

October 26, 2016

#5B24624-BG16

Heather Patterson Environmental Specialist NMOCD District II 1301 W Grand Ave Artesia, NM 88210

SUBJECT: WORK PLAN FOR INCIDENT 2RP-3902, Charlie Sweeney 201H
UNIT M SECTION 30-T23S-R28E NMPM, API# 30-015-43695, EDDY COUNTY, NEW MEXICO

Dear Ms. Patterson:

On behalf of Matador Resources Company (Matador), Souder Miller & Associates (SMA) is pleased to submit a work plan summarizing the planned soil remediation for the release site located at the Charlie Sweeney 201H in Eddy 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 June 8, 2016.

SMA responded on September 20,2016 at the request of Matador Resources Company, to assess and delineate the release of production fluids associated with the Charlie Sweeney 201H well location. The release was initially reported to NMOCD by Matador Resources Company, on September 20, 2016 and was a result of a human error. The table below summarizes information regarding the release. Results of the assessment and delineation are described in the following Soil Remediation Workplan.

Table 1: Release information and Site Ranking							
Name		Charlie Sweeney 201H					
	Incident Number	API Number	Sectio	Range			
Location	2RP-3902 30-015- 43695		SW/NE (Unit M)	Section 30	T23S, R28E NMPM		
Estimated Date of Release	September 2	20, 2016					
Date Reported to NMOCD	September 2	20, 2016					
Reported by	Catherine G	reen					
Land Owner	Private						
Reported To	NM Oil Cons	servation Divis	sion (NMOCD)			
Source of Release	Human Error						
Released Material	Produced Water						
Released Volume	25 bbls Prod	duced Water			_		



Recovered Volume	10 bbls Produced Water
Net Release	15 bbls Produced Water
Nearest Waterway	0.12 miles north of the location
Depth to Groundwater	Estimated to be 79 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	20
SMA Response Dates	Initial: 9/21/16
Subcontractors	
Disposal Facility	
Estimated Yd3 Contaminated Soil Excavated and Disposed	210

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: Reviewed by:

SOUDER, MILLER & ASSOCIATES

J. Austr Wegant

Austin Weyant Project Scientist Shawna Chubbuck Senior Scientist

Shauna Chubbuck

SOIL REMEDIATION WORK PLAN FOR INCIDENT 2RP-3902

MATADOR RESOURCES COMPANY

CHARLIE SWEENEY 201H UL M, SECTION 30, T23S R28E, NMPM API #30-015-43695 EDDY COUNTY, NM



Prepared for: Matador Resources Company PO Box 1933, Roswell, NM 88202 Prepared by: Souder, Miller & Associates 201 S. Halagueno Carlsbad, NM 88221 575-689-7040

> October 26, 2016 SMA Reference 5B24624 BG16

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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 Charlie Sweeney 201H location API# 30-015-43695 (Incident #2RP-3902). The site is located in Section 30, Township 23S, Range 28E NMPM, Eddy 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 2.5 miles north of the Black River, with an elevation of approximately 3,116 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 79 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. Four wells are 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 October 4, 2016 after receiving 811 clearance, SMA field personnel assessed the release area with soil samples collected using a gas powered auger. Samples were screened for hydrocarbons using a calibrated Photo Ionization Detector (PID), and for chlorides using a mobile chlorides titration kit (EPA method 9045D) meter. Field screening results are included in Table 2. The potentially affected area was determined to be approximately 140 feet long and 40 feet wide. The site delineation samples were taken to depths of 1.5 feet bgs. Samples indicate the impacted soil does not appear to extend past one foot bgs. Specific sample locations for all samples are depicted on Figure 2 (Sample Location Map). 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 analyses of BTEX (EPA Method 8021B), TPH (EPA Method 8015) and/or total chlorides (EPA Method 300.0).

Soil contaminant concentrations found during the initial delineation are included in Table 3. Laboratory reports are included in Appendix A. Photo documentation is available by request.

4.0 Soil Remediation Work Plan

Matador and its subcontractors 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 (NRCS1:1) and a calibrated PID. Excavation will occur to depths to sufficient to delineate the plume by

hauna Chubbuck

NMOCD standards, which is estimated to be 0.5 feet bgs. Closure samples will be collected at the final depth of excavation and sidewalls. Approximately 210 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 an NMOCD permitted facility.

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

5.0 Limitations

The scope of our services consisted of the performance of initial spill 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: Reviewed by:

SOUDER, MILLER & ASSOCIATES

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Austin Weyant Shawna Chubbuck Project Scientist Senior Scientist

Figures:

Figure 1: Vicinity Map

Figure 2: Detailed Site and Sample Map

Tables:

Table 1: Release Information and Site Ranking

Table 2: Summary of Chloride Field Screening Results

Table 3: Summary of Laboratory Analyses

Appendices:

Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Final

FIGURE 1 VICINITY MAP

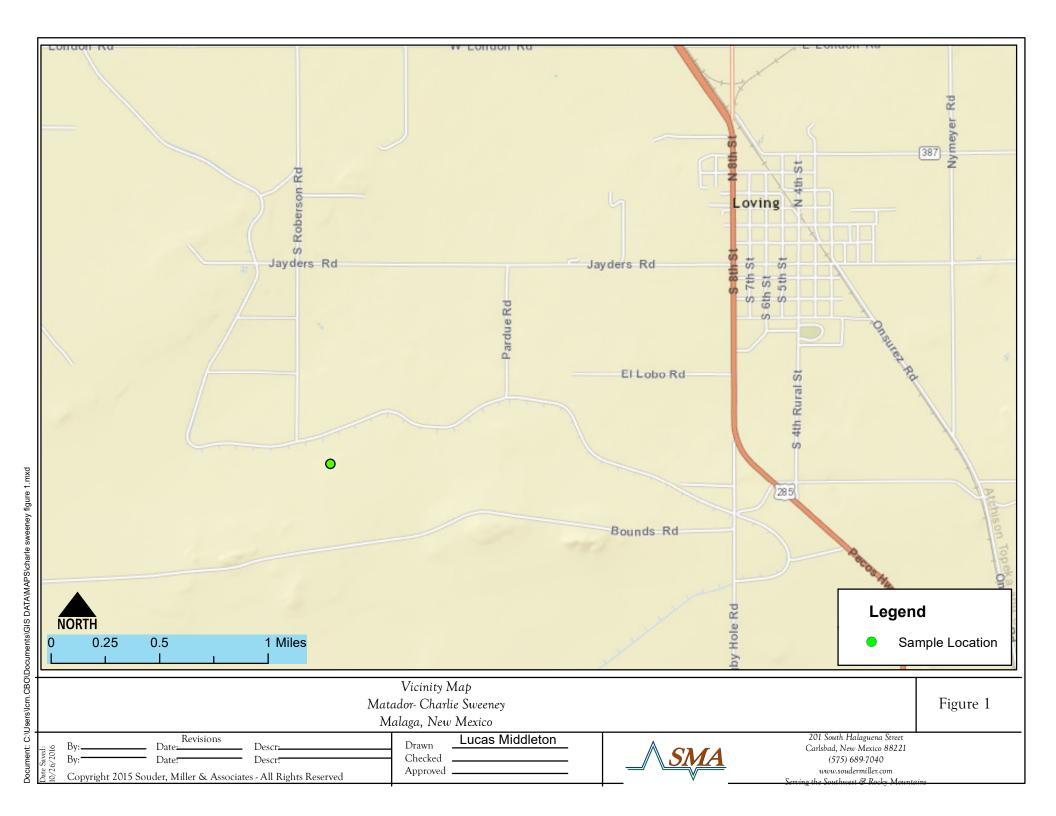


FIGURE 2 DETAILED SITE AND SAMPLE MAP

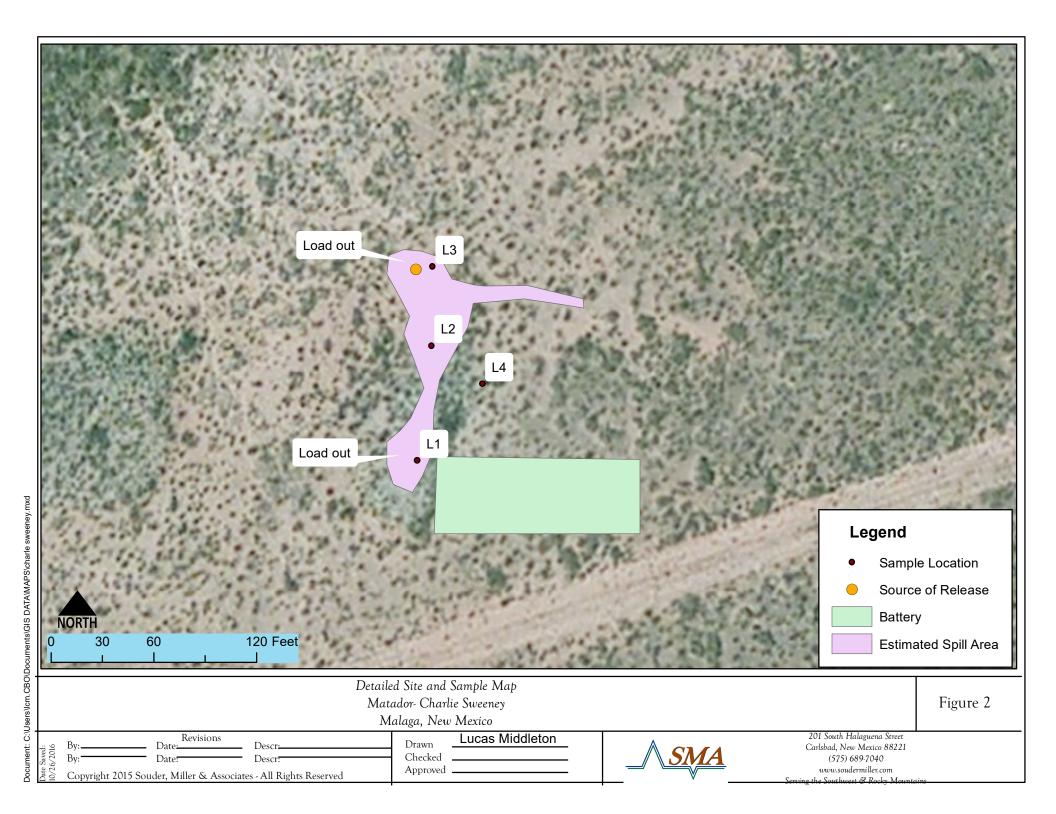


TABLE 1 RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking							
Name	Charlie Sweeney 201H						
Location	Incident API Section, Township, Range						
Location	2RP-3902	30-015- 43695	SW/NE (Unit M)	Section 30	R28E		
Estimated Date of Release	September	· 20, 2016					
Date Reported to NMOCD	September	· 20, 2016					
Reported by	Catherine (Green					
Land Owner	Private						
Reported To	NM Oil Cor	nservation I	Division (NN	ЛОCD)			
Source of Release	Human Err	or					
Released Material	Produced \	Nater					
Released Volume	25 bbls Pr	oduced Wa	ter				
Recovered Volume	10 bbls Pr	oduced Wa	ter				
Net Release	15 bbls Pr	oduced Wa	ter				
Nearest Waterway	0.12 miles	north of th	e location				
Depth to Groundwater	Estimated	to be 79 fee	et				
Nearest Domestic Water Source	Greater th	an 1,000 fe	et				
NMOCD Ranking	20						
SMA Response Dates	Initial: 9/2	1/16					
Subcontractors							
Disposal Facility							
Estimated Yd3 Contaminated Soil Excavated and Disposed	210						

TABLE 2 SUMMARY OF CHLORIDE FIELD SCREENING RESULTS

Table 2: Summary of Chloride Field Screening Results

FIELD SCREENING RESULTS SUMMARY								
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	Chlorides Results	Lab Sample Collected Y/N			
9/26/2016	1:00pm	L1	1.5'	0	Υ			
9/26/2016	1:00pm	L2	1'	0	Υ			
9/26/2016	1:00pm	L3	1'	0	Υ			
9/26/2016	1:00pm	L4	1'	0	Υ			



TABLE 3 SUMMARY OF LABORATORY ANALYSES

Table 3: Summary of Laboratory Analyses

Analytical Report- 1610672	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	CI- mg/Kg
1610672- 001	L1	10/4/2016	1.5'	<0.095	<0.024	N/A	N/A	<30
1610672- 002	L2	10/4/2016	1'	N/A	N/A	<4.8	<10	<30
1610672- 003	L3	10/4/2016	1'	N/A	N/A	N/A	N/A	<30
1610672- 004	L4	10/4/2016	1'	N/A	N/A	N/A	N/A	<30

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 (505) 327-1496

RE: Charlie Sweenzy OrderNo.: 1610672

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 10/11/2016 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

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 10/19/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: L1-1.5

 Project:
 Charlie Sweenzy
 Collection Date: 10/4/2016 3:30:00 PM

 Lab ID:
 1610672-001
 Matrix: SOIL
 Received Date: 10/11/2016 9:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Anal	yst: LGT
Chloride	ND	30	mg/Kg	20	10/17/2016 1:23:17	PM 28108
EPA METHOD 8021B: VOLATILES					Anal	yst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.095	mg/Kg	1	10/17/2016 12:24:15	PM 28066
Benzene	ND	0.024	mg/Kg	1	10/17/2016 12:24:15	PM 28066
Toluene	ND	0.047	mg/Kg	1	10/17/2016 12:24:15	PM 28066
Ethylbenzene	ND	0.047	mg/Kg	1	10/17/2016 12:24:15	PM 28066
Xylenes, Total	ND	0.095	mg/Kg	1	10/17/2016 12:24:15	PM 28066
Surr: 4-Bromofluorobenzene	97.7	80-120	%Rec	1	10/17/2016 12:24:15	PM 28066

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
- R RPD outside accepted recovery limits
- 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 Page 1 of 9
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

Date Reported: 10/19/2016

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: L2-1

 Project:
 Charlie Sweenzy
 Collection Date: 10/4/2016 3:30:00 PM

 Lab ID:
 1610672-002
 Matrix: SOIL
 Received Date: 10/11/2016 9:30:00 AM

Analyses	Result	PQL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analys	st: LGT
Chloride	ND	30	mg/Kg	20	10/17/2016 1:35:41 P	M 28108
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	S			Analys	st: TOM
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/18/2016 1:14:21 P	M 28076
Motor Oil Range Organics (MRO)	ND	50	mg/Kg	1	10/18/2016 1:14:21 P	M 28076
Surr: DNOP	86.7	70-130	%Rec	1	10/18/2016 1:14:21 P	M 28076
EPA METHOD 8015D: GASOLINE R	ANGE				Analys	st: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/17/2016 1:34:41 P	M 28066
Surr: BFB	83.7	68.3-144	%Rec	1	10/17/2016 1:34:41 P	M 28066

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

*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank	
D	Sample Diluted Due to Matrix	E	Value above quantitation range	
Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 2 of 9	
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	
	ND	D Sample Diluted Due to Matrix H Holding times for preparation or analysis exceeded ND Not Detected at the Reporting Limit R RPD outside accepted recovery limits	D Sample Diluted Due to Matrix E H Holding times for preparation or analysis exceeded J ND Not Detected at the Reporting Limit P R RPD outside accepted recovery limits RL	

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 10/19/2016

CLIENT: Souder, Miller & Associates Client Sample ID: L3-1

 Project:
 Charlie Sweenzy
 Collection Date: 10/4/2016 3:30:00 PM

 Lab ID:
 1610672-003
 Matrix: SOIL
 Received Date: 10/11/2016 9:30:00 AM

Analyses	Result	PQL Qua	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				Ar	nalyst: LGT
Chloride	ND	30	mg/Kg	20 10/17/2016 1:48:0	06 PM 28108

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank	
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range	
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 3 of 9	
	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.

Date Reported: 10/19/2016

CLIENT: Souder, Miller & Associates Client Sample ID: L4-1

 Project:
 Charlie Sweenzy
 Collection Date: 10/4/2016 3:30:00 PM

 Lab ID:
 1610672-004
 Matrix: SOIL
 Received Date: 10/11/2016 9:30:00 AM

Analyses	Result	PQL Qua	al Units	DF Date Analyzed	Batch
EPA METHOD 300.0: ANIONS				An	alyst: LGT
Chloride	ND	30	mg/Kg	20 10/17/2016 2:00:3	0 PM 28108

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	В	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	Е	Value above quantitation range
	Н	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits Page 4 of 9
	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.

WO#: **1610672**

19-Oct-16

Client: Souder, Miller & Associates

Project: Charlie Sweenzy

Sample ID MB-28108 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 28108 RunNo: 38011

Prep Date: 10/17/2016 Analysis Date: 10/17/2016 SeqNo: 1184848 Units: mg/Kg

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

Chloride ND 1.5

Sample ID LCS-28108 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 28108 RunNo: 38011

Prep Date: 10/17/2016 Analysis Date: 10/17/2016 SeqNo: 1184849 Units: mg/Kg

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

Chloride 14 1.5 15.00 0 93.2 90 110

Qualifiers:

* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

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 Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

Result

WO#: 1610672

19-Oct-16

Client: Souder, Miller & Associates

Project: Charlie Sweenzy

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 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

LowLimit

%RPD

RPDLimit

Qual

SPK value SPK Ref Val %REC

Analyte HighLimit Surr: DNOP 8.9 10.00 89.5 130

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

Surr: DNOP 8.6 10.00 85.7 70 130 Sample ID LCS-28076 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS

Analysis Date: 10/18/2016 SeqNo: 1184792 Prep Date: 10/14/2016 Units: mg/Kg

Batch ID: 28076

Result SPK value SPK Ref Val %REC LowLimit %RPD **RPDLimit** Analyte PQI HighLimit Qual Diesel Range Organics (DRO) 45 10 50.00 0 89.2 62.6 124 Surr: DNOP 5.000 4.4 88.8 70 130

RunNo: 38007

Sample ID LCS-28102 TestCode: EPA Method 8015M/D: Diesel Range Organics SampType: LCS Batch ID: 28102 RunNo: 38007 Client ID: LCSS Prep Date: 10/17/2016 Analysis Date: 10/18/2016 SeqNo: 1185574 Units: %Rec %RPD PQL SPK value SPK Ref Val %REC HighLimit **RPDLimit** Analyte Result LowLimit Qual

Surr: DNOP 5.000 4.5 90.0 70 130

Sample ID MB-28102 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 28102 RunNo: 38007 Prep Date: 10/17/2016 Analysis Date: 10/18/2016 SeqNo: 1185575 Units: %Rec Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

Surr: DNOP 9.6 10.00 96.5 70 130

Qualifiers:

Client ID: LCSS

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Η Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix В Analyte detected in the associated Method Blank

Е Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1610672**

19-Oct-16

Client: Souder, Miller & Associates

Project: Charlie Sweenzy

Sample ID MB-28066 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: PBS Batch ID: 28066 RunNo: 37988

Prep Date: 10/14/2016 Analysis Date: 10/17/2016 SeqNo: 1184548 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 810 1000 81.3 68.3 144

Sample ID LCS-28066 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 28066 RunNo: 37988

Prep Date: 10/14/2016 Analysis Date: 10/17/2016 SeqNo: 1184549 Units: mg/Kg

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

 Gasoline Range Organics (GRO)
 26
 5.0
 25.00
 0
 103
 74.6
 123

 Surr: BFB
 890
 1000
 89.4
 68.3
 144

Sample ID 1610672-002AMS SampType: MS TestCode: EPA Method 8015D: Gasoline Range

Client ID: L2-1 Batch ID: 28066 RunNo: 37988

Prep Date: 10/14/2016 Analysis Date: 10/17/2016 SeqNo: 1184552 Units: mg/Kg

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

 Gasoline Range Organics (GRO)
 23
 4.8
 23.83
 0
 95.3
 59.3
 143

 Surr: BFB
 870
 953.3
 91.1
 68.3
 144

Sample ID 1610672-002AMSD SampType: MSD TestCode: EPA Method 8015D: Gasoline Range

Client ID: L2-1 Batch ID: 28066 RunNo: 37988

Prep Date: 10/14/2016 Analysis Date: 10/17/2016 SeqNo: 1184553 Units: mg/Kg

Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) 28 4.8 24.20 115 59.3 143 20.4 20 R Λ Surr: BFB 890 968.1 91.5 68.3 144 0 0

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

R RPD outside accepted recovery limits

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

below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

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Hall Environmental Analysis Laboratory, Inc.

WO#: **1610672**

19-Oct-16

Client: Souder, Miller & Associates

Project: Charlie Sweenzy

Sample ID MB-28066	SampT	уре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: PBS	Batch	n ID: 28	066	R	RunNo: 3	7988				
Prep Date: 10/14/2016	Analysis D	oate: 10	0/17/2016	S	SeqNo: 1	184561	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		94.8	80	120			

Sample ID LCS-28066	Samp1	Type: LC	s	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID: LCSS	Batcl	h ID: 28	066	F	RunNo: 3	7988				
Prep Date: 10/14/2016	Analysis D	Date: 10	0/17/2016	5	SeqNo: 1	184562	Units: mg/h	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.10	1.000	0	89.7	65.7	116			
Benzene	0.93	0.025	1.000	0	92.6	75.2	115			
Toluene	0.96	0.050	1.000	0	96.1	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.6	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	97.9	79.2	115			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID 1610672-001AMS	SampT	ype: MS	5	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: L1-1.5	Batch	n ID: 280	066	R	RunNo: 3	7988				
Prep Date: 10/14/2016	Analysis D	ate: 10)/17/2016	S	SeqNo: 1	184564	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.84	0.097	0.9728	0	86.5	69.2	128			
Benzene	0.90	0.024	0.9728	0	92.3	71.5	122			
Toluene	0.92	0.049	0.9728	0	94.2	71.2	123			
Ethylbenzene	0.93	0.049	0.9728	0	95.8	75.2	130			
Xylenes, Total	2.8	0.097	2.918	0	95.4	72.4	131			
Surr: 4-Bromofluorobenzene	0.99		0.9728		102	80	120			

Sample ID 1610672-001AMS	D SampT	ype: MS	SD	Tes	tCode: El	PA Method	8021B: Volat	iles		
Client ID: L1-1.5	Batch	ID: 280	066	F	RunNo: 3	7988				
Prep Date: 10/14/2016	Analysis D	ate: 10)/17/2016	5	SeqNo: 1	184565	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.83	0.099	0.9901	0	83.5	69.2	128	1.75	20	
Benzene	0.86	0.025	0.9901	0	86.9	71.5	122	4.27	20	
Toluene	0.92	0.050	0.9901	0	92.9	71.2	123	0.341	20	
Ethylbenzene	0.96	0.050	0.9901	0	96.8	75.2	130	2.76	20	

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

R RPD outside accepted recovery limits

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 Detection Limit

Page 8 of 9

W Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

WO#: **1610672**

19-Oct-16

Client: Souder, Miller & Associates

Project: Charlie Sweenzy

Sample ID 1610672-001AMSD SampType: MSD TestCode: EPA Method 8021B: Volatiles

Client ID: L1-1.5 Batch ID: 28066 RunNo: 37988

Prep Date: 10/14/2016 Analysis Date: 10/17/2016 SeqNo: 1184565 Units: mg/Kg

	110p Bate. 10/1-72010	7 triaryolo D	ato. It	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		oqito. I	10-1000	Omio. mg/m	9			
	Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
>	(ylenes, Total	2.9	0.099	2.970	0	96.0	72.4	131	2.38	20		
	Surr: 4-Bromofluorobenzene	1.0		0.9901		103	80	120	0	0		

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

R RPD outside accepted recovery limits

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 Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 9



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

RcptNo: 1 Client Name: SMA-CARLSBAD Work Order Number: 1610672 Received by/date: 10/11/2016 9:30:00 AM Ashley Gallegos Logged By: 10/13/2016 7:44:36 PM Ashley Gallegos Completed By: 10/14/16 Reviewed By: Chain of Custody No 🗌 Not Present Yes 🗌 1 Custody seals intact on sample bottles? No 🗌 Not Present Yes 🗹 2. Is Chain of Custody complete? Courier 1 3 How was the sample delivered? Log In NA 🗌 No 🔲 Yes 🗹 4. Was an attempt made to cool the samples? NA 🗔 Yes 🗹 No 🗌 5. Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Yes 🗹 6. Sample(s) in proper container(s)? No 🗌 Yes 🔽 7. Sufficient sample volume for indicated test(s)? No 🗀 Yes 🗹 8. Are samples (except VOA and ONG) properly preserved? NA 🗌 No 🗹 Yes 🗌 9. Was preservative added to bottles? No 🗌 No VOA Vials 🗹 Yes 10.VOA vials have zero headspace? Yes 🗌 No 🗹 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗀 12. Does paperwork match bottle labels? Yes 🛂 (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗀 Yes 🗸 13. Are matrices correctly identified on Chain of Custody? No 🗌 **✓** 14. Is it clear what analyses were requested? No 🗌 Checked by: Yes 🗸 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) No 🗌 NA 🗹 Yes 16. Was client notified of all discrepancies with this order? Person Notified: Date eMail Phone Fax in Person By Whom: Via: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Temp °C | Condition | Seal Intact | Seal No Seal Date Signed By Cooler No 1.7 Good Yes

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	recessary,	samples subr	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.	contracted to other accredited lab	poratories. This serves as notice of	this possib	lity. Any	sub-cont	acted de	ıta will be	clearly	notate	on the	analytik	al repo	ند

Air Bubbles (Y or M)

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**

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

Form C-141

Revised August 8, 2011

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

	OPERATOR	XInitial Report	Final Report
Name of Company Matador Resources Company	Contact Catherine Green		
Address 500 N Main St Ste One Roswell NM 88201	Telephone No. 575-623-6601		
Facility Name Charlie Sweeney 201 H	Facility Type production battery		

Surface Owner Fee Mineral Owner API No. 30-015-4395

LOCATION OF RELEASE

Unit Letter	Section 30	Township 23S	Range 28E	Feet from the 492	North/South Line FSL	Feet from the 497	East/West Line FWL	County Eddy
M								

Latitude 32.2700693 Longitude-104.133231

NATURE OF RELEASE

* Attach Additional Sheets If Necessary

Type of Release Produced Water	Volume of Release 25 Bbls	Volume Recovered 10 bbls
Source of Release Valve not closed properly	Date and Hour of Occurrence Sep. 20, 2016 6am	Date and Hour of Discovery Sep. 20, 2016 6am
Was Immediate Notice Given? Yes X No Not Required	If YES, To Whom? Catherine Green	•
By Whom? Heith Gaspard	Date and Hour Sep. 20, 2016 10an	n
Was a Watercourse Reached? Yes No X	If YES, Volume Impacting the Wa	itercourse.

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Water hauler did not properly close load valve. Lease operator discovered open valve, closed it, called for vacuum truck to vacuum up excess fluid on production pad.

Describe Area Affected and Cleanup Action Taken.*

Produced water spilled on ground around load line. Soil will be sampled for contaminates. Contaminated soil will be removed and replaced.

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.

	OIL CONSE	RVATION I	DIVISION
Signature: Catherine Green	Ammound by Environmental Charles	list	
Printed Name: Catherine Green	Approved by Environmental Specia	mst.	
Title: Regulatory Analyst	Approval Date:	Expiration D	ate:
E-mail Address: cgreen@matadorresources.com	Conditions of Approval:		
Date: Sep. 20, 2016 Phone: 575-623-6601			Attached