Souder, Miller & Associates ♦ 201 S. Halagueno ♦ Carlsbad, NM 88221
(575) 689-7040

Needs furthe delineation

November 2, 2016

#5B24624-BG15

NMOCD District I
Kristen Lynch
1625 N. French Dr.
Hobbs, NM 88240

SUBJECT: WORK PLAN FOR INCIDENT 1RP-4418, CAUDILL # 002, UNIT L SECTION 8-T16S-R37E NMPM, API# 30-025-30406, LEA COUNTY, NEW MEXICO

Dear Mrs. Lynch:

On behalf of Matador Resources Company (Matador), Souder Miller & Associates is pleased to submit a work plan summarizing the planned soil remediation for the release site located at the Caudill # 002 in Lea County, New Mexico. The purpose of the work plan is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for the remediation of the release that occurred on Private property on August 24, 2016.

Souder, Miller & Associates (SMA) responded at the request of Matador Resources Company, to assess and delineate the release of production fluids associated with the Caudill # 002 well location. The release was initially reported to NMOCD by Matador Resources Company, on August 24, 2016 and was a result of an equipment failure. The table below summarizes information regarding the release. Results of the assessment, delineation are described in the following report.

Table 1: Release information and Site Ranking

Name	Caudill # 002				
Location	Incident Number	API Number	Section, Township, Range		
	1RP-4418	30-025-30406	SW/NE (LUnit)	Section 8	T16S, R37 E NMPM
Estimated Date of Release	August 24, 2016				
Date Reported to NMOCD	August 24, 2016				
Reported by	Catherine Green				
Land Owner	Private				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Equipment Failure				
Released Material	Produced Fluids				
Released Volume	~56 bbls of Produced Fluids				
Recovered Volume	35 bbls of Produced Fluids				
Net Release	21 bbls of Produced Fluids				

Nearest Waterway	2 miles West of the location
Depth to Groundwater	Estimated to be 54 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	20

Attached is a copy of the C-141 initial located in Appendix B. For questions or comments pertaining to the release or the attached work plan please feel free to contact either of us.

Submitted by:

SOUDER, MILLER & ASSOCIATES

J. Austin Weyant

Austin Weyant
Project Scientist

Reviewed by:

Cynthia Gray, CHMM
Senior Scientist

SOIL REMEDIATION WORK PLAN FOR INCIDENT 1RP-4418

MATADOR RESOURCES COMPANY

CAUDILL # 002
UL L, SECTION 8, T16S R37E, NMPM
API #30-025-30406
LEA COUNTY, NM

Prepared for:
Matador Resources Company
PO Box 1933,
Roswell, NM 88202

Prepared by:
Souder, Miller & Associates
201 S. Halagueno
Carlsbad, NM 88221
575-689-704

October 11, 2016
SMA Reference
5B24624 BG15

Table of Contents

Figures:

Tables:

Appendices:

1.0 Introduction

On behalf of Matador Resources Company, Souder, Miller & Associates (SMA) has prepared this report that describes the assessment, initial delineation and proposed remediation for a release associated with the release associated with the Caudill # 002 location API# 30-025-30406. The site is located in Section 8, Township 16S, Range 37E NMPM, Lea County, New Mexico, on private property. Figure 1 illustrates the vicinity and location of the site.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 2 miles east of the Twin lakes, with an elevation of approximately 3,865 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 54 feet below ground surface (bgs).

SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. 36 well is located within a one mile radius of the site. Figure 1 depicts the site vicinity and Figure 2 shows the site itself. The physical location of this release is within the jurisdiction of NMOCD.

Based on the NMOCD Guidelines Ranking Criteria, this release location has been assigned a NMOCD ranking of 20 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 100 ppm total petroleum hydrocarbons (TPH). Table 1 illustrates site ranking rationale.

3.0 Assessment and Initial Results

On August 24, 2016 after receiving 811 clearance, SMA field personnel assessed the remediated release area onsite with a gas powered auger, Photo Ionization Detector (PID), and a mobile chlorides titration kit EPA method 9045D meter. The potentially affected area was found to be approximately 70 feet long and 30 feet wide. The site delineation samples were taken to depths of one feet bgs. Location 2 (L2) and Location 3 (L3) do not meet the recommended remediation action levels from TPH. Specific sample locations for all samples are depicted on Figure 2 (Sample Location Map) along with sampling details. All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for Total Chlorides using EPA Method 300.0.

4.0 Soil Remediation Work Plan

SMA will begin the excavation of affected soils, with approval from area utilities owners via 811 and NMOCD. SMA will continuously guide the excavation activities by collecting composite soil samples for field screening with a mobile titration unit (EPA 4500) and a calibrated PID. Excavation will occur at L2 and L3 (Figure 2) to depths of six to eight inches bgs to sufficient to delineate the plume by NMOCD standards according to the sample results in Table 2. Affected soils will be removed from these areas before the closure samples are collected at the final depth of excavation and sidewalls. Approximately 50 cubic yards of contaminated soil are projected to be removed and replaced with clean backfill material sufficient to return the contours to surface gradient. The contaminated soil will be transported for proper disposal at Lea Land, near Carlsbad, NM an NMOCD permitted facility.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 20: 10 ppm (mg/kg) Benzene, 50 ppm total BTEX, and 100 ppm TPH

After the soil remediation work plan is approved by NMOCD, SMA will begin soil remediation activities on site.

Soil contaminant concentrations found during the initial delineation are illustrated in Figure 2. A summary of the laboratory analyses is included in Table 2. Laboratory reports are included in Appendix A.

Photo documentation is available by request.

6.0 Closure and Limitations

The scope of our services consisted of the performance of confirmatory spill and spill mitigation assessment sampling, verification of release stabilization, regulatory liaison, and preparation of this work plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-7040 or Cindy Gray at 505-325-7535.

Submitted by:

SOUDER, MILLER & ASSOCIATES

Austin Weyant
Project Scientist

Reviewed by:

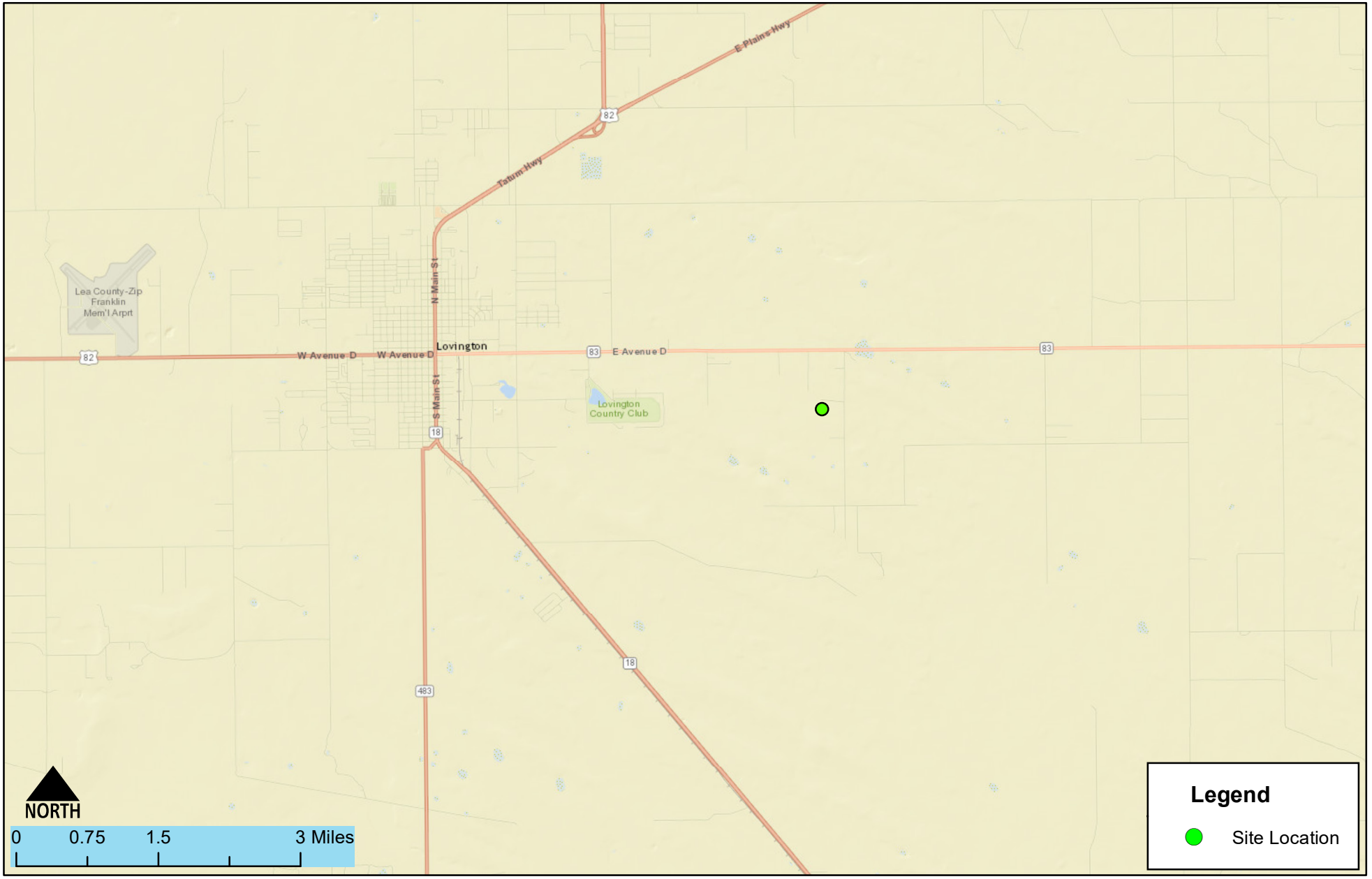
Cynthia Gray, CHMM
Senior Scientist

Figures:

Tables:

Appendices:

FIGURE 1
VICINITY MAP



Vicinity Map
Matador- Caudill # 002
Lovington, New Mexico

Figure 1

Document: C:\Users\lcm.CBO\Documents\GIS DATA\MAPS\caudill figure 1.mxd

Date Saved: 11/2/2016

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Lucas Middleton
Checked
Approved

SMA
201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689.7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

FIGURE 2

DETAILED SITE AND SAMPLE MAP

Detailed Site and Sample Map
Matador- Caudill # 002
Lovington, New Mexico

Figure 2

Revisions
By: Date: Descr:
By: Date: Descr:

Drawn Lucas Middleton
Checked
Approved

201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689-7040
www.soudermiller.com
Serving the Southwest & Rocky Mountains

Date Saved: 11/2/2016

Document: C:\Users\lcm.CBO\Documents\GIS DATA\MAPS\Figure 2 caudill.mxd

TABLE 1

RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking					
Name	Caudill # 002				
Location	Incident Number	API Number	Section, Township, Range		
	1RP-4418	30-025-30406	SW/NE (LUnit)	Section 8	T16S, R37 E NMPM
Estimated Date of Release	August 24, 2016				
Date Reported to NMOCD	August 24, 2016				
Reported by	Catherine Green				
Land Owner	Private				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Equipment Failure				
Released Material	Produced Fluids				
Released Volume	~56 bbls of Produced Fluids				
Recovered Volume	35 bbls of Produced Fluids				
Net Release	21 bbls of Produced Fluids				
Nearest Waterway	2 miles West of the location				
Depth to Groundwater	Estimated to be 54 feet				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	20				
SMA Response Dates	August 24, 2016				
Subcontractors					
Disposal Facility					
Estimated Yd^3 Contaminated Soil Excavated and Disposed	50				

TABLE 2

SUMMARY OF CHLORIDE FIELD SCREENING RESULTS

Table 2: Summary of Chloride Field Screening Results

Caudill # 002
Sample Event
8/24/16

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	Chlorides Results	Lab Sample Collected Y/N
8/24/2016	1:00	L1	0.5'	0	Y
8/24/2016	1:00	L2	Surface	0	Y
8/24/2016	1:00	L2	0.5'	0	Y

TABLE 3

SUMMARY OF LABORATORY ANALYSES

Table 3: Summary of Laboratory Analyses

Analytical Report- 1610720	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	Cl- mg/Kg
1610720-001	L1	8/24/2016	0.5'	N/A	N/A	BDL	65	N/A
1610720-002	L2	8/24/2016	Surface	BDL	BDL	BDL	18000	N/A
1610720-003	L3	8/24/2016	0.5'	N/A	N/A	BDL	5900	N/A

APPENDIX A

LABORATORY ANALYTICAL REPORTS

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

October 19, 2016

Austin Weyant
Souder, Miller & Associates
201 S Halagueno
Carlsbad, NM 88221
TEL: (575) 689-7040
FAX

RE: Caudill #2 OrderNo.: 1610720

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/14/2016 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L1
Project: Caudill #2
Collection Date: 8/24/2016 2:00:00 PM
Lab ID: 1610720-001
Matrix: SOIL
Received Date: 10/14/2016 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	65	9.8	H	mg/Kg	1	10/19/2016 12:22:26 AM	28076
Motor Oil Range Organics (MRO)	83	49	H	mg/Kg	1	10/19/2016 12:22:26 AM	28076
Surr: DNOP	103	70-130	H	%Rec	1	10/19/2016 12:22:26 AM	28076
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.7	H	mg/Kg	1	10/18/2016 7:43:16 PM	28072
Surr: BFB	85.1	68.3-144	H	%Rec	1	10/18/2016 7:43:16 PM	28072

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L2
Project: Caudill #2
Collection Date: 8/24/2016 2:00:00 PM
Lab ID: 1610720-002
Matrix: SOIL
Received Date: 10/14/2016 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	18000	1000	H	mg/Kg	100	10/17/2016 8:49:01 PM	28076
Motor Oil Range Organics (MRO)	12000	5000	H	mg/Kg	100	10/17/2016 8:49:01 PM	28076
Surr: DNOP	0	70-130	SH	%Rec	100	10/17/2016 8:49:01 PM	28076
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	240	H D	mg/Kg	50	10/18/2016 8:07:22 PM	28072
Surr: BFB	86.3	68.3-144	H D	%Rec	50	10/18/2016 8:07:22 PM	28072
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	1.2	H D	mg/Kg	50	10/18/2016 8:07:22 PM	28072
Toluene	ND	2.4	H D	mg/Kg	50	10/18/2016 8:07:22 PM	28072
Ethylbenzene	ND	2.4	H D	mg/Kg	50	10/18/2016 8:07:22 PM	28072
Xylenes, Total	ND	4.8	H D	mg/Kg	50	10/18/2016 8:07:22 PM	28072
Surr: 4-Bromofluorobenzene	100	80-120	H D	%Rec	50	10/18/2016 8:07:22 PM	28072

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L3
Project: Caudill #2
Collection Date: 8/24/2016 2:00:00 PM
Lab ID: 1610720-003
Matrix: SOIL
Received Date: 10/14/2016 8:45:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	5900	97	H	mg/Kg	10	10/17/2016 9:34:59 PM	28076
Motor Oil Range Organics (MRO)	4400	480	H	mg/Kg	10	10/17/2016 9:34:59 PM	28076
Surr: DNOP	0	70-130	SH	%Rec	10	10/17/2016 9:34:59 PM	28076
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	250	H D	mg/Kg	50	10/18/2016 8:31:28 PM	28072
Surr: BFB	84.8	68.3-144	H D	%Rec	50	10/18/2016 8:31:28 PM	28072

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

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1610720**

19-Oct-16

Client: Souder, Miller & Associates

Project: Caudill #2

Sample ID	**LCS-28085**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID: **28085**			RunNo: **37982**				
Prep Date:	**10/17/2016**	Analysis Date: **10/17/2016**			SeqNo: **1183862**	Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.5	70	130			

Sample ID	**MB-28085**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID: **28085**			RunNo: **37982**				
Prep Date:	**10/17/2016**	Analysis Date: **10/17/2016**			SeqNo: **1183863**	Units: **%Rec**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.9		10.00		89.5	70	130			

Sample ID	**MB-28076**	SampType: **MBLK**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID: **28076**			RunNo: **37981**				
Prep Date:	**10/14/2016**	Analysis Date: **10/17/2016**			SeqNo: **1184449**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.6		10.00		85.7	70	130			

Sample ID	**LCS-28076**	SampType: **LCS**			TestCode: **EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID: **28076**			RunNo: **38007**				
Prep Date:	**10/14/2016**	Analysis Date: **10/18/2016**			SeqNo: **1184792**	Units: **mg/Kg**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	89.2	62.6	124			
Surr: DNOP	4.4		5.000		88.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1610720**

19-Oct-16

Client: Souder, Miller & Associates

Project: Caudill #2

Sample ID	**MB-28072**	SampType:	**MBLK**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**PBS**	Batch ID:	**28072**	RunNo:	**38021**
Prep Date:	**10/14/2016**	Analysis Date:	**10/18/2016**	SeqNo:	**1185981** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	840		1000		84.1	68.3	144			

Sample ID	**LCS-28072**	SampType:	**LCS**	TestCode:	**EPA Method 8015D: Gasoline Range**
Client ID:	**LCSS**	Batch ID:	**28072**	RunNo:	**38021**
Prep Date:	**10/14/2016**	Analysis Date:	**10/18/2016**	SeqNo:	**1185995** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	106	74.6	123			
Surr: BFB	930		1000		92.8	68.3	144			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: **1610720**

19-Oct-16

Client: Souder, Miller & Associates

Project: Caudill #2

Sample ID **MB-28072**	SampType: **MBLK**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **PBS**	Batch ID: **28072**	RunNo: **38021**
Prep Date: **10/14/2016**	Analysis Date: **10/18/2016**	SeqNo: **1186010** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		97.7	80	120			

Sample ID **LCS-28072**	SampType: **LCS**	TestCode: **EPA Method 8021B: Volatiles**
Client ID: **LCSS**	Batch ID: **28072**	RunNo: **38021**
Prep Date: **10/14/2016**	Analysis Date: **10/18/2016**	SeqNo: **1186011** Units: **mg/Kg**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	92.0	75.2	115			
Toluene	0.93	0.050	1.000	0	93.5	80.7	112			
Ethylbenzene	0.96	0.050	1.000	0	95.9	78.9	117			
Xylenes, Total	2.8	0.10	3.000	0	94.9	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Sample Log-In Check List

Client Name: SMA-CARLSBAD Work Order Number: 1610720 RcptNo: 1

Received by/date: _____

Logged By: **Michelle Garcia** 10/14/2016 8:45:00 AM Michelle Garcia

Completed By: **Michelle Garcia** 10/14/2016 12:48:13 PM Michelle Garcia

Reviewed By: aJ 10/14/16

Chain of Custody

1. Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
2. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
3. How was the sample delivered?	UPS		

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: SMA - Carlsbad

☑ Standard ☐ Rush

Project Name: Caudill #2

Project #:

Mailing Address:

Phone #:

email or Fax#:

Project Manager: Austin Weyant

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Sampler: Dan/Clay

Accreditation:

☐ NELAP ☐ Other

On Ice: ☑ Yes ☐ No

☐ EDD (Type)

Sample Temperature: 1.7°C

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1610720	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Air Bubbles (Y or N)
10/6	2:00	Soil	L1	4oz		001			X									
"	"	"	L2	"		002	X		X									
"	"	"	L3	"		003			X									

Date: 10/6 Time: 2:00 Relinquished by: Received by: Date: 10/14/16 Time: 0845

Date: Time: Relinquished by: Received by: Date: Time:

Remarks: Verified analysis with Austin. Email MRO Results. OK to run out of hold mg 10/14/16

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.

APPENDIX B
FORM C141 INITIAL

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

x☐ Initial Report ☐ Final Report

Name of Company Matador Resources	Contact Catherine Green
Address 500 N Main St Suite 1Roswell NM 88201	Telephone No. 575-623-6601
Facility Name Caudill # 002	Facility Type Oil Well

Surface Owner	Mineral Owner	API No. 30-025-30406

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	16S	37E	1980	FSL	810	FWL	Lea

Latitude_32.9348221___ **Longitude**_ ,-103.278389 _____

NATURE OF RELEASE

Type of Release overflow of produced water tank	Volume of Release ~56 barrels	Volume Recovered 35 barrels
Source of Release Recirculation pump	Date and Hour of Occurrence August 24, 2016	Date and Hour of Discovery August 24, 2016 9am
Was Immediate Notice Given? x☐ Yes ☐ No ☐ Not Required	If YES, To Whom? Catherine Green	
By Whom? Rickie Anguiano	Date and Hour August 24, 2016 10am	
Was a Watercourse Reached? ☐ Yes x☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*Connection broke to water dump valve. Gas lost on treater, circulating pump pumped oil out of oil tank to treater putting excess fluid in water tank.

Describe Area Affected and Cleanup Action Taken.*

Leak was contained in containment area. Excess fluid was vacuumed up and removed. Soil containing unsatisfactory levels of BTEX, DROs, and chlorides will be removed and replaced. See attached.

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

Signature: *Catherine S Green*	OIL CONSERVATION DIVISION	
Printed Name: Catherine Green	Approved by Environmental Specialist:	
Title: Regulatory Analyst	Approval Date:	Expiration Date:
E-mail Address: cgreen@matadorresources.com	Conditions of Approval:	Attached ☐
Date: August 24, 2016, 2016 Phone:575-623-6601		

* Attach Additional Sheets If Necessary