

EOG Resources, Inc. Artesia Division Office 104 S. 4<sup>th</sup> Street Artesia, N. M. 88210

March 29, 2021

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

Re:

Goat Roper LP #1 30-015-23059 P-30-17S-26E Eddy County, NM

Incident #NRM2035039644

EOG Resources, Inc. is submitting the enclosed remediation work plan for the above referenced site. The plan is being submitted in reference to the C-141 report submitted on December 3, 2020.

If you have any questions, feel free to call me at (575) 748-1471.

Respectfully,

Chase Settle

Rep Safety & Environmental Sr

EOG Resources, Inc.

Chase Settle

Received by OCD: 3/31/2021 3:53:06 PM



**Goat Roper LP #1** 

**Remediation Work Plan** 

30-015-23059

P-30-17S-26E

**Eddy County, NM** 

March 29, 2021

NRM2035039644



March 29, 2021

Released to Imaging: 7/7/2021 11:22:00 AM

l.	Table of Contents  Location	1
II.	Background	1
III.	Surface and Ground Water	1
IV.	NMOCD Assessment Criteria	1
V.	Soils	2
VI.	Scope of Work	.2

### Tables:

Table 1: Soil Analytical Data

### Figures:

Figure 1: Site Map with Sample Points

### **Photos**

### Appendices:

Appendix A: Soil Sample Laboratory Data

Appendix B: NMOSE Groundwater Data

Appendix C: NRCS Soil Data

Appendix D: FEMA Flood Map

Appendix E: Form C-141

Goat Roper LP #1 Remediation Work Plan #NRM2035039644



March 29, 2021

Released to Imaging: 7/7/2021 11:22:00 AM

### 1. Location

From the intersection of Fairgrounds Road and 13th Street, head west on Fairgrounds Road for 0.5 mile, then turn north on the lease road to the location.

### II. Background

During a site inspection, EOG personnel discovered a release from the condensate tank. EOG drained and removed the tank once discovered, then began excavating the impacted soils stockpiling the excavated soil within a lined, bermed holding cell. Initial sampling was conducted on January 7, 2021, with a notification sent to NMOCD on December 31, 2020. After removing the impacted soil to a depth of 25 feet below grade surface (bgs), EOG submitted a sampling notification to NMOCD on January 11, 2021, for sampling activities that occurred on January 13, 2021. Confirmation samples, vertical and horizontal, were collected at this event to verify that all impacted soil had been excavated. Approximately 200 cubic yards of impacted soil was stockpiled in the lined and bermed treatment cell on location.

### III. Surface and Ground Water

Area surface geology is Cenozoic Quaternary. Based on information from the New Mexico Office of the State Engineer (NMOSE) regarding this location (Section 30, T17S-R26E), the closest wells within a half mile of the release site with data from the last 20 years have groundwater depths of 130 to 200 feet bgs. Watercourses in the area are dry except for infrequent flows in response to major precipitation events, with the nearest body of significant surface water being the Pecos River at 5.25 miles away. The site is not within a High or Critical Karst area, nor within a 100 year flood plain according to FEMA.

### IV. NMOCD Assessment Criteria

The site assessment criteria are as follows:

Depth to ground water > 100' Wellhead Protection Area > 1000' Distance to surface water body > 1000'

Based on the assessment criteria, the NMOCD established RRALs for this site are:

Benzene 10 mg/kg **BTEX** 50 mg/kg 2,500 mg/kg TPH GRO + DRO 1,000 mg/kg Chlorides 20,000 mg/kg

### V. Soils

USDA Natural Resources Conservation Service (NRCS) classifies soil in the area as Reagan loam, with 0-1% slope.

Goat Roper LP #1 Remediation Work Plan #NRM2035039644



March 29, 2021

Released to Imaging: 7/7/2021 11:22:00 AM

### VI. Scope of Work

Stockpiled soils, approximately 200 cubic yards, have already begun bioremediation procedures with a microbial product (Liquid Remediact). The bioremediation product was administered to the stockpiled material on February 1, 2021. This consisted of mixing 20 gallons of the product with 200 gallons of water and applying the mixture to the soil within the lined and bermed treatment cell. The impacted material is in approximately an 8 inch lift. In order to create greater contact with the mixture, the soil was turned immediately following application. Based on the treatment date, EOG performed the first confirmation sampling of the bioremediated soil on March 15, 2021. 5 point composite samples were collected with 1 sample representative of 25 cubic yards of soil. The treated soil has yet to reach guidelines for NMAC 19.15.29.13, therefore another treatment with Liquid Remediact is scheduled to occur in April 2021, following the same protocols as previously used. The next confirmation sampling will occur approximately 60 days following treatment. Once all samples confirm that soils are below the requirements of NMAC 19.15.29.13, the excavation will be backfilled with the remediated soil.

At the completion of the remediation project, the area will not be reseeded since the battery is still active. When remediation work is completed, a C-141 Closure Report will be submitted to the NMOCD requesting closure of the site.



# **Table 1**Soil Analytical Data

Goat Roper LP #1 Remediation Work Plan #NRM2035039644



March 29, 2021

Released to Imaging: 7/7/2021 11:22:00 AM

Soil Analytical Data

Sample ID	Depth (ft. bgs)	Date	Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	TPH (GRO)	TPH (DRO)	TPH EXT DRO	Total TPH	Chlorides
V1-20'	20	1/7/21	ND	ND	ND	2.6	2.6	290	2600	ND	2890	ND
V1-25'	25	1/7/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
V1C-25'	25	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HS 0-13'	0-13	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HS 13-25'	13-25	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HN 0-13'	0-13	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	170
HN 13-25'	13-25	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HE 0-13'	0-13	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	160
HE 13-25'	13-25	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
HW 0-13'	0-13	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	95
HW 13-25'	13-25	1/13/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ور الاستان		i i ni i i i i i i i i i i i i i i i i			Confirmation F	Results						
C1	<1	3/15/21	ND	ND	ND	ND	ND	120	1200	ND	1320	63
C2	<1	3/15/21	ND	ND	ND	ND	ND	ND	300	ND	300	100
C3	<1	3/15/21	ND	ND	ND	ND	ND	5.7	110	ND	115.7	150
C4	<1	3/15/21	ND	ND	ND	ND	ND	37	850	ND	887	62
C5	<1	3/15/21	ND	ND	ND	ND	ND	89	660	ND	749	66
C6	<1	3/15/21	ND	ND	ND	ND	ND	31	420	ND	451	94
C7	<1	3/15/21	ND	ND	ND	ND	ND	32	1200	ND	1232	66
C8	<1	3/15/21	ND	ND	ND	ND	ND	ND	300	ND	300	84



# Figure 1 Site Map with Sample Points

**@**eog resources

Received by OCD: 3/31/2021 3:53:06 PM

Goat Roper LP #1 Remediation Work Plan #NRM2035039644



March 29, 2021





**O**eog resources

March 29, 2021

Released to Imaging: 7/7/2021 11:22:00 AM





energy opportunity growth





# **Appendix A**Soil Sample Laboratory Data



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

OrderNo.: 2101342

January 12, 2021

Chase Settle
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:

FAX:

RE: Goat Roper LP 1

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/9/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Received by OCD: 3/31/2021 3:53:06 PM

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report** 

Lab Order 2101342

Date Reported: 1/12/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: V1-20'

 Project:
 Goat Roper LP 1
 Collection Date: 1/7/2021 9:43:00 AM

 Lab ID:
 2101342-001
 Matrix: MEOH (SOIL)
 Received Date: 1/9/2021 8:40:00 AM

Result DF Date Analyzed Batch Analyses RL Qual Units Analyst: VP **EPA METHOD 300.0: ANIONS** 1/10/2021 11:44:01 AM 57441 Chloride ND 60 mg/Kg 20 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: JME 1/11/2021 9:23:46 AM 2600 90 Diesel Range Organics (DRO) mg/Kg 10 Motor Oil Range Organics (MRO) ND 450 D 1/11/2021 9:23:46 AM 57445 mg/Kg 10 S 1/11/2021 9:23:46 AM 57445 Surr: DNOP 0 30.4-154 %Rec 10 Analyst: NSB **EPA METHOD 8015D: GASOLINE RANGE** Gasoline Range Organics (GRO) 290 mg/Kg 5 1/9/2021 12:05:08 PM G74508 17 690 5 1/9/2021 12:05:08 PM G74508 75.3-105 S %Rec Surr: BFB Analyst: NSB **EPA METHOD 8021B: VOLATILES** Benzene ND 0.084 mg/Kg 5 1/9/2021 12:05:08 PM B74508 5 1/9/2021 12:05:08 PM B74508 Toluene ND 0.17 mg/Kg ND 0.17 5 1/9/2021 12:05:08 PM B74508 Ethylbenzene mg/Kg 2.6 B74508 0.33 5 1/9/2021 12:05:08 PM Xylenes, Total mg/Kg Surr: 4-Bromofluorobenzene 117 80-120 %Rec 5 1/9/2021 12:05:08 PM B74508

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

### Qualifiers:

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

- 3 Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 6

Analytical Report

Date Reported: 1/12/2021

Lab Order 2101342

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: V1-25'

 Project:
 Goat Roper LP 1
 Collection Date: 1/7/2021 11:51:00 AM

 Lab ID:
 2101342-002
 Matrix: MEOH (SOIL)
 Received Date: 1/9/2021 8:40:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	ND	60		mg/Kg	20	1/10/2021 11:56:26 AM	57441
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS					Analyst	JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/11/2021 9:00:07 AM	57445
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	1/11/2021 9:00:07 AM	57445
Surr: DNOP	90.4	30.4-154		%Rec	1	1/11/2021 9:00:07 AM	57445
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	ND	2.6		mg/Kg	1	1/9/2021 1:39:43 PM	G74508
Surr: BFB	108	75.3-105	S	%Rec	1	1/9/2021 1:39:43 PM	G74508
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.013		mg/Kg	1	1/9/2021 1:39:43 PM	B74508
Toluene	ND	0.026		mg/Kg	1	1/9/2021 1:39:43 PM	B74508
Ethylbenzene	ND	0.026		mg/Kg	1	1/9/2021 1:39:43 PM	B74508
Xylenes, Total	ND	0.052		mg/Kg	1	1/9/2021 1:39:43 PM	B74508
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	1/9/2021 1:39:43 PM	B74508

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 6

# Received by OCD: 3/31/2021 3:53:06 PM

# **QC SUMMARY REPORT**

# Hall Environmental Analysis Laboratory, Inc.

WO#:

2101342 12-Jan-21

Client:

Project:

Goat Roper LP 1

Sample ID: MB-57441

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS

Batch ID: 57441

RunNo: 74509

TestCode: EPA Method 300.0: Anions

SeqNo: 2630317

Units: mg/Kg

Prep Date: 1/10/2021 Analyte

Analysis Date: 1/10/2021 SPK value SPK Ref Val PQL

%REC LowLimit

HighLimit

**RPDLimit** 

%RPD

Qual

Chloride

ND 1.5

Sample ID: LCS-57441 Client ID: LCSS

SampType: LCS Batch ID: 57441

RunNo: 74509

Prep Date: 1/10/2021

Analysis Date: 1/10/2021

SeqNo: 2630318 %REC LowLimit Units: mg/Kg

**RPDLimit** 

Qual

Analyte

SPK value SPK Ref Val 15.00

95.0

HighLimit

%RPD

Chloride

### Qualifiers:

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

- Analyte detected in the associated Method Blank
- Value above quantitation range Ε
- Analyte detected below quantitation limits
- Sample pH Not In Range

Reporting Limit

Page 3 of 6

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2101342

12-Jan-21

Client:

**EOG** 

Project:

Goat Roper LP 1

Sample ID: MB-57445	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID: PBS	Batch	n ID: 574	145	F	RunNo: 74	4518				
Prep Date: 1/11/2021	Analysis D	ate: 1 <i>1</i> °	11/2021	S	SeqNo: 2	630575	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.8		10.00		87.8	30.4	154			

Sample ID: LCS-57445	Samp	ype: LC	s	Tes	tCode: El	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID: LCSS	Batc	n ID: <b>57</b> 4	445	F	RunNo: 74	<b>4518</b>				
Prep Date: 1/11/2021	Analysis [	)ate: 1/	11/2021	8	SegNo: 20	630576	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	86.7	68.9	141			
Surr: DNOP	4.4		5.000		88.0	30.4	154			

### Qualifiers:

Received by OCD: 3/31/2021 3:53:06 PM

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

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits Sample pH Not In Range Reporting Limit

# Received by OCD: 3/31/2021 3:53:06 PM

# QC SUMMARY REPORT

# Hall Environmental Analysis Laboratory, Inc.

WO#: 2101342

12-Jan-21

Client:

**EOG** 

Project:

Goat Roper LP 1

Sample ID: mb	Samp?	Гуре: М	3LK	Tes	Code: EF	PA Method	8015D: Gaso	line Rang	е	
Client ID: PBS	Batc	h ID: G7	4508	F	tunNo: 74	4508				
Prep Date:	Analysis [	Date: 1/	9/2021	8	eqNo: 26	630293	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1100		1000		113	75.3	105			S
Sample ID: 2.5ug ug Ics	Samp <sup>-</sup>	ype: LC	s	Tes	Code: EF	PA Method	8015D: Gaso	line Rang	e	
Client ID: LCSS	Batc	h ID: G7	4508	F	tunNo: 74	4508				
								_		

0"	ent ib. Ecos	Duto	110. 01	7000	•							
Pre	ep Date:	Analysis E	ate: 1/	9/2021	5	SeqNo: 2	630294	Units: mg/K	(g			
An	alyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gas	oline Range Organics (GRO)	26	5.0	25.00	0	104	72.5	106				
S	urr: BFB	1100		1000		115	75.3	105			S	

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

QL Practical Quanitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

L Reporting Limit

Page 5 of 6

# Received by OCD: 3/31/2021 3:53:06 PM

# QC SUMMARY REPORT

# Hall Environmental Analysis Laboratory, Inc.

WO#:

2101342 12-Jan-21

Client:

**EOG** 

Project:

Goat Roper LP 1

Sample ID: mb	SampT	ype: ME	3LK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	1D: <b>B7</b>	4508	F	RunNo: 74	4508				
Prep Date:	Analysis D	ate: 1/	9/2021	9	SeqNo: 2	630309	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID: 100ng btex Ics	Samp	Гуре: LC	S	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batc	h ID: <b>B7</b>	4508	F	RunNo: 7	4508				
Prep Date:	Analysis Date: 1/9/2021		5	SeqNo: 2	630310	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.025	1.000	0	98.8	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.0			0	101	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

### Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits Sample pH Not In Range

Reporting Limit

Page 6 of 6



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

# Sample Log-In Check List

Client Name: EOG	Work Order Num	ber: 2101342		RcptNo	: 1
Received By: Emily Mocho	1/9/2021 8:40:00 A	·Μ			
Completed By: Emily Mocho	1/9/2021 8:57:26 A	М			
Reviewed By:					
Chain of Custody					
1. Is Chain of Custody complete?		Yes 🗹	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
<u>Log In</u>					
3. Was an attempt made to cool the samples	37	Yes 🔽	No 🗌	NA 🗆	
4. Were all samples received at a temperature	re of >0° C to 6.0°C	Yes 🔽	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
6. Sufficient sample volume for indicated test	(s)?	Yes 🔽	No 🗌		
7. Are samples (except VOA and ONG) prope	erly preserved?	Yes 🔽	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. Received at least 1 vial with headspace <1		Yes 🗌	No 🗆	NA 🗹	/
10. Were any sample containers received broken	ken?	Yes 🗌	No 🗹	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗆	bottles checked for pH;	>12 unless noted)
12. Are matrices correctly identified on Chain of	f Custody?	Yes 🗹	No 🗆	Adjusted?	,
13. Is it clear what analyses were requested?		Yes 🗹	No 🗆		-
14. Were all holding times able to be met?  (If no, notify customer for authorization.)		Yes 🔽	No 🗆	Checked by:	Em 1/9/21
Special Handling (if applicable)				e de la companya della companya della companya de la companya della companya dell	
15. Was client notified of all discrepancies with	this order?	Yes 🗀	No 🗆	NA 🗹	
Person Notified:	Date:	gradie verse in medicial destruction, large conservational	a viete attachentaj regi, trakjet pravagi		
By Whom:	Via:	eMail F	hone 🔲 Fax	☐ In Person	
Regarding:	akan kan kan kan penganan menangan pengan kan ang pengangan dalah pengan pengan pengan pengangan pengangan pen Pengangan	на наменя при при на при н			
Client Instructions: 16. Additional remarks:	ing memendah dalah dengan dan dibanggan perlampan pengangan pengangan dan dan pengangan pengangan pengangan pe	an de Carlo Ca	n och († 1880) men sta Commune i statuminen stär dännag stäng geligida och stäret.	و مستون المارة المستورة في المستورة المستورة المستورة المستورة المستورة المستورة المستورة المستورة المستورة الم	:
17. Cooler Information Cooler No Temp °C Condition to 1 0.8 Good	Seal Intact   Seal No	Seal Date	Signed By	•	

Received by OCD: 3/31/2021 3:53:06 PM

Chair	Chain-of-Custody Record	Turn-Around Time: 24 Nevr	Time: ハタブ	lour			*				1	1	; (	
Client: $10C$	Kesources, Inc.	Deta Neded	ed Monday	ant y hour					ב על על	i v	HALL ENVIKONMENTAL Anal Yets I Abodatody			•
	- Printed data-	Project Name:						led w		ן הקרול הקרול	www.hallenvironmental.com	5	2	
Mailing Address:	On F.1.	Goat Koper	Per 16 #1		7	901 Hg	wkins	ų W	Albug	ueran	4901 Hawkins NE - Albuquerque, NM 87109	60		
		Project #:				Tel. 505-345-3975	-345	3975	Fax	505	505-345-4107	<u>:</u>		
Phone #:						:		A	Analysis Request	Req	uest		200 mm, mm	
email or Fax#:	***************************************	Project Manager:	jer.			10			۲O		(Jr			
QA/QC Package:		,					SM		S '*(		pseı			
□ Standard	☐ Level 4 (Full Validation)	These	JENK.				IIS0		Od		۸۷۲			
	☐ Az Compliance ☐ Other	Sampler:	1,2 5, t	<i>پا/د</i> ⊡ No					'ZON '	(A	Presel			
□ EDD (Type)		# of Coolers:							103		) w.			
		Cooler Temp(including cF):		(O.) 30=20-03							olilo		······	
Data Timo	Matrix Cample Name	Container	Preservative	HEAL No.	X3T	08:H9 9 180	M) 80: d sHA	ARD.	Seo (∧	S) 07S	otal Co		······································	
9.43	1		- ypc	7 [0] Z	<u> </u>				<del></del> }		L		+	
4	1	1 / 2 2	1 2	2		<u></u>							$\dashv$	_
11:31 N	1 11-25	11	,,	202	X		-			$\Box$				
	TANAMATA I													
	TOTAL TOTAL PROPERTY OF THE PR													
	e e e e e e e e e e e e e e e e e e e												<del></del>	
													<del></del>	
	THE THE THE PROPERTY OF THE													
	The common measurable and the control of the contro													
Time:	Relinquished by:	Received by:	Via: ∙	Date Time	Remarks:	ķ:								
21 9:00,	\	MAMMULES	3	9				(						
Time:	•	Received by:	Viais	Date Time		-	 در	<u></u>						W
17514 1900 (	(elymn)	200	(OULTAN	<b>                                  </b>		,	`							
a venaced is	of the state of th	104	enotitod laboratoria	13	ihili	4.0.00	1	1 400	31 the ed		And her than annul.	iodai jung	١,	

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

\$\text{\text{CM}} \text{1} \text{2} \text{2} \text{2} \text{2} \text{2} \text{2} \text{3} \text{4} \text{4} \text{4} \text{5} \text{4} \text{2} \text{4} \text{4} \text{5} \text{4} \text{5} \text{4} \text{5} \text{4} \



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

OrderNo.: 2101593

January 22, 2021

Chase Settle
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX

RE: Goat Roper LP 1

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 9 sample(s) on 1/15/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Received by OCD: 3/31/2021 3:53:06 PM

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** 

Client Sample ID: VIC-25'

Project: Lab ID: Goat Roper LP 1 2101593-001

Matrix: SOIL

Collection Date: 1/13/2021 1:00:00 PM

Received Date: 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	VP
Chloride	ND	60	mg/Kg	20	1/18/2021 10:15:53 PM	57587
EPA METHOD 8015D MOD: GASOLINE RANG	E				Analyst:	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/17/2021 4:57:22 AM	57568
Surr: BFB	105	70-130	%Rec	1	1/17/2021 4:57:22 AM	57568
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.0	mg/Kg	1	1/19/2021 2:51:20 PM	57593
Motor Oil Range Organics (MRO)	ND	45	mg/Kg	1	1/19/2021 2:51:20 PM	57593
Surr: DNOP	92.9	30.4-154	%Rec	1	1/19/2021 2:51:20 PM	57593
<b>EPA METHOD 8260B: VOLATILES SHORT LIS</b>	T				Analyst:	DJF
Benzene	ND	0.024	mg/Kg	1	1/17/2021 4:57:22 AM	57568
Toluene	ND	0.049	mg/Kg	1	1/17/2021 4:57:22 AM	57568
Ethylbenzene	ND	0.049	mg/Kg	1	1/17/2021 4:57:22 AM	57568
Xylenes, Total	ND	0.097	mg/Kg	1	1/17/2021 4:57:22 AM	57568
Surr: 1,2-Dichloroethane-d4	99.3	70-130	%Rec	1	1/17/2021 4:57:22 AM	57568
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	1/17/2021 4:57:22 AM	57568
Surr: Dibromofluoromethane	109	70-130	%Rec	1	1/17/2021 4:57:22 AM	57568
Surr: Toluene-d8	98.9	70-130	%Rec	1	1/17/2021 4:57:22 AM	57568

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 15

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: HS 0-13'

 Project:
 Goat Roper LP 1
 Collection Date: 1/13/2021 1:05:00 PM

 Lab ID:
 2101593-002
 Matrix: SOIL
 Received Date: 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	59	mg/Kg	20	1/18/2021 10:28:18 PM	57587
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/17/2021 5:25:42 AM	57568
Surr: BFB	104	70-130	%Rec	1	1/17/2021 5:25:42 AM	57568
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/19/2021 4:02:16 PM	57593
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/19/2021 4:02:16 PM	57593
Surr: DNOP	106	30.4-154	%Rec	1	1/19/2021 4:02:16 PM	57593
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	DJF
Benzene	ND	0.025	mg/Kg	1	1/17/2021 5:25:42 AM	57568
Toluene	ND	0.049	mg/Kg	1	1/17/2021 5:25:42 AM	57568
Ethylbenzene	ND	0.049	mg/Kg	1	1/17/2021 5:25:42 AM	57568
Xylenes, Total	ND	0.098	mg/Kg	1	1/17/2021 5:25:42 AM	57568
Surr: 1,2-Dichloroethane-d4	95.4	70-130	%Rec	1	1/17/2021 5:25:42 AM	57568
Surr: 4-Bromofluorobenzene	95.7	70-130	%Rec	1	1/17/2021 5:25:42 AM	57568
Surr: Dibromofluoromethane	101	70-130	%Rec	1	1/17/2021 5:25:42 AM	57568
Surr: Toluene-d8	102	70-130	%Rec	1	1/17/2021 5:25:42 AM	57568

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 15

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** 

Project:

Goat Roper LP 1

Lab ID: 2101593-003 Client Sample ID: HS 13-25'

Collection Date: 1/13/2021 1:03:00 PM Received Date: 1/15/2021 7:36:00 AM

Result **RL Qual Units DF** Date Analyzed Batch Analyses Analyst: VP **EPA METHOD 300.0: ANIONS** 1/18/2021 10:40:42 PM 57587 ND 60 mg/Kg Chloride **EPA METHOD 8015D MOD: GASOLINE RANGE** Analyst: DJF Gasoline Range Organics (GRO) ND 4.8 mg/Kg 1/17/2021 5:54:07 AM 57568 1/17/2021 5:54:07 AM 57568 Surr: BFB 108 70-130 %Rec 1 **EPA METHOD 8015M/D: DIESEL RANGE ORGANICS** Analyst: BRM 1/19/2021 4:25:49 PM 57593 Diesel Range Organics (DRO) ND mg/Kg 8.8 1 1/19/2021 4:25:49 PM 57593 Motor Oil Range Organics (MRO) ND 44 mg/Kg 1 1/19/2021 4:25:49 PM 57593 Surr: DNOP 114 30.4-154 %Rec 1 **EPA METHOD 8260B: VOLATILES SHORT LIST** Analyst: DJF 0.024 1/17/2021 5:54:07 AM 57568 Benzene ND mg/Kg 1 57568 ND 0.048 mg/Kg 1 1/17/2021 5:54:07 AM Toluene ND 0.048 mg/Kg 1/17/2021 5:54:07 AM 57568 Ethylbenzene ND 0.096 mg/Kg 1 1/17/2021 5:54:07 AM 57568 Xylenes, Total 57568 Surr: 1,2-Dichloroethane-d4 96.5 70-130 %Rec 1 1/17/2021 5:54:07 AM Surr: 4-Bromofluorobenzene 100 70-130 %Rec 1 1/17/2021 5:54:07 AM 57568 Surr: Dibromofluoromethane 105 70-130 %Rec 1 1/17/2021 5:54:07 AM 57568 1/17/2021 5:54:07 AM 57568 Surr: Toluene-d8 99.7 70-130 %Rec 1

Matrix: SOIL

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

### Qualifiers:

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

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 3 of 15

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** 

Client Sample ID: HN 0-13'

Project: Goat Roper LP 1 Collection Date: 1/13/2021 1:10:00 PM

Lab ID: 2101593-004 Matrix: SOIL

Received Date: 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	VP
Chloride	170	60	mg/Kg	20	1/18/2021 10:53:07 PM	57587
EPA METHOD 8015D MOD: GASOLINE RANGE	Ē				Analyst:	DJF
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/17/2021 6:22:26 AM	57568
Surr: BFB	106	70-130	%Rec	1	1/17/2021 6:22:26 AM	57568
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst:	BRM
Diesel Range Organics (DRO)	ND	9.9	mg/Kg	1	1/19/2021 4:49:13 PM	57593
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/19/2021 4:49:13 PM	57593
Surr: DNOP	98.9	30.4-154	%Rec	1	1/19/2021 4:49:13 PM	57593
EPA METHOD 8260B: VOLATILES SHORT LIST	Т				Analyst:	DJF
Benzene	ND	0.025	mg/Kg	1	1/17/2021 6:22:26 AM	57568
Toluene	ND	0.049	mg/Kg	1	1/17/2021 6:22:26 AM	57568
Ethylbenzene	ND	0.049	mg/Kg	1	1/17/2021 6:22:26 AM	57568
Xylenes, Total	ND	0.098	mg/Kg	1	1/17/2021 6:22:26 AM	57568
Surr: 1,2-Dichloroethane-d4	101	70-130	%Rec	1	1/17/2021 6:22:26 AM	57568
Surr: 4-Bromofluorobenzene	98.0	70-130	%Rec	1	1/17/2021 6:22:26 AM	57568
Surr: Dibromofluoromethane	109	70-130	%Rec	1	1/17/2021 6:22:26 AM	57568
Surr: Toluene-d8	96.6	70-130	%Rec	1	1/17/2021 6:22:26 AM	57568

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

### Qualifiers:

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

- Analyte detected in the associated Method Blank
- Ε Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RLReporting Limit

Page 4 of 15

Analytical Report

Lab Order 2101593

Date Reported: 1/22/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

**Project:** Goat Roper LP 1

**Lab ID:** 2101593-005

Client Sample ID: HN 13-25'

**Collection Date:** 1/13/2021 1:08:00 PM

Received Date: 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst:	: VP
Chloride	ND	60	mg/Kg	20	1/19/2021 12:17:18 PM	57609
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/18/2021 8:22:28 PM	57572
Surr: BFB	92.4	70-130	%Rec	1	1/18/2021 8:22:28 PM	57572
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/19/2021 5:12:35 PM	57593
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/19/2021 5:12:35 PM	57593
Surr: DNOP	92.2	30.4-154	%Rec	1	1/19/2021 5:12:35 PM	57593
<b>EPA METHOD 8260B: VOLATILES SHORT LIST</b>	•				Analyst	JMR
Benzene	ND	0.024	mg/Kg	1	1/18/2021 8:22:28 PM	57572
Toluene	ND	0.049	mg/Kg	1	1/18/2021 8:22:28 PM	57572
Ethylbenzene	ND	0.049	mg/Kg	1	1/18/2021 8:22:28 PM	57572
Xylenes, Total	ND	0.097	mg/Kg	1	1/18/2021 8:22:28 PM	57572
Surr: 1,2-Dichloroethane-d4	92.5	70-130	%Rec	1	1/18/2021 8:22:28 PM	57572
Surr: 4-Bromofluorobenzene	105	70-130	%Rec	1	1/18/2021 8:22:28 PM	57572
Surr: Dibromofluoromethane	83.9	70-130	%Rec	1	1/18/2021 8:22:28 PM	57572
Surr: Toluene-d8	97.0	70-130	%Rec	1	1/18/2021 8:22:28 PM	57572

Matrix: SOIL

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 15

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: HE 0-13'

 Project:
 Goat Roper LP 1
 Collection Date: 1/13/2021 1:15:00 PM

 Lab ID:
 2101593-006
 Matrix: SOIL
 Received Date: 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	160	60	mg/Kg	20	1/19/2021 12:29:42 PM	57609
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Ko	1	1/18/2021 9:44:02 PM	57572
Surr: BFB	92.7	70-130	%Rec	1	1/18/2021 9:44:02 PM	57572
EPA METHOD 8015M/D: DIESEL RANGE ORGA	ANICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.6	mg/Kg	1	1/19/2021 5:35:52 PM	57593
Motor Oil Range Organics (MRO)	ND	48	mg/Kg	1	1/19/2021 5:35:52 PM	57593
Surr: DNOP	80.8	30.4-154	%Red	1	1/19/2021 5:35:52 PM	57593
EPA METHOD 8260B: VOLATILES SHORT LIST	Γ				Analyst	JMR
Benzene	ND	0.025	mg/Kg	1	1/18/2021 9:44:02 PM	57572
Toluene	ND	0.050	mg/Kg	1	1/18/2021 9:44:02 PM	57572
Ethylbenzene	ND	0.050	mg/Kg	1	1/18/2021 9:44:02 PM	57572
Xylenes, Total	ND	0.10	mg/Kg	1	1/18/2021 9:44:02 PM	57572
Surr: 1,2-Dichloroethane-d4	89.4	70-130	%Red	1	1/18/2021 9:44:02 PM	57572
Surr: 4-Bromofluorobenzene	108	70-130	%Red	1	1/18/2021 9:44:02 PM	57572
Surr: Dibromofluoromethane	78.7	70-130	%Red	1	1/18/2021 9:44:02 PM	57572
Surr: Toluene-d8	103	70-130	%Rec	1	1/18/2021 9:44:02 PM	57572

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Project:

Goat Roper LP 1

Lab ID: 2101593-007

Matrix: SOIL

Client Sample ID: HE 13-25'

**Collection Date:** 1/13/2021 1:13:00 PM **Received Date:** 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	60	mg/Kg	20	1/19/2021 12:42:07 PM	57609
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	1/18/2021 11:05:49 PM	57572
Surr: BFB	89.0	70-130	%Rec	1	1/18/2021 11:05:49 PM	57572
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	1/19/2021 5:59:06 PM	57593
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	1/19/2021 5:59:06 PM	57593
Surr: DNOP	114	30.4-154	%Rec	1	1/19/2021 5:59:06 PM	57593
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	JMR
Benzene	ND	0.025	mg/Kg	1	1/18/2021 11:05:49 PM	57572
Toluene	ND	0.050	mg/Kg	1	1/18/2021 11:05:49 PM	57572
Ethylbenzene	ND	0.050	mg/Kg	1	1/18/2021 11:05:49 PM	57572
Xylenes, Total	ND	0.099	mg/Kg	1	1/18/2021 11:05:49 PM	57572
Surr: 1,2-Dichloroethane-d4	88.1	70-130	%Rec	1	1/18/2021 11:05:49 PM	57572
Surr: 4-Bromofluorobenzene	103	70-130	%Rec	1	1/18/2021 11:05:49 PM	57572
Surr: Dibromofluoromethane	79.7	70-130	%Rec	1	1/18/2021 11:05:49 PM	57572
Surr: Toluene-d8	99.7	70-130	%Rec	1	1/18/2021 11:05:49 PM	57572

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 15

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

### Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** 

Goat Roper LP 1 Project:

Lab ID: 2101593-008 Client Sample ID: HW 0-13'

Collection Date: 1/13/2021 1:17:00 PM

Received Date: 1/15/2021 7:36:00 AM

Analyses	Result	RL	Qual U	nits	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	95	60	m	g/Kg	20	1/19/2021 12:54:31 PM	57609
EPA METHOD 8015D MOD: GASOLINE RANGE						Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.9	m	g/Kg	1	1/18/2021 11:33:01 PM	57572
Surr: BFB	91.0	70-130	%	Rec	1	1/18/2021 11:33:01 PM	57572
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS					Analyst	BRM
Diesel Range Organics (DRO)	ND	9.1	m	g/Kg	1	1/19/2021 6:22:18 PM	57593
Motor Oil Range Organics (MRO)	ND	45	m	g/Kg	1	1/19/2021 6:22:18 PM	57593
Surr: DNOP	124	30.4-154	%	Rec	1	1/19/2021 6:22:18 PM	57593
EPA METHOD 8260B: VOLATILES SHORT LIS	Т					Analyst	JMR
Benzene	ND	0.024	m	g/Kg	1	1/18/2021 11:33:01 PM	57572
Toluene	ND	0.049	m	g/Kg	1	1/18/2021 11:33:01 PM	57572
Ethylbenzene	ND	0.049	m	g/Kg	1	1/18/2021 11:33:01 PM	57572
Xylenes, Total	ND	0.098	m	g/Kg	1	1/18/2021 11:33:01 PM	57572
Surr: 1,2-Dichloroethane-d4	89.5	70-130	%	Rec	1	1/18/2021 11:33:01 PM	57572
Surr: 4-Bromofluorobenzene	107	70-130	%	Rec	1	1/18/2021 11:33:01 PM	57572
Surr: Dibromofluoromethane	81.2	70-130	%	Rec	1	1/18/2021 11:33:01 PM	57572
Surr: Toluene-d8	95.1	70-130	%	Rec	1	1/18/2021 11:33:01 PM	57572

Matrix: SOIL

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

Qualifiers:

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

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- P Sample pH Not In Range
- Reporting Limit

Page 8 of 15

**Analytical Report** 

Lab Order 2101593

Date Reported: 1/22/2021

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: HW 13-25'

Project:

Goat Roper LP 1

**Collection Date:** 1/13/2021 1:20:00 PM **Received Date:** 1/15/2021 7:36:00 AM

Lab ID: 2101593-009

Matrix: SOIL

Analyses	Result	RL	Qual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	: VP
Chloride	ND	61	mg/Kg	20	1/19/2021 1:06:56 PM	57609
EPA METHOD 8015D MOD: GASOLINE RANGE					Analyst	JMR
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	1/19/2021 12:00:09 AM	57572
Surr: BFB	87.1	70-130	%Rec	1	1/19/2021 12:00:09 AM	57572
EPA METHOD 8015M/D: DIESEL RANGE ORGA	NICS				Analyst	BRM
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	1/19/2021 8:37:30 PM	57592
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	1/19/2021 8:37:30 PM	57592
Surr: DNOP	126	30.4-154	%Rec	1	1/19/2021 8:37:30 PM	57592
EPA METHOD 8260B: VOLATILES SHORT LIST					Analyst	: JMR
Benzene	ND	0.025	mg/Kg	1	1/19/2021 12:00:09 AM	57572
Toluene	ND	0.049	mg/Kg	1	1/19/2021 12:00:09 AM	57572
Ethylbenzene	ND	0.049	mg/Kg	1	1/19/2021 12:00:09 AM	57572
Xylenes, Total	ND	0.098	mg/Kg	1	1/19/2021 12:00:09 AM	57572
Surr: 1,2-Dichloroethane-d4	88.7	70-130	%Rec	1	1/19/2021 12:00:09 AM	57572
Surr: 4-Bromofluorobenzene	99.3	70-130	%Rec	1	1/19/2021 12:00:09 AM	57572
Surr: Dibromofluoromethane	81.9	70-130	%Rec	1	1/19/2021 12:00:09 AM	57572
Surr: Toluene-d8	97.5	70-130	%Rec	1	1/19/2021 12:00:09 AM	57572

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

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 9 of 15

# **QC SUMMARY REPORT**

### Hall Environmental Analysis Laboratory, Inc.

WO#:

2101593

22-Jan-21

Client:

EOG

Project:

Goat Roper LP 1

Sample ID: MB-57587

SampType: MBLK

TestCode: EPA Method 300.0: Anions

TestCode: EPA Method 300.0: Anions

Client ID:

PBS

Prep Date: 1/18/2021

Batch ID: 57587 Analysis Date: 1/18/2021

RunNo: 74690 SeqNo: 2636028

Units: mg/Kg

**RPDLimit** 

Qual

Analyte Chloride

Result

SPK value SPK Ref Val %REC LowLimit

HighLimit

%RPD

%RPD

ND

Result

1.5 SampType: LCS

PQL

PQL

RunNo: 74690

Prep Date: 1/18/2021

Client ID: PBS

Client ID: LCSS

Sample ID: LCS-57587

Batch ID: 57587

SegNo: 2636029

Units: mg/Kg

Analyte

Analysis Date: 1/18/2021

15.00

%REC SPK value SPK Ref Val

HighLimit LowLimit 110 **RPDLimit** 

Qual

Chloride

Sample ID: MB-57609

Prep Date: 1/19/2021

SampType: MBLK

Batch ID: 57609

TestCode: EPA Method 300.0: Anions RunNo: 74716

Units: mg/Kg

Analyte

Analysis Date: 1/19/2021

SPK value SPK Ref Val %REC LowLimit

SeqNo: 2636793

HighLimit

%RPD **RPDLimit**  Qual

Chloride

ND

PQL 1.5

TestCode: EPA Method 300.0: Anions

Sample ID: LCS-57609 Client ID: LCSS

Prep Date: 1/19/2021

SampType: LCS Batch ID: 57609

RunNo: 74716

SeqNo: 2636794

Units: mg/Kg

**RPDLimit** 

Analyte Chloride

Analysis Date: 1/19/2021

SPK value SPK Ref Val %REC LowLimit

91.4

HighLimit

%RPD

Qual

1.5

15.00

# Qualifiers:

- Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded

% Recovery outside of range due to dilution or matrix

- Value exceeds Maximum Contaminant Level.
- Not Detected at the Reporting Limit Practical Quanitative Limit

- E Value above quantitation range Analyte detected below quantitation limits

Analyte detected in the associated Method Blank

Sample pH Not In Range

Page 10 of 15

Reporting Limit

Received by OCD: 3/31/2021 3:53:06 PM

# Received by OCD: 3/31/2021 3:53:06 PM

# QC SUMMARY REPORT

# Hall Environmental Analysis Laboratory, Inc.

WO#:

2101593

22-Jan-21

Client   Dic   MB-57593   SampType:   MB-LK   TesiCode: EPA   Method   Solition   Miles   mg/Kg	Client: EOG	Y D 1			
Pare	Project: Goat Ro	oper LP 1		·	
Prep Date: 1/18/2021	Sample ID: MB-57593	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Org	anics
Analyte	Client ID: PBS	Batch ID: 57593	RunNo: 74697		
Diesel Range Organics (DRO)   ND   10   10   10   10   10   10   10   1	Prep Date: 1/18/2021	Analysis Date: 1/19/2021	SeqNo: <b>2637248</b>	Units: mg/Kg	
Motor Oil Range Organics (MRO)			SPK Ref Val %REC LowLimit	HighLimit %RPD RPD	DLimit Qual
Sample   D: LCS-57593   SampType: LCS   TestCode: EPA Method 8015M/D: Diesel Range Organics					
Sample   D    LCS   LCS   Samp    S			105 30.4	154	
Client ID:   LCSS   Bate   ID:   57593   Run No.   74697   SeqNo:   2637249   Units: mg/Kg	Our. DNO				*****
Prep Date: 1/18/2021   Analysis Date: 1/19/2021   SeqNo: 2637249   Units: mg/Kg	Sample ID: LCS-57593	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Org	anics
Analyte	Client ID: LCSS	Batch ID: 57593	RunNo: 74697		
Diesel Range Organics (DRO)   51   10   50.00   0   101   68.9   141   154	Prep Date: 1/18/2021	Analysis Date: 1/19/2021	SeqNo: 2637249	Units: mg/Kg	
Sample   Di   MB-57585   Samp   Type   MB   K   Test   Code: EPA   Method   8015M/D: Dieset   Range   Organics		Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPD	DLimit Qual
Sample ID: MB-57585         SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics         Corganics           Client ID: PBS         Batch ID: 57585         RunNo: 74697         Units: %Rec         Frep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637290         Units: %Rec         Frep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637290         Units: %Rec         Frep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637290         Units: %Rec         Frep Date: 1/18/2021         Frep Date: 1/18/2021 <td< td=""><td></td><td></td><td>•</td><td></td><td></td></td<>			•		
Client ID:   PBS	Surr: DNOP	5.2 5.000	104 30.4	154	
Prep Date:         1/18/2021         Analysis Date:         1/19/2021         SeqNo:         2637290         Units:         %Rec         Analysis Pate:         4/19/2021         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr: DNOP         12         10.00         116         30.4         154	Sample ID: <b>MB-57585</b>	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Org	anics
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr; DNOP         12         10.00         116         30.4         154	Client ID: PBS	Batch ID: 57585	RunNo: 74697		
Surri DNOP         12         10.00         116         30.4         154           Sample ID: LCS-57585         SampType: LCS         TestCode: EPA Method 8015M/D: Dieset Range Organics           Client ID: LCSS         Batch ID: 57585         RunNo: 74697           Prep Date: 1/18/2021         Analysis Date: 1/20/2021         SeqNo: 2637291         Units: %Rec           Analyte         Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit WRPD RPDLimit Qual         WRPD RPDLimit Qual           Surr: DNOP         5.6         5.000         112         30.4         154           Sample ID: LCS-57592         SampType: LCS         TestCode: EPA Method 8015M/D: Dieset Range Organics         Organics           Client ID: LCSS         Batch ID: 57592         RunNo: 74729         Units: mg/Kg           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637435         Units: mg/Kg           Analyte         Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual         Qual           Diesel Range Organics (DRO) 6.3 10 50.00 0 125 68.9         141           Surr: DNOP 6.3 5.000 5.000 0 125 68.9         141           Sample ID: MB-57592 SampType: MBLK         TestCode: EPA Method 8015M/D: Dieset Range Organics           Client ID: PBS Batch ID: 57592 RunNo: 74729         RunNo: 74729           Prep D	Prep Date: 1/18/2021	Analysis Date: 1/19/2021	SeqNo: 2637290	Units: %Rec	
Sample ID: LCS-57585         SampType: LCS         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: LCSS         Batch ID: 57585         RunNo: 74697           Prep Date: 1/18/2021         Analysis Date: 1/20/2021         SeqNo: 2637291         Units: %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr: DNOP         5.6         5.000         112         30.4         154           Sample ID: LCS-57592         SampType: LCS         TestCode: EPA Method 8015M/D: Diesel Range Organics         Organics           Client ID: LCSS         Batch ID: 57592         RunNo: 74729         Units: mg/Kg           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637435         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Diesel Range Organics (DRO)         63         10         50.00         0         125         68.9         141           Sum: DNOP         6.3         10         50.00         0         125	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPD	DLimit Qual
Client ID: LCSS   Batch ID: 57585   RunNo: 74697	Surr: DNOP	12 10.00	116 30.4	154	
Prep Date:         1/18/2021         Analysis Date:         1/20/2021         SeqNo:         2637291         Units:         %Rec           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr; DNOP         5.6         5.000         112         30.4         154         ————————————————————————————————————	Sample ID: LCS-57585	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Org	anics
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Surr: DNOP         5.6         5.000         112         30.4         154         ————————————————————————————————————	Client ID: LCSS	Batch ID: 57585	RunNo: 74697		
Surr: DNOP         5.6         5.000         112         30.4         154           Sample ID: LCS-57592         SampType: LCS         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: LCSS         Batch ID: 57592         RunNo: 74729           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637435         Units: mg/Kg           Analyte         Result PQL SPK value SPK Ref Val MREC LowLimit Night Surr: DNOP         HighLimit MRPD RPDLimit Qual           Surr: DNOP         6.3         10         50.00         0         125         68.9         141           Sample ID: MB-57592         SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: PBS         Batch ID: 57592         RunNo: 74729           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637438         Units: mg/Kg           Analyte         Result PQL SPK value SPK Ref Val MREC LowLimit HighLimit MRPD RPDLimit Qual	Prep Date: 1/18/2021	Analysis Date: 1/20/2021	SeqNo: 2637291	Units: %Rec	
Sample ID: LCS-57592         SampType: LCS         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: LCSS         Batch ID: 57592         RunNo: 74729           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637435         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Diesel Range Organics (DRO) Surr: DNOP         63         10         50.00         0         125         68.9         141           Sample ID: MB-57592         SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: PBS         Batch ID: 57592         RunNo: 74729           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637438         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPI	DLimit Qual
Client ID: LCSS   Batch ID: 57592   RunNo: 74729	Surr: DNOP	5.6 5.000	112 30.4	154	
Prep Date:         1/18/2021         Analysis Date:         1/19/2021         SeqNo:         2637435         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Diesel Range Organics (DRO) Surr: DNOP         63         10         50.00         0         125         68.9         141           Sample ID: MB-57592         SampType:         MBLK         TestCode:         EPA Method         8015M/D: Diesel Range Organics           Client ID:         PBS         Batch ID:         57592         RunNo:         74729           Prep Date:         1/18/2021         Analysis Date:         1/19/2021         SeqNo:         2637438         Units:         mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Sample ID: LCS-57592	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Org	anics
Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual           Diesel Range Organics (DRO)         63         10         50.00         0         125         68.9         141           Surr: DNOP         6.3         5.000         125         30.4         154           SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: PBS         Batch ID: 57592         RunNo: 74729           Prep Date:         1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637438         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Client ID: LCSS	Batch ID: 57592	RunNo: 74729		
Diesel Range Organics (DRO)         63         10         50.00         0         125         68.9         141           Surr: DNOP         6.3         5.000         125         30.4         154           Sample ID: MB-57592         SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: PBS         Batch ID: 57592         RunNo: 74729           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637438         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Prep Date: 1/18/2021	Analysis Date: 1/19/2021	SeqNo: 2637435	Units: mg/Kg	
Surr: DNOP         6.3         5.000         125         30.4         154           Sample ID: MB-57592         SampType: MBLK         TestCode: EPA Method 8015M/D: Diesel Range Organics           Client ID: PBS         Batch ID: 57592         RunNo: 74729           Prep Date: 1/18/2021         Analysis Date: 1/19/2021         SeqNo: 2637438         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPI	DLimit Qual
Sample ID: MB-57592 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 57592 RunNo: 74729 Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637438 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Diesel Range Organics (DRO)				
Client ID:         PBS         Batch ID:         57592         RunNo:         74729           Prep Date:         1/18/2021         Analysis Date:         1/19/2021         SeqNo:         2637438         Units: mg/Kg           Analyte         Result         PQL         SPK value         SPK Ref Val         %REC         LowLimit         HighLimit         %RPD         RPDLimit         Qual	Surr: DNOP	6.3 5.000	125 30.4	154 	
Prep Date: 1/18/2021 Analysis Date: 1/19/2021 SeqNo: 2637438 Units: mg/Kg  Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Sample ID: MB-57592	SampType: MBLK	TestCode: EPA Method	8015M/D: Diesel Range Org	anics
Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual	Client ID: PBS	Batch ID: 57592	RunNo: 74729		
	Prep Date: 1/18/2021	Analysis Date: 1/19/2021	SeqNo: 2637438	Units: mg/Kg	
Diesel Range Organics (DRO) ND 10	Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPI	DLimit Qual
	Diesel Range Organics (DRO)	ND 10			

### Qualifiers:

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

- В Analyte detected in the associated Method Blank
- Value above quantitation range E
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 11 of 15

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2101593

22-Jan-21

Client:

**EOG** 

Project:

Goat Roper LP 1

Sample ID: MB-57592

SampType: MBLK

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: PBS

Batch ID: 57592

**PQL** 

50

RunNo: 74729

HighLimit

Units: mg/Kg

Prep Date: 1/18/2021 Analyte

Surr: DNOP

Analysis Date: 1/19/2021

SeqNo: 2637438

Qual

**RPDLimit** 

Motor Oil Range Organics (MRO)

Result ND 14

10.00

SPK value SPK Ref Val

144

%REC LowLimit

30.4

154

%RPD

### Qualifiers:

Received by OCD: 3/31/2021 3:53:06 PM

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

Page 12 of 15

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#:

2101593

22-Jan-21

Client:

EOG

Project:

Goat Roper LP 1

Sample ID: mb-57568	SampT	Type: ME	BLK	Tes	tCode: El	Code: EPA Method 8260B: Volatiles Short List						
Client ID: PBS	Batc	Batch ID: 57568			RunNo: 7	4670						
Prep Date: 1/15/2021	Analysis E	Analysis Date: 1/16/2021			SeqNo: 2	635273	Units: mg/K	(g				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Benzene	ND	0.025										
Toluene	ND	0.050										
Ethylbenzene	ND	0.050										
Xylenes, Total	ND	0.10										
Surr: 1,2-Dichloroethane-d4	0.47		0.5000		93.5	70	130					
Surr: 4-Bromofluorobenzene	0.51		0.5000		102	70	130					
Surr: Dibromofluoromethane	0.52		0.5000		105	70	130					
Surr: Toluene-d8	0.49		0.5000		98.3	70	130					

Sample ID: Ics-57568	Sampl	Гуре: <b>LC</b>	S4	Test	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: BatchQC	Batc	Batch ID: 57568			tunNo: 74	4670					
Prep Date: 1/15/2021	Analysis E	Analysis Date: 1/16/2021			SeqNo: 2635274			Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	1.1	0.025	1.000	0	110	80	120				
Toluene	1.1	0.050	1.000	0	112	80	120				
Ethylbenzene	1.1	0.050	1.000	0	112	80	120				
Xylenes, Total	3.5	0.10	3.000	0	117	80	120				
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130				
Surr: 4-Bromofluorobenzene	0.50		0.5000		101	70	130				
Surr: Dibromofluoromethane	0.52		0.5000		104	70	130				
Surr: Toluene-d8	0.50		0.5000		99.4	70	130				

Sample ID: mb-57572	SampT	ype: ME	BLK	Tes	tCode: El	PA Method	8260B: Volat	iles Short	List	
Client ID: PBS	Batch	Batch ID: 57572			RunNo: 7	4676				
Prep Date: 1/15/2021	Analysis D	ate: 1/	18/2021	8	SeqNo: 2	635771	Units: mg/K	g		
Analyte	Result	PQL.	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.49		0.5000		98.2	70	130			
Surr: 4-Bromofluorobenzene	0.51		0.5000		103	70	130			
Surr: Dibromofluoromethane	0.41		0.5000		82.1	70	130			
Surr: Toluene-d8	0.53		0.5000		105	70	130			

### Qualifiers:

Received by OCD: 3/31/2021 3:53:06 PM

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 13 of 15

# Received by OCD: 3/31/2021 3:53:06 PM

# **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#:

2101593

22-Jan-21

Client:

EOG

Project:

Goat Roper LP 1

Sample ID: lcs-57572	Sampi	fype: LC	S4	Tes	TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: BatchQC	Batcl	h ID: <b>57</b> !	572	F	RunNo: 74	4676					
Prep Date: 1/15/2021	Analysis E	Date: 1 <i>1</i> *	18/2021	8	SeqNo: 2635773 Units: mg/Kg						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.96	0.025	1.000	0	95.6	80	120				
Toluene	1.0	0.050	1.000	0	105	80	120				
Ethylbenzene	1.1	0.050	1.000	0	110	80	120				
Xylenes, Total	3.1	0.10	3.000	0	103	80	120				
Surr: 1,2-Dichloroethane-d4	0.46		0.5000		92.8	70	130				
Surr: 4-Bromofluorobenzene	0.49		0.5000		97.5	70	130				
Surr: Dibromofluoromethane	0.41		0.5000		82.0	70	130				
Surr: Toluene-d8	0.51		0.5000		103	70	130				

Sample ID: 2101593-005ams	ample ID: 2101593-005ams SampType: MS4				TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: HN 13-25'	Batch ID: 57572			F	RunNo: 74	4712					
Prep Date: 1/15/2021	Analysis Date: 1/18/2021			SeqNo: 2636729			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.88	0.025	0.9940	0	88.3	71.1	115				
Toluene	0.95	0.050	0.9940	0	95.5	79.6	132				
Ethylbenzene	1.0	0.050	0.9940	0	101	83.8	134				
Xylenes, Total	2.9	0.099	2.982	0	97.5	82.4	132				
Surr: 1,2-Dichloroethane-d4	0.46		0.4970		92.4	70	130				
Surr: 4-Bromofluorobenzene	0.52		0.4970		105	70	130				
Surr: Dibromofluoromethane	0.40		0.4970		79.7	70	130				
Surr: Toluene-d8	0.47		0.4970		95.3	70	130				

Sample ID: 2101593-005amsc	01593-005amsd SampType: MSD4				TestCode: EPA Method 8260B: Volatiles Short List						
Client ID: HN 13-25'	Batch ID: 57572			F	RunNo: 7	4712					
Prep Date: 1/15/2021	Analysis Date: 1/18/2021			SeqNo: 2636730			Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	0.87	0.025	1.000	0	87.0	71.1	115	0.819	20		
Toluene	0.97	0.050	1.000	0	97.1	79.6	132	2.29	20		
Ethylbenzene	1.0	0.050	1.000	0	101	83.8	134	1.24	20		
Xylenes, Total	2.9	0.10	3.000	0	95.1	82.4	132	1.85	20		
Surr: 1,2-Dichloroethane-d4	0.44		0.5000		88.4	70	130	0	0		
Surr: 4-Bromofluorobenzene	0.52		0.5000		103	70	130	0	0		
Surr: Dibromofluoromethane	0.39		0.5000		78.2	70	130	0	0		
Surr: Toluene-d8	0.50		0.5000		99.3	70	130	0	0		

### Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 14 of 15

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#:

2101593

22-Jan-21

Client:

**EOG** 

Project: Goat Ro	per LP 1								
Troject. Goat Re	per Dr T		***************************************						
Sample ID: mb-57568	SampType:	MBLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch ID:	57568	F	RunNo: 74	4670				
Prep Date: 1/15/2021	Analysis Date:	1/16/2021	8	SeqNo: 20	635301	Units: mg/h	<b>(</b> g		
Analyte	Result PC	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5	5.0							
Surr: BFB	530	500.0		106	70	130			
Sample ID: Ics-57568	SampType:	LCS	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: LCSS	Batch ID:	57568	F	RunNo: 74	4670				
Prep Date: 1/15/2021	Analysis Date:	1/16/2021	S	SeqNo: 20	635302	Units: mg/k	<b>(</b> g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22 5	5.0 25.00	0	87.2	70	130			·
Surr: BFB	530	500.0		105	70	130			
Sample ID: mb-57572	SampType:	MBLK	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: PBS	Batch ID:	57572	F	RunNo: 74	4676				
Prep Date: 1/15/2021	Analysis Date:	1/18/2021	S	SeqNo: 2	635776	Units: mg/k	(g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 5	5.0							
Surr: BFB	460	500.0		92.1	70	130			
Sample ID: Ics-57572	SampType:	LCS	Tes	tCode: El	PA Method	8015D Mod:	Gasoline	Range	
Client ID: LCSS	Batch ID:	57572	F	RunNo: 7	4676				
Prep Date: 1/15/2021	Analysis Date:	1/18/2021	8	SeqNo: 20	635777	Units: mg/F	<b>(</b> g		
Analyte	Result PQ	L SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22 5	5.0 25.00	0	89.2	70	130			
Surr: BFB	430	500.0		86.3	70	130			

### Qualifiers:

Received by OCD: 3/31/2021 3:53:06 PM

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

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range Reporting Limit

Page 15 of 15

Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

## Sample Log-In Check List

Client Name: EOG		Work Order Nur	nber: 2101593		RcptNo: 1
Received By: Isai	ah Ortiz	1/15/2021 7:36:00	ι Δ8.4	II. Og	
•	ah Ortiz			I. O.	
•		1/15/2021 8:32:24	AW	grades severy buildings	
Reviewed By:	. 1/15/21	(			
Chain of Custody					
1. Is Chain of Custody	complete?		Yes 🔽	No 🗌	Not Present
2. How was the sampl	e delivered?		Courier		
Log In  3. Was an attempt ma	de to cool the sample	s?	Yes 🔽	No 🗆	na 🗆
4. Were all samples re	ceived at a temperatu	re of >0° C to 6.0°C	Yes 🗹	No 🗀	NA 🗆
5. Sample(s) in proper	container(s)?		Yes 🗸	No 🗆	
6. Sufficient sample vo	lume for indicated test	t(s)?	Yes 🗹	No 🗆	
7. Are samples (except	VOA and ONG) prop	erly preserved?	Yes 🗹	No 🗌	
8. Was preservative ad	ded to bottles?		Yes 🗌	No 🗹	NA 🗆
9. Received at least 1 v	rial with headspace <1	/4" for AQ VOA?	Yes 🗌	No 🗆	na 🗹
10. Were any sample co	ontainers received bro	ken?	Yes 🗆	No 🗹 #	of preserved
11.Does paperwork mai (Note discrepancies			Yes 🔽		ottles checked or pH: (<2 or >12 unless noted)
12. Are matrices correct	y identified on Chain o	of Custody?	Yes 🗹	No 🗌	Adjusted?
3. Is it clear what analy			Yes 🔽	No 🗌	In hob
<ol> <li>Were all holding time (If no, notify custome</li> </ol>			Yes 🗹	No 🗆	Checked by C (15/2
Special Handling (i	f applicable)			•	
15. Was client notified o	f all discrepancies wit	h this order?	Yes 🗌	No 🗆	NA 🗹
Person Notifie	d:	Date	»: [		
By Whom:	control of the Statement or communicating was pro-	Via:	☐ eMail ☐ PI	hone 🗌 Fax 📋	] In Person
Regarding:	galantation of the state of the security and integrity of the state of	e video distribusio del constitució de servició de describido de la constitució de l	والمنافقة	november de la companya de la compa	matching and dength and consequence of the form the grant in the first of the first
Client Instructi 16. Additional remarks:	ons:		and a second		
17. Cooler Information Cooler No Ter 1 0.3	np °C Condition	Seal Intact   Seal No	Seal Date	Signed By	

Received by OCD: 3/31/2021 3:53:06 PM

~	Shain	1-of-C	Chain-of-Custody Record	Turn-Around Time:			•		1			
Client:	Client: $E06$		RESOURCES INC.	□ Standard □ Rush			I «				HALL ENVIRONMENTAL	
			1 A Print	<b>.</b>				www.ballonvironmontal.com			5	
Mailine	Mailing Address:	.s: O	416	Guat Roper LP #1	1 1	4901 H	4901 Hawkins NE			- Albianerane NM 87109	87109	
				Project #:		Tel. 5(	Tel. 505-345-3975		-ax 5(	Fax 505-345-4107	107	
Phone #:	#				6.3			\na	sis R	Analysis Request		
email (	email or Fax#:	,,,,	- The state of the	Project Manager:	( )			<sup>†</sup> 0		(31		
QA/QC Pack:	QA/QC Package:	ài		Phas. Sottle	. (802	AM /	SMIS	····		iəsdA'		
Accred	Accreditation:	1	S	Sampler: Char. Settle	    s'8MT	י פאכ						
	□ NELAC	□ Other	- Tribination -	On Ice: ☑ Yes ☐ No	. / :	ОЯ		S				
	O (Type)				38.	ເອ)		lste	(			
				Cooler Temp(Including:cr): (公子: 生()	(0°) TM	12D		•M 8	AO\		***************************************	
Date	Time	Matrix	Sample Name	Container Preservative 2101593	BTEX/	08:H9T 9 1808	EDB ( <i>N</i>	АСВА О F, п	/) 09Z8	2) 0728 O lstoT		·· ·····
14331	000:1	1:05 0	VIC-25"	1	× E	×				4		T
	1:050		HS 0-13'		002 X	~		7				1
	1:030		HS 13-25'		603 X	メ		×		_		T
	1:100	. 0	HN 0-13		× 750	×		メ				<del>                                     </del>
	1:080	. 0	HN 13-35'		605 X	  X 						Ι
	1:150		HE 0-13'		700 M	ブ		メ				Ī
	1130		形 13-35,		007 K	X		$\prec$				<u> </u>
	1:170		HW 0-13		_	メメ		メ				Ι
	1:200		HW 13-25		X 300	イ		ス				Ι
			**************************************									l
				THE REPORT OF THE PARTY OF THE								
Date;	Time:	Relinquished by:	ed by:			Remarks:						
_   	į			KEHII, SANNIM	500							
	ime:	<u> </u>	ed by:	Date Date	Time							
PLANE.	0061  e/h/		allmmin	I still	0736							
			- V		X							1

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



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

March 25, 2021

Chase Settle
EOG
105 South Fourth Street
Artesia, NM 88210
TEL:
FAX

RE: Goat Roper LP #1

OrderNo.: 2103751

Dear Chase Settle:

Hall Environmental Analysis Laboratory received 8 sample(s) on 3/16/2021 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

**Analytical Report** 

Lab Order 2103751

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG

Client Sample ID: C1

Project: Goat Roper LP #1 Collection Date: 3/15/2021 8:00:00 AM

2103751-001 Lab ID:

Matrix: SOIL

Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	63	60		mg/Kg	20	3/19/2021 7:26:17 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst	JME
Diesel Range Organics (DRO)	1200	99		mg/Kg	10	3/18/2021 12:05:54 PM	58778
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	3/18/2021 12:05:54 PM	58778
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2021 12:05:54 PM	58778
EPA METHOD 8015D: GASOLINE RANGE						Analyst	CCM
Gasoline Range Organics (GRO)	120	24		mg/Kg	5	3/19/2021 4:03:00 AM	58771
Surr: BFB	151	75.3-105	s	%Rec	5	3/19/2021 4:03:00 AM	58771
EPA METHOD 8021B: VOLATILES						Analyst	CCM
Benzene	ND	0.12		mg/Kg	5	3/19/2021 4:03:00 AM	58771
Toluene	ND	0.24		mg/Kg	5	3/19/2021 4:03:00 AM	58771
Ethylbenzene	ND	0.24		mg/Kg	5	3/19/2021 4:03:00 AM	58771
Xylenes, Total	ND	0.48		mg/Kg	5	3/19/2021 4:03:00 AM	58771
Surr: 4-Bromofluorobenzene	144	80-120	S	%Rec	5	3/19/2021 4:03:00 AM	58771

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

## Qualifiers:

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

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 1 of 14

**Analytical Report** 

Date Reported: 3/25/2021

Lab Order 2103751

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: C2

 Project:
 Goat Roper LP #1
 Collection Date: 3/15/2021 8:05:00 AM

 Lab ID:
 2103751-002
 Matrix: SOIL
 Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	100	60		mg/Kg	20	3/19/2021 7:38:41 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE OR	RGANICS					Analyst	: JME
Diesel Range Organics (DRO)	300	9.3		mg/Kg	1	3/18/2021 10:58:34 AM	58778
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/18/2021 10:58:34 AM	58778
Surr: DNOP	75.5	70-130		%Rec	1	3/18/2021 10:58:34 AM	58778
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: CCM
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	3/19/2021 4:23:00 AM	58771
Surr: BFB	108	75.3-105	s	%Rec	5	3/19/2021 4:23:00 AM	58771
EPA METHOD 8021B: VOLATILES						Analyst	CCM
Benzene	ND	0.12		mg/Kg	5	3/19/2021 4:23:00 AM	58771
Toluene	ND	0.24		mg/Kg	5	3/19/2021 4:23:00 AM	58771
Ethylbenzene	ND	0.24		mg/Kg	5	3/19/2021 4:23:00 AM	58771
Xylenes, Total	ND	0.48		mg/Kg	5	3/19/2021 4:23:00 AM	58771
Surr: 4-Bromofluorobenzene	98.7	80-120		%Rec	5	3/19/2021 4:23:00 AM	58771

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

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 14

**Analytical Report** 

Lab Order 2103751

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** 

Project:

Goat Roper LP #1

Lab ID: 2103751-003

Client Sample ID: C3

**Collection Date:** 3/15/2021 8:11:00 AM

Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				,		Analyst	: VP
Chloride	150	60		mg/Kg	20	3/19/2021 7:51:06 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: JME
Diesel Range Organics (DRO)	110	9.8		mg/Kg	1	3/18/2021 11:08:27 AM	58778
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/18/2021 11:08:27 AM	58778
Surr: DNOP	90.2	70-130		%Rec	1	3/18/2021 11:08:27 AM	58778
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: CCM
Gasoline Range Organics (GRO)	5.7	4.9		mg/Kg	1	3/19/2021 4:42:00 AM	58771
Surr: BFB	12 <del>4</del>	75.3-105	S	%Rec	1	3/19/2021 4:42:00 AM	58771
EPA METHOD 8021B: VOLATILES						Analyst	CCM
Benzene	ND	0.025		mg/Kg	1	3/19/2021 4:42:00 AM	58771
Toluene	ND	0.049		mg/Kg	1	3/19/2021 4:42:00 AM	58771
Ethylbenzene	ND	0.049		mg/Kg	1	3/19/2021 4:42:00 AM	58771
Xylenes, Total	ND	0.099		mg/Kg	1	3/19/2021 4:42:00 AM	58771
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	1	3/19/2021 4:42:00 AM	58771

Matrix: SOIL

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

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 3 of 14

**CLIENT: EOG** 

# Released to Imaging: 7/7/2021 11:22:00 AM

**Analytical Report** 

Date Reported: 3/25/2021

Lab Order 2103751

Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: C4

**Collection Date:** 3/15/2021 8:16:00 AM **Received Date:** 3/16/2021 7:30:00 AM

Project: Goat Roper LP #1

Lab ID: 2103751-004 Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	:: VP
Chloride	62	60		mg/Kg	20	3/19/2021 8:03:31 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE C	RGANICS					Analyst	: JME
Diesel Range Organics (DRO)	850	9.8		mg/Kg	1	3/18/2021 11:18:19 AM	58778
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/18/2021 11:18:19 AM	58778
Surr: DNOP	88.6	70-130		%Rec	1	3/18/2021 11:18:19 AM	58778
EPA METHOD 8015D: GASOLINE RANGE						Analyst	CCM
Gasoline Range Organics (GRO)	37	24		mg/Kg	5	3/19/2021 5:02:00 AM	58771
Surr: BFB	166	75.3-105	s	%Rec	5	3/19/2021 5:02:00 AM	58771
EPA METHOD 8021B: VOLATILES						Analyst	CCM
Benzene	ND	0.12		mg/Kg	5	3/19/2021 5:02:00 AM	58771
Toluene	ND	0.24		mg/Kg	5	3/19/2021 5:02:00 AM	58771
Ethylbenzene	ND	0.24		mg/Kg	5	3/19/2021 5:02:00 AM	58771
Xylenes, Total	ND	0.48		mg/Kg	5	3/19/2021 5:02:00 AM	58771
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	5	3/19/2021 5:02:00 AM	58771

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

## Qualifiers:

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

- Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 4 of 14

**Analytical Report** 

Lab Order 2103751

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT: EOG** 

Client Sample ID: C5

Goat Roper LP #1 Project:

Lab ID: 2103751-005

Matrix: SOIL

Collection Date: 3/15/2021 8:20:00 AM Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	66	60		mg/Kg	20	3/19/2021 8:15:56 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE O	RGANICS					Analyst	: JME
Diesel Range Organics (DRO)	660	9.4		mg/Kg	1	3/18/2021 8:33:25 AM	58794
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/18/2021 8:33:25 AM	58794
Surr: DNOP	80.0	70-130		%Rec	1	3/18/2021 8:33:25 AM	58794
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	89	25		mg/Kg	5	3/20/2021 4:36:18 PM	58791
Surr: BFB	246	75.3-105	S	%Rec	5	3/20/2021 4:36:18 PM	58791
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.12		mg/Kg	5	3/20/2021 4:36:18 PM	58791
Toluene	ND	0.25		mg/Kg	5	3/20/2021 4:36:18 PM	58791
Ethylbenzene	ND	0.25		mg/Kg	5	3/20/2021 4:36:18 PM	58791
Xylenes, Total	ND	0.49		mg/Kg	5	3/20/2021 4:36:18 PM	58791
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	5	3/20/2021 4:36:18 PM	58791

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

### Qualifiers:

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

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RLReporting Limit

Page 5 of 14

**CLIENT: EOG** 

Goat Roper LP #1

2103751-006

Project:

Lab ID:

# Released to Imaging: 7/7/2021 11:22:00 AM

**Analytical Report** 

Lab Order 2103751

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: C6

Collection Date: 3/15/2021 8:26:00 AM

Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	: VP
Chloride	94	60		mg/Kg	20	3/19/2021 8:28:20 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: JME
Diesel Range Organics (DRO)	420	8.6		mg/Kg	1	3/18/2021 8:42:54 AM	58794
Motor Oil Range Organics (MRO)	ND	43		mg/Kg	1	3/18/2021 8:42:54 AM	58794
Surr: DNOP	70.7	70-130		%Rec	1	3/18/2021 8:42:54 AM	58794
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	31	24		mg/Kg	5	3/20/2021 1:49:53 AM	58791
Surr: BFB	150	75.3-105	S	%Rec	5	3/20/2021 1:49:53 AM	58791
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.12		mg/Kg	5	3/20/2021 1:49:53 AM	58791
Toluene	ND	0.24		mg/Kg	5	3/20/2021 1:49:53 AM	58791
Ethylbenzene	ND	0.24		mg/Kg	5	3/20/2021 1:49:53 AM	58791
Xylenes, Total	ND	0.49		mg/Kg	5	3/20/2021 1:49:53 AM	58791
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	5	3/20/2021 1:49:53 AM	58791

Matrix: SOIL

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

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

**Analytical Report** 

Lab Order 2103751

Date Reported: 3/25/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: C7

 Project:
 Goat Roper LP #1
 Collection Date: 3/15/2021 8:31:00 AM

 Lab ID:
 2103751-007
 Matrix: SOIL
 Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	VP.
Chloride	66	60		mg/Kg	20	3/19/2021 8:40:44 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS					Analyst	JME
Diesel Range Organics (DRO)	1200	93		mg/Kg	10	3/18/2021 10:29:18 AM	58794
Motor Oil Range Organics (MRO)	ND	460		mg/Kg	10	3/18/2021 10:29:18 AM	58794
Surr: DNOP	0	70-130	S	%Rec	10	3/18/2021 10:29:18 AM	58794
EPA METHOD 8015D: GASOLINE RANGE						Analyst	NSB
Gasoline Range Organics (GRO)	32	24		mg/Kg	5	3/20/2021 2:36:51 AM	58791
Surr: BFB	145	75.3-105	S	%Rec	5	3/20/2021 2:36:51 AM	58791
EPA METHOD 8021B: VOLATILES						Analyst	NSB
Benzene	ND	0.12		mg/Kg	5	3/20/2021 2:36:51 AM	58791
Toluene	ND	0.24		mg/Kg	5	3/20/2021 2:36:51 AM	58791
Ethylbenzene	ND	0.24		mg/Kg	5	3/20/2021 2:36:51 AM	58791
Xylenes, Total	ND	0.49		mg/Kg	5	3/20/2021 2:36:51 AM	58791
Surr: 4-Bromofluorobenzene	101	80-120		%Rec	5	3/20/2021 2:36:51 AM	58791

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

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 7 of 14

**Analytical Report** 

Date Reported: 3/25/2021

Lab Order 2103751

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: EOG Client Sample ID: C8

 Project:
 Goat Roper LP #1
 Collection Date: 3/15/2021 8:36:00 AM

 Lab ID:
 2103751-008
 Matrix: SOIL
 Received Date: 3/16/2021 7:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst	:: VP
Chloride	84	59		mg/Kg	20	3/19/2021 8:53:09 PM	58816
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS					Analyst	: JME
Diesel Range Organics (DRO)	300	9.7		mg/Kg	1	3/18/2021 9:01:54 AM	58794
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/18/2021 9:01:54 AM	58794
Surr: DNOP	74.4	70-130		%Rec	1	3/18/2021 9:01:54 AM	58794
EPA METHOD 8015D: GASOLINE RANGE						Analyst	: NSB
Gasoline Range Organics (GRO)	ND	24		mg/Kg	5	3/20/2021 3:00:25 AM	58791
Surr: BFB	109	75.3-105	S	%Rec	5	3/20/2021 3:00:25 AM	58791
EPA METHOD 8021B: VOLATILES						Analyst	: NSB
Benzene	ND	0.12		mg/Kg	5	3/20/2021 3:00:25 AM	58791
Toluene	ND	0.24		mg/Kg	5	3/20/2021 3:00:25 AM	58791
Ethylbenzene	ND	0.24		mg/Kg	5	3/20/2021 3:00:25 AM	58791
Xylenes, Total	ND	0.48		mg/Kg	5	3/20/2021 3:00:25 AM	58791
Surr: 4-Bromofluorobenzene	99.6	80-120		%Rec	5	3/20/2021 3:00:25 AM	58791

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

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- I Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 8 of 14

# Received by OCD: 3/31/2021 3:53:06 PM

## QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2103751

25-Mar-21

Client:

**EOG** 

Project:

Goat Roper LP #1

Sample ID: MB-58816

SampType: MBLK

TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 58816

RunNo: 76062

Prep Date: 3/18/2021

Analysis Date: 3/19/2021

PQL.

SeqNo: 2693200

Units: mg/Kg

**RPDLimit** 

Qual

Analyte

SPK value SPK Ref Val %REC LowLimit

TestCode: EPA Method 300.0: Anions

HighLimit

%RPD

Chloride

Sample ID: LCS-58816

SampType: LCS Batch ID: 58816

RunNo: 76062

Client ID: LCSS Prep Date: 3/18/2021

Analysis Date: 3/19/2021

SeqNo: 2693201

Units: mg/Kg

%RPD **RPDLimit** 

Qual

Analyte

15.00

%REC 95.7

HighLimit

Chloride

14

1.5

SPK value SPK Ref Val

90

110

## Qualifiers:

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

- Analyte detected in the associated Method Blank
- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 9 of 14

# Received by OCD: 3/31/2021 3:53:06 PM

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#:

2103751

25-Mar-21

Client:

**EOG** 

Project:

Goat Roper LP #1

Project: Goat Ro	per LP #1		
Sample ID: MB-58778	SampType: MBLK	TestCode: EPA Method 8015	M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 58778	RunNo: 76025	
Prep Date: 3/17/2021	Analysis Date: 3/18/2021	SeqNo: 2691572 Unit	ts: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	ghLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10		
Motor Oil Range Organics (MRO)	ND 50		100
Surr: DNOP	9.5 10.00	94.8 70	130
Sample ID: MB-58794	SampType: MBLK	TestCode: EPA Method 8015	M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 58794	RunNo: <b>76025</b>	
Prep Date: 3/17/2021	Analysis Date: 3/18/2021	SeqNo: <b>2691573</b> Unit	ts: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	ghLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND 10		
Motor Oil Range Organics (MRO)	ND 50		
Surr. DNOP	9.2 10.00	91.5 70	130
Sample ID: LCS-58778	SampType: LCS	TestCode: EPA Method 8015	5M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 58778	RunNo: 76025	
Prep Date: 3/17/2021	Analysis Date: 3/18/2021	SeqNo: <b>2691574</b> Unit	ts: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	ghLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	49 10 50.00	0 99.0 68.9	141
Surr: DNOP	4.3 5.000	85.8 70	130
Sample ID: LCS-58794	SampType: LCS	TestCode: EPA Method 8015	5M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 58794	RunNo: <b>76025</b>	
Prep Date: 3/17/2021	Analysis Date: 3/18/2021	SeqNo: <b>2691575</b> Unit	ts: mg/Kg
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	ghLimit %RPD RPDLimit Qual
Diesel Range Organics (DRO)	49 10 50.00	0 98.1 68.9	141
Surr: DNOP	4.2 5.000	83.3 70	130
Sample ID: <b>MB-58798</b>	SampType: MBLK	TestCode: EPA Method 8015	5M/D: Diesel Range Organics
Client ID: PBS	Batch ID: 58798	RunNo: 76064	
Prep Date: 3/18/2021	Analysis Date: 3/19/2021	SeqNo: 2693658 Unit	ts: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit Hig	ghLimit %RPD RPDLimit Qual
Surr: DNOP	9.7 10.00	97.0 70	130

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 10 of 14

## **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2103751

25-Mar-21

Client:

**EOG** 

Project:

Goat Roper LP #1

Sample ID: LCS-58798

SampType: LCS

TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: LCSS

Batch ID: 58798

RunNo: 76064

Prep Date: 3/18/2021

Analysis Date: 3/19/2021

SeqNo: 2693659

Units: %Rec

PQL SPK value SPK Ref Val

%REC LowLimit

Analyte

HighLimit 130 **RPDLimit** 

Qual

Surr: DNOP

90.8

%RPD

5.000 4.5

Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

Page 11 of 14

# Received by OCD: 3/31/2021 3:53:06 PM

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2103751 25-Mar-21

Client:

EOG

Project:

Goat Roper LP #1

				- there's						
Sample ID: LCS-58771	SampType: LCS			Test	TestCode: EPA Method 8015D: Gasoline Range					
Client ID: LCSS	Batch	ID: 587	771	R	RunNo: <b>76060</b>					
Prep Date: 3/16/2021	Analysis Da	ite: 3/	18/2021	S	eqNo: 20	392502	Units: mg/Kg	j		
Analyte	Result	PQL	SPK value	SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	117	80 75.3	120			
Surr: BF8	1000		1000		104	75.3	105		****	
Sample ID: MB-58771	SampTy	rpe: ME	BLK	Test	Code: EF	PA Method	8015D: Gasol	ine Rang	0	
Client ID: PBS	Batch	ID: 587	771	R	tunNo: 70	6060				
Prep Date: 3/16/2021	Analysis Da	ate: 3/	18/2021	S	eqNo: 20	592503	Units: mg/Kg	3		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 010	5.0	1000		90.9	75.3	105			
Surr: BFB	910		1000		90.9	75.5	103			
Sample ID: mb-58791	SampType: MBLK			Test	Code: EF	PA Method	8015D: Gasol	ine Rang	e	
Client ID: PBS	Batch	ID: <b>58</b> 7	791	R	tunNo: 70	6071				
Prep Date: 3/17/2021	Analysis Da	ite: 3/	1 <del>9</del> /2021	S	eqNo: 20	693921	Units: mg/Ko	)		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND 980	5.0	1000		97.5	75.3	105			
Surr: BFB	960		1000		97.3	70.0	100			
Sample ID: Ics-58791	SampTy	rpe: LC	S	TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS		ID: <b>58</b> 7			tunNo: 70					
Prep Date: 3/17/2021	Analysis Da	ite: 3/	19/2021	S	eqNo: 20	693922	Units: mg/Kg	3		
Analyte	Result	PQL	SPK value	CDIZ Dof Vol	N/DEO	LowLimit	F (1) - 1 - 1 - 1 - 1 - 1 - 1 - 1	MDDD	DDDLimit	
Concline Denge Organics (CDC)					%REC		HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.4	80	120	%RPD	KPDLIMI	
Surr: BFB	24 1100							%RPD	RPDLITIII	Qual S
		5.0	25.00 1000	0	97.4 108	80 75.3	120			
Surr: BFB Sample ID: mb-58863 Client ID: PBS	1100 SampTy	5.0	25.00 1000 BLK	0 Test	97.4 108	80 75.3 PA Method	120 105 8015D: Gasol			
Surr: BFB Sample ID: mb-58863	1100 SampTy	5.0 /pe: <b>MB</b> ID: <b>588</b>	25.00 1000 BLK 863	0 Test R	97.4 108 Code: <b>EF</b>	80 75.3 PA Method 3109	120 105			
Surr: BFB  Sample ID: mb-58863  Client ID: PBS  Prep Date: 3/20/2021  Analyte	SampTy Batch Analysis Da	5.0 /pe: <b>MB</b> ID: <b>588</b>	25.00 1000 BLK 863 22/2021 SPK value	0 Test R	97.4 108 Code: EF tunNo: 76 SeqNo: 26	80 75.3 PA Method 6109 695161 LowLimit	120 105 <b>8015D: Gasol</b> Units: %Rec HighLimit			
Surr: BFB  Sample ID: mb-58863  Client ID: PBS  Prep Date: 3/20/2021	SampTy Batch Analysis Da	5.0 /pe: ME ID: 588 ate: 3/2	25.00 1000 BLK 863 22/2021	0 Test R S	97.4 108 Code: EF tunNo: 70	80 75.3 PA Method 6109 695161	120 105 <b>8015D: Gasol</b> Units: %Rec	ine Rang	е	S
Surr: BFB  Sample ID: mb-58863  Client ID: PBS  Prep Date: 3/20/2021  Analyte	SampTy Batch Analysis Da	5.0 /pe: ME ID: 588 ate: 3/2	25.00 1000 BLK 863 22/2021 SPK value 1000	0 Test R S SPK Ref Val	97.4 108 Code: EF tunNo: 76 SeqNo: 26 %REC 94.6	80 75.3 PA Method 6109 695161 LowLimit 75.3	120 105 <b>8015D: Gasol</b> Units: %Rec HighLimit	ine Rang %RPD	e RPDLimit	S
Surr: BFB  Sample ID: mb-58863  Client ID: PBS  Prep Date: 3/20/2021  Analyte  Surr: BFB	SampTy Batch Analysis Da Result 950 SampTy	5.0 /pe: ME ID: 588 ate: 3/2	25.00 1000 BLK 863 22/2021 SPK value 1000	0 Test R S SPK Ref Val	97.4 108 Code: EF tunNo: 76 SeqNo: 26 %REC 94.6	80 75.3 PA Method 6109 695161 LowLimit 75.3	120 105 <b>8015D: Gasol</b> Units: %Rec HighLimit 105	ine Rang %RPD	e RPDLimit	S
Surr: BFB  Sample ID: mb-58863  Client ID: PBS  Prep Date: 3/20/2021  Analyte  Surr: BFB  Sample ID: Ics-58863	SampTy Batch Analysis Da Result 950 SampTy	5.0 /pe: ME ID: 588 ate: 3/: PQL /pe: LC	25.00 1000 BLK 863 22/2021 SPK value 1000 S	0 Test R S SPK Ref Val Test	97.4 108 Code: EF tunNo: 76 SeqNo: 26 %REC 94.6	80 75.3 PA Method 6109 695161 LowLimit 75.3 PA Method 6109	120 105 <b>8015D: Gasol</b> Units: %Rec HighLimit 105	ine Rang %RPD	e RPDLimit	S
Surr: BFB  Sample ID: mb-58863  Client ID: PBS  Prep Date: 3/20/2021  Analyte  Surr: BFB  Sample ID: Ics-58863  Client ID: LCSS	SampTy Batch Analysis Da Result 950 SampTy Batch	5.0 /pe: ME ID: 588 ate: 3/: PQL /pe: LC	25.00 1000 BLK 863 22/2021 SPK value 1000 S 8663	0 Test R S SPK Ref Val Test	97.4 108 Code: EF tunNo: 76 seqNo: 26 %REC 94.6 Code: EF	80 75.3 PA Method 6109 695161 LowLimit 75.3 PA Method 6109	120 105 8015D: Gasol Units: %Rec HighLimit 105 8015D: Gasol	ine Rang %RPD	e RPDLimit	S

## Qualifiers:

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

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- L Reporting Limit

Page 12 of 14

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#:

2103751 25-Mar-21

Client:

EOG

Project: Goat R	oper LP #1								<u>.</u>	
Sample ID: LCS-58771	SampType: LCS TestCode: EPA Method 8021B: Volatiles									
Client ID: LCSS	Batch ID: 58771			F	RunNo: 76060					
Prep Date: 3/16/2021	Analysis D	Date: 3/	18/2021	8	SeqNo: 2	692508	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.0	80	120			
Toluene	0.95	0.050	1.000	0	94.7	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.3	80	120			
Xylenes, Total	2.8	0.10	3.000	0	93.5	80	120			
Surr: 4-Bromofluorobenzene	0.97		1.000		96.6	80	120			
Sample ID: MB-58771	SampT	Гуре: <b>МЕ</b>	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	h ID: <b>58</b> 1	771	F	RunNo: <b>7</b>	6060				
Prep Date: 3/16/2021	Analysis D	Date: 3/	18/2021	5	SeqNo: 2	692509	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Хуlenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.5	80	120			
Sample ID: mb-58791	SampT	Type: ME	BLK	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	h ID: 58	791	F	RunNo: 7	6071				
Prep Date: 3/17/2021	Analysis D	Date: 3/	19/2021	5	SeqNo: 2	693972	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.2	80	120			
Sample ID: LCS-58791	SampT	Type: LC	s	Tes	tCode: E	PA Method	8021B: Volat	iles		
Client ID: LCSS	Batch	h ID: <b>58</b>	791	F	RunNo: 7	6071				
Prep Date: 3/17/2021	Analysis D	Date: 3/	19/2021	\$	SeqNo: 2	693973	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val		LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.5	80	120			
Toluene	0.93	0.050	1.000	0	93.0	80	120			
Ethylbenzene	0.93	0.050	1.000	0	92.6	80	120			

## Qualifiers:

Xylenes, Total

Received by OCD: 3/31/2021 3:53:06 PM

- Value exceeds Maximum Contaminant Level.
- Sample Diluted Due to Matrix

Surr: 4-Bromofluorobenzene

- Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- Practical Quanitative Limit
- % Recovery outside of range due to dilution or matrix

Analyte detected in the associated Method Blank

91.2

100

80

80

120

120

- Value above quantitation range
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

0.10

2.7

1.0

3.000

1.000

Page 13 of 14

# Received by OCD: 3/31/2021 3:53:06 PM

## **QC SUMMARY REPORT**

## Hall Environmental Analysis Laboratory, Inc.

WO#:

2103751

25-Mar-21

Client:

EOG

Project:

Goat Roper LP #1

Sample ID: mb-58863

SampType: MBLK Batch ID: 58863

TestCode: EPA Method 8021B: Volatiles

Client ID:

PBS

RunNo: 76109

Prep Date:

3/20/2021

Analysis Date: 3/22/2021

SeqNo: 2695199

Units: %Rec

120

Analyte

%REC

Surr: 4-Bromofluorobenzene

Result

SPK value SPK Ref Val 1.000

97.3

LowLimit HighLimit %RPD **RPDLimit** 

%RPD

Qual

Sample ID: LCS-58863

SampType: LCS

Batch ID: 58863

TestCode: EPA Method 8021B: Volatiles RunNo: 76109

Client ID: LCSS Prep Date: 3/20/2021

Analysis Date: 3/22/2021

SeqNo: 2695200

Units: %Rec

Analyte

Result

SPK value SPK Ref Val

%REC

80

LowLimit

Surr: 4-Bromofluorobenzene

0.99

1.000

99.1

HighLimit

**RPDLimit** 

Qual

120

## Qualifiers:

Value exceeds Maximum Contaminant Level.

Sample Diluted Due to Matrix

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Practical Quanitative Limit % Recovery outside of range due to dilution or matrix Analyte detected in the associated Method Blank

Value above quantitation range

Analyte detected below quantitation limits

Sample pH Not In Range

Reporting Limit

Page 14 of 14



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: clients.hallenvironmental.com

## Sample Log-In Check List

	Website: clients.l.	allenvironmenta	l.com		
Client Name: EOG	Work Order Numbe	r: <b>2103751</b>	dagittikaki an di kacamatan an ana anganja	RcptNo:	1
Received By: Juan Rojas  Completed By: Cheyenne Cason  Reviewed By: SPA 3.16			(Juneal)		
Chain of Custody  1. Is Chain of Custody complete?		Yes 🗹	No 🗀	Not Present 🗌	
2. How was the sample delivered?		Courier	NO (	Not Plesent	
Log In 3. Was an attempt made to cool the	samples?	Yes 🔽	No 🗆	na 🗆	
4. Were all samples received at a ter	nperature of >0° C to 6.0°C	Yes ☐ Not requ	No 🗹	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🔽	No 🗆		
<ul><li>6. Sufficient sample volume for indica</li><li>7. Are samples (except VOA and ON</li></ul>	, ,	Yes 🔽	No □ No □		
8. Was preservative added to bottles		Yes	No 🗹	NA 🗆	
9. Received at least 1 vial with heads	•	Yes 🗌	No 🗆	NA 🗹	TO
<ol> <li>Were any sample containers recei</li> <li>Does paperwork match bottle labe (Note discrepancies on chain of cu</li> </ol>	is?	Yes 🔽	No ☑	# of preserved bottles checked for pH:	3   16   2 (
12. Are matrices correctly identified on	Chain of Custody?	Yes 🔽	No 🔲	Adjusted?	
13. Is it clear what analyses were requively. Were all holding times able to be number of notify customer for authorization.	net?	Yes 🗹 Yes 🗹	No 🗆	Checked by:	
Special Handling (if applicabl	<u>(e)</u>	•			
15. Was client notified of all discrepar	icles with this order?	Yes 🗌	No 🗆	NA 🗹	
Person Notified:  By Whom:  Regarding:  Client Instructions:	Date: j	eMail F	Phone	In Person  Control and the Control of the Control o	
16. Additional remarks:					
17. Cooler Information  Cooler No Temp °C Conc  1 2.0 Good  2 16.2 Good  3 2.4 Good	lition   Seal Intact   Seal No	Seal Date	Signed By		

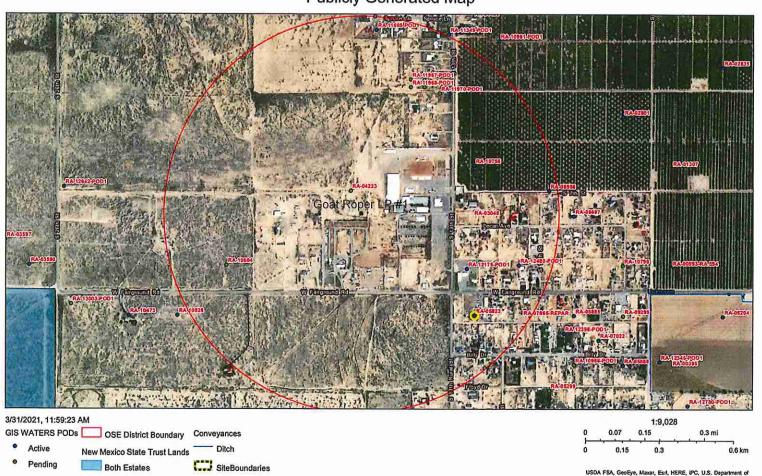
Ü	ב מ	10-to	Chain-of-Custody Record	i urn-Arouna	Furn-Around Time: $5 L_{y}$					•					ě L		
Client: (	207	RESOURCES	13 Inc.	区 Standard	□ Rush					Z Z				ANALYSIS LABORATORY		. >	
				Project Name:						www.	lallen	www.hallenvironmental.com	nenta	mos	)	ŧ	
Mailing Address:	Address	: On F.l.	10	Cont Roper	1# 17 "		•	1901	ławki	ıs NE	4	pndne	erdne	4901 Hawkins NE - Albuquerque, NM 87109			
				Project #:				Tel. 505-345-3975	05-34	5-397	2	Fax	505-3	505-345-4107			
Phone #:	٠. ي								T. Carlos A. Carlos		Anal	Analysis Request	Redu	<b>St</b>			Special dealers
email or Fax#:	Fax#:			Project Manager:	ger:			(0)			<sup>†</sup> O:			/111			
QA/QC Package:	ackage:				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					SWI	S '7C			esay.			
☐ Standard	Jard		☐ Level 4 (Full Validation)	Mise	11411					ISO,	9 ,						
Accreditation:	ation:	□ Az Co	mpliance	Sampler: 6	Chros Sittle	) NE				728 H	NO						
	֧֧֧֧֧֓֞֟֝֝֝֟֝֝֝֝֟֝֝֝֟֝֝֟֝֝֝֟֝֝֟֝֝֝֟֝֝֟֝֝֟֝		***************************************	OI 106.	ß									1) 1			
□ EUU (1ype,	(1 ype)_			# or coolers: こ	Ś	100								ui0			
		·		Cooler I emp	Cooler Lemp(Induding cF): ソベー	OPECALIFIE								WID?		<del></del>	
d d	Tine	Matrix	Sample Name	Container Type and #	Preservative Tvne	HEAL No.	XEX	8:H97 3081 F	) 8a=	sHAc	₹CRA	9260 (	) 07S8	lotal (			
2	8:00	-ieŻ		1	G.	(36)	1	<u> </u>		<u> </u>		1				-	<del>.,</del>
	8.05	_	27			28	-	-			1-						
	8-11		53	ange.		603											1
	8:16		h3			Och											
	8:20		57			S0S							<del> </del>				
	8:26		1)			006											
	8:31		[7]			607											
	836		87			008											
						and distribution of the state o	1	1									
																	<del></del>
Date:	Time:	RelinauisKed bv.	pa pa	Received/av.	Vía:	Date Time	Remarks	<u>.</u>		$\dashv$	_		_			-	
12	11:30	M		S		M				-			ر آ	1.940,1=2.0 10:1+0:1=10	, <		
	Time:	Relinquished by:	ed by:	Received by:	Via:	Date Time			1/5 / ot /	of			0	2.5+6.1=2	ز ز		
2  32	(1/g)	7		1	4:2001	7.70			>						,		
<u> </u>	vicesouou.	camplecent	of the Hall Emission and I half at	e ranto di other a	seinten fahoratories	This serves as notice of this	nesihi	N Anys	100-41 t	racted	Ilian etc	o clear	y notate	report report the analytical report	T C		



# Appendix B **NMOSE Groundwater Data**

Received by OCD: 3/31/2021 3:53:06 PM

## **Publicly Generated Map**



USDA FSA, GeoEye, Maxar, Esrl, HERE, IPC, U.S. Department of Energy Office of Legacy Management, Esrl, HERE, Garmin, IPC



(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** 

RA 11605 POD1

Q64Q16Q4 Sec Tws Rng 1 4 2 30 17S 26E

X 554681 3630208

Driller License: 1064

Driller Company:

DELFORD W. MARTIN

Driller Name:

MARTIN, DELFORD

Drill Start Date: 05/02/2010

**Drill Finish Date:** 

05/05/2010

Plug Date:

Log File Date: 05/20/2010

PCW Rcv Date:

Source:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield: 15 GPM

Casing Size:

5.00

Depth Well:

Depth Water:

148 feet

Water Bearing Stratifications:

Top Bottom Description

240 feet

148

240 Sandstone/Gravel/Conglomerate

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

3/31/21 11:57 AM

POINT OF DIVERSION SUMMARY



(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** 

Drill Start Date: 06/17/2008

RA 11349 POD1

Q64Q16Q4 Sec Tws Rng 2 30 17S 26E

X

Driller License: 1400

554975 3630191

SOUTHEAST DRILLING COMPANY

Driller Name: HAMMOND, MARK

**Drill Finish Date:** 

Driller Company:

06/23/2008

Plug Date: Source:

Shallow

Pump Type:

Log File Date: 07/01/2008

PCW Rcv Date: Pipe Discharge Size:

Estimated Yield: 20 GPM

Casing Size:

7.00

Depth Well:

240 feet

Depth Water:

143 feet

Water Bearing Stratifications:

Top Bottom Description 5 Other/Unknown

0 5

25 Shale/Mudstone/Siltstone 40 Sandstone/Gravel/Conglomerate

25 90 Shale/Mudstone/Siltstone 40

90 175 Shale/Mudstone/Siltstone

230 Sandstone/Gravel/Conglomerate 175

240 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

240 182

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

3/31/21 11:58 AM

POINT OF DIVERSION SUMMARY



(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) Q64Q16Q4 Sec Tws Rng (NAD83 UTM in meters)

**POD Number** Well Tag

RA 10755

1 3 29 17S 26E

Х 555081 3629663\*

**Driller License: 1448** 

Driller Company: KENNARD DRILLING

Driller Name: KENNARD, DALE

Drill Start Date: 05/17/2005

**Drill Finish Date:** PCW Rcv Date:

05/23/2005

Plug Date: Shallow

Pump Type:

Log File Date: 06/02/2005

Pipe Discharge Size:

Estimated Yield: 30 GPM

Casing Size:

5.00

Depth Well:

Depth Water:

130 feet

Water Bearing Stratifications:

Top Bottom Description 180 195

185 Limestone/Dolomite/Chalk 205 Limestone/Dolomite/Chalk 220 Limestone/Dolomite/Chalk

210

287 Limestone/Dolomite/Chalk

287 feet

**Casing Perforations:** 

Top Bottom

287

207

\*UTM location was derived from PLSS - see Help

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

3/31/21 11:50 AM

POINT OF DIVERSION SUMMARY



(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (

(NAD83 UTM in meters)

Well Tag POD Number Q64Q16Q4 Sec Tws Rng X

3 3 3 29 17S 26E 555054 3629244

Driller Company: HOPPER PUMP & DRILLING, INC. Driller License: 1632

Driller Name: CURRY, CALEB

RA 12175 POD1

Drill Start Date: 10/01/2014 **Drill Finish Date:** 10/08/2014 Plug Date:

Log File Date: 10/23/2014 PCW Rcv Date: Source: Shallow Estimated Yield: 60 GPM Pump Type: Pipe Discharge Size: Casing Size: Depth Well: Depth Water: 200 feet 5.00 260 feet

Water Bearing Stratifications: Top Bottom Description 200 220 Sandstone/Gravel/Conglomerate 220 230 Sandstone/Gravel/Conglomerate 230 260 Sandstone/Gravel/Conglomerate

**Casing Perforations:** Top Bottom 200

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

3/31/21 11:50 AM

POINT OF DIVERSION SUMMARY



(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

**POD Number** Well Tag RA 12480 POD1 Q64Q16Q4 Sec Tws Rng 3 3 29 17S 26E

Х 555266 3629260

Driller License: 1632

Driller Company: HOPPER PUMP & DRILLING, INC.

Driller Name: CURRY, CALEB

Drill Start Date: 06/21/2017

**Drill Finish Date:** 

06/23/2017

Plug Date:

Shallow

Pump Type:

Log File Date: 07/05/2017

PCW Rcv Date:

Source:

5.00

Pipe Discharge Size: Depth Well:

Estimated Yield: 50 GPM

Casing Size:

260 feet Top Bottom Description

Depth Water:

142 feet

Water Bearing Stratifications:

190 Sandstone/Gravel/Conglomerate

200

260 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

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

3/31/21 11:58 AM

POINT OF DIVERSION SUMMARY



(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) Q64Q16Q4 Sec Tws Rng (NAD83 UTM in meters)

POD Number Well Tag

RA 10528

2 1 31 17S 26E

Х 553878 3629049\*

Driller License: 1229

Driller Company: CARTER'S WELL DRILLING

**Driller Name:** 

Drill Start Date: 06/25/2004 Log File Date: 08/12/2004

PCW Rcv Date:

**Drill Finish Date:** 

07/01/2004

Plug Date: Source:

Shallow

Pump Type:

SUBMER

Pipe Discharge Size:

Estimated Yield: 30 GPM

Casing Size:

Depth Well:

331 feet

Depth Water: 150 feet

Water Bearing Stratifications:

Casing Perforations:

Top Bottom Description

210 Sandstone/Gravel/Conglomerate

Top Bottom

100 331

\*UTM location was derived from PLSS - see Help

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

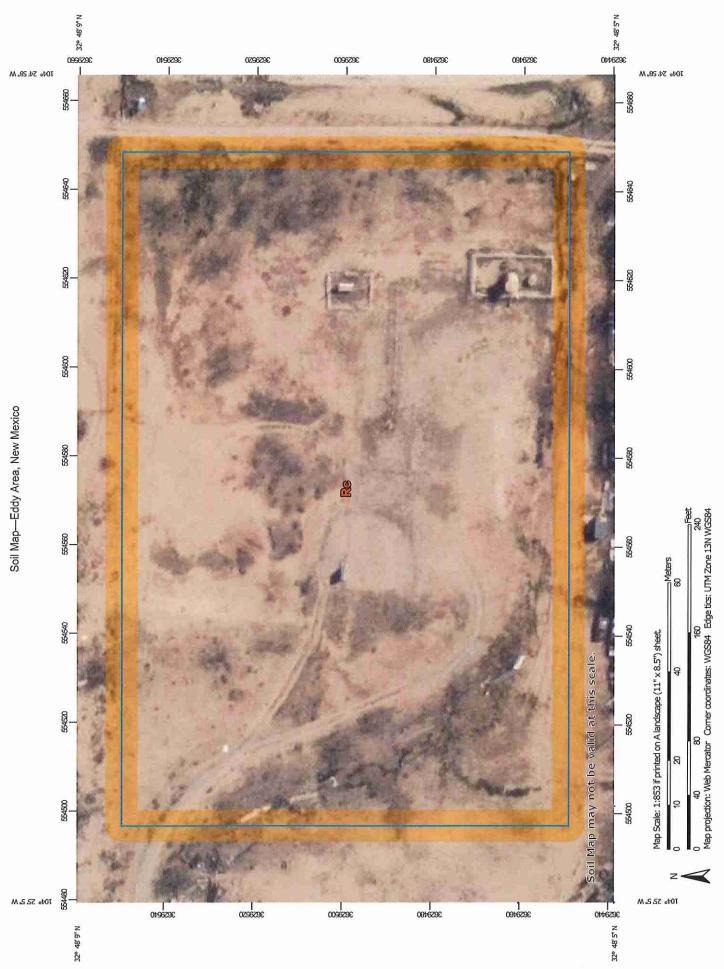
3/31/21 11:50 AM

POINT OF DIVERSION SUMMARY

Received by OCD: 3/31/2021 3:53:06 PM



# Appendix C NRCS Soil Data



Web Soil Survey National Cooperative Soil Survey

3/31/2021 Page 1 of 3

Natural Resources Conservation Service USDA

# MAP LEGEND

### Special Line Features Streams and Canals Interstate Highways Very Stony Spot Major Roads Local Roads Stony Spot Spoil Area US Routes Wet Spot Other Rails **Nater Features** Transportation Background W 1 8 Q ‡ Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Soil Map Unit Lines Closed Depression Special Point Features **Gravelly Spot** Borrow Pit Clay Spot **Gravel Pit** Lava Flow Area of Interest (AOI) Blowout Landfill Soils

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map measurements. Natural Resources Conservation Service Web Soil Survey URL: Source of Map:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator distance and area. A projection that preserves area, such as the projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Aerial Photography

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

Survey Area Data: Version 16, Jun 8, 2020 Eddy Area, New Mexico Soil Survey Area:

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: Feb 27, 2020—Feb

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Severely Eroded Spot

Slide or Slip

Sinkhole

Sodic Spot

## **Map Unit Legend**

Totals for Area of Interest		3.8	100.0%
Rc	Reagan loam, 0 to 1 percent slopes	3.8	100.0%
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI

Received by OCD: 3/31/2021 3:53:06 PM



# Appendix D FEMA Flood Map



(//www.fema.gov/)

Navigation

Search

Languages

MSC Home (/portal/)

MSC Search by Address (/portal/search)

MSC Search All Products (/portal/advanceSearch)

 MSC Products and Tools (/portal/resources/productsandtools)

(/portal/resources/hazus)

LOMC Batch Files (/portal/resources/lomc)

Product Availability (/portal/productAvailability)

MSC Frequently Asked Questions (FAQs) (/portal/resources/faq)

MSC Email Subscriptions (/portal/subscriptionHome)

Contact MSC Help (/portal/resources/contact)

## FEMA Flood Map Service Center: Search By **Address**

Enter an address, place, or coordinates: 🔞

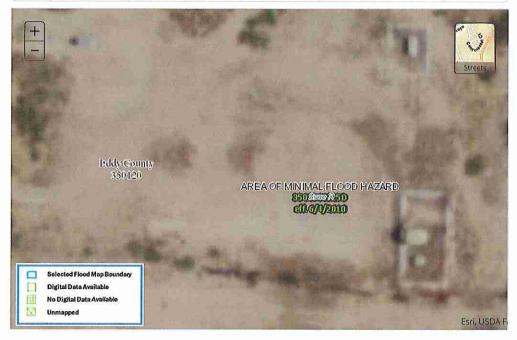
Eddy County New Mexico

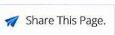
Search

Released to Imaging: 7/7/2021 11:22:00 AM

Whether you are in a high risk zone or not, you may need flood insurance (https://www.fema.gov/national-floodinsurance-program) because most homeowners insurance doesn't cover flood damage. If you live in an area with low or moderate flood risk, you are 5 times more likely to experience flood than a fire in your home over the next 30 years. For many, a National Flood Insurance Program's flood insurance policy could cost less than \$400 per year. Call your insurance agent today and protect what you've built.

Learn more about steps you can take (https://www.fema.gov/what-mitigation) to reduce flood risk damage.





Home (//www.fema.gov/), Download Plug-ins (//www.fema.gov/download-plug-ins), About Us (//www.fema.gov/about-agency) Privacy Policy (//www.fema.gov/privacy-policy) FOIA (//www.fema.gov/foia) Office of the Inspector General (//www.oig.dhs.gov/) Strategic Plan (//www.fema.gov/fema-strategic-plan) Whitehouse.gov (//www.whitehouse.gov) DHS.gov (//www.dhs.gov) Ready.gov (//www.ready.gov) USA.gov (//www.usa.gov) DisasterAssistance.gov (//www.disasterassistance.gov/)



(https://www.oig.dhs.gov/hotline)

Official website of the Department of Homeland Security

Received by OCD: 3/31/2021 3:53:06 PM



# Appendix E Form C-141

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

State of New Mexico Energy Minerals and Natural Resources Department

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

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

Released to Imaging: 7/7/2021 11:22:00 AM

	Incident ID	NRM2035039644
***************************************	District RP	
	Facility ID	
	Application ID	

## **Release Notification**

## **Responsible Party**

Responsible	Party EOG	Resources, In	C.		OGRID 7	 377	A A A A A A A A A A A A A A A A A A A	
Contact Name Chase Settle				Contact Te	elephone 575-748	B-1471		
Contact email Chase_Settle@eogresources.com				(assigned by OCD)				
Contact mai	ling address	104 S. 4th Stı	eet, Artesia, I	NM 8	B210			
L			Location		•	ource		
32	<u> </u>							
Latitude 32	.00201			ecimal de	Longitude _ grees to 5 decin	-104.41693 nal places)		
Site Name o		I D #4			Sita Tuna -	- 11		
Site Name G	oat Kope	r LP #1			Site Type			
Date Release	Discovered	12/01/2020			API# (if applicable) 30-015-23059			
Unit Letter   Section   Township   Range				Coun	ity			
Р	30	17S	26E	Eddy				
Surface Owne	er: State	Federal T	ribal 🛛 Private (	Name:			)	
			Nature and	d Vol	lume of I	Release		
	Mataria	ila) Balannad (Calanta	II that anote and attack	, aalaulat	iona on spacifia	justification for the volu	omeon manifest helenid	
Crude Oi		Volume Release		i caiculai	ions or specific	Volume Recover		
Produced	Water	Volume Release	ed (bbls)			Volume Recover	ed (bbls)	
,			tion of dissolved o	chloride	in the	in the Yes No		
produced water >10,000 mg/l?  Condensate Volume Released (bbls) 19					Volume Recovered (bbls) 0			
Natural C	<del>l</del> as	Volume Release	ed (Mcf)		Volume Recovered (Mcf)			
Other (de	escribe)	Volume/Weight	Released (provid	e units)		Volume/Weight l	Recovered (provide units)	
gauged so	was discover the lost version	l vered approxim olume was 16 i to be just unde	nches of the ta	ink ca	pacity whic	om of the tank. ch calculates to	The tank had previously been 1.16 barrels per inch, making	

Incident ID	NRM2035039644
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the response	onsible party consider this a major release?							
19.15.29.7(A) NMAC?									
☐ Yes ⊠ No									
100 2110									
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?									
	Initial R	esponse							
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury									
The source of the rele	ase has been stopped.								
The impacted area has	s been secured to protect human health and	the environment.							
Released materials ha	ve been contained via the use of berms or	dikes, absorbent pads, or other containment devices.							
All free liquids and re	coverable materials have been removed ar	nd managed appropriately.							
If all the actions described	above have <u>not</u> been undertaken, explain	why:							
Day 10 15 20 9 D (4) NIM	A C the weep enable weeks were enabled	and distingtion and district the first terms of the state							
has begun, please attach a	narrative of actions to date. If remedial	remediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred							
within a lined containmen	t area (see 19.15.29.11(A)(5)(a) NMAC),	please attach all information needed for closure evaluation.							
I hereby certify that the informations all appropriates	mation given above is true and complete to the	best of my knowledge and understand that pursuant to OCD rules and ifications and perform corrective actions for releases which may endanger							
public health or the environm	ent. The acceptance of a C-141 report by the G	OCD does not relieve the operator of liability should their operations have							
failed to adequately investiga addition, OCD acceptance of	te and remediate contamination that pose a three a C-141 report does not relieve the operator of	eat to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws							
and/or regulations.		, , , , , , , , , , , , , , , , , , , ,							
Printed Name: Chase S	Settle	Title: Rep Safety & Environmental II							
Signature: Chan Se		40/00/0000							
email: Chase_Settle@	@eogresources.com	Telephone: 575-748-1471							
		•							
OCD Only									
		D .							
Received by:		Date:							

Incident ID	NRM2035039644
District RP	
Facility ID	
Application ID	

Released to Imaging: 7/7/2021 11:22:00 AM

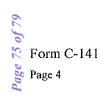
## Site Assessment/Characterization

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?	130 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☑ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☑ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☑ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☑ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☑ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☑ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☑ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☑ No
Did the release impact areas not on an exploration, development, production, or storage site?	☐ Yes ☑ No
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and ve contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.	rtical extents of soil
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 we Field data	ls.
☐ 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	

Depth to water determination
Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
Boring or excavation logs
Photographs including date and GIS information
Topographic/Aerial maps
Laboratory data including chain of custody

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



Incident ID	NRM2035039644
District RP	
Facility ID	
Application ID	

regulations all operators are required to report and/or file certain release not public health or the environment. The acceptance of a C-141 report by the failed to adequately investigate and remediate contamination that pose a thr addition, OCD acceptance of a C-141 report does not relieve the operator of and/or regulations.	OCD does not relieve the operator of liability should their operations have eat to groundwater, surface water, human health or the environment. In
Printed Name: Chase Settle	Title: Rep Safety & Environmental Sr
Signature: Chan Settle	Date: 3/29/2021
email: Chase_Settle@eogresources.com	Telephone: 575-748-1471
OCD Only	
Received by:	Date:

Incident ID	NRM2035039644
District RP	
Facility ID	
Application ID	

Released to Imaging: 7/7/2021 11:22:00 AM

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	e included in the plan.
<ul> <li>✓ Detailed description of proposed remediation technique</li> <li>✓ Scaled sitemap with GPS coordinates showing delineation point</li> <li>✓ Estimated volume of material to be remediated</li> <li>✓ Closure criteria is to Table 1 specifications subject to 19.15.29.1</li> <li>✓ Proposed schedule for remediation (note if remediation plan times)</li> </ul>	2(C)(4) NMAC
Deferral Requests Only: Each of the following items must be con-	offermed as part of any request for deferral of remediation
Contamination must be in areas immediately under or around predeconstruction.	
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 complet rules and regulations all operators are required to report and/or file c which may endanger public health or the environment. The acceptantiability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local laterals.	ertain release notifications and perform corrective actions for releases nce of a C-141 report by the OCD does not relieve the operator of and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name: Chase Settle	Title: Rep Safety & Environmental Sr
Signature: Chau Settle	Date: 3/29/2021
email: Chase_Settle@eogresources.com	Telephone: 575-748-1471
OCD Only	
Received by:	Date:
Approved Approved with Attached Conditions of A	Approval Denied Deferral Approved
Signature:	Date:



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

Incident ID	
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.

A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC	
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office	
Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of	tions. The responsible party acknowledges they must substantially nditions that existed prior to the release or their final land use in	
Printed Name:	Title:	
Signature:	Date:	
email:	Telephone:	
OCD Only		
Received by:	Date:	
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.		
Closure Approved by:	Date:	
Printed Name:	Title:	

Incident ID	NRM2035039644
Incident 1D	NRIVI2035039644
District RP	
Facility ID	
Application ID	

Released to Imaging: 7/7/2021 11:22:00 AM

# **Remediation Plan**

Remediation Plan Checklist: Each of the following items must be	e included in the plan.
Detailed description of proposed remediation technique  Scaled sitemap with GPS coordinates showing delineation poin  Estimated volume of material to be remediated  Closure criteria is to Table 1 specifications subject to 19.15.29.  Proposed schedule for remediation (note if remediation plan times)	12(C)(4) NMAC
The state of the s	terme is more than 50 days OCD approvar is required)
Deferral Requests Only: Each of the following items must be con	nfirmed as part of any request for deferral of remediation.
	roduction equipment where remediation could cause a major facility
Extents of contamination must be fully delineated.	
Contamination does not cause an imminent risk to human health	n, the environment, or groundwater.
I hereby certify that the information given above is true and complete rules and regulations all operators are required to report and/or file of which may endanger public health or the environment. The accepta liability should their operations have failed to adequately investigate surface water, human health or the environment. In addition, OCD a responsibility for compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal state, or local limits of the compliance with any other federal, state, or local limits of the compliance with any other federal state.	e and remediate contamination that pose a threat to groundwater, acceptance of a C-141 report does not relieve the operator of
Printed Name: Chase Settle	Title: Rep Safety & Environmental Sr
Signature: Chan Settle	Date: 3/29/2021
email: Chase_Settle@eogresources.com	Telephone: 575-748-1471
OCD Only	
Received by: Robert Hamlet	Date:
☐ Approved	Approval Denied Deferral Approved
Signature: Robert Hamlet	Date: 7/7/2021

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 22487

## **CONDITIONS**

Operator:	OGRID:
EOG RESOURCES INC	7377
P.O. Box 2267	Action Number:
Midland, TX 79702	22487
	Action Type:
	[C-141] Release Corrective Action (C-141)

### CONDITIONS

Created	Condition	Condition
Ву		Date
	The Workplan/Remediation Plan is approved with the following conditions: When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to ground water within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for ground water at a depth of 50 feet or less. Please make sure all groundwater data is included in closure report summary. Soil contamination limits need to meet closure criteria standards for proven depth to water determination. Please make sure the contaminated material not meeting OCD closure criteria standards is delineated, removed, and hauled off site to a division-approved facility within 90 days of remediation plan approval.	7/7/2021