



December 13, 2016

INFORMATION ONLY

#5B24624-BG23

NMOCD District I
Tomas Oberding
1625 N. French Dr.
Hobbs, NM 88240

SUBJECT: WORK PLAN FOR INCIDENT TBD, YOUNG DEEP UNIT 3 FED 31, API# 30-025-27369,
LEA COUNTY, NEW MEXICO

Dear Tomas Oberding:

On behalf of Matador Resources, Souder Miller & Associates (SMA) is pleased to submit a work plan summarizing the planned soil remediation for the release site located at the Young Deep Unit 3 Fed 31 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 Bureau of Land Management property on November 9, 2016.

SMA responded at the request of Matador, to assess and delineate the release of production fluids associated with the Latham Federal Storage Facility well location. The release was initially reported to NMOCD by Matador, on November 9, 2016 and was a result of a equipment failure. The table below summarizes information regarding the release. Results of the assessment and, delineation are described in the following report.

Table 1: Release information and Site Ranking					
Name	Young Deep Unit 3 Fed 31				
Location	Incident Number	API Number	Section, Township, Range		
	TBD	30-25-27369	SW/NE (Unit O)	Section 3	T 18 S, R 32 E NMPM
Estimated Date of Release	November 9, 2016				
Date Reported to NMOCD	November 9, 2016				
Reported by	Catherine Green				
Land Owner	Bureau of Land Management				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Equipment Failure				
Released Material	Produced Water and Crude Oil				
Released Volume	~175 bbls Produced Water and Crude Oil				
Recovered Volume	~170 bbls Produced Water and Crude Oil				

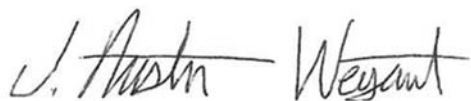


Net Release	5 bbls Produced Water and Crude Oil
Nearest Waterway	26 miles west of the location
Depth to Groundwater	Estimated to be ~65 feet below ground surface
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	10
SMA Response Dates	Initial: 11/15/16 Mitigation Activities: TBD
Subcontractors	TBD
Disposal Facility	TBD
Estimated Yd ³ Contaminated Soil Excavated and Disposed	250

A copy of the Initial C-141 form is attached in Appendix B of the enclosed work plan. 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



Austin Weyant
Project Scientist

Reviewed by:



Shawna Chubbuck
Senior Scientist

SOIL REMEDIATION WORK PLAN FOR INCIDENT TBD

MATADOR RESOURCES COMPANY

YOUNG DEEP UNIT 3 FED 31
UL O, SECTION 3, T18S R32E, NMPM
API #30-025-27369
LEA, 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

December 15, 2016
SMA Reference
5B24624 BG23

Table of Contents

1.0	Introduction.....	4
2.0	Site Ranking and Land Jurisdiction	4
3.0	Assessment and Initial Results	4
4.0	Soil Remediation Work Plan.....	4
5.0	Closure and Limitations.....	5

Figures:

Figure 1: Vicinity Map

Figure 2: Detailed Site and Sample Map

Tables:

Table 1: Release Information and Site Ranking

Table 2: Summary Chloride Field Screening Results

Table 3: Summary of Laboratory Analyses

Appendices:

Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Initial

1.0 Introduction

On behalf of Matador Resources, Souder, Miller & Associates (SMA) has prepared this report that describes the assessment, initial delineation and proposed remediation for a release associated with the Young Deep Unit 3 Fed 31 location API# 30-025-27369. The site is located in Section 3, Township 18S, Range 32E NMPM, Lea County, New Mexico, on federal land administered by the Bureau Land Management. Figure 1 illustrates the vicinity and location of the site.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 26 miles east of the Pecos River, with an elevation of approximately 3,843 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 65 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. Zero 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 10 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTX), and 1000 ppm total petroleum hydrocarbons (TPH). Table 1 illustrates site ranking rationale.

3.0 Assessment and Initial Results

On November 15, after receiving 811 clearance, SMA field personnel assessed the release area onsite. Soils were screened for hydrocarbons and chlorides using a calibrated Photo Ionization Detector (PID), and a mobile chlorides titration kit (EPA method 9045D) meter. The potentially affected area was determined to be approximately 80 feet long and 70 feet wide within the tank battery. Delineation samples at 3' bgs show to be below the Recommended Remediation Action Level according to NMOCD Guidelines for Remediation of Leaks, Spills and Releases, 1993. The site was excavated to 1 foot bgs in the battery as a initial response and hauled to an approved NMOCD facility.

Delineation samples were collected. 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 analysis for Total Chlorides using EPA Method 300.0.

A summary of the laboratory analyses is included in Table 2. Laboratory reports are included in Appendix A. Photo documentation is available by request.

4.0 Soil Remediation Work Plan

The proposed areas of deferment are shown in Figure 2. This area cannot be excavated due to the proximity of the operational equipment in the area. Request for deferment on this area are being asked. At time of the site being closed the deferment area will then be remediated to NMOCD standards.

5.0 Closure and 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 Shawna Chubbuck at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES



Austin Weyant
Project Scientist



Shawna Chubbuck
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

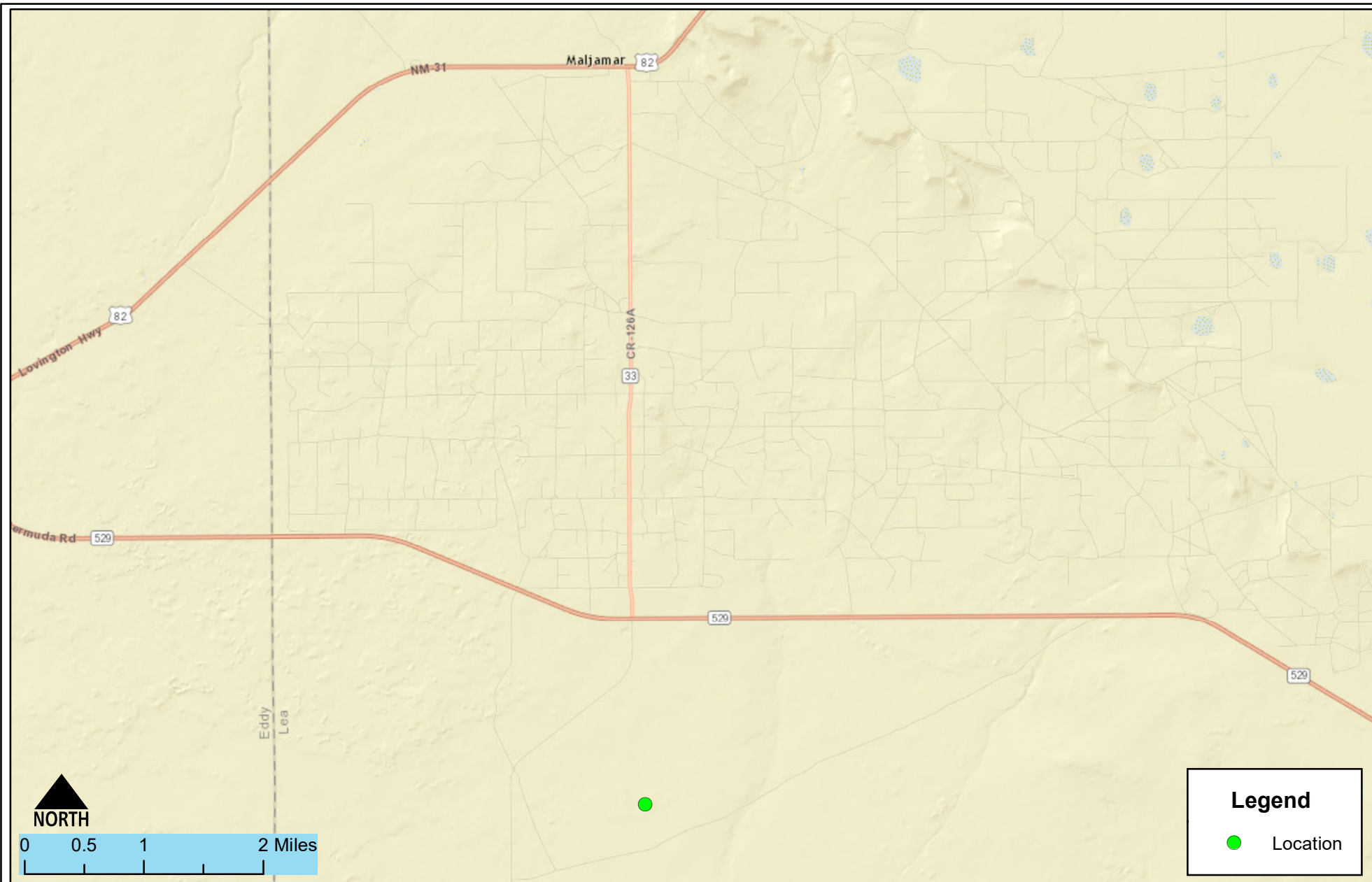
Table 3: Summary of Laboratory Analyses

Appendices:

Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Initial

FIGURE 1 VICINITY MAP



Vicinity Map
Matador-Young Deep Unit 3 Fed #1
Maljamar, New Mexico

Figure 1

Date Saved: 12/6/2016	By: _____	Date: _____	Revisions	Descr: _____
	By: _____	Date: _____		Descr: _____
Copyright 2015 Souder, Miller & Associates - All Rights Reserved				

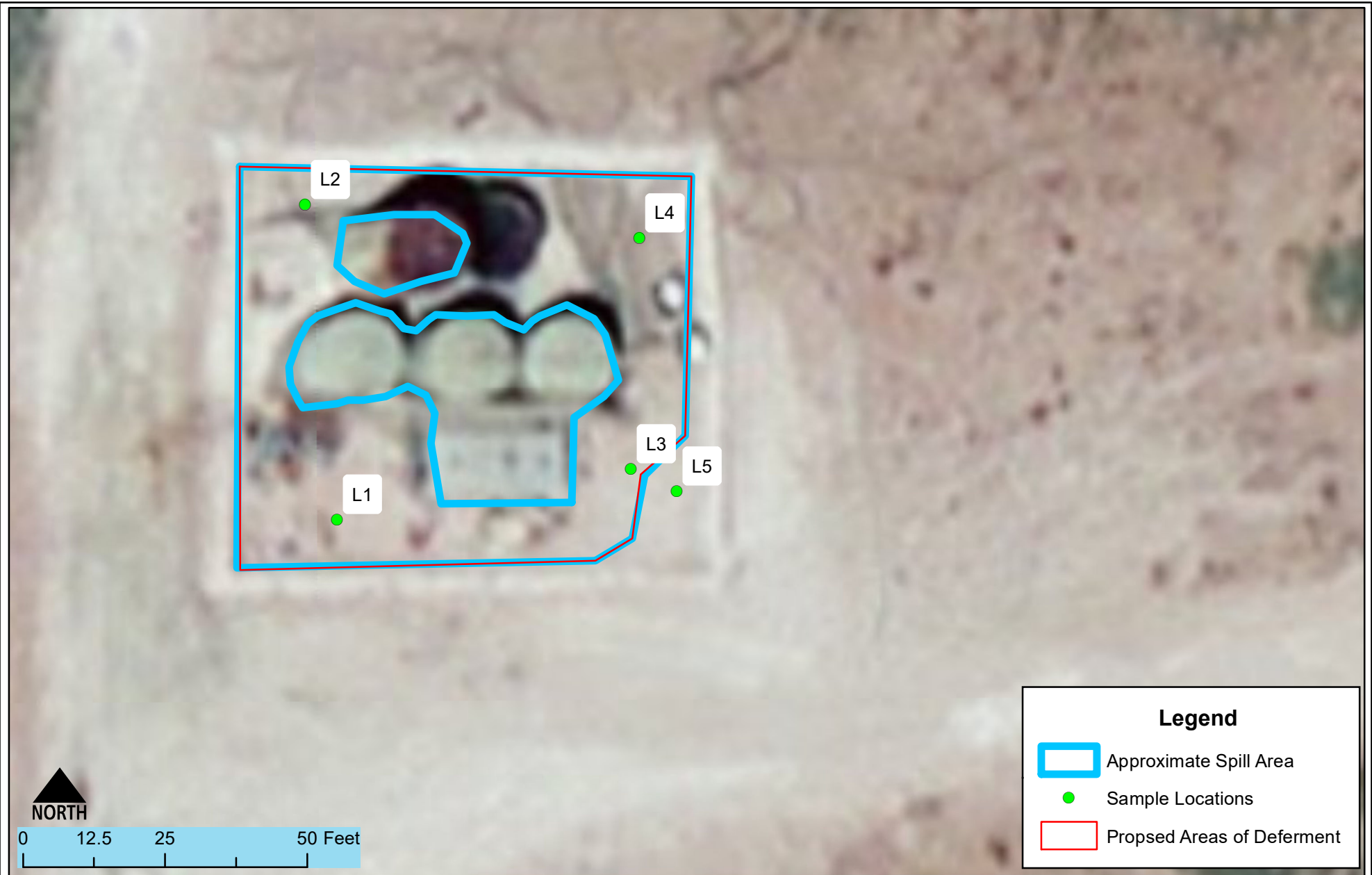
Drawn	Lucas Middleton
Checked	_____
Approved	_____



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 Location Map
Matador- Young Deep Unit 3 Fed #1
Maljamar , New Mexico

Figure 2

Date Saved:
12/15/2016

Revisions	
By:	Date:
By:	Date:

Copyright 2015 Souder, Miller & Associates - All Rights Reserved

Lucas Middleton	
Drawn	
Checked	
Approved	



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

TABLE 1

RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking					
Name	Young Deep Unit 3 Fed 31				
Location	Incident Number	API Number	Section, Township, Range		
	TBD	30-25-27369	SW/NE (Unit)	Section 3	T 18 S, R 32 E NMPM
Estimated Date of Release	November 9, 2016				
Date Reported to NMOCD	November 9, 2016				
Reported by	Catherine Green				
Land Owner	Bureau of Land Management				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Equipment Failure				
Released Material	Produced Water and Crude Oil				
Released Volume	~175 bbls Produced Water and Crude Oil				
Recovered Volume	~170 bbls Produced Water and Crude Oil				
Net Release	5 bbls Produced Water and Crude Oil				
Nearest Waterway	26 miles west of the location				
Depth to Groundwater	Estimated to be ~65 feet below ground surface				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	10				
SMA Response Dates	Initial: 11/15/16 Mitigation Activities: TBD				
Subcontractors	TBD				
Disposal Facility	TBD				
Estimated Yd ³ Contaminated Soil Excavated and Disposed	250				

TABLE 2

SUMMARY OF CHLORIDE FIELD SCREENING RESULTS

Table 2: Summary of Chloride Field Screening Results

Young Deep Unit 3 Fed #1
Site Sampling
11-15-16

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	Chlorides Results	Lab Sample Collected Y/N
11/15/2016	2:00	L1-1	1'	3875	Y
11/15/2016	2:00	L2-2	2'	3898	Y
11/15/2016	2:00	L2-4	4'	3955	Y
11/15/2016	2:00	L3-1	1'	1260	Y
11/15/2016	2:00	L4-1	1'	895	Y
11/15/2016	2:00	L4-3.5	3.5'	221	Y
11/15/2016	2:00	L5	0.5'	1934	Y
11/15/2016	2:00	S	Surface	6832	Y



TABLE 3

SUMMARY OF LABORATORY ANALYSES

Table 3: Summary of Laboratory Analyses

Analytical Report- 1611A97	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	Cl- mg/Kg
1611A97-001	L4	11/15/2016	3'	>0.093	>0.023	>4.7	360	210
1611A97-002	L3-1	11/15/2016	1'	N/A	N/A	>4.7	420	9500
1611A97-003	L1-1	11/15/2016	1'	N/A	N/A	>4.7	2800	5600

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

December 06, 2016

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

RE: Young Deep Unit 3 Fed #1

OrderNo.: 1611A97

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 3 sample(s) on 11/19/2016 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 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 #NM0190

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1611A97

Date Reported: 12/6/2016

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-3S

Project: Young Deep Unit 3 Fed #1

Collection Date: 11/15/2016 7:00:00 AM

Lab ID: 1611A97-001

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	210	30		mg/Kg	20	11/29/2016 1:56:51 PM	28901
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	360	93		mg/Kg	10	11/23/2016 4:04:00 PM	28807
Surr: DNOP	0	70-130	S	%Rec	10	11/23/2016 4:04:00 PM	28807
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/23/2016 1:20:09 PM	28828
Surr: BFB	99.4	68.3-144		%Rec	1	11/23/2016 1:20:09 PM	28828
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	11/23/2016 1:20:09 PM	28828
Benzene	ND	0.023		mg/Kg	1	11/23/2016 1:20:09 PM	28828
Toluene	ND	0.047		mg/Kg	1	11/23/2016 1:20:09 PM	28828
Ethylbenzene	ND	0.047		mg/Kg	1	11/23/2016 1:20:09 PM	28828
Xylenes, Total	ND	0.093		mg/Kg	1	11/23/2016 1:20:09 PM	28828
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	11/23/2016 1:20:09 PM	28828

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.

Analytical Report

Lab Order 1611A97

Date Reported: 12/6/2016

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-1

Project: Young Deep Unit 3 Fed #1

Collection Date: 11/15/2016 7:00:00 AM

Lab ID: 1611A97-002

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	9500	750		mg/Kg	500	11/30/2016 9:50:23 PM	28901
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	420	9.2		mg/Kg	1	11/28/2016 7:42:37 PM	28807
Motor Oil Range Organics (MRO)	340	46		mg/Kg	1	11/28/2016 7:42:37 PM	28807
Surr: DNOP	101	70-130		%Rec	1	11/28/2016 7:42:37 PM	28807
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/22/2016 3:17:30 PM	28828
Surr: BFB	107	68.3-144		%Rec	1	11/22/2016 3:17:30 PM	28828

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.

Analytical Report

Lab Order 1611A97

Date Reported: 12/6/2016

CLIENT: Souder, Miller & Associates

Client Sample ID: L1-1

Project: Young Deep Unit 3 Fed #1

Collection Date: 11/15/2016 7:00:00 AM

Lab ID: 1611A97-003

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	5600	300		mg/Kg	200	12/2/2016 6:29:52 PM	28901
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	2800	96		mg/Kg	10	11/28/2016 8:36:05 PM	28807
Motor Oil Range Organics (MRO)	3200	480		mg/Kg	10	11/28/2016 8:36:05 PM	28807
Surr: DNOP	0	70-130	S	%Rec	10	11/28/2016 8:36:05 PM	28807
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/22/2016 5:38:20 PM	28828
Surr: BFB	92.0	68.3-144		%Rec	1	11/22/2016 5:38:20 PM	28828

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#: 1611A97

06-Dec-16

Client: Souder, Miller & Associates

Project: Young Deep Unit 3 Fed #1

Sample ID	MB-28901		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 28901		RunNo: 39040					
Prep Date:	11/29/2016		Analysis Date: 11/29/2016		SeqNo: 1221142		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-28901		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 28901		RunNo: 39040					
Prep Date:	11/29/2016		Analysis Date: 11/29/2016		SeqNo: 1221143		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.4	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611A97

06-Dec-16

Client: Souder, Miller & Associates

Project: Young Deep Unit 3 Fed #1

Sample ID	LCS-28807		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 28807		RunNo: 38942					
Prep Date:	11/22/2016		Analysis Date: 11/23/2016		SeqNo: 1217667		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.8	62.6	124			
Surr: DNOP	4.4		5.000		88.8	70	130			

Sample ID	MB-28807		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 28807		RunNo: 38942					
Prep Date:	11/22/2016		Analysis Date: 11/23/2016		SeqNo: 1217668		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.6		10.00		96.4	70	130			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611A97

06-Dec-16

Client: Souder, Miller & Associates

Project: Young Deep Unit 3 Fed #1

Sample ID	MB-28828		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 28828		RunNo: 38913					
Prep Date:	11/21/2016		Analysis Date: 11/22/2016		SeqNo: 1216601		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	860		1000		85.9	68.3	144			

Sample ID	LCS-28828		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 28828		RunNo: 38913					
Prep Date:	11/21/2016		Analysis Date: 11/22/2016		SeqNo: 1216602		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	910		1000		91.4	68.3	144			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611A97

06-Dec-16

Client: Souder, Miller & Associates

Project: Young Deep Unit 3 Fed #1

Sample ID	MB-28828		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 28828		RunNo: 38913					
Prep Date:	11/21/2016		Analysis Date: 11/22/2016		SeqNo: 1216628		Units: mg/Kg			
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	1.0		1.000		102	80	120			

Sample ID	LCS-28828		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 28828		RunNo: 38913					
Prep Date:	11/21/2016		Analysis Date: 11/22/2016		SeqNo: 1216629		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.10	1.000	0	112	65.7	116			
Benzene	1.1	0.025	1.000	0	113	75.2	115			
Toluene	1.0	0.050	1.000	0	103	80.7	112			
Ethylbenzene	0.99	0.050	1.000	0	98.9	78.9	117			
Xylenes, Total	2.9	0.10	3.000	0	97.0	79.2	115			
Surr: 4-Bromofluorobenzene	1.1		1.000		107	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
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: 1611A97

RcptNo: 1

Received by/date:	cm 11/19/16		
Logged By:	Anne Thorne	11/19/2016 8:15:00 AM	Anne Thorne
Completed By:	Anne Thorne	11/21/2016	Anne Thorne
Reviewed By:	as	11/21/16	

Chain of Custody

- | | | | |
|--|---|-----------------------------|---|
| 1. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 2. Is Chain of Custody complete? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 3. How was the sample delivered? | Courier | | |

Log In

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

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:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

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

☒ Initial Report ☐ Final Report

Name of Company Matador Production Company	Contact Catherine Green	
Address 500 N Main St Suite One Roswell NM 88201	Telephone No. 575-623-6601	
Facility Name Young Deep Unit 3 Fed #1	Facility Type Injection	
Surface Owner Federal	Mineral Owner Federal	API No.30-025-27369

LOCATION OF RELEASE

Unit Letter O	Section 03	Township 18S	Range 32E	Feet from the 660	North/South Line S	Feet from the 1980	East/West Line E	County Lea
------------------	---------------	-----------------	--------------	----------------------	-----------------------	-----------------------	---------------------	---------------

Latitude 32.7710037 Longitude -103.7520981

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release ~175 bbls	Volume Recovered ~170bbls
Source of Release Pump failure	Date and Hour of Occurrence Nov. 9, 2016, 8am	Date and Hour of Discovery Nov. 9, 2016 9am
Was Immediate Notice Given? Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not	If YES, To Whom? Heith Gaspard	
By Whom? Ismael Lopez	Date and Hour Nov. 9, 2016 9am	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Injection pump stopped injecting, causing tanks to overflow into berm. Wells sending water to injection were shut down. Injection system was stopped.

Describe Area Affected and Cleanup Action Taken.*

Water filled a section of the containment. Water was vacuumed up and sent to disposal. Soil samples will be collected, any contaminated soil will be disposed of and backfilled.

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 CONSERVATION DIVISION

Signature: Catherine Green

Printed Name: Catherine Green

Title :Regulatory Analyst

E-mail Address:cgreen@matadorresources.com

Date: Nov. 9, 2016

Phone:575-627-2453

Approved by Environmental Specialist:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached ☐

* Attach Additional Sheets If Necessary