

Remediation Excavation Closure Report



Lucky Wolf 31 Federal Com #2H

API #30-015-37448

Unit H, Section 31, T16S, R28E

Eddy County, New Mexico

nAAP2128557106



June 29, 2022

Project #19034-0010

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Introduction

Envirotech, Inc. (Envirotech) of Farmington, New Mexico, was contracted by EOG Resources (EOG) to complete the remediation excavation oversight and confirmation sampling at the plugged well site identified as Lucky Wolf 31 Federal Com #2H (API: 30-015-37448). The well site located within Unit H, Section 31, Township 16 South, Range 28 East in Eddy County, New Mexico; see **Figure 1, Vicinity Map**. The remediation excavation was proposed in a *Characterization and Remediation Plan* (December 21, 2021) previously submitted by EOG to the New Mexico Oil Conservation Division (NMOCD).

Regulatory Standards

Groundwater Exploratory Soil Boring

Since depth to groundwater records within 0.5 mile of the well site were not available, one (1) soil boring was advanced on April 26, 2022. Prior to installing soil boring, an *Application for Permit to Drill a Well with No Water Right* was submitted to New Mexico Office of the State Engineer (NMOSE) and was approved on April 13, 2022. The soil boring was installed utilizing a track mounted drill rig equipped with a hollow stem auger and was located on the north side of the well pad; see **Figure 2, Site Map**.

The soil boring was completed to a depth of 50 feet below ground surface (bgs). Once total depth had been reached, the augers were removed, and 2-inch polyvinyl chloride (PVC) screened-casing was placed into the boring to total depth. The casing was left in place over 72 hours. On May 3, 2022, using a water level meter, the boring was confirmed to be dry, and the casing was removed. The boring was then backfilled with a bentonite slurry and the drill cuttings. Soil boring activities are illustrated in **Appendix A, Site Photography** and **Appendix B, Field Notes**.

Furthermore, the subject well site is 764 feet south from a tributary of the Dog Canyon Draw. Documentation for the additional siting criteria is provided in **Appendix C, Siting Documentation**.

The closure criteria for the site were based on the reclamation standards for the upper four (4) feet of the excavation (19.15.29.13 NMAC):

Constituent	Method	Limit
Chloride	EPA 300.0	600 mg/kg
Total Petroleum Hydrocarbons (TPH)	EPA Method 8015D	100 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA Method 8021B	50 mg/kg
Benzene	EPA Method 8021B	10 mg/kg

Soils depths greater than 4 feet bgs were closed based on the following release closure criteria (19.15.29.12 NMAC):

Constituent	Method	Limit
Chloride	EPA 300.0	10,000 mg/kg
Total Petroleum Hydrocarbons (TPH)	EPA Method 8015D	2,500 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA Method 8021B	50 mg/kg
Benzene	EPA Method 8021B	10 mg/kg

Remediation Excavation and Sampling Activities

On March 23 through April 7, 2022, Envirotech personnel and EOG's earth work contractor were on-site to conduct the remediation activities. Prior to field work, a Job Safety Analysis (JSA) was completed.

Utilizing a trackhoe, the area of concern was excavated, and the contaminated soil was loaded into dump trucks to be transported to NMOCD permitted disposal facility. The final extents of the excavation measured approximately 75 feet by 50 feet by 22 feet bgs.

Field Screening Analysis

To direct excavation activities and prior to collection of a confirmation laboratory sample, field screening for volatile organic compounds (VOCs) was conducted with a photo-ionization detector (PID) organic vapor meter (OVM). Prior to performing field screening activities, the PID-OVM was first calibrated with 100 parts per million (ppm) isobutylene gas. The soil sample was also screened in the field for TPH per United States Environmental Protection Agency (EPA) Method 418.1 using an Infracal Total Oil and Grease (TOG)/ TPH Analyzer. A three-point calibration was completed prior to conducting soil screening. Field screening protocol followed the manufacture's operating procedures. The sample was also field screened for chlorides using a Hach Chloride Test Kit. Field screening results are summarized below and in **Appendix B**.

Confirmation Sampling Activities

EOG Resources notified the NMOCD prior to collecting confirmation samples at the site. Confirmation samples were collected on April 18, 2022. A total of forty-two (42) five-point composite soil samples were collected from the excavation for laboratory analysis. Soil samples, representative of 200 square feet (ft²) or less, were collected from the walls and base of the excavation. Additionally, the walls of the excavation were segregated as surface to 4 feet and 4 feet to total depth.

The soil samples were placed into individual laboratory provided 4-ounce jars, capped head space free, and transported on ice to Envirotech Analytical Laboratory under strict chain of custody. The NMOCD notification is included in **Appendix D, Regulatory Correspondence** and soil sample locations are illustrated in **Figure 2** and **Appendix C**.

Laboratory Analytical Results

The soil samples were analyzed per analytical methods referenced in 19.15.29 NMAC. Laboratory results indicated soils were below applicable closure criteria in all samples collected except for CS-72. The sample identified as CS-72 was collected from the upper 4 feet of the southwest ramp and exceed the reclamation criteria for chloride; however, the laboratory results indicated that the material could be used as backfill in the base of the excavation. Analytical results are summarized in **Table 1, Summary of Soil Analytical Results** and **Appendix E, Laboratory Analytical Report**.

Backfilling and Confirmation Sampling Activities

On April 27, 2022, EOG's earth work contractor returned to the site to backfill the excavation. The southwest ramp (CS-72) was used as backfill in the base of the excavation and clean fill material was transported in for the remaining void to 4 feet bgs.

EOG Resources notified the NMOCD prior to collecting a confirmation sample of the newly exposed southwest wall (former location of the ramp). The sample was collected on May 26, 2022. One (1) five-point composite soil sample was collected from the wall for laboratory analysis. The sample collected was representative of 200 square feet (ft²) or less. The soil sample was placed into an individual laboratory provided 4-ounce jars, capped head space free, and transported on ice to Envirotech Analytical Laboratory under strict chain of custody.

Laboratory Analytical Results

The soil sample was analyzed per analytical methods referenced in 19.15.29 NMAC. The sample collected returned results below applicable regulatory standards for all contaminants of concern.

Summary and Conclusions

Envirotech personnel completed the closure sampling of the remediation excavation at the Lucky Wolf 31 Federal Com #2H. EOG contractors completed the backfill of the excavation with non-waste containing material on June 23, 2022. Based on the analytical results, all contaminants of concern are below the NMOCD reclamation and release closure criteria; therefore, Envirotech recommends requesting a **No Further Action** status regarding the remediation excavations.

Statement of Limitations

The work and services provided were in accordance with NMOCD standards. All observations and conclusions provided here are based on the information and current site conditions found at the subject well site. This work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry, and hydrogeology.

We appreciate the opportunity to be of service. If you have any questions or require additional information, please contact our office at (505) 632-0615.

Respectfully submitted,
ENVIROTECH, INC.



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Figures

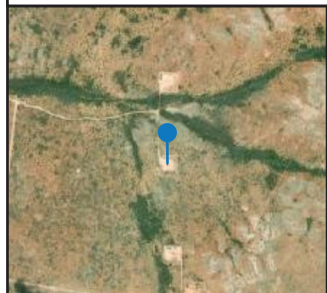


Figure 1, *Vicinity Map*

Figure 2, *Site Map*



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EOG Resources
Lucky Wolf 31 Federal #2H
API: 30-015-37448
Eddy County, New Mexico
Sec 31, Township 16S, Range 28E
Project #19034-0010

Date Drawn: 06/08/2022
Drawn by: B.Hall

Figure 2, Site Map

EOG Resources
Lucky Wolf 31 Federal #2H
API: 30-0415-37448
Eddy County, New Mexico
Sec 31, Township 16S, Range 28E
Project #19034-0010



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

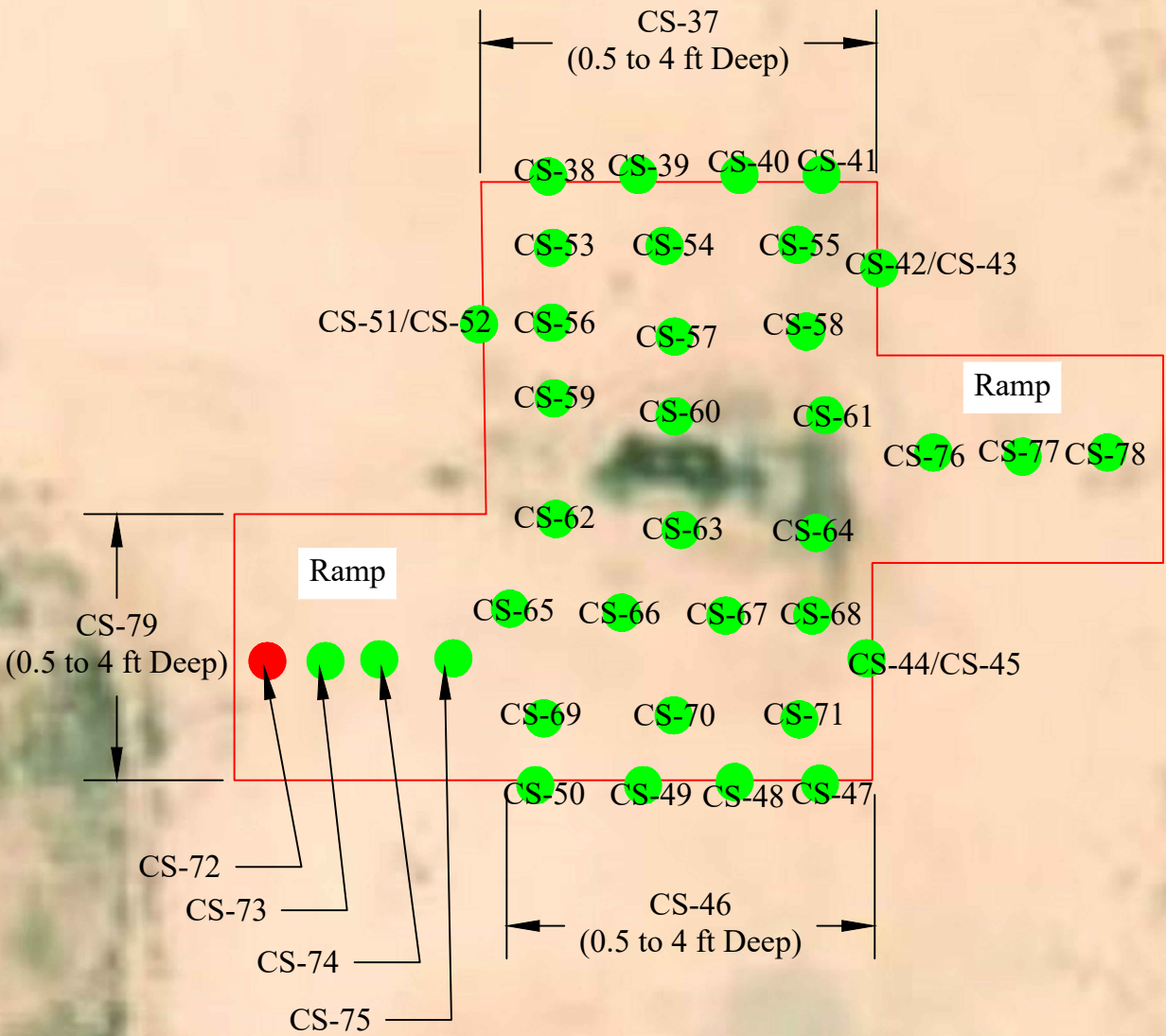
MAP DRAWN BY: BH	DATE DRAWN: 06/13/2022
REVISIONS BY: NAME	DATE REVISED: DATE
APPROVED BY: NAME	DATE APPROVED: DATE

LEGEND

- Excavation
- 5-point Composite Sample
- Over reclamation standard
(Used as backfill in base)
- CS-42/CS-43- 0.5 ft to 4 ft/ 4 ft to 22 ft deep
- SB-1



Scale
1" = 15'



Overall Excavation Dimensions: 75 ft x 50 ft x 22 ft deep

Tables



Table 1, *Summary of Soil Analytical Results*



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Table 1, Summary of Soil Analytical Results
EOG Resources, Inc. Release Closure Report
Lucky Wolf Federal Com #2H ; API: 30-015-37448
Unit H Section 31, Township 16S, Range 28E
Eddy County, New Mexico
Project #19034-0010

Date	Laboratory Sample ID	Sample Depth (below ground surface)	EPA Method 8015			EPA Method 8021		EPA Method 300.0
			mg/kg					
			GRO	DRO	ORO	Benzenze	BTEX	Chloride
NMOCD Reclamation Closure Criteria Table 1 - 19.15.29.13 NMAC (mg/kg)			100			10	50	600
NMOCD Release Closure Criteria Table 1 - 19.15.29.12 NMAC (mg/kg)			2,500			10	50	10,000
4/18/2022	CS-37	North Wall (0.5 to 4 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-38	North Wall (4 to 22 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-39		<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-40		<20.0	<25.0	<50.0	<0.025	<0.1	803
	CS-41		<20.0	<25.0	<50.0	<0.025	<0.1	457
	CS-42	NE Wall (0.5 to 4 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	458
	CS-43	NE Wall (4 to 22 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	334
	CS-44	SE Wall (0.5 to 4 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-45	SE Wall (4 to 22 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-46	South Wall (0.5 to 4 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-47	South Wall (4 to 22 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	398
	CS-48		<20.0	<25.0	<50.0	<0.025	<0.1	320
	CS-49		<20.0	<25.0	<50.0	<0.025	<0.1	349
	CS-50		<20.0	<25.0	<50.0	<0.025	<0.1	212
	CS-51	NW Wall (0.5 to 4 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-52	NW Wall (4 to 22 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	232
	CS-53	Base (18 to 22 ft)	<20.0	<25.0	<50.0	<0.025	<0.1	497
	CS-54		<20.0	<25.0	<50.0	<0.025	<0.1	549
	CS-55		<20.0	<25.0	<50.0	<0.025	<0.1	526
	CS-56		<20.0	188	76.9	<0.025	<0.1	278
	CS-57		<20.0	32.0	<50.0	<0.025	<0.1	595
	CS-58		<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-59		<20.0	100	<50.0	<0.025	<0.1	304
	CS-60		<20.0	38.2	<50.0	<0.025	<0.1	620
	CS-61		<20.0	<25.0	<50.0	<0.025	<0.1	573
	CS-62		<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-63		<20.0	42.4	<50.0	<0.025	<0.1	554
	CS-64		<20.0	<25.0	<50.0	<0.025	<0.1	394
	CS-65		<20.0	69.9	<50.0	<0.025	<0.1	<200
	CS-66		<20.0	31.3	<50.0	<0.025	<0.1	<400
	CS-67		<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-68		<20.0	<25.0	<50.0	<0.025	<0.1	264
	CS-69		<20.0	88.4	<50.0	<0.025	<0.1	<400
	CS-70		<20.0	<25.0	<50.0	<0.025	<0.1	<400
	CS-71		<20.0	<25.0	<50.0	<0.025	<0.1	<400
	CS-72	SW Ramp	<20.0	<25.0	<50.0	<0.025	<0.1	909
	CS-73		<20.0	<25.0	<50.0	<0.025	<0.1	839*
	CS-74		<20.0	<25.0	<50.0	<0.025	<0.1	739*
	CS-75		<20.0	<25.0	<50.0	<0.025	<0.1	<400
	CS-76	NE Ramp	<20.0	<25.0	<50.0	<0.025	<0.1	<400
	CS-77		<20.0	<25.0	<50.0	<0.025	<0.1	<200
	CS-78		<20.0	65.6	<50.0	<0.025	<0.1	204
5/26/2022	CS-79	SW Ramp	<20.0	<25.0	<50.0	<0.025	<0.1	591

* These ramp samples are below 4 feet below ground surface; therefore, they can be left in place.



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Appendix A



Site Photography



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Site Photography
EOG Resources
Remediation Excavation Closure Report
Lucky Wolf 31 Federal Com #2H
Eddy County, New Mexico
Incident ID: nAPP2128557106

October 8, 2021



Picture 1: Excavation (View 1)



Picture 2: Excavation West Wall

Site Photography
EOG Resources
Remediation Excavation Closure Report
Lucky Wolf 31 Federal Com #2H
Eddy County, New Mexico
Incident ID: nAPP2128557106



Picture 3: Northeast Ramp



Picture 4: Southwest Ramp

Site Photography
EOG Resources
Remediation Excavation Closure Report
Lucky Wolf 31 Federal Com #2H
Eddy County, New Mexico
Incident ID: nAPP2128557106



Picture 5: Final Excavation (View 1)



Picture 6: Final Excavation (View 2)

Site Photography
EOG Resources
Remediation Excavation Closure Report
Lucky Wolf 31 Federal Com #2H
Eddy County, New Mexico
Incident ID: nAPP2128557106



Picture 7: Soil Boring Drilling Activities



Picture 8: Completed SB-1

Site Photography
EOG Resources
Remediation Excavation Closure Report
Lucky Wolf 31 Federal Com #2H
Eddy County, New Mexico
Incident ID: nAPP2128557106



Picture 9: SB-1 P&A



Picture 10: Backfilling Activities of SB-1

Site Photography
EOG Resources
Remediation Excavation Closure Report
Lucky Wolf 31 Federal Com #2H
Eddy County, New Mexico
Incident ID: nAPP2128557106



Picture 11: Backfilling Activities



Picture 12: Backfilling Activities

Appendix B



Field Notes



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Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/22/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	3/24/2022 5:36 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/22/2022 7:30 AM
Departed Site	3/22/2022 5:30 PM

Field Notes

- 8:22** Crew arrived on site @ 8:15
- 8:44** Moved previous PCS pile to southwest of location
- 9:40** Obvious signs of contamination on base. Hard, rock-like layer broken through. South wall shows signs of heavy contamination.
- 12:35** Western wall dug to visible clearance 10' horizontally
- 12:35** Northern wall dug to visible clearance 12' horizontally.
- 12:36** Contamination seems to be consistent across all walls depth-wise.
- 12:38** All PCS being stockpiled in southwest corner of location. Roughly 40-50 yards so far.
- 14:20** Excavation seems to reveal contamination moving in a downward direction away from wellhead in all directions. Unclear how far down at this point
- 15:21** 2nd mouse hole found southeast of wellhead approximately 5'
- 17:13** End of day, all removed PCS stockpiled in SW corner of location. Excavation measures 30'x24'x12'deep

Next Steps & Recommendations



Daily Spill Visit Report

1

Daily Spill Visit Report

Site Photos

Viewing Direction: East



Previous dirt pile removal

Viewing Direction: North



Excavation overview

Viewing Direction: South







Excavation overview

Viewing Direction: South






Debris in pile

Daily Spill Visit Report

Viewing Direction: West	Viewing Direction: South
 <p>Descriptive Photo - 3 Viewing Direction: West Topic: Base contamination Created: 3/22/2022 9:18:57 AM Lat:32.880474, Long:-104.207745</p>	 <p>Descriptive Photo - 4 Viewing Direction: South Topic: Base contamination view 2 Created: 3/22/2022 9:26:07 AM Lat:32.880391, Long:-104.207708</p>
Base contamination	Base contamination view 2
Viewing Direction: South	Viewing Direction: North
 <p>Descriptive Photo - 7 Viewing Direction: South Topic: Contamination of base and south wall Created: 3/22/2022 11:45:32 AM Lat:32.880405, Long:-104.207729</p>	 <p>Descriptive Photo - 6 Viewing Direction: North Topic: Base and north wall Created: 3/22/2022 11:38:54 AM Lat:32.880360, Long:-104.207690</p>
Contamination of base and south wall	Base and north wall

Daily Spill Visit Report

Viewing Direction: Northeast	Viewing Direction: South
 <p>Descriptive Photo - 7 Viewing Direction: Northeast Desc: North wall Created: 3/22/2022 12:42:06 PM Lat:32.880459, Long:-104.207750</p>	 <p>Descriptive Photo - 8 Viewing Direction: South Desc: West wall progress Created: 3/22/2022 2:18:48 PM Lat:32.880459, Long:-104.207751</p>
North wall	West wall progress
Viewing Direction: South	
 <p>Descriptive Photo - 9 Viewing Direction: South Desc: Excavation around wellhead Created: 3/22/2022 4:58:03 PM Lat:32.880457, Long:-104.207743</p>	
Excavation around wellhead	




Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature

CLIENT:	EOG	 505-632-0615 1-800-362-1879 5796 US Highway 64 Farmington, NM 87401	Envmtl. Spclst:	KS
CLIENT/JOB #:	19034-0010		Site Name:	Lucky Wolf 2
START DATE:	3-23-22		LAT	32.88036
FINISH DATE:	3-24-22		LONG	-104.20772
Page #	3-31-22 of			

Field Screening Report

SAMPLE NAME	TIME COLLECTED	DESCRIPTION	VOC		TPH (Method 418.1)			CHLORIDE	
			TIME	PID/OV ppm	TIME	READING	CALC. ppm	TIME	mg/kg
3-23 WEST WALL CS-01	11:18	WEST WALL	11:38	10.3	21:21	30	120	11:26	<300
CS-02	13:53	NORTH WALL	14:10	16.4	21:28	102	408	17:06	352
		200 STD			21:11	228			
3-24 CS-03	11:43	BASE S.E.	11:59	23.0	21:35	107	428	12:01	392
CS-04	12:08	WEST WALL-SOUTH	12:29	0.0	21:43	67	268	12:21	282
CS-05	13:06	WEST WALL-NORTH	13:23	0.0	21:51	17	68	13:27	<281
CS-06	14:40	NORTH WALL-WEST	15:03	0.0	22:08	17	68	15:06	<281
CS-07	14:44	NORTH WALL-EAST	15:05	0.0	22:11	26	104	15:06	352
CS-08	16:50	EAST WALL-NORTH	16:13	0.0	22:17	16	64	16:15	<281
CS-09	16:54	EAST WALL-SOUTH	16:14	0.0	22:15	16	64	16:17	<281
		200 STD			21:13	227			
3-29 CS-10	10:05	SOUTH WALL-EAST	10:23	0.0	21:22	27	108	10:24	390
CS-11	13:01	SOUTH WALL-WEST	13:22	0.0	21:26	21	84	13:26	366
CS-12	15:50	BASE-SOUTH EAST	16:20	2.0	21:29	179	716	16:32	315
CS-13	15:52	BASE-SOUTH EAST	16:22	0.2	21:32	88	352	16:33	431
CS-14	15:53	BASE-NORTH EAST	16:24	14.5	21:35	259	1036	16:34	390
CS-15	15:59	BASE-NORTH WEST	16:26	2.8 4.4	21:38	46	184	16:35	731
		200 STD	21:35		21:36	183			
3-30 TP-1	11:50	TEST PIT-SW			22:08	166	664	12:20	352
TP-2	11:52	TEST PIT-SE			22:10	-40	-160	12:22	<281
TP-3	11:54	TEST PIT-NE			22:13	-73	-292	12:24	<281
TP-4	11:57	TEST PIT-NW			22:16	-62	-248	12:26	<281
					11:20	108			
3-31 WHITE ROCK	11:02	WHITE ROCK FROM EXCAV	11:26	1.4	11:26	7.414	5.656		
CS-16	12:00	BOTTOM OF BASE			12:16	63	252		

NOTES: Include laboratory analysis information



505-632-0615 | 1-800-362-1879
5796 US Highway 64
Farmington, NM 87401

3-31

* ALL SAMPLES TURNED INTO LAB



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/23/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	3/24/2022 5:36 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/23/2022 7:00 AM
Departed Site	3/23/2022 3:30 PM

Field Notes

- 8:55** Crew did not arrive until 8:00. Larry had a drug test. Began excavation at 8:20. Excavating on south and west walls so far.
- 10:40** West wall needs more excavation. Will remove 2-3 feet
- 11:14** Entire west wall as well as north wall visibly clean. All of base still visibly stained. Track hoe will be on site tomorrow for base excavation per Rocky Hocker.
- 14:11** Field sampled western and northern walls. Chlorides are fine and VOCs are 10.3 and 16.4 respectively.
- 14:41** Finished the day with excavation around 2nd Rat hole. Roughly 275-300 cubic yards excavated total. Will begin work tomorrow with track hoe

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: West



Descriptive Photo - 1
Viewing Direction: West
Desc: West wall removal
Created: 3/23/2022 10:39:57 AM
Lat:32.880429, Long:-104.207659

West wall removal. Green area is clear.

Viewing Direction: North



Descriptive Photo - 2
Viewing Direction: North
Desc: North wall
Created: 3/23/2022 2:12:17 PM
Lat:32.880429, Long:-104.207659

North wall. All of wall is visibly free of staining

Viewing Direction: South



Descriptive Photo - 3
Viewing Direction: South
Desc: Excavation overview
Created: 3/23/2022 2:35:38 PM
Lat:32.880429, Long:-104.207659

Excavation overview

Viewing Direction: North



Descriptive Photo - 4
Viewing Direction: North
Desc: Excavation overview
Created: 3/23/2022 2:40:22 PM
Lat:32.880429, Long:-104.207659

Excavation overview

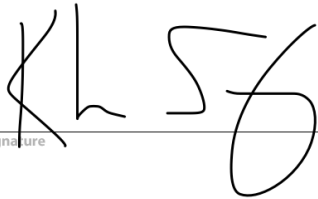


Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/24/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:37 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/24/2022 7:00 AM
Departed Site	3/24/2022 5:30 PM

Field Notes

- 10:04** Carlos from Hocker arrived at 7:15, cleared the excavation of berms. Standby until excavator showed up at 9:30
- 10:16** Thick concrete all around wellhead and rat holes. Electing to dig actual soil around concrete in order to find contamination
- 15:06** Western AND Northern wall delineated at PID readings of 0.0. (South and North of West wall) (West and East of North wall)
- 16:34** Finished off day by excavation east wall 3 more feet. Also made a ramp entrance coming in from the west side of excavation. Will fence off entire excavation before leaving

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: South



Descriptive Photo - 3
Viewing Direction: South
Desc: Excavation activities
Created: 3/24/2022 10:04:27 AM
Lat:32.680426, Long:-104.207785

Excavation activities

Viewing Direction: West



Descriptive Photo - 2
Viewing Direction: West
Desc: Concrete around wellhead
Created: 3/24/2022 10:39:08 AM
Lat:32.680426, Long:-104.207785

Concrete around wellhead

Viewing Direction: West



Descriptive Photo - 1
Viewing Direction: West
Desc: West wall excavation
Created: 3/24/2022 2:55:45 PM
Lat:32.680426, Long:-104.207785

West wall excavation. All of wall excavated to visibility and odor clearance

Viewing Direction: East



Descriptive Photo - 4
Viewing Direction: East
Desc: North/East excavation activities
Created: 3/24/2022 2:55:45 PM
Lat:32.680426, Long:-104.207785

North/East excavation activities

Daily Spill Visit Report

Viewing Direction: North



Excavation overview (end of day)

Viewing Direction: West



Excavation overview (end of day) view 2

Viewing Direction: South



Excavation overview (end of day) view 3

Viewing Direction: West



Excavation overview (end of day) view 4

Daily Spill Visit Report





Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/28/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:37 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/28/2022 12:00 PM
Departed Site	3/28/2022 4:00 PM

Field Notes

12:50 3 belly dumps and 3 end dumps arrived on site ready to be loaded. Will load with track hoe.

13:50 All trucks loaded and left by 13:50. ~96-100 yd3

15:55 Finished day with cleaning up all remaining PCS and stockpiled it in main pile. Plan to have all trucks here at 7:00 tomorrow as well as begin excavation.

Next Steps & Recommendations

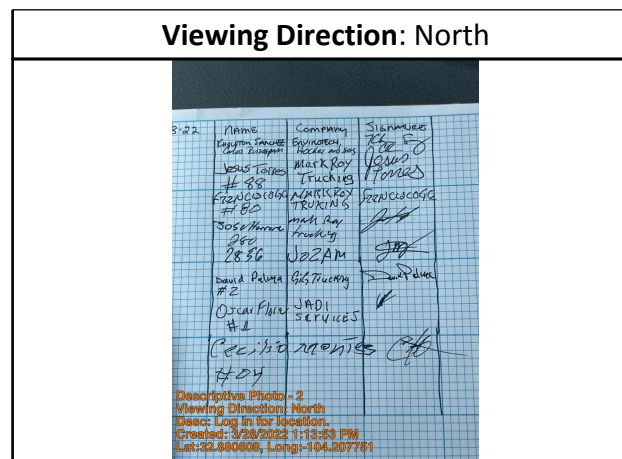
1

Daily Spill Visit Report

Site Photos



Trucks for transport



Log in for location.



Loading activities



Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/29/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:37 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/29/2022 7:00 AM
Departed Site	3/29/2022 5:00 PM

Field Notes

- 9:44** Trucks being loaded at 7:15. 4 end dumps, 3 belly dumps. ~108yds3. Trucks finished at 8:00
- 11:31** Beginning excavation on south wall. East end of wall complete and field screening @ O.O for VOC and 390 for chlorides. Beginning west of south wall excavation
- 11:32** 4 end dumps loaded and gone. 3 belly dumps being loaded now and on their way to Lea Land (2nd trip)
- 13:50** Sour wall complete per field screening. Excavating base with backhoe now

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: South



Loading activities

Viewing Direction: South



Excavating south wall 3 more feet

Viewing Direction: South



Base excavation

Viewing Direction: West



South wall excavation



Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/30/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:37 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/30/2022 7:15 AM
Departed Site	3/30/2022 2:30 PM

Field Notes

- 10:15** Arrived on site to trucks being loaded and leaving. Same amount as yesterday
- 10:15** Began cleaning stuff around base and pot holing at 9:30
- 10:16** 1st truck arrived back for 2nd trip at 10:15
- 14:09** Trucks unable to make it back for 3rd trip.
- 14:10** Dug three feet southwest of wellhead, white powdery rock. Maybe gypsum. Got underneath and it's clay. Looking for extents
- 14:10** Done for day. Larry and Carlos have to meet the truckers at Lea Land. Excavation fenced off and will continue excavation tomorrow.

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: South



Truck loading

Viewing Direction: South



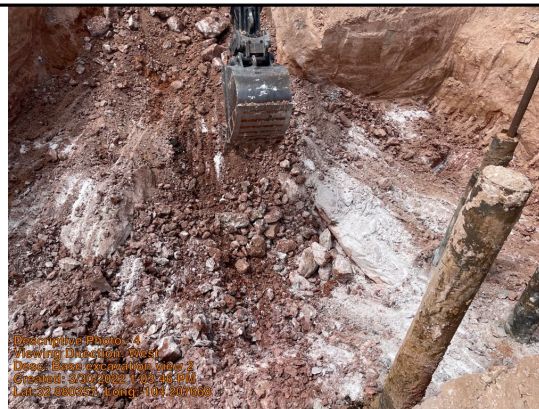
Test pits

Viewing Direction: South



Base excavation

Viewing Direction: West



Base excavation view 2

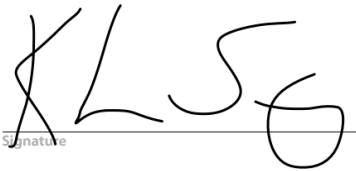


Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	3/31/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:37 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	3/31/2022 7:15 AM
Departed Site	3/31/2022 4:30 PM

Field Notes

- 10:18** Upon arrival, trucks being loaded. 5 end dumps and 2 belly dumps. Finished at 7:45.
- 8:52** Continuing excavation on base
- 8:55** Widening ramp on east side of excavation
- 10:36** 2nd trip of trucks being loaded

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: West



Base excavation

Viewing Direction: South



Soil work being done

Viewing Direction: South



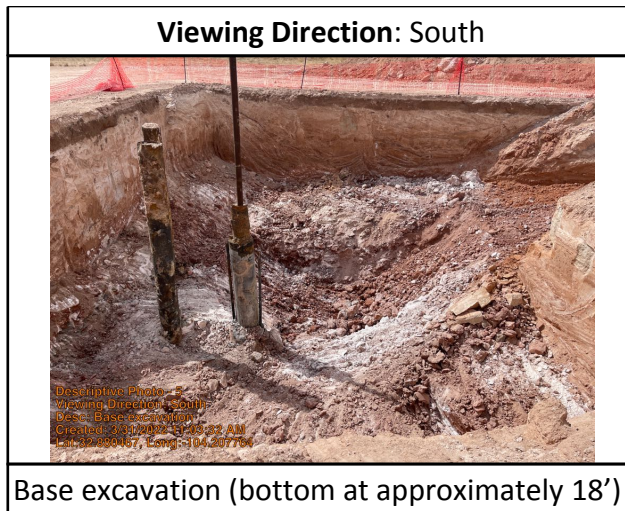
White rock with oil on it. Still wet

Viewing Direction: East



Where white rock with oil was

Daily Spill Visit Report






Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	4/6/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:30 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	4/6/2022 7:15 AM
Departed Site	4/6/2022 5:00 PM

Field Notes

10:17 Took down fence at 7:15 and began widening ramp.

10:18 Base excavation is revealing non-visible, but odor contamination. Pretty strong still

12:40 Field testing of base level shows a calculated TPH reading of 72 and chloride level of <281. Will continue to dig base to current depth

15:41 Finished excavating for day. North side of base dug out as much as possible

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: South



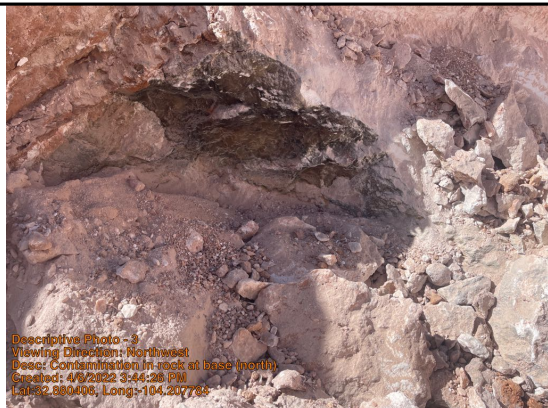
Base excavation @ 10:15

Viewing Direction: South



Excavation @ 15:45

Viewing Direction: Northwest



Contamination in rock at base (north)

Viewing Direction: East



Excavation fencing at end of day




Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature

CLIENT: <u>EOG</u>	 envirotech 505-632-0615 1-800-362-1879 5796 US Highway 64 Farmington, NM 87401	Envmtl. Spclst: <u>KS</u>
CLIENT/JOB #: <u>19034-0010</u>		Site Name: <u>Lucky Whale 31 Feb 2</u>
START DATE: <u>4-6-22</u>		LAT <u>32.88036</u>
FINISH DATE: <u>4-7-22</u>		LONG <u>-104.20742</u>
Page # _____ of _____		

Field Screening Report

[illegible]

NOTES: *Include laboratory analysis information*



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	4/7/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:29 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	4/7/2022 10:45 AM
Departed Site	4/7/2022 4:30 PM

Field Notes

14:42 Upon arrival, trucks being loaded. 10 end dumps and 1 belly dump.

14:43 Ramp was dug into east wall in order to continue excavating base

14:43 Trucks showed back up at 14:30

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: South



Base excavation

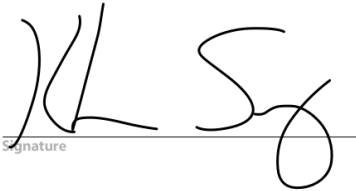


Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	4/12/2022
Site Location Name:	Dazed BDZ Federal Com #2	Report Run Date:	5/6/2022 4:29 PM
Client Contact Name:	Bob Asher	API #:	
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-Dazed BDZ Federal Com #2	Project Owner:	F.Aragon
Project Reference #	19034-0008	Project Manager:	B. Hall

Summary of Times

Arrived at Site 4/12/2022 7:00 AM

Departed Site

Field Notes

Next Steps & Recommendations

1

Daily Spill Visit Report

Site Photos

Viewing Direction: North



Further excavation of base main section 1

Viewing Direction: East



Futher excavation of base main section 2



Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Isaac Garcia

Signature:



Daily Spill Visit Report

Client:	EOG Resources	Inspection Date:	4/18/2022
Site Location Name:	Lucky Wolf 31 Federal #2H	Report Run Date:	5/6/2022 4:29 PM
Client Contact Name:	Bob Asher	API #:	3001537448
Client Contact Phone #:	575-365-4021		
Unique Project ID	19034-0005-Lucky Wolf 31 Federal #2H	Project Owner:	F. Aragon
Project Reference #	19034-0001	Project Manager:	T. Knight

Summary of Times

Arrived at Site	4/18/2022 8:00 AM
Departed Site	4/18/2022 3:00 PM

Field Notes

8:14 Arrived on site, spoke with Larry Barnes about plans for today for confirmation sampling

18:31 Completed confirmation sampling at 14:45

Next Steps & Recommendations

1



Daily Spill Visit Report

Daily Site Visit Signature

Inspector: Kholeton Sanchez

Signature:


Signature

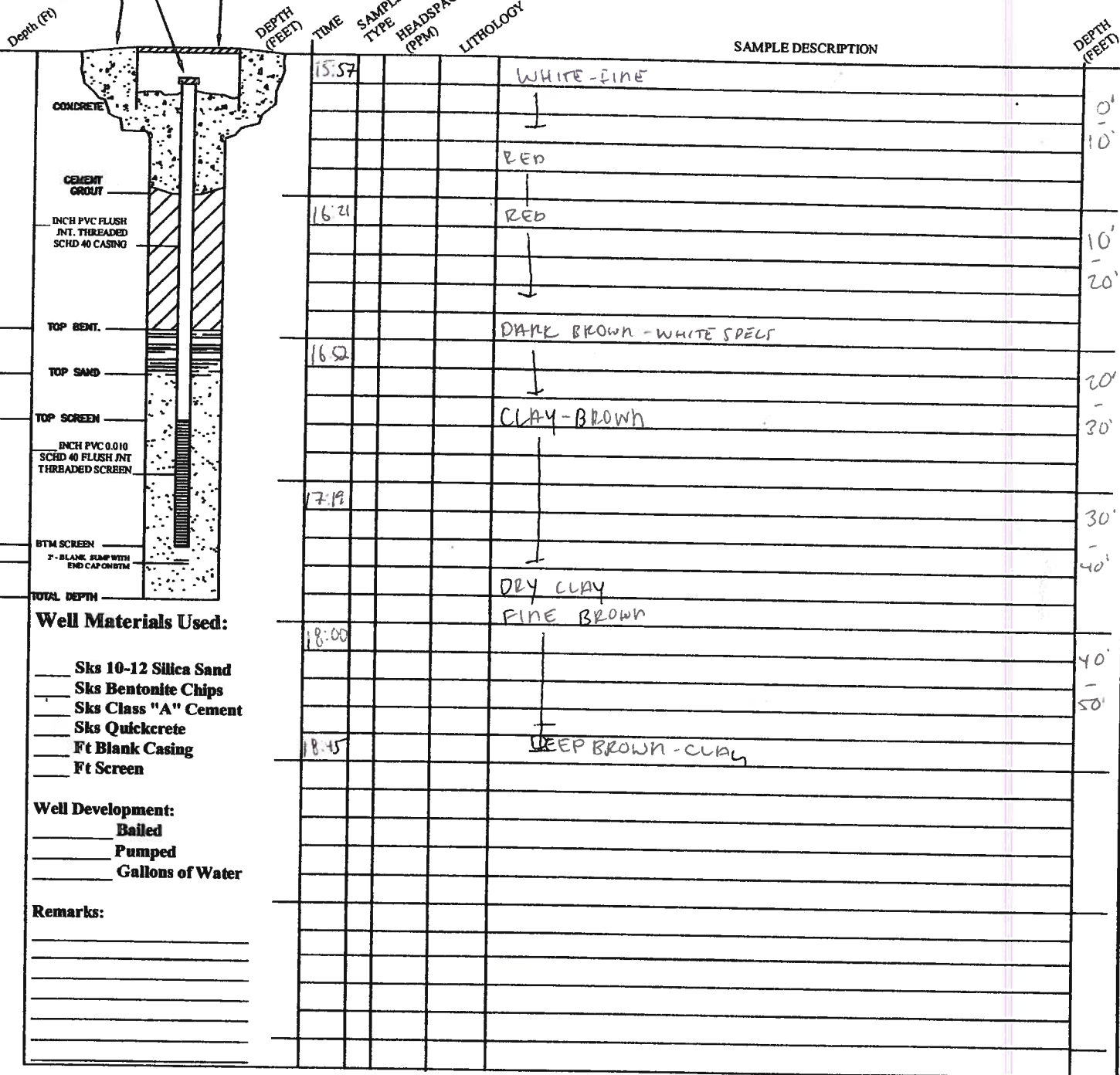
BELOW GRADE WELL COMPLETION DIAGRAM / LITHOLOGY LOG

MW _____

SB 1

FLUSH MOUNT
TRAFFIC RATED
WELL COVER

LOCKING CAP
CONCRETE



Well Materials Used:

- ___ Sks 10-12 Silica Sand
- ___ Sks Bentonite Chips
- ___ Sks Class "A" Cement
- ___ Sks Quickcrete
- ___ Ft Blank Casing
- ___ Ft Screen

Well Development:

- ___ Bailed
- ___ Pumped
- ___ Gallons of Water

Remarks:

DRILLER: Ben
 HELPER: Kyle
 DRILLING COMPANY: HRL
 DRILLING METHOD: A
 Note: SS = Split Spoon A = Auger

BIT SIZE: 4 inch
 TOTAL BORING DEPTH: 50'
 DATE STARTED: 4/26/22
 SAMPLER TYPE: _____

LOCATION: Lucky Wolf 31 Feb 24
 ELEVATION: _____
 DATE COMPLETED: 1/1
 GEOLOGIST: KSANCHEZ

c5 = 5 foot composite from air cuttings


ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
 5796 U.S. HIGHWAY 64
 FARMINGTON, NEW MEXICO 87401
 (505) 632-0815
EnviroLog.dwg

REVISIONS
 BY _____ DATE _____
 BY _____ DATE _____

JOB # _____

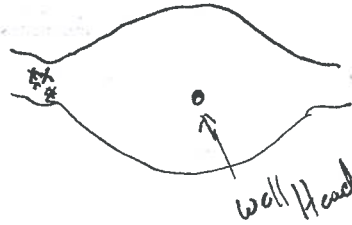
DATE _____ DRAWN _____
 SCALE _____ APPROVED _____
 PAGE _____ OF _____

CLIENT: <u>EUG</u>	 envirotech 505-632-0615 1-800-362-1879 5796 US Highway 64 Farmington, NM 87401	Envmtl. Spclst: <u>Z. Garcia</u>
CLIENT/JOB #: <u>19034-0010</u>		Onsite: <u>14:30</u> Offsite: <u>15:30</u>
START DATE: <u>5/26/2022</u>		LAT: <u>32.88036</u>
FINISH DATE: <u>5/26/2022</u>		LONG: <u>-104.20772</u>
Page # <u>1</u> of <u>1</u>		

LOCATION:	Name: <u>Lucky Wolf</u>	Well #: <u>31 Federal #24</u>	API: <u>30-015-37443</u>
	County: <u>Eddy</u>	State: <u>NM</u>	HWY-MM: _____
Cause of Release: _____	Material Released: _____	Amt. Released: _____	
QUAD/UNIT: <u>H</u>	SEC: <u>31</u>	TWP: <u>16S</u>	RNG: <u>28E</u> PM: _____
Spill Located Approximately: _____ FT. FROM _____			
Excavation Approx: _____ FT. X _____ FT. X _____ FT. Volume (cy/tons): _____			
Disposal Facility: _____			
Land Use: _____ Land Owner: _____			
REGULATORY AGENCY: _____		TPH CLOSURE STD: _____	
ADDITIONAL CLOSURE REQUIREMENTS: _____			

SAMPLE NAME	TIME COLLECTED	DESCRIPTION	VOC		TPH (Method 418.1)			Chloride	
			TIME	PID/OV ppm	TIME	READING	CALC ppm	TIME	mg/kg
<u>CS-79</u>	<u>15:08</u>	<u>SW Ramp</u>							

NOTES: Include laboratory analysis information	
CS-COMPOSITE SAMPLE GS-GRAB SAMPLE SB-SOIL BORING TP-TEST PIT DU- DECISION UNIT ST-STATION	

SITE PERIMETER: Draw a schematic of the spill site. Attach photos and other diagrams as needed.

sample collected from
32.890397
-104.208008

EXCAVATION OVERVIEW:**EXCAVATION PROFILE VIEWS:**

Sample Name:

Sample Name:

Sample Name:

Sample Name:

Appendix C



Siting Criteria Documentation



Practical Solutions for a Better Tomorrow

Site Name:	Lucky Wolf 31 Federal Com #2h			
API #:	30-015-37448			
Lat/Long:	32.88036, -104.20772			
TRS:	Unit H, Sec 31 T16S R28E			
Land Jurisdiction:	Federal			
County:	Eddy			
Wellhead Protection Area Assessment				
Water Source Type (well/spring/stock pond)	ID	Latitude	Longitude	Distance
Distance to Nearest Significant Watercourse				
656 feet south of unnamed tributary of Dog Canyon Draw (3,519 amsl)				
Depth to Groundwater Determination				
Cathodic Report/Site Specific Hydrogeology				
Elevation Differential				
Water Wells	Exploratory soil boring RA-13179 at 50 feet dry			
Sensitive Receptor Determination				
<300' of any continuously flowing watercourse or any other significant watercourse	No			
<200' of any lakebed, sinkhole or playa lake (measured from the Ordinary High Water	No			
<300' of an occupied permanent residence, school, hospital, institution or church	No			
<500' of a spring or private/domestic water well used by <5 households for domestic or stock watering purposes	No			
<1000' of any water well or spring	No			
Within incorporated municipal boundaries or within a defined municipal fresh water well	No			
<300' of a wetland	No			
Within the area overlying a subsurface mine	No			
Within an unstable area	No			
Within a 100-year floodplain	No			
DTW Determination	≤50 <input type="checkbox"/>	50-100 <input checked="" type="checkbox"/>	>100 <input type="checkbox"/>	
Benzene	10	10	10	
BTEX (mg/kg)	50	50	50	
8015 TPH (GRO/DRO) (mg/kg)	Not Applicable	1,000	1,000	
8015 TPH (GRO/DRO/MRO) (mg/kg)	100	2,500	2,500	
Chlorides (mg/kg)	600	10,000	20,000	



Practical Solutions of a Better Tomorrow





Basemap Gallery

Imagery

Imagery with Labels

National Geographic

OpenStreetMap

Streets

Terrain with Labels

Topographic

USA Topo Maps

USGS National Map

+

-

▼

30-015-37448

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🔍

🖨️

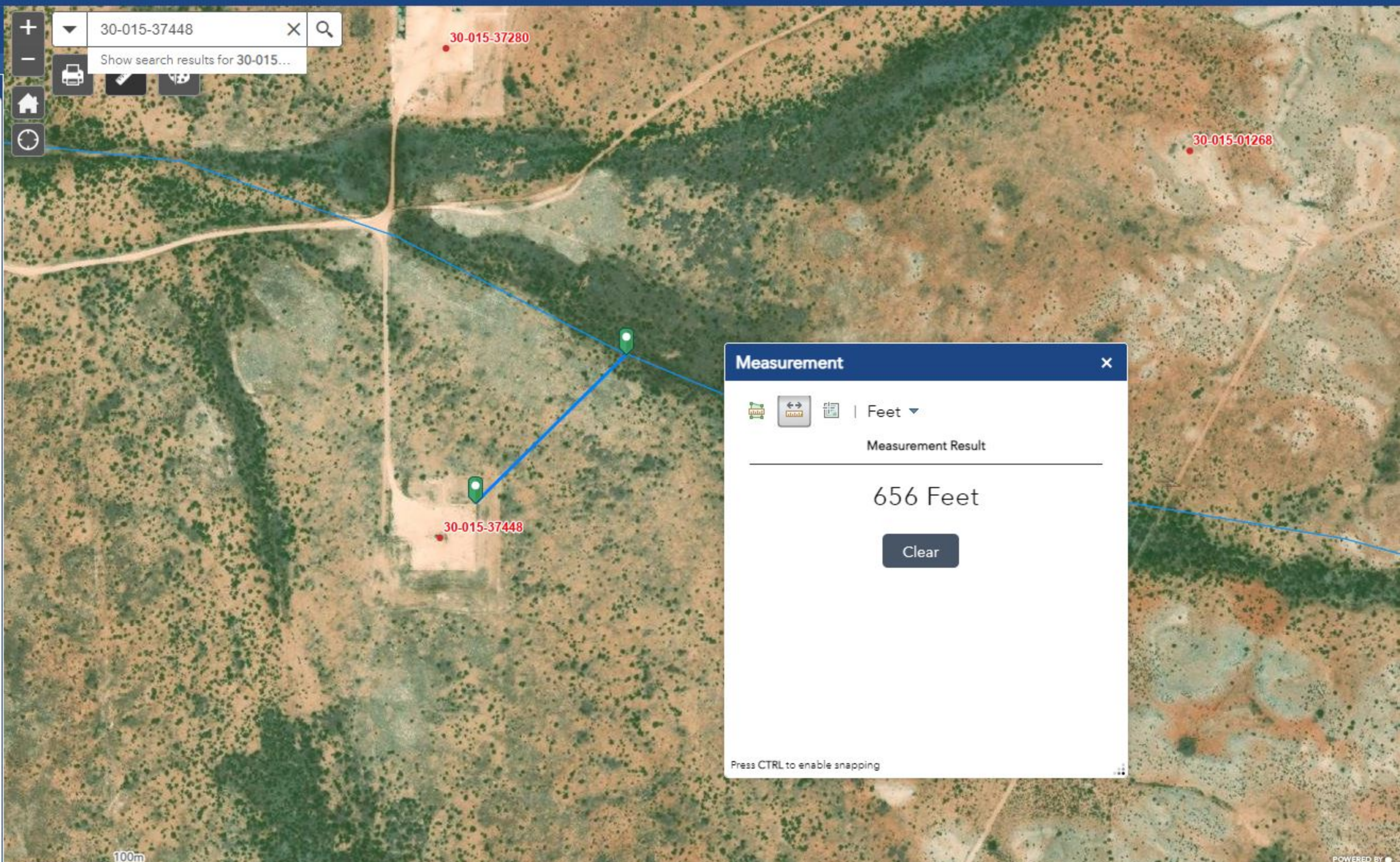
📱

🗺️

🏠

🕒

Show search results for 30-015...



Measurement

Feet ▼

Measurement Result

656 Feet

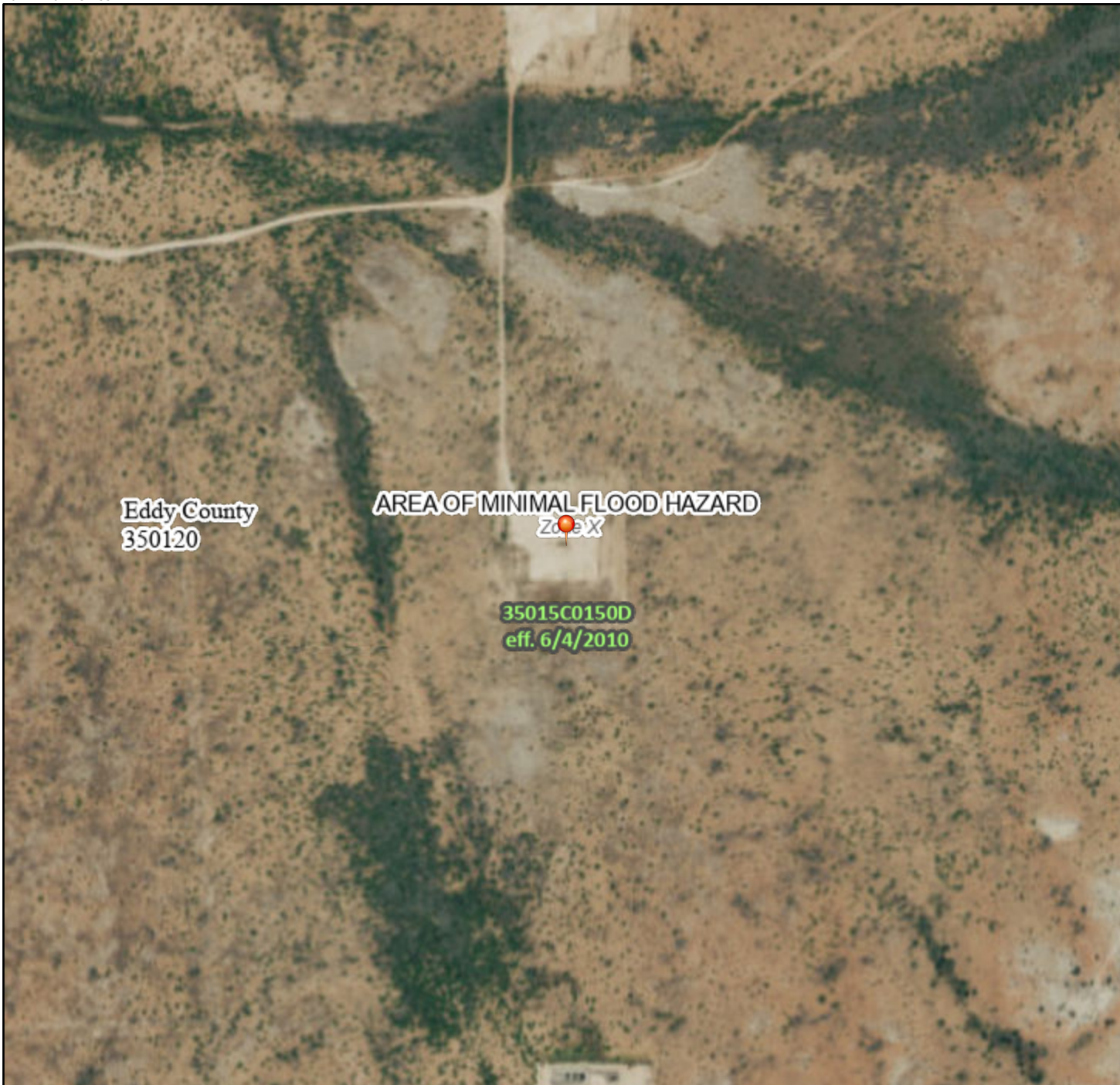
Clear

Press CTRL to enable snapping

National Flood Hazard Layer FIRMette



104°12'46"W 32°53'4"N



Legend

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

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/23/2022 at 12:40 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix D



Regulatory Correspondence



Practical Solutions for a Better Tomorrow

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	nAPP2128557106
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party EOG Resources, Inc.	OGRID 7377
Contact Name Robert Asher	Contact Telephone 575-748-4217
Contact email bob_asher@eogresources.com	Incident # nAPP2128557106
Contact mailing address 104 South Fourth Street, Artesia, NM 88210	

Location of Release Source

Latitude 32.88036 Longitude -104.20772
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Lucky Wolf 31 Federal Com #2H	Site Type: Well Pad
Date Release Discovered: 9/28/2021	API# 30-015-37448

Unit Letter	Section	Township	Range	County
H	31	16S	28E	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 (Unknown)	Volume Recovered (Unknown)
<input checked="" type="checkbox"/> Produced Water	Volume Released (Unknown)	Volume Recovered (Unknown)
	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"/>	Volume/Weight Released	Volume/Weight Recovered

Cause of Release


When conducting decommissioning work of the well pad after the Lucky Wolf 31 Federal Com #2H was plugged and abandoned, historical contamination (hydrocarbons & chlorides) was discovered in an area in and around the dry hole marker. (approximate area, 10' X 10').

Incident ID	NAPP2128557106
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>Robert Asher</u>	Title: <u>Environmental Supervisor</u>
Signature: <u></u>	Date: <u>10/12/2021</u>
email: <u>bob_asher@eogresources.com</u>	Telephone: <u>575-748-4217</u>
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>10/13/2021</u>

Incident ID	NAPP2128557106
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>>50</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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

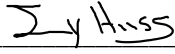
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	
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: Jeremy Haass Title: S&E Specialist
Signature:  Date: 8/16/2022
email: jeremy_haass@eogresources.com Telephone: 575-748-4311

OCD Only

Received by: Jocelyn Harimon Date: 08/16/2022

Incident ID	NAPP2128557106
District RP	
Facility ID	
Application ID	

Remediation Plan

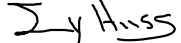
Remediation Plan Checklist: *Each of the following items must be included in the plan.*

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

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

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

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

Printed Name: Jeremy Haass Title: S&E Specialist
Signature:  Date: 8/16/2022
email: jeremy_haass@eogresources.com Telephone: 575-748-4311

OCD Only

Received by: Jocelyn Harimon Date: 08/16/2022

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

Signature: _____ Date: _____

Incident ID	NAPP2128557106
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.

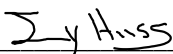
Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ 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: Jeremy Haass

Title: S&E Specialist

Signature: 

Date: 8/16/2022

email: jeremy_haass@eogresources.com

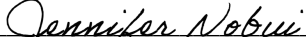
Telephone: 575-748-4311

OCD Only

Received by: Jocelyn Harimon

Date: 08/16/2022

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

Closure Approved by: 

Date: 08/16/2022

Printed Name: Jennifer Nobui

Title: Environmental Specialist A

From: [Jeremy Haass](#)
To: [Tami Knight](#); [Brittany Hall](#)
Subject: FW: Lucky Wolf 31 Federal Com 2H (nAPP2128557106) Sampling Notification
Date: Wednesday, April 13, 2022 2:50:49 PM
Attachments: [image001.png](#)

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

FYI

From: Tina Huerta <Tina_Huerta@eogresources.com>
Sent: Wednesday, April 13, 2022 1:08 PM
To: Robert.Hamlet@state.nm.us; mnaranjo@slo.state.nm.us; rmann@slo.state.nm.us
Cc: Artesia S&E Spill Remediation <Artesia_S&E_Spill_Remediation@eogresources.com>; Artesia Regulatory <Artesia_Regulatory@eogresources.com>
Subject: Lucky Wolf 31 Federal Com 2H (nAPP2128557106) Sampling Notification

Good Morning,

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

Lucky Wolf 31 Federal Com 2H
30-015-37448
H-31-16S-28E
Eddy County, NM
nAPP2128557106

Sampling will begin at 8:00 a.m. on Monday, April 18, 2022.

Thank you,

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



Brittany Hall

From: Tami Knight
Sent: Monday, June 13, 2022 9:38 AM
To: Brittany Hall
Subject: FW: Lucky Wolf 31 Federal Com 2H (nAPP2128557106) Confirmation Sampling request

From: Jeremy Haass <Jeremy_Haass@eogresources.com>
Sent: Tuesday, May 24, 2022 3:45 PM
To: Brittany Hall <bhall@envirotech-inc.com>; Tami Knight <TKnight@envirotech-inc.com>
Subject: FW: Lucky Wolf 31 Federal Com 2H (nAPP2128557106) Confirmation Sampling request

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

FYI

From: Miriam Morales <Miriam_Morales@eogresources.com>
Sent: Tuesday, May 24, 2022 3:04 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: Lucky Wolf 31 Federal Com 2H (nAPP2128557106) Confirmation Sampling request

Good afternoon,

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

Lucky Wolf 31 Federal Com #2H
API 30-015-37448
H-31-16S-28E
Eddy County, NM
nAPP2128557106

Sampling will begin at 3:00 pm. on Thursday, May 26, 2022. Sample will be collected of the upper 4 feet, southwest wall of the excavation, where the ramp was located.

Thank you,

Miriam Morales

Appendix E

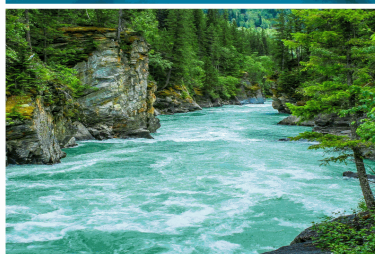


Laboratory Analytical Reports



Practical Solutions for a Better Tomorrow

Report to:
Greg Crabtree



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources

Project Name: Lucky Wolf 31 Fed 2H

Work Order: E204095

Job Number: 19034-0010

Received: 4/20/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/22/22

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

Date Reported: 4/22/22

Greg Crabtree
104 South 4th Street
Artesia, NM 88210



Project Name: Lucky Wolf 31 Fed 2H
Workorder: E204095
Date Received: 4/20/2022 6:30:00AM

Greg Crabtree,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/20/2022 6:30:00AM, under the Project Name: Lucky Wolf 31 Fed 2H.

The analytical test results summarized in this report with the Project Name: Lucky Wolf 31 Fed 2H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

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

Field Offices:

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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

EOG Resources 104 South 4th Street Artesia NM, 88210	Project Name: Lucky Wolf 31 Fed 2H Project Number: 19034-0010 Project Manager: Greg Crabtree	Reported: 04/22/22 13:31
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS - 37	E204095-01A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 38	E204095-02A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 39	E204095-03A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 40	E204095-04A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 41	E204095-05A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 42	E204095-06A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 43	E204095-07A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 44	E204095-08A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 45	E204095-09A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 46	E204095-10A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 47	E204095-11A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 48	E204095-12A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 49	E204095-13A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 50	E204095-14A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 51	E204095-15A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 52	E204095-16A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 53	E204095-17A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 54	E204095-18A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 55	E204095-19A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.
CS - 56	E204095-20A	Soil	04/18/22	04/20/22	Glass Jar, 4 oz.



Sample Data

EOG Resources 104 South 4th Street Artesia NM, 88210	Project Name: Lucky Wolf 31 Fed 2H Project Number: 19034-0010 Project Manager: Greg Crabtree	Reported: 4/22/2022 1:31:26PM
--	--	----------------------------------

CS - 37

E204095-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	88.4 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.6 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	88.4 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.6 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/20/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/20/22	
Surrogate: n-Nonane	111 %	50-200		04/20/22	04/20/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 38

E204095-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	91.1 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	94.9 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	91.1 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	94.9 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	112 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 39

E204095-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.6 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	109 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	95.7 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.6 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	109 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	95.7 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	116 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 40

E204095-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.6 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.6 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.6 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.6 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	109 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	803	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 41

E204095-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
Surrogate: Bromofluorobenzene	88.9 %	70-130		04/20/22	04/21/22	
Surrogate: 1,2-Dichloroethane-d4	99.0 %	70-130		04/20/22	04/21/22	
Surrogate: Toluene-d8	101 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
Surrogate: Bromofluorobenzene	88.9 %	70-130		04/20/22	04/21/22	
Surrogate: 1,2-Dichloroethane-d4	99.0 %	70-130		04/20/22	04/21/22	
Surrogate: Toluene-d8	101 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	117 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	457	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 42

E204095-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.9 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.4 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.9 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.4 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	116 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	458	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 43

E204095-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	91.1 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.9 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	91.1 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	96.9 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	110 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	334	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 44

E204095-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.2 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	94.7 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	89.2 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	94.7 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	97.3 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 45

E204095-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/20/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/20/22	
Toluene	ND	0.0250	1	04/20/22	04/20/22	
o-Xylene	ND	0.0250	1	04/20/22	04/20/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/20/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	92.1 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	95.1 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/20/22	
Surrogate: Bromofluorobenzene	92.1 %	70-130		04/20/22	04/20/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/20/22	
Surrogate: Toluene-d8	95.1 %	70-130		04/20/22	04/20/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	114 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 46

E204095-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/22/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/22/22	
Toluene	ND	0.0250	1	04/20/22	04/22/22	
o-Xylene	ND	0.0250	1	04/20/22	04/22/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/22/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/22/22	
Surrogate: Bromofluorobenzene	90.1 %	70-130		04/20/22	04/22/22	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		04/20/22	04/22/22	
Surrogate: Toluene-d8	98.6 %	70-130		04/20/22	04/22/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/22/22	
Surrogate: Bromofluorobenzene	90.1 %	70-130		04/20/22	04/22/22	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		04/20/22	04/22/22	
Surrogate: Toluene-d8	98.6 %	70-130		04/20/22	04/22/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	116 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 47

E204095-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/22/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/22/22	
Toluene	ND	0.0250	1	04/20/22	04/22/22	
o-Xylene	ND	0.0250	1	04/20/22	04/22/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/22/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/22/22	
Surrogate: Bromofluorobenzene	88.7 %	70-130		04/20/22	04/22/22	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		04/20/22	04/22/22	
Surrogate: Toluene-d8	101 %	70-130		04/20/22	04/22/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/22/22	
Surrogate: Bromofluorobenzene	88.7 %	70-130		04/20/22	04/22/22	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		04/20/22	04/22/22	
Surrogate: Toluene-d8	101 %	70-130		04/20/22	04/22/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	112 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	398	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 48

E204095-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/22/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/22/22	
Toluene	ND	0.0250	1	04/20/22	04/22/22	
o-Xylene	ND	0.0250	1	04/20/22	04/22/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/22/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/22/22	
Surrogate: Bromofluorobenzene	88.5 %	70-130		04/20/22	04/22/22	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		04/20/22	04/22/22	
Surrogate: Toluene-d8	99.9 %	70-130		04/20/22	04/22/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/22/22	
Surrogate: Bromofluorobenzene	88.5 %	70-130		04/20/22	04/22/22	
Surrogate: 1,2-Dichloroethane-d4	106 %	70-130		04/20/22	04/22/22	
Surrogate: Toluene-d8	99.9 %	70-130		04/20/22	04/22/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	114 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	320	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 49

E204095-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2217014	
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.6 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2217014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	88.7 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2217023	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>	122 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS		Batch: 2217015	
Chloride	349	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 50

E204095-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2217014	
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>	93.5 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2217014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>	88.8 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2217023	
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>	120 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS		Batch: 2217015	
Chloride	212	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 51

E204095-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217014
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	92.8 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217014
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.7 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>						
	112 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	ND	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 52

E204095-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217014
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	93.3 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217014
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.4 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	232	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 53

E204095-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
Surrogate: Bromofluorobenzene	88.0 %	70-130		04/20/22	04/21/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/21/22	
Surrogate: Toluene-d8	96.9 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217012
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
Surrogate: Bromofluorobenzene	88.0 %	70-130		04/20/22	04/21/22	
Surrogate: 1,2-Dichloroethane-d4	104 %	70-130		04/20/22	04/21/22	
Surrogate: Toluene-d8	96.9 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
Surrogate: n-Nonane	112 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	497	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 54

E204095-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217031
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.1 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217031
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	97.7 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>						
	99.7 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	549	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 55

E204095-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217031
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	94.0 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2217031
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	89.2 %	70-130		04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2217023
Diesel Range Organics (C10-C28)	ND	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	ND	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		04/20/22	04/21/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2217015
Chloride	526	200	10	04/20/22	04/20/22	



Sample Data

EOG Resources
104 South 4th Street
Artesia NM, 88210

Project Name: Lucky Wolf 31 Fed 2H
Project Number: 19034-0010
Project Manager: Greg Crabtree

Reported:
4/22/2022 1:31:26PM

CS - 56

E204095-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2217031	
Benzene	ND	0.0250	1	04/20/22	04/21/22	
Ethylbenzene	ND	0.0250	1	04/20/22	04/21/22	
Toluene	ND	0.0250	1	04/20/22	04/21/22	
o-Xylene	ND	0.0250	1	04/20/22	04/21/22	
p,m-Xylene	ND	0.0500	1	04/20/22	04/21/22	
Total Xylenes	ND	0.0250	1	04/20/22	04/21/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2217031	
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/20/22	04/21/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		88.7 %	70-130	04/20/22	04/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2217023	
Diesel Range Organics (C10-C28)	188	25.0	1	04/20/22	04/21/22	
Oil Range Organics (C28-C36)	76.9	50.0	1	04/20/22	04/21/22	
<i>Surrogate: n-Nonane</i>		113 %	50-200	04/20/22	04/21/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: RAS		Batch: 2217015	
Chloride	278	200	10	04/20/22	04/20/22	



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217012-BLK1)

Prepared: 04/20/22 Analyzed: 04/22/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.434		0.500		86.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.523		0.500		105	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

LCS (2217012-BS1)

Prepared: 04/20/22 Analyzed: 04/21/22

Benzene	2.64	0.0250	2.50		106	70-130			
Ethylbenzene	2.55	0.0250	2.50		102	70-130			
Toluene	2.56	0.0250	2.50		102	70-130			
o-Xylene	2.43	0.0250	2.50		97.4	70-130			
p,m-Xylene	4.95	0.0500	5.00		99.0	70-130			
Total Xylenes	7.39	0.0250	7.50		98.5	70-130			
Surrogate: Bromofluorobenzene	0.476		0.500		95.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

LCS Dup (2217012-BSD1)

Prepared: 04/20/22 Analyzed: 04/21/22

Benzene	2.63	0.0250	2.50		105	70-130	0.607	23	
Ethylbenzene	2.60	0.0250	2.50		104	70-130	1.87	27	
Toluene	2.58	0.0250	2.50		103	70-130	0.954	24	
o-Xylene	2.51	0.0250	2.50		100	70-130	2.97	27	
p,m-Xylene	5.05	0.0500	5.00		101	70-130	1.96	27	
Total Xylenes	7.56	0.0250	7.50		101	70-130	2.30	27	
Surrogate: Bromofluorobenzene	0.475		0.500		94.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.511		0.500		102	70-130			
Surrogate: Toluene-d8	0.508		0.500		102	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Volatile Organics by EPA 8021B

Analyst: IY

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

Blank (2217014-BLK1)

Prepared: 04/20/22 Analyzed: 04/20/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.41		8.00		105	70-130			

LCS (2217014-BS1)

Prepared: 04/20/22 Analyzed: 04/20/22

Benzene	4.59	0.0250	5.00		91.8	70-130			
Ethylbenzene	4.43	0.0250	5.00		88.6	70-130			
Toluene	4.61	0.0250	5.00		92.2	70-130			
o-Xylene	4.63	0.0250	5.00		92.5	70-130			
p,m-Xylene	9.15	0.0500	10.0		91.5	70-130			
Total Xylenes	13.8	0.0250	15.0		91.8	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.20		8.00		103	70-130			

LCS Dup (2217014-BSD1)

Prepared: 04/20/22 Analyzed: 04/20/22

Benzene	4.49	0.0250	5.00		89.8	70-130	2.21	20	
Ethylbenzene	4.34	0.0250	5.00		86.7	70-130	2.20	20	
Toluene	4.51	0.0250	5.00		90.2	70-130	2.18	20	
o-Xylene	4.54	0.0250	5.00		90.7	70-130	1.98	20	
p,m-Xylene	8.96	0.0500	10.0		89.6	70-130	2.14	20	
Total Xylenes	13.5	0.0250	15.0		89.9	70-130	2.08	20	
Surrogate: 4-Bromochlorobenzene-PID	7.86		8.00		98.3	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217031-BLK1)

Prepared: 04/21/22 Analyzed: 04/21/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.64		8.00		95.5	70-130			

LCS (2217031-BS1)

Prepared: 04/21/22 Analyzed: 04/21/22

Benzene	4.80	0.0250	5.00		96.0	70-130			
Ethylbenzene	4.84	0.0250	5.00		96.8	70-130			
Toluene	4.98	0.0250	5.00		99.6	70-130			
o-Xylene	5.07	0.0250	5.00		101	70-130			
p,m-Xylene	9.98	0.0500	10.0		99.8	70-130			
Total Xylenes	15.1	0.0250	15.0		100	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.80		8.00		97.5	70-130			

Matrix Spike (2217031-MS1)

Source: E204111-01

Prepared: 04/21/22 Analyzed: 04/21/22

Benzene	4.81	0.0250	5.00	ND	96.3	54-133			
Ethylbenzene	4.91	0.0250	5.00	ND	98.2	61-133			
Toluene	5.03	0.0250	5.00	ND	101	61-130			
o-Xylene	5.14	0.0250	5.00	ND	103	63-131			
p,m-Xylene	10.1	0.0500	10.0	ND	101	63-131			
Total Xylenes	15.3	0.0250	15.0	ND	102	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			

Matrix Spike Dup (2217031-MSD1)

Source: E204111-01

Prepared: 04/21/22 Analyzed: 04/21/22

Benzene	4.80	0.0250	5.00	ND	96.0	54-133	0.344	20	
Ethylbenzene	4.86	0.0250	5.00	ND	97.2	61-133	0.979	20	
Toluene	5.00	0.0250	5.00	ND	100	61-130	0.707	20	
o-Xylene	5.09	0.0250	5.00	ND	102	63-131	0.990	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	0.961	20	
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131	0.971	20	
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217012-BLK1)

Prepared: 04/20/22 Analyzed: 04/22/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.434		0.500		86.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.523		0.500		105	70-130			
Surrogate: Toluene-d8	0.506		0.500		101	70-130			

LCS (2217012-BS2)

Prepared: 04/20/22 Analyzed: 04/21/22

Gasoline Range Organics (C6-C10)	53.5	20.0	50.0		107	70-130			
Surrogate: Bromofluorobenzene	0.458		0.500		91.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.508		0.500		102	70-130			

LCS Dup (2217012-BSD2)

Prepared: 04/20/22 Analyzed: 04/21/22

Gasoline Range Organics (C6-C10)	54.6	20.0	50.0		109	70-130	1.90	20	
Surrogate: Bromofluorobenzene	0.462		0.500		92.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		96.9	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217014-BLK1)

Prepared: 04/20/22 Analyzed: 04/20/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.12		8.00		89.0	70-130			

LCS (2217014-BS2)

Prepared: 04/20/22 Analyzed: 04/20/22

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0		96.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.7	70-130			

LCS Dup (2217014-BSD2)

Prepared: 04/20/22 Analyzed: 04/20/22

Gasoline Range Organics (C6-C10)	50.0	20.0	50.0		99.9	70-130	3.92	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.19		8.00		89.9	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217031-BLK1)

Prepared: 04/21/22 Analyzed: 04/21/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.4	70-130			

LCS (2217031-BS2)

Prepared: 04/21/22 Analyzed: 04/21/22

Gasoline Range Organics (C6-C10)	51.4	20.0	50.0		103	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			

Matrix Spike (2217031-MS2)

Source: E204111-01

Prepared: 04/21/22 Analyzed: 04/21/22

Gasoline Range Organics (C6-C10)	55.7	20.0	50.0	ND	111	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.17		8.00		89.6	70-130			

Matrix Spike Dup (2217031-MSD2)

Source: E204111-01

Prepared: 04/21/22 Analyzed: 04/21/22

Gasoline Range Organics (C6-C10)	52.5	20.0	50.0	ND	105	70-130	5.97	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.16		8.00		89.5	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217023-BLK1)

Prepared: 04/20/22 Analyzed: 04/20/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.4		50.0		109	50-200			

LCS (2217023-BS1)

Prepared: 04/20/22 Analyzed: 04/20/22

Diesel Range Organics (C10-C28)	581	25.0	500		116	38-132			
Surrogate: n-Nonane	62.5		50.0		125	50-200			

Matrix Spike (2217023-MS1)

Source: E204095-12

Prepared: 04/20/22 Analyzed: 04/20/22

Diesel Range Organics (C10-C28)	586	25.0	500	ND	117	38-132			
Surrogate: n-Nonane	63.5		50.0		127	50-200			

Matrix Spike Dup (2217023-MSD1)

Source: E204095-12

Prepared: 04/20/22 Analyzed: 04/20/22

Diesel Range Organics (C10-C28)	510	25.0	500	ND	102	38-132	14.0	20	
Surrogate: n-Nonane	59.4		50.0		119	50-200			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	Reported:
104 South 4th Street	Project Number:	19034-0010	
Artesia NM, 88210	Project Manager:	Greg Crabtree	4/22/2022 1:31:26PM

Anions by EPA 300.0/9056A

Analyst: RAS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2217015-BLK1)

Prepared: 04/20/22 Analyzed: 04/20/22

Chloride	ND	20.0
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LCS (2217015-BS1)

Prepared: 04/20/22 Analyzed: 04/20/22

Chloride	245	20.0	250	98.1	90-110
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Matrix Spike (2217015-MS1)

Source: E204095-01

Prepared: 04/20/22 Analyzed: 04/20/22

Chloride	381	200	250	ND	152	80-120	M6
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Matrix Spike Dup (2217015-MSD1)

Source: E204095-01

Prepared: 04/20/22 Analyzed: 04/20/22

Chloride	384	200	250	ND	154	80-120	0.865	20	M6
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QC Summary Report Comment:

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



Definitions and Notes

EOG Resources	Project Name:	Lucky Wolf 31 Fed 2H	
104 South 4th Street	Project Number:	19034-0010	Reported:
Artesia NM, 88210	Project Manager:	Greg Crabtree	04/22/22 13:31

- M6 Matrix spike recovery has a high bias. The native sample results were below the RL, but appears to have contributed to high MS recoveries.
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

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



Project Information

Chain of Custody

2 DAY TAT

Client: <u>E66</u>					Bill To		Lab Use Only		TAT				EPA Program			
Project: <u>LUCKY WALK 31 Feb 24</u>					Attention:		Lab WO# <u>E204095</u>		Job Number <u>19034-0010</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: <u>Felipe Aragon GREG CARDROS</u>					Address:		Analysis and Method					<input checked="" type="checkbox"/>				
Address:					City, State, Zip											
City, State, Zip					Phone:										State	
Phone:					Email:										NM	
Email: <u>Faragon Tknight Gcrabtree Bhall Igarcia</u>															CO	
<u>Mflores KSANCHEZ</u>															UT	
Report due by:															AZ	
															TX	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	CO 910.1 Table	TDS	Remarks		
10:17	4-18-22	S	1	CS-37	1	X	X	X			X			500 ml poly cool 102 GLASS JARS		
10:21				CS-38	2											
10:24				CS-39	3											
10:28				CS-40	4											
10:28				CS-41	5											
10:39				CS-42	6											
10:42				CS-43	7											
10:44				CS-44	8											
10:47				CS-45	9											
10:53				CS-46	10											
Additional Instructions:																
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.											Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only								
<u>[Signature]</u>		4-18-22	15:37	<u>[Signature]</u>		4/18/22	15:37	Received on ice: <input checked="" type="checkbox"/> Y / N								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1								
<u>[Signature]</u>		4/19/22	14:30	<u>[Signature]</u>		4/20/22	14:30	T2								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T3								
								AVG Temp °C <u>4</u>								
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other											Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																

2 DAY TAT

Client: <u>EO6</u> Project: <u>Lucky Wolf 31 FEB 24</u> Project Manager: <u>Felipe Aragon GREG CRABTREE</u> Address: _____ City, State, Zip _____ Phone: _____ Email: <u>Faragon-Tknight Gcrabtree Bhall Igarcia</u> <u>Mflores KSANCHEZ</u> Report due by: _____					Bill To Attention: _____ Address: _____ City, State, Zip _____ Phone: _____ Email: _____					Lab Use Only Lab WO# <u>E204095</u> Job Number <u>19034-0010</u> Analysis and Method DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 CO 910.1 Table TDS					TAT 1D 2D 3D Standard (X) (X) (X) (X)				EPA Program CWA SDWA RCRA State NM CO UT AZ TX X	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	CO 910.1 Table	TDS	Remarks						
10:56	4-18-22	S	1	CS-47	11	X	X	X			X			500 ml poly cool 700 GLASS JARS						
10:59				CS-48	12															
11:01				CS-49	13															
11:04				CS-50	14															
11:18				CS-51	15															
11:15				CS-52	16															
12:38				CS-53	17															
12:46				CS-54	18															
12:43				CS-55	19															
12:47				CS-56	20															

Additional Instructions:

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>4-18-22</u>	Time <u>15:37</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>4/18/22</u>	Time <u>15:37</u>	Lab Use Only Received on ice: <u>(Y) N</u> T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>4/19/22</u>	Time <u>14:30</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>4/20/22</u>	Time <u>10:30</u>	
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>4/19/22</u>	Time <u>14:30</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>4/20/22</u>	Time <u>10:30</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

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

Envirotech Analytical Laboratory

Printed: 4/21/2022 2:37:08PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	EOG Resources	Date Received:	04/20/22 06:30	Work Order ID:	E204095
Phone:	(575) 748-4217	Date Logged In:	04/19/22 15:15	Logged In By:	Caitlin Christian
Email:		Due Date:	04/21/22 17:00 (1 day TAT)		

Chain of Custody (COC)

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

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

Carrier: CourierSample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client InstructionComments/Resolution

Project has been separated into 2 reports due to amount of samples. Workorders are as follows:
E204095 COC page 1&2 of 5, E204096 COC pages 3,4 & 5 of 5.

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

Date



envirotech Inc.

Report to:
Greg Crabtree



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

EOG Resources

Project Name: Lucky Wolf 31 Federal #2H

Work Order: E205149

Job Number: 19034-0005

Received: 5/27/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/3/22

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

Date Reported: 6/3/22

Greg Crabtree
104 South 4th Street
Artesia, NM 88210



Project Name: Lucky Wolf 31 Federal #2H
Workorder: E205149
Date Received: 5/27/2022 12:57:00PM

Greg Crabtree,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/27/2022 12:57:00PM, under the Project Name: Lucky Wolf 31 Federal #2H.

The analytical test results summarized in this report with the Project Name: Lucky Wolf 31 Federal #2H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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Sample Summary

EOG Resources	Project Name:	Lucky Wolf 31 Federal #2H	Reported: 06/03/22 15:43
104 South 4th Street	Project Number:	19034-0005	
Artesia NM, 88210	Project Manager:	Greg Crabtree	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS-79	E205149-01A	Soil	05/26/22	05/27/22	Glass Jar, 4 oz.
	E205149-01B	Soil	05/26/22	05/27/22	Glass Jar, 4 oz.



Sample Data

EOG Resources 104 South 4th Street Artesia NM, 88210	Project Name: Lucky Wolf 31 Federal #2H Project Number: 19034-0005 Project Manager: Greg Crabtree	Reported: 6/3/2022 3:43:40PM
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CS-79

E205149-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2223031	
Benzene	ND	0.0313	1	06/02/22	06/02/22	
Ethylbenzene	ND	0.0313	1	06/02/22	06/02/22	
Toluene	ND	0.0313	1	06/02/22	06/02/22	
o-Xylene	ND	0.0313	1	06/02/22	06/02/22	
p,m-Xylene	ND	0.0625	1	06/02/22	06/02/22	
Total Xylenes	ND	0.0313	1	06/02/22	06/02/22	
Surrogate: 4-Bromochlorobenzene-PID	84.0 %	70-130		06/02/22	06/02/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2223031	
Gasoline Range Organics (C6-C10)	ND	25.0	1	06/02/22	06/02/22	
Surrogate: 1-Chloro-4-fluorobenzene-FID	95.5 %	70-130		06/02/22	06/02/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2223044	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/02/22	06/03/22	
Oil Range Organics (C28-C36)	ND	50.0	1	06/02/22	06/03/22	
Surrogate: n-Nonane	106 %	50-200		06/02/22	06/03/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL		Batch: 2223035	
Chloride	591	40.0	2	06/02/22	06/03/22	



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Federal #2H	Reported:
104 South 4th Street	Project Number:	19034-0005	
Artesia NM, 88210	Project Manager:	Greg Crabtree	6/3/2022 3:43:40PM

Volatile Organics by EPA 8021B

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2223031-BLK1)

Prepared: 06/02/22 Analyzed: 06/03/22

Benzene	ND	0.0313							
Ethylbenzene	ND	0.0313							
Toluene	ND	0.0313							
o-Xylene	ND	0.0313							
p,m-Xylene	ND	0.0625							
Total Xylenes	ND	0.0313							
Surrogate: 4-Bromochlorobenzene-PID	9.41		10.0		94.1	70-130			

LCS (2223031-BS1)

Prepared: 06/02/22 Analyzed: 06/03/22

Benzene	6.24	0.0313	6.25		99.8	70-130			
Ethylbenzene	6.59	0.0313	6.25		105	70-130			
Toluene	6.89	0.0313	6.25		110	70-130			
o-Xylene	6.54	0.0313	6.25		105	70-130			
p,m-Xylene	13.4	0.0625	12.5		107	70-130			
Total Xylenes	19.9	0.0313	18.8		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	9.44		10.0		94.4	70-130			

Matrix Spike (2223031-MS1)

Source: E205149-01

Prepared: 06/02/22 Analyzed: 06/03/22

Benzene	6.55	0.0313	6.25	ND	105	54-133			
Ethylbenzene	6.86	0.0313	6.25	ND	110	61-133			
Toluene	7.19	0.0313	6.25	ND	115	61-130			
o-Xylene	6.81	0.0313	6.25	ND	109	63-131			
p,m-Xylene	14.0	0.0625	12.5	ND	112	63-131			
Total Xylenes	20.8	0.0313	18.8	ND	111	63-131			
Surrogate: 4-Bromochlorobenzene-PID	9.09		10.0		90.9	70-130			

Matrix Spike Dup (2223031-MSD1)

Source: E205149-01

Prepared: 06/02/22 Analyzed: 06/03/22

Benzene	6.77	0.0313	6.25	ND	108	54-133	3.39	20	
Ethylbenzene	7.12	0.0313	6.25	ND	114	61-133	3.78	20	
Toluene	7.46	0.0313	6.25	ND	119	61-130	3.59	20	
o-Xylene	7.04	0.0313	6.25	ND	113	63-131	3.38	20	
p,m-Xylene	14.5	0.0625	12.5	ND	116	63-131	3.45	20	
Total Xylenes	21.5	0.0313	18.8	ND	115	63-131	3.43	20	
Surrogate: 4-Bromochlorobenzene-PID	9.13		10.0		91.3	70-130			



QC Summary Data

EOG Resources 104 South 4th Street Artesia NM, 88210	Project Name: Project Number: Project Manager:	Lucky Wolf 31 Federal #2H 19034-0005 Greg Crabtree	Reported: 6/3/2022 3:43:40PM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2223031-BLK1)

Prepared: 06/02/22 Analyzed: 06/03/22

Gasoline Range Organics (C6-C10)	ND	25.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.96		10.0		89.6	70-130			

LCS (2223031-BS2)

Prepared: 06/02/22 Analyzed: 06/03/22

Gasoline Range Organics (C6-C10)	62.2	25.0	62.5		99.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	9.56		10.0		95.6	70-130			

Matrix Spike (2223031-MS2)

Source: E205149-01

Prepared: 06/02/22 Analyzed: 06/03/22

Gasoline Range Organics (C6-C10)	60.3	25.0	62.5	ND	96.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.93		10.0		89.3	70-130			

Matrix Spike Dup (2223031-MSD2)

Source: E205149-01

Prepared: 06/02/22 Analyzed: 06/03/22

Gasoline Range Organics (C6-C10)	59.7	25.0	62.5	ND	95.6	70-130	0.890	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	8.94		10.0		89.4	70-130			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Federal #2H	Reported:
104 South 4th Street	Project Number:	19034-0005	
Artesia NM, 88210	Project Manager:	Greg Crabtree	6/3/2022 3:43:40PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2223044-BLK1)

Prepared: 06/02/22 Analyzed: 06/03/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	51.7		50.0		103	50-200			

LCS (2223044-BS1)

Prepared: 06/02/22 Analyzed: 06/03/22

Diesel Range Organics (C10-C28)	503	25.0	500		101	38-132			
Surrogate: <i>n</i> -Nonane	44.9		50.0		89.7	50-200			

Matrix Spike (2223044-MS1)

Source: E205148-05

Prepared: 06/02/22 Analyzed: 06/03/22

Diesel Range Organics (C10-C28)	528	25.0	500	ND	106	38-132			
Surrogate: <i>n</i> -Nonane	51.7		50.0		103	50-200			

Matrix Spike Dup (2223044-MSD1)

Source: E205148-05

Prepared: 06/02/22 Analyzed: 06/03/22

Diesel Range Organics (C10-C28)	518	25.0	500	ND	104	38-132	1.90	20	
Surrogate: <i>n</i> -Nonane	52.0		50.0		104	50-200			



QC Summary Data

EOG Resources	Project Name:	Lucky Wolf 31 Federal #2H	Reported:
104 South 4th Street	Project Number:	19034-0005	
Artesia NM, 88210	Project Manager:	Greg Crabtree	6/3/2022 3:43:40PM

Anions by EPA 300.0/9056A

Analyst: KL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2223035-BLK1)

Prepared: 06/02/22 Analyzed: 06/03/22

Chloride	ND	20.0
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LCS (2223035-BS1)

Prepared: 06/02/22 Analyzed: 06/03/22

Chloride	253	20.0	250	101	90-110
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Matrix Spike (2223035-MS1)

Source: E205149-01

Prepared: 06/02/22 Analyzed: 06/03/22

Chloride	881	40.0	250	591	116	80-120
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Matrix Spike Dup (2223035-MSD1)

Source: E205149-01

Prepared: 06/02/22 Analyzed: 06/03/22

Chloride	896	40.0	250	591	122	80-120	1.71	20	M2
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QC Summary Report Comment:

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



Definitions and Notes

EOG Resources	Project Name:	Lucky Wolf 31 Federal #2H	
104 South 4th Street	Project Number:	19034-0005	Reported:
Artesia NM, 88210	Project Manager:	Greg Crabtree	06/03/22 15:43

M2 Matrix spike recovery was outside quality control limits. The associated LCS spike recovery was acceptable.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

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

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



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

Envirotech Analytical Laboratory

Printed: 5/27/2022 1:14:25PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	EOG Resources	Date Received:	05/27/22 12:57	Work Order ID:	E205149
Phone:	(575) 748-4217	Date Logged In:	05/27/22 13:10	Logged In By:	Caitlin Christian
Email:		Due Date:	06/06/22 17:00 (5 day TAT)		

Chain of Custody (COC)

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

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

Carrier: Isaac GarciaComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

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 134519

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 134519
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	8/16/2022