



July 20, 2022

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

**Re: Closure Report
Federal FC Com #2H Wellhead
Incident Number NAPP2213936364
Eddy County, New Mexico**

To Whom it May Concern:

Ensolum, LLC (Ensolum) on behalf of EOG Resources, Inc. (EOG), has prepared this Closure Report to document site assessment, excavation, and soil sampling activities performed at the Federal FC Com #2H Wellhead (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. Based on the excavation activities and analytical results from the soil sampling events, EOG is submitting this Closure Report, describing remediation that has occurred for closure of Incident Number NAPP2213936364.

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 the decommissioning process of the Site. An unknown quantity of crude oil and produced water appears to have been released to the facility pad. No fluids were recovered. 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 NAPP2213936364. The historical release extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 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 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 depth to groundwater determination are presented on Figure 1. The referenced well records are included in Attachment 1.

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

EXCAVATION SOIL SAMPLING ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On May 31, 2022, Ensolum personnel were at the Site to oversee excavation activities. Impacted soil was excavated from the release area as indicated by visible staining and information provided on the Form C-141. Excavation activities were performed using track-mounted backhoe and transport vehicle. The excavation occurred on pad at the location of the decommissioned wellhead. To direct excavation activities, soil was screened for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to a depth of 2 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of the impacted soil, 5-point composite soil samples were collected at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil sample SW01 was collected from the sidewall of the excavation from depths ranging from the ground surface to 2 feet bgs. Composite soil samples FS01 and FS02 were collected from the floor of the excavation from a depth of 2 feet bgs. The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Hall Environmental Analysis Laboratories (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. The excavation extent and excavation soil sample locations are presented on Figure 3.

On June 22, 2022, Ensolum personnel returned to the Site to oversee further excavation activities. Additional impacted soil was excavated from the floor of the excavation. Composite floor soil samples FS01A and FS02A were collected from the floor of the excavation at a depth of 3 feet bgs. Composite sidewall sample SW02 was collected from the sidewall of the excavation from depths ranging from the ground surface to 3 feet bgs. The soil samples were collected, handled, and analyzed following the same

procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

The excavation area measured approximately 390 square feet. A total of approximately 44 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the Lea Land Disposal Facility in Carlsbad, New Mexico.

LABORATORY ANALYTICAL RESULTS

Any preliminary floor or sidewall samples exceeding the Closure Criteria were further excavated. Laboratory analytical results for final floor samples indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C.

CLOSURE REPORT

Site assessment and excavation activities were conducted at the Site to address the historical release of produced water and crude oil discovered on May 18, 2022. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no further remediation was required. EOG will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions.

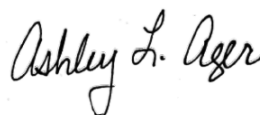
Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been confirmed to be greater than 100 feet bgs and the completion of these remedial actions are protective of human health, the environment, and groundwater. As such, EOG respectfully requests closure for Incident Number NAPP2213936364.

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

Sincerely,
Ensolum, LLC



Hadlie Green
Field Geologist



Ashley Ager
Program Director

cc: Chase Settle, EOG
Amber Griffin, EOG
Bureau of Land Management

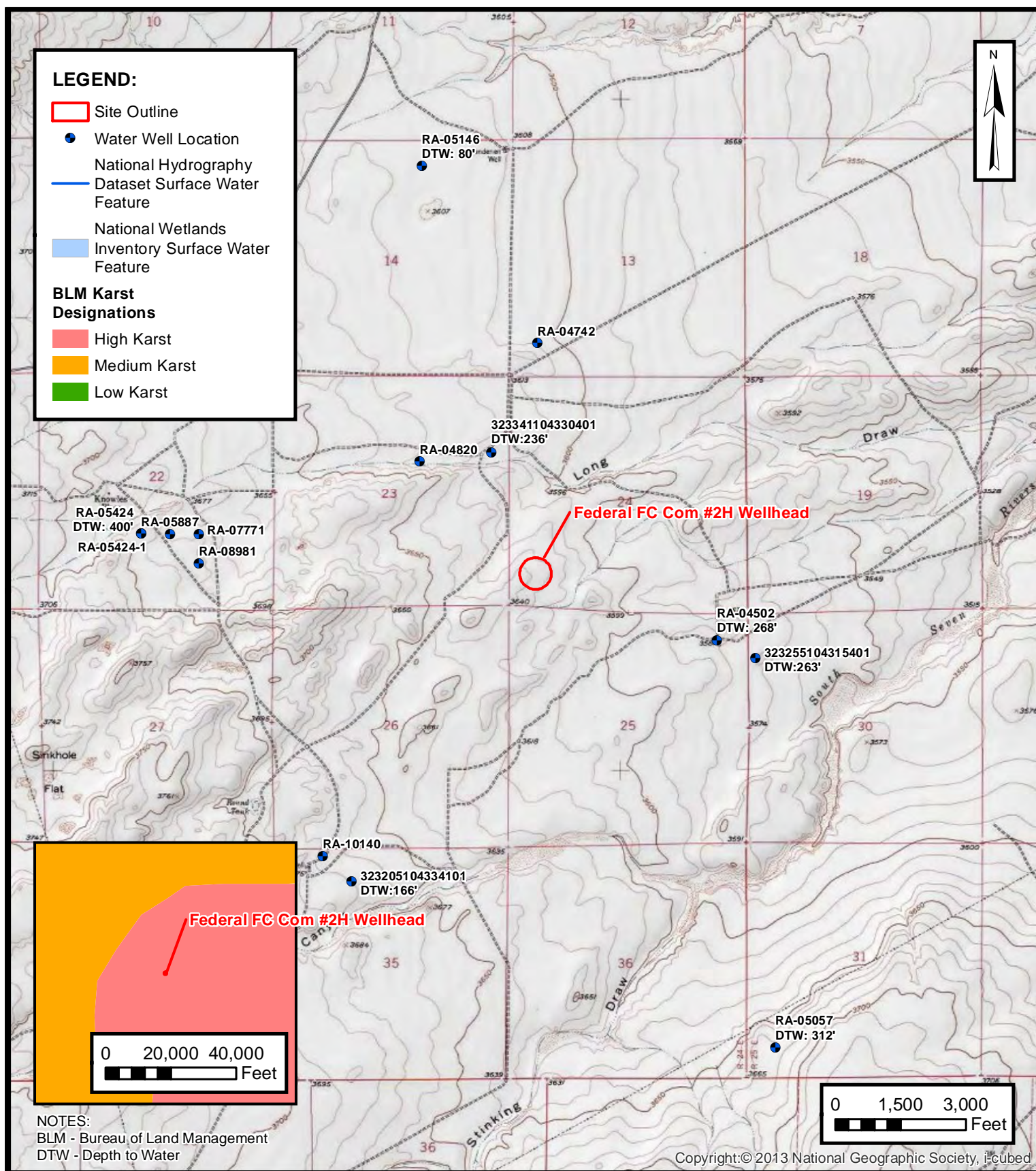
Appendices:

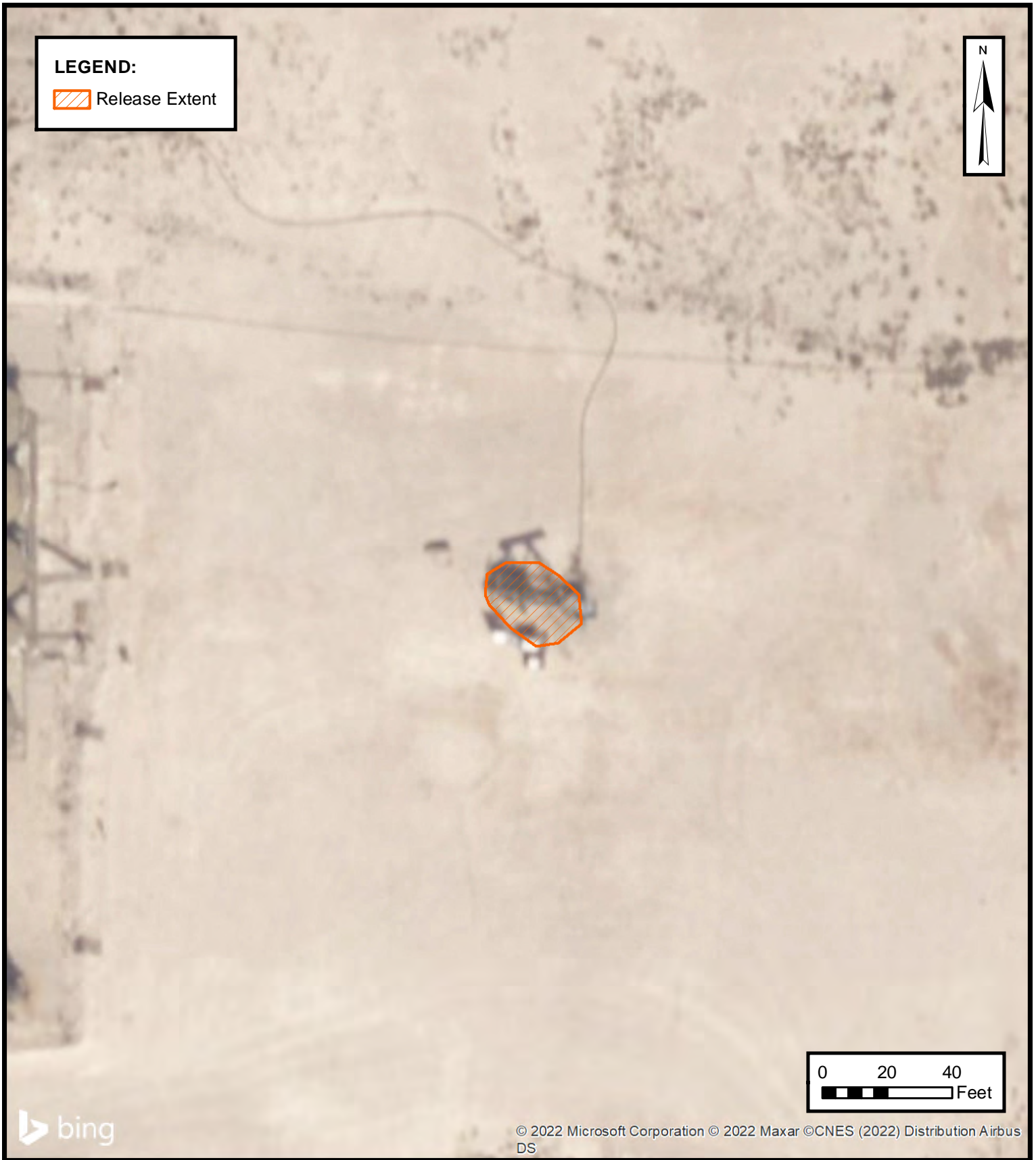
Figure 1	Site Receptor Map
Figure 2	Release Map
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records

Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	NMOCD Notifications
Appendix E	Final C-141



FIGURES

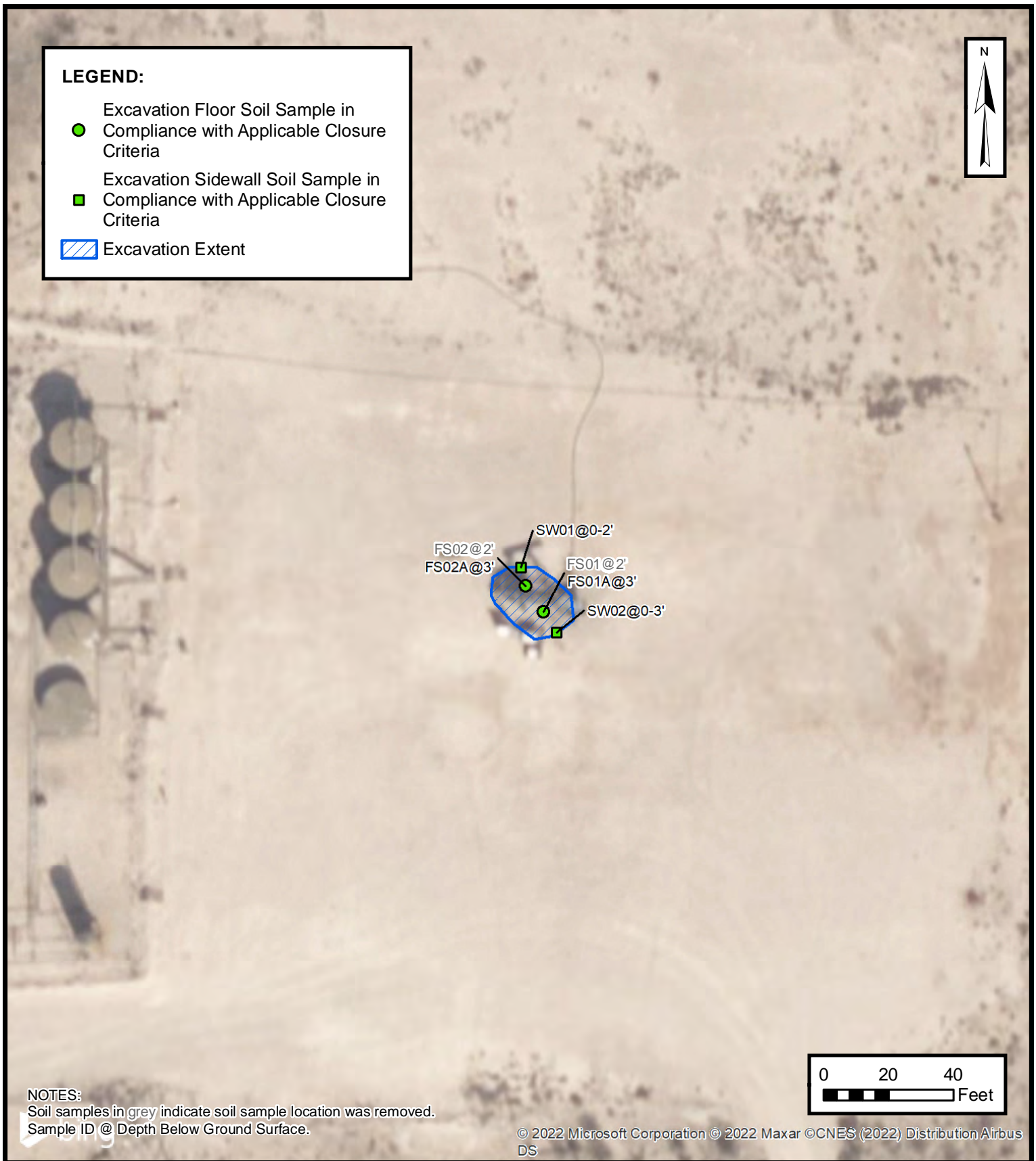




 **ENSOLUM**
Environmental & Hydrogeologic Consultants

RELEASE MAP
EOG RESOURCES, INC.
FEDERAL FC COM #2H WELLHEAD
NAPP2213936364
Unit M, Sec 24 T20S R24E
Eddy County, New Mexico

FIGURE
2



EXCAVATION SOIL SAMPLE LOCATIONS

EOG RESOURCES, INC.
FEDERAL FC COM #2H WELLHEAD
NAPP2213936364
Unit M, Sec 24 T20S R24E
Eddy County, New Mexico

FIGURE

3

ENSOLUM
Environmental & Hydrogeologic Consultants



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Federal FC Com #2H Wellhead
 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 Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Excavation Floor Soil Samples										
FS01	05/31/2022	2	<0.0240	<0.0900	<4.70	52.0	56.0	52.0	110	200
FS01A	06/22/2022	3	<0.0240	<0.0900	<4.70	26.0	<48.0	26.0	26.0	<60.0
FS02	05/31/2022	2	<0.0240	<0.100	<4.90	51.0	77.0	51.0	130	610
FS02A	06/22/2022	3	<0.0250	<0.100	<5.00	<14.0	<46.0	<14.0	<46.0	<60.0
Excavation Sidewall Soil Samples										
SW01	05/31/2022	0 - 2	<0.0230	<0.0900	<4.70	34.0	<47.0	34.0	34.0	<60.0
SW02	06/22/2022	0 - 3	<0.0230	<0.0900	<4.70	40.0	<46.0	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



APPENDIX A

Referenced Well Records



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

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

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

Groundwater levels for the Nation



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

Search Results -- 1 sites found

site_no list =

- 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.

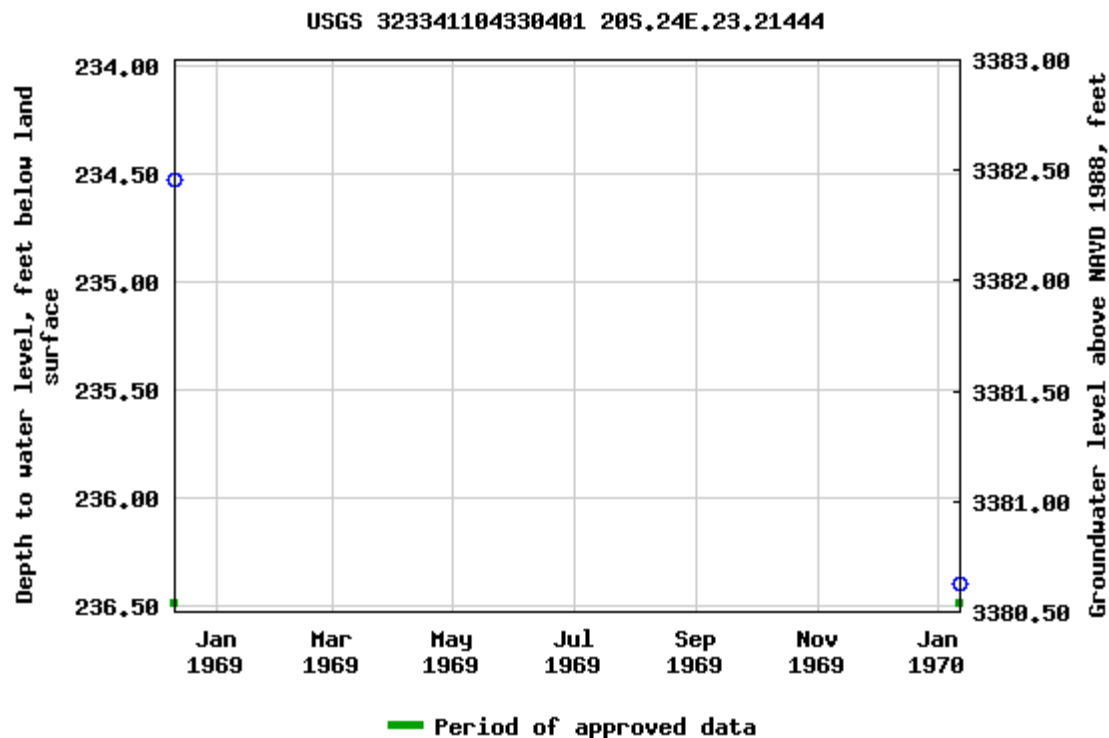
Output formats

[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](#)

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

Title: Groundwater for USA: Water Levels

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



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

Page Last Modified: 2022-05-16 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	Tws	Rng	X	Y
	RA 04820		3	2	23	20S	24E	541596	3602701*

Driller License:**Driller Company:****Driller Name:****Drill Start Date:****Drill Finish Date:****Plug Date:****Log File Date:****PCW Rcv Date:****Source:****Pump Type:****Pipe Discharge Size:****Estimated Yield:****Casing Size:****Depth Well:****Depth Water:**

*UTM location was derived from PLSS - see Help

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



APPENDIX B

Photographic Log

**Photographic Log**

EOG Resources, Inc.

Federal FC Com # 2H Wellhead

M-24-20S-24E

Eddy County, New Mexico



Photograph 1 Date: 20-Apr-22

Description: View of staining observed during decommissioning facing east.



Photograph 2 Date: 28-Apr-22

Description: View of staining observed during decommissioning facing north.



Photograph 3 Date: 31-May-22

Description: View of excavaton facing northeast.



Photograph 4 Date: 22-Jun-22

Description: View of final excavation facing north.



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



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

July 07, 2022

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

RE: Federal FC Com 2H Wellhead

OrderNo.: 2206D60

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 3 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2206D60

Date Reported: 7/7/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS01A @ 3'

Project: Federal FC Com 2H Wellhead

Collection Date: 6/22/2022 12:15:00 PM

Lab ID: 2206D60-001

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: JMT
Chloride	ND	60		mg/Kg	20	6/30/2022 12:20:55 PM	68460
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	26	14		mg/Kg	1	6/30/2022 11:53:32 AM	68415
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	6/30/2022 11:53:32 AM	68415
Surr: DNOP	105	51.1-141		%Rec	1	6/30/2022 11:53:32 AM	68415
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/29/2022 5:40:00 AM	68382
Surr: BFB	87.3	37.7-212		%Rec	1	6/29/2022 5:40:00 AM	68382
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/29/2022 5:40:00 AM	68382
Toluene	ND	0.047		mg/Kg	1	6/29/2022 5:40:00 AM	68382
Ethylbenzene	ND	0.047		mg/Kg	1	6/29/2022 5:40:00 AM	68382
Xylenes, Total	ND	0.094		mg/Kg	1	6/29/2022 5:40:00 AM	68382
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	6/29/2022 5:40:00 AM	68382

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

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

Page 1 of 7

Analytical Report

Lab Order 2206D60

Date Reported: 7/7/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS02A @ 3'

Project: Federal FC Com 2H Wellhead

Collection Date: 6/22/2022 12:20:00 PM

Lab ID: 2206D60-002

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							Analyst: JMT
Chloride	ND	60		mg/Kg	20	6/30/2022 12:33:20 PM	68460
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	ND	14		mg/Kg	1	6/30/2022 12:17:39 PM	68415
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/30/2022 12:17:39 PM	68415
Surr: DNOP	105	51.1-141		%Rec	1	6/30/2022 12:17:39 PM	68415
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/29/2022 5:59:00 AM	68382
Surr: BFB	90.0	37.7-212		%Rec	1	6/29/2022 5:59:00 AM	68382
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.025		mg/Kg	1	6/29/2022 5:59:00 AM	68382
Toluene	ND	0.050		mg/Kg	1	6/29/2022 5:59:00 AM	68382
Ethylbenzene	ND	0.050		mg/Kg	1	6/29/2022 5:59:00 AM	68382
Xylenes, Total	ND	0.099		mg/Kg	1	6/29/2022 5:59:00 AM	68382
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	6/29/2022 5:59:00 AM	68382

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

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

Page 2 of 7

Analytical Report

Lab Order 2206D60

Date Reported: 7/7/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW02 @ 0-3'

Project: Federal FC Com 2H Wellhead

Collection Date: 6/22/2022 12:25:00 PM

Lab ID: 2206D60-003

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: JMT
Chloride	ND	60		mg/Kg	20	6/30/2022 12:45:45 PM	68460
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	40	14		mg/Kg	1	6/30/2022 12:41:40 PM	68415
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	6/30/2022 12:41:40 PM	68415
Surr: DNOP	106	51.1-141		%Rec	1	6/30/2022 12:41:40 PM	68415
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/29/2022 6:19:00 AM	68382
Surr: BFB	87.4	37.7-212		%Rec	1	6/29/2022 6:19:00 AM	68382
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/29/2022 6:19:00 AM	68382
Toluene	ND	0.047		mg/Kg	1	6/29/2022 6:19:00 AM	68382
Ethylbenzene	ND	0.047		mg/Kg	1	6/29/2022 6:19:00 AM	68382
Xylenes, Total	ND	0.093		mg/Kg	1	6/29/2022 6:19:00 AM	68382
Surr: 4-Bromofluorobenzene	84.9	70-130		%Rec	1	6/29/2022 6:19:00 AM	68382

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

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

Page 3 of 7

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

WO#: 2206D60

07-Jul-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

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

Page 4 of 7

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

WO#: 2206D60

07-Jul-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

Sample ID: MB-68386	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68386		RunNo: 89114							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3168753		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.1	51.1	141			

Sample ID: LCS-68386	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68386		RunNo: 89114							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3168754		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		102	51.1	141			

Sample ID: MB-68415	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 68415		RunNo: 89114							
Prep Date: 6/28/2022	Analysis Date: 6/30/2022		SeqNo: 3170264		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	9.5		10.00		94.5	51.1	141			

Sample ID: LCS-68415	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 68415		RunNo: 89114							
Prep Date: 6/28/2022	Analysis Date: 6/30/2022		SeqNo: 3170265		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	15	50.00	0	98.8	64.4	127			
Surr: DNOP	5.1		5.000		103	51.1	141			

Qualifiers:

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

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

WO#: 2206D60

07-Jul-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

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
Surr: BFB	2000		1000		196	37.7	212			

Sample ID: mb-68381	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
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: mb-68382	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 68382		RunNo: 89090							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3165011		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	37.7	212			

Sample ID: ics-68382	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 68382		RunNo: 89090							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3165012		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	114	72.3	137			
Surr: BFB	2200		1000		218	37.7	212			S

Qualifiers:

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

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

WO#: 2206D60

07-Jul-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

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			

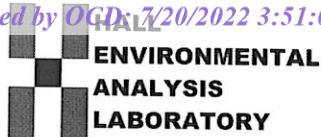
Sample ID: mb-68381	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68381		RunNo: 89080							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3164771		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.85		1.000		85.2	70	130			

Sample ID: mb-68382	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 68382		RunNo: 89090							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3165039		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.7	70	130			

Sample ID: LCS-68382	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 68382		RunNo: 89090							
Prep Date: 6/27/2022	Analysis Date: 6/28/2022		SeqNo: 3165040		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	84.9	80	120			
Toluene	0.90	0.050	1.000	0	89.6	80	120			
Ethylbenzene	0.91	0.050	1.000	0	90.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	91.1	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.0	70	130			

Qualifiers:

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



Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206D60

RcptNo: 1

Received By: Kasandra Payan 6/24/2022 8:16:00 AM

Completed By: Sean Livingston 6/24/2022 9:31:08 AM

Reviewed By: DAD 6/24/22

Chain of Custody

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

Log In

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

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

Adjusted? _____

Checked by:

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.8	Good				
2	2.0	Good				



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

June 08, 2022

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

RE: Federal FC Com 2H Wellhead

OrderNo.: 2206104

Dear Tacoma Morrissey:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/2/2022 for the analyses presented in the following report.

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2206104

Date Reported: 6/8/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS01 2'

Project: Federal FC Com 2H Wellhead

Collection Date: 5/31/2022 10:30:00 AM

Lab ID: 2206104-001

Matrix: SOIL

Received Date: 6/2/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	200	60		mg/Kg	20	6/7/2022 7:15:50 PM	67935
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	52	9.7		mg/Kg	1	6/4/2022 7:35:15 AM	67871
Motor Oil Range Organics (MRO)	56	48		mg/Kg	1	6/4/2022 7:35:15 AM	67871
Surr: DNOP	110	51.1-141		%Rec	1	6/4/2022 7:35:15 AM	67871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/3/2022 9:26:00 AM	67862
Surr: BFB	83.4	37.7-212		%Rec	1	6/3/2022 9:26:00 AM	67862
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/3/2022 9:26:00 AM	67862
Toluene	ND	0.047		mg/Kg	1	6/3/2022 9:26:00 AM	67862
Ethylbenzene	ND	0.047		mg/Kg	1	6/3/2022 9:26:00 AM	67862
Xylenes, Total	ND	0.094		mg/Kg	1	6/3/2022 9:26:00 AM	67862
Surr: 4-Bromofluorobenzene	84.3	70-130		%Rec	1	6/3/2022 9:26:00 AM	67862

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

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

Page 1 of 7

Analytical Report

Lab Order 2206104

Date Reported: 6/8/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: FS02 2'

Project: Federal FC Com 2H Wellhead

Collection Date: 5/31/2022 10:40:00 AM

Lab ID: 2206104-002

Matrix: SOIL

Received Date: 6/2/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	610	60		mg/Kg	20	6/7/2022 7:28:11 PM	67935
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	51	9.8		mg/Kg	1	6/4/2022 8:46:33 AM	67871
Motor Oil Range Organics (MRO)	77	49		mg/Kg	1	6/4/2022 8:46:33 AM	67871
Surr: DNOP	109	51.1-141		%Rec	1	6/4/2022 8:46:33 AM	67871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	6/3/2022 10:25:00 AM	67862
Surr: BFB	84.0	37.7-212		%Rec	1	6/3/2022 10:25:00 AM	67862
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.024		mg/Kg	1	6/3/2022 10:25:00 AM	67862
Toluene	ND	0.049		mg/Kg	1	6/3/2022 10:25:00 AM	67862
Ethylbenzene	ND	0.049		mg/Kg	1	6/3/2022 10:25:00 AM	67862
Xylenes, Total	ND	0.097		mg/Kg	1	6/3/2022 10:25:00 AM	67862
Surr: 4-Bromofluorobenzene	83.9	70-130		%Rec	1	6/3/2022 10:25:00 AM	67862

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

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

Page 2 of 7

Analytical Report

Lab Order 2206104

Date Reported: 6/8/2022

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: SW01 2'

Project: Federal FC Com 2H Wellhead

Collection Date: 5/31/2022 10:45:00 AM

Lab ID: 2206104-003

Matrix: SOIL

Received Date: 6/2/2022 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: NAI
Chloride	ND	60		mg/Kg	20	6/7/2022 7:40:32 PM	67935
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: ED
Diesel Range Organics (DRO)	34	9.5		mg/Kg	1	6/4/2022 9:10:18 AM	67871
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	6/4/2022 9:10:18 AM	67871
Surr: DNOP	110	51.1-141		%Rec	1	6/4/2022 9:10:18 AM	67871
EPA METHOD 8015D: GASOLINE RANGE							Analyst: BRM
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	6/3/2022 11:24:00 AM	67862
Surr: BFB	82.7	37.7-212		%Rec	1	6/3/2022 11:24:00 AM	67862
EPA METHOD 8021B: VOLATILES							Analyst: BRM
Benzene	ND	0.023		mg/Kg	1	6/3/2022 11:24:00 AM	67862
Toluene	ND	0.047		mg/Kg	1	6/3/2022 11:24:00 AM	67862
Ethylbenzene	ND	0.047		mg/Kg	1	6/3/2022 11:24:00 AM	67862
Xylenes, Total	ND	0.093		mg/Kg	1	6/3/2022 11:24:00 AM	67862
Surr: 4-Bromofluorobenzene	83.7	70-130		%Rec	1	6/3/2022 11:24:00 AM	67862

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

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

Page 3 of 7

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

WO#: 2206104

08-Jun-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

Sample ID: MB-67935	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 67935	RunNo: 88545								
Prep Date: 6/7/2022	Analysis Date: 6/7/2022	SeqNo: 3142412	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-67935	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 67935	RunNo: 88545								
Prep Date: 6/7/2022	Analysis Date: 6/7/2022	SeqNo: 3142413	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

Qualifiers:

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

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

WO#: 2206104

08-Jun-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

Sample ID: MB-67821	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 67821		RunNo: 88418							
Prep Date: 6/1/2022	Analysis Date: 6/3/2022		SeqNo: 3138396		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.0	51.1	141			

Sample ID: LCS-67821	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 67821		RunNo: 88418							
Prep Date: 6/1/2022	Analysis Date: 6/3/2022		SeqNo: 3138397		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	3.8		5.000		76.1	51.1	141			

Sample ID: MB-67871	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 67871		RunNo: 88418							
Prep Date: 6/2/2022	Analysis Date: 6/4/2022		SeqNo: 3140066		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.6	51.1	141			

Sample ID: LCS-67871	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 67871		RunNo: 88418							
Prep Date: 6/2/2022	Analysis Date: 6/4/2022		SeqNo: 3140074		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	105	64.4	127			
Surr: DNOP	4.9		5.000		98.0	51.1	141			

Qualifiers:

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

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

WO#: 2206104

08-Jun-22

Client: EOG**Project:** Federal FC Com 2H Wellhead

Sample ID: lcs-67862	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 67862	RunNo: 88476								
Prep Date: 6/2/2022	Analysis Date: 6/3/2022	SeqNo: 3138847 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	95.0	72.3	137			
Surr: BFB	1800		1000		184	37.7	212			

Sample ID: mb-67862	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 67862	RunNo: 88476								
Prep Date: 6/2/2022	Analysis Date: 6/3/2022	SeqNo: 3138848 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	870		1000		87.1	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 Quantitative Limit
S % Recovery outside of range due to dilution or matrix interference

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

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

WO#: 2206104

08-Jun-22

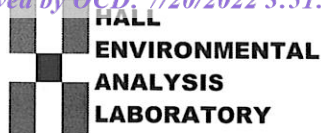
Client: EOG**Project:** Federal FC Com 2H Wellhead

Sample ID: lcs-67862	SampType: LCS				TestCode: EPA Method 8021B: Volatiles					
Client ID: LCSS	Batch ID: 67862				RunNo: 88476					
Prep Date: 6/2/2022	Analysis Date: 6/3/2022				SeqNo: 3138879	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.4	80	120			
Toluene	0.97	0.050	1.000	0	96.8	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.2	80	120			
Xylenes, Total	2.8	0.10	3.000	0	95.0	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		89.2	70	130			

Sample ID: mb-67862	SampType: MBLK				TestCode: EPA Method 8021B: Volatiles					
Client ID: PBS	Batch ID: 67862				RunNo: 88476					
Prep Date: 6/2/2022	Analysis Date: 6/3/2022				SeqNo: 3138880	Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		86.8	70	130			

Qualifiers:

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



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

Sample Log-In Check List

Client Name: EOG

Work Order Number: 2206104

RcptNo: 1

Received By: Cheyenne Cason 6/2/2022 7:30:00 AM

Completed By: Cheyenne Cason 6/2/2022 8:46:58 AM

Reviewed By: JML 6/2/22

Cason

Cason

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

Adjusted? _____

Checked by: DAD 6/2/22

Special Handling (if applicable)

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

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Not Present			
2	4.7	Good	Not Present			



APPENDIX D

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: [Tacoma Morrissey](#); [Ashley Ager](#)
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



APPENDIX E

Final 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	nAPP2213936364
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Amber Griffin	Contact Telephone 575-748-1471
Contact email amber_griffin@eogresources.com	Incident # nAPP2213936364
Contact mailing address 104 S. 4th Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.5538864 Longitude -104.5482407
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Federal FC Com # 2H	Site Type Wellhead
Date Release Discovered 5/18/2022	API# (if applicable) 30-015-26907

Unit Letter	Section	Township	Range	County
M	24	20S	24E	Eddy

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

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) Unknown	Volume Recovered (bbls) 0 bbls
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Unknown	Volume Recovered (bbls) 0 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Historical impacts were discovered during the decommissioning process of the location. The environmental consultant contracted to investigate the area determined on 5/18/2022, based on the impacted area footprint, that the release more than likely breached the reportable volume threshold.

Incident ID	NAPP2213936364
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Amber Griffin</u>	Title: <u>Rep Safety & Environmental Sr</u>
Signature: <u>Amber Griffin</u>	Date: <u>5/19/2022</u>
email: <u>amber_griffin@eogresources.com</u>	Telephone: <u>575-748-1471</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>05/19/2022</u>

Incident ID	nAPP2213936364
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Incident ID	nAPP2213936364
District RP	
Facility ID	
Application ID	

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

Printed Name: Amber Griffin Title: Rep Safety & Environmental Sr
Signature: *Amber Griffin* Date: 07/20/2022
email: amber_griffin@eogresources.com Telephone: 575-748-1471

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2213936364
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: Amber Griffin

Title: Rep Safety & Environmental Sr

Signature: Amber Griffin

Date: 07/20/2022

email: amber_griffin@eogresources.com

Telephone: 575-748-1471

OCD Only

Received by: _____

Date: _____

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

Closure Approved by: Jennifer Nobui

Date: 08/30/2022

Printed Name: Jennifer Nobui

Title: Environmental Specialist A

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 127529

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 127529
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	8/30/2022