg/Kg

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

 Benzene
 ND
 0.025

 Toluene
 ND
 0.050

 Ethylbenzene
 ND
 0.050

 Xylenes, Total
 ND
 0.10

 Surr: 4-Bromofluorobenzene
 0.84
 1.000
 84.0
 70
 130

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

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

B Analyte detected in the associated Method Blank

E Estimated value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 8 of 8



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 Num	ber: 220	6D66			RcptNo	: 1
Received By:	Kasandra	a Payan	6/24/20	22 8:16:00	AM		4/2-		y of	
Completed By:	Sean Livi	ngston	6/24/20	22 9:40:46	AM		<	/	·	
Reviewed By:	DAO (	124/22					<i>ا</i> ر		7501	
Chain of Cus	tody									
1. Is Chain of C	ustody comp	olete?			Yes	<b>✓</b>	No		Not Present	
2. How was the	sample deliv	vered?			Cou	<u>rier</u>				
<u>Log In</u>										
3. Was an attern	npt made to	cool the samp	es?		Yes	<b>✓</b>	No		NA 🗆	
4. Were all samp	oles received	l at a tempera	ture of >0° C	to 6.0°C	Yes	<b>~</b>	No		ŅA 🗆	
5. Sample(s) in p	proper conta	iner(s)?			Yes	<b>✓</b>	No			
6. Sufficient sam	ple volume t	or indicated te	st(s)?		Yes	<b>V</b>	No			
7. Are samples (	except VOA	and ONG) pro	perly preserve	ed?	Yes	<b>✓</b>	No			
8. Was preserva	tive added to	bottles?			Yes		No	<b>✓</b>	NA 🗆	
9. Received at le	ast 1 vial wit	h headspace	<1/4" for AQ V	/OA?	Yes		No		NA 🗹	
10. Were any san	nple contain	ers received b	roken?		Yes		No	<b>v</b>		
11. Does paperwo (Note discrepa					Yes	<b>✓</b>	No		# of preserved bottles checked for pH:	>12 unless noted)
12. Are matrices o	orrectly ider	tified on Chair	of Custody?		Yes	<b>✓</b>	No		Adjusted?	
3. Is it clear what			?		Yes	<b>✓</b>	No			
<ol> <li>Were all holding</li> <li>(If no, notify cut)</li> </ol>					Yes	✓	No		Checked by:	mc Cleylu
Special Handl	ing (if app	olicable)								
15. Was client no	tified of all d	iscrepancies v	vith this order?	·	Yes		No		NA 🗹	
Person	Notified:			Date:		nu videna primi		noneman's		
By Who	m:			Via:	□ eM	ail [	Phone	Fax	☐ In Person	
Regardi	ng:				THE RESERVE					
Client Ir	structions:						4	MANAGEMENT OF THE PARTY OF THE		
16. Additional rer	marks:									
17. Cooler Infor										
Cooler No		Condition	Seal Intact	Seal No	Seal D	ate	Signed E	Зу		
2	0.8 2.0	Good Good	Professional							
_	2.0	Good	nanoo.				1			



Project Name: Federal FC Com #2H

Rush\_

Page 54 of 67

Client:

Chase Settle, Amber Griffin

Chain-of-Custody Record

Turn-Around Time:

# ANALYSIS LABORATORY HALL ENVIRONMENTAL

4901 Hawkins NE - Albuquerque, NM 87109

Total Coliform (Present/Absent)

www.hallenvironmental.com



APPENDIX E

**NMOCD Notifications** 

From: Chase Settle
To: Tacoma Morrissey
Cc: Amber Griffin

Subject: FW: Federal FC Com #2H (NAPP2213936364 & NAPP2213935679) Sampling Notification

**Date:** Thursday, July 7, 2022 4:07:09 PM

## [\*\*EXTERNAL EMAIL\*\*]

From: Miriam Morales < Miriam\_Morales@eogresources.com>

Sent: Thursday, July 7, 2022 2:47 PM

**To:** blm\_nm\_cfo\_spill@blm.gov; Robert.Hamlet@state.nm.us; mike.bratcher@state.nm.us; jocelyn.harimon@state.nm.us; Jennifer.Nobui@state.nm.us

**Cc:** Artesia S&E Spill Remediation <Artesia\_S&E\_Spill\_Remediation@eogresources.com>; Artesia Regulatory <Artesia\_Regulatory@eogresources.com>

Subject: Federal FC Com #2H (NAPP2213936364 & NAPP2213935679) Sampling Notification

Good afternoon,

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

Federal FC Com #2H M-24-20S-24, Eddy Co, NM NAPP2213936364 & NAPP2213935679

Sampling will begin at 8:30 a.m. Tuesday, July 12, 2022 and continue through Friday, July 15, 2022.

Thank you,

Miriam Morales

From: Amber Griffin

To: <u>Tacoma Morrissey</u>; <u>Ashley Ager</u>

Cc: Chase Settle

**Subject:** FW: Federal FC Com #2H- Sampling Notification **Date:** Wednesday, May 11, 2022 3:55:31 PM

## [\*\*EXTERNAL EMAIL\*\*]

Thank you, Amber Griffin

From: Miriam Morales < Miriam\_Morales@eogresources.com>

Sent: Wednesday, May 11, 2022 2:53 PM

**To:** Robert.Hamlet@state.nm.us; blm\_nm\_cfo\_spill@blm.gov

**Cc:** Artesia Regulatory <Artesia\_Regulatory@eogresources.com>; Artesia S&E Spill Remediation

 $<\!\!Artesia\_S\&E\_Spill\_Remediation@eogresources.com\!\!>$ 

Subject: Federal FC Com #2H- Sampling Notification

Good afternoon,

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

Federal FC Com #2H M-24-20S-24, Eddy Co, NM

Sampling will begin at 8:30 a.m. on Monday, May 16, 2022 and will be continuous through Tuesday, May 17, 2022.

Thank you,

Miriam Morales

From: Amber Griffin
To: Tacoma Morrissey

**Subject:** FW: Federal FC Com 2H (nAPP2213935679) Sampling Notification

**Date:** Wednesday, July 27, 2022 3:20:34 PM

Attachments: <u>image001.png</u>

## [ \*\*EXTERNAL EMAIL\*\*]

Thank you, Amber Griffin

From: Tina Huerta < Tina Huerta@eogresources.com>

Sent: Wednesday, July 27, 2022 2:18 PM

**To:** blm\_nm\_cfo\_spill@blm.gov; Jennifer Nobui <Jennifer.Nobui@state.nm.us>; Jocelyn Harimon <Jocelyn.Harimon@state.nm.us>; Mike Bratcher <mike.bratcher@state.nm.us>; Robert Hamlet <Robert.Hamlet@state.nm.us>

**Cc:** Artesia S&E Spill Remediation <Artesia\_S&E\_Spill\_Remediation@eogresources.com>; Artesia Regulatory <Artesia\_Regulatory@eogresources.com>

Subject: Federal FC Com 2H (nAPP2213935679) Sampling Notification

Good Afternoon,

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

Federal FC Com 2H M-24-20S-24E Eddy County, NM nAPP2213935679

Sampling will begin at 8:30 a.m. on Monday, August 1, 2022 and continue through Thursday, August 4, 2022.

Thank you,

Tina Hverta Regulatory Specialist Direct: 575.748.4168 Cell: 575.703.3121

Email: tina huerta@eogresources.com



# **Artesia Division**

From: <u>Amber Griffin</u>

To: <u>Tacoma Morrissey</u>; <u>Ashley Ager</u>

Cc: Chase Settle

**Subject:** FW: Federal FC Com 2H Sampling Notification **Date:** Thursday, May 19, 2022 10:52:12 AM

Attachments: <u>image001.png</u>

## [ \*\*EXTERNAL EMAIL\*\*]

Thank you,

Amber Griffin

From: Tina Huerta <Tina\_Huerta@eogresources.com>

Sent: Thursday, May 19, 2022 9:45 AM

**To:** Robert.Hamlet@state.nm.us; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Jennifer.Nobui@state.nm.us; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>; blm\_nm\_cfo\_spill@blm.gov

**Cc:** Artesia S&E Spill Remediation <Artesia\_S&E\_Spill\_Remediation@eogresources.com>; Artesia Regulatory <Artesia\_Regulatory@eogresources.com>

Subject: Federal FC Com 2H Sampling Notification

Good Morning,

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

Federal FC Com 2H M-24-20S-24E; Eddy County, NM

Sampling will begin at 8:30 a.m. on Wednesday, May 25, 2022 and will be continuous through Friday, May 27, 2022.

Thank you,

Tina Hverta Regulatory Specialist Direct: 575.748.4168 Cell: 575.703.3121

Email: tina huerta@eogresources.com





**APPENDIX F** 

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	nAPP2213935679
District RP	
Facility ID	
Application ID	

# **Release Notification**

## **Responsible Party**

					_						
	Responsible Party EOG Resources, Inc.					OGRID 7377					
Contact Nar	<sup>ne</sup> Amber	Griffin			Contact Telephone 575-748-1471						
	Contact email amber_griffin@eogresources.com					# nAPP2213935679					
		104 S. 4th St		NM 8	8210						
			Location	n of R	Release S	Source					
Latitude 32	Latitude 32.5538864					<sub>e</sub> -104.5482407					
			(NAD 83 in a	lecimal de	egrees to 5 deci	cimal places)					
Site Name F	ederal FC	Com # 2H			Site Type	e Battery					
		<sup>1</sup> 5/18/2022				applicable) 30-015-26907					
		_									
Unit Letter	Section	Township	Range		Cou	punty					
М	24	20S	24E	Edd	у						
Surface Owne	or: State	✓ Federal ☐ T	ribal 🗌 Private	(Namo:		)					
Surface Owne	ı. 🗀 State	V rederar 1		(Ivame.	_						
			Nature an	ıd Vo	lume of	f Release					
	Materia	al(s) Released (Select a	all that apply and atta	ch calcula	tions or specifi	fic justification for the volumes provided below)					
Crude Oi		Volume Releas	ed (bbls) Unkno	wn	Volume Recovered (bbls) 0						
☑ Produced	l Water	Volume Releas	ed (bbls) Unkno	own		Volume Recovered (bbls) 0					
		Is the concentra	ation of dissolved		e in the	☑ Yes ☐ No					
Condens	nta	Produced water Volume Releas				Volume Recovered (bbls)					
						, ,					
Natural (		Volume Releas			Volume Recovered (Mcf)						
Other (describe) Volume/Weight Released (provide units			S) Volume/Weight Recovered (provide units)								
Comment	1										
Cause of Re	<sup>lease</sup> Histor enviro	rical impacts we	ere discovered	d during	g the deco	commissioning process of the battery. The e the area determined on 5/18/2022, based on	,				
	the in	npacted area fo	otprint, that th	e relea	ase more t	than likely breached the reportable volume					
	thresh	nold.									

Page 63 of 67

Incident ID	NAPP2213935679
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respon	nsible party consider this a major release?
☐ Yes ☑ No		
If YES, was immediate no	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial R	esponse
The responsible	party must undertake the following actions immediated	y unless they could create a safety hazard that would result in injury
✓ The source of the rele	ease has been stopped.	
☑ The impacted area ha	s been secured to protect human health and	the environment.
Released materials ha	ave been contained via the use of berms or o	ikes, absorbent pads, or other containment devices.
All free liquids and re	ecoverable materials have been removed an	d managed appropriately.
If all the actions described	d 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.		
		best of my knowledge and understand that pursuant to OCD rules and
public health or the environr	ment. The acceptance of a C-141 report by the C	fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have
		at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Amber (	Griffin	Title: Rep Safety & Environmental Sr
Signature: Amber (	Griffin	Date: 5/19/2022
email: amber griffing	@eogresources.com	Telephone: 575-748-1471
	<u> </u>	1 Stophono.
OCD Only		
Received by: Jocelyn	Harimon	Date: 05/19/2022
-		<del></del>

Incident ID NAPP2213935679 District RP Facility ID Application ID

## **Site Assessment/Characterization**

This information must be provided to the appropriate district office no tales man 20 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)	
Did this release impact groundwater or surface water?	Yes X No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Yes X 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)?	Yes X No	
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Yes X 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?	Yes X No	
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Yes X No	
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	Yes X No	
Are the lateral extents of the release within 300 feet of a wetland?	Yes X No	
Are the lateral extents of the release overlying a subsurface mine?	Yes X No	
Are the lateral extents of the release overlying an unstable area such as karst geology?	X Yes No	
Are the lateral extents of the release within a 100-year floodplain?	Yes X No	
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	Yes X No	
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil		

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.

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

Received by OCD: 8/15/2022 3:31:51 PMI State of New Mexico
Page 4 Oil Conservation Division

Page 65 4f 67

Incident ID	NAPP2213935679
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  email: amber_griffin@eogresources.com	Date: 8/15/2022	
email: _amber_griffin@eogresources.com	Telephone:575-748-1741	
OCD Only		
Received by: Jocelyn Harimon	Date: <u>08/15/2022</u>	

Page 66 of 67

Incident ID	NAPP2213935679
District RP	
Facility ID	
Application ID	

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be included in the plan.		
<ul> <li>Detailed description of proposed remediation technique</li> <li>Scaled sitemap with GPS coordinates showing delineation points</li> <li>Estimated volume of material to be remediated</li> <li>Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC</li> <li>Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)</li> </ul>		
Deferral Requests Only: Each of the following items must be confi	rmed as part of any request for deferral of remediation.	
Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.		
Extents of contamination must be fully delineated.		
Contamination does not cause an imminent risk to human health, the environment, or groundwater.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Printed Name: Amber Griffin	Title: Rep Safety & Environmental Sr.	
Signature: Amber Griffin  email: amber_griffin@eogresources.com	Date: 8/15/2022	
email: amber_griffin@eogresources.com	Telephone: _575-748-1741	
OCD Only		
Received by: Jocelyn Harimon	Date: 08/15/2022	
☐ Approved	pproval	
Signature: Jennifer Nobili I	Date: 09/30/2022	

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

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 134235

## **CONDITIONS**

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	134235
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created	Condition	Condition
Ву		Date
jnobui	Remediation Plan Approved with Conditions. Release has not been laterally delineated. Sidewall samples should be delineated to 100 mg/kg for TPH to define the edge of the release.	9/30/2022