



December 6 , 2016

#5B24624-BG24

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

SUBJECT: WORK PLAN FOR INCIDENT 2RP-4008, Paul 25 24S 28E RB #221H, UNIT D SECTION 25-T24S-R28E NMPM,
API# 30-015-43018, 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 Paul 25 24S 28E RB #221H 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 November 22, 2016.

SMA responded at the request of Matador Resources Company, to assess and delineate the release of production fluids associated with Paul 25 24S 28E RB #221H well location. The release was initially reported to NMOCD by Matador Resources Company, on November 22, 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	Paul 25 24S 28E RB #221H				
Location	Incident Number	API Number	Section, Township, Range		
	2RP-4008	30-015-43018	NW/NE (Unit D)	Section 25	T24S, R28E NMPM
Estimated Date of Release	November 22, 2016				
Date Reported to NMOCD	November 22, 2016				
Reported by	Catherine Green				
Land Owner	Private				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Equipment Failure				
Released Material	Produced Water				
Released Volume	~560 bbls Produced Water				
Recovered Volume	240 bbls Produced Water				
Net Release	320 bbls Produced Water				

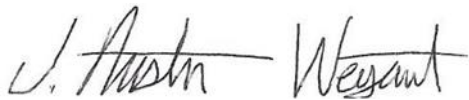


Nearest Waterway	1.4 miles north of the location
Depth to Groundwater	Estimated to be 49 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	20
SMA Response Dates	Initial: 11/23/16
Subcontractors	
Disposal Facility	
Estimated Yd3 Contaminated Soil Excavated and Disposed	5,800

A copy of the C-141 Initial is attached 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



Austin Weyant
Project Scientist

Reviewed by:



Cynthia Gray, CHMM
Senior Scientist

SOIL REMEDIATION WORK PLAN FOR INCIDENT 2RP-4008

MATADOR RESOURCES COMPANY

PAUL 25 24S 28E RB #221H
UL D, SECTION 25, T24S R28E, NMPM
API #30-015-43018
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

December 6, 2016
SMA Reference
5B24624 BG24

Table of Contents

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

Figures:

Figure 1: Vicinity Map

Figure 2: Detailed Site and Sample Location 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 Company, Souder, Miller & Associates (SMA) has prepared this report that describes the assessment, initial delineation and proposed remediation for a release associated with the Paul 25 24S 28E RB #221H location APl# 30-015-43018. The site is in Section 25, Township 24S, Range 28E NMPM, Eddy County, New Mexico, on private property. Figure 1 illustrates the vicinity and location of the site.

2.0 Site Ranking, Land Status, and Jurisdiction

The release site is located approximately 1.3 miles east of the Willow Lake, with an elevation of approximately 2,934 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be 49 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. Two 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 on private property and is within the jurisdiction of NMOCD.

Based on the NMOCD Guidelines Ranking Criteria, this release location has been assigned an 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 the site ranking rationale.

3.0 Assessment and Initial Results

On November 23, 2016, SMA field personnel were on site to assess the release area using a Photo Ionization Detector (PID), and a mobile chlorides titration kit EPA method 9045D meter. The potentially affected area was found to be approximately 580 feet long and 50 feet wide. The site delineation samples were taken to depths of four feet bgs initially. On November 30, 2016, further delineation occurred, proceeding to 12' bgs at the request of NMOCD. Specific sample locations for all samples are depicted on Figure 2 (Site and Sample Location Map). Field screening sample results are detailed in Table 2. 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 to depths of up to six feet bgs sufficient to remove the impacted materials to NMOCD requirements as indicated by the sample results in Table 2. Affected soils will be removed from these areas before closure samples are collected at the final depth of excavation and from the sidewalls. Approximately 5,800 cubic yards of contaminated soil are projected to be removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil will be transported for proper disposal at Lea Land, near Carlsbad, NM, an NMOCD permitted disposal 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.

When 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 release assessment, initial delineation sampling and field screening, 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



Austin Weyant
Project Scientist



Cynthia Gray, CHMM
Senior Scientist

Figures:

Figure 1: Vicinity Map

Figure 2: Detailed Site and Sample Location Map

Tables:

Table 1: Release Information and Site Ranking

Table 2: Summary of Chloride Field Screening Results

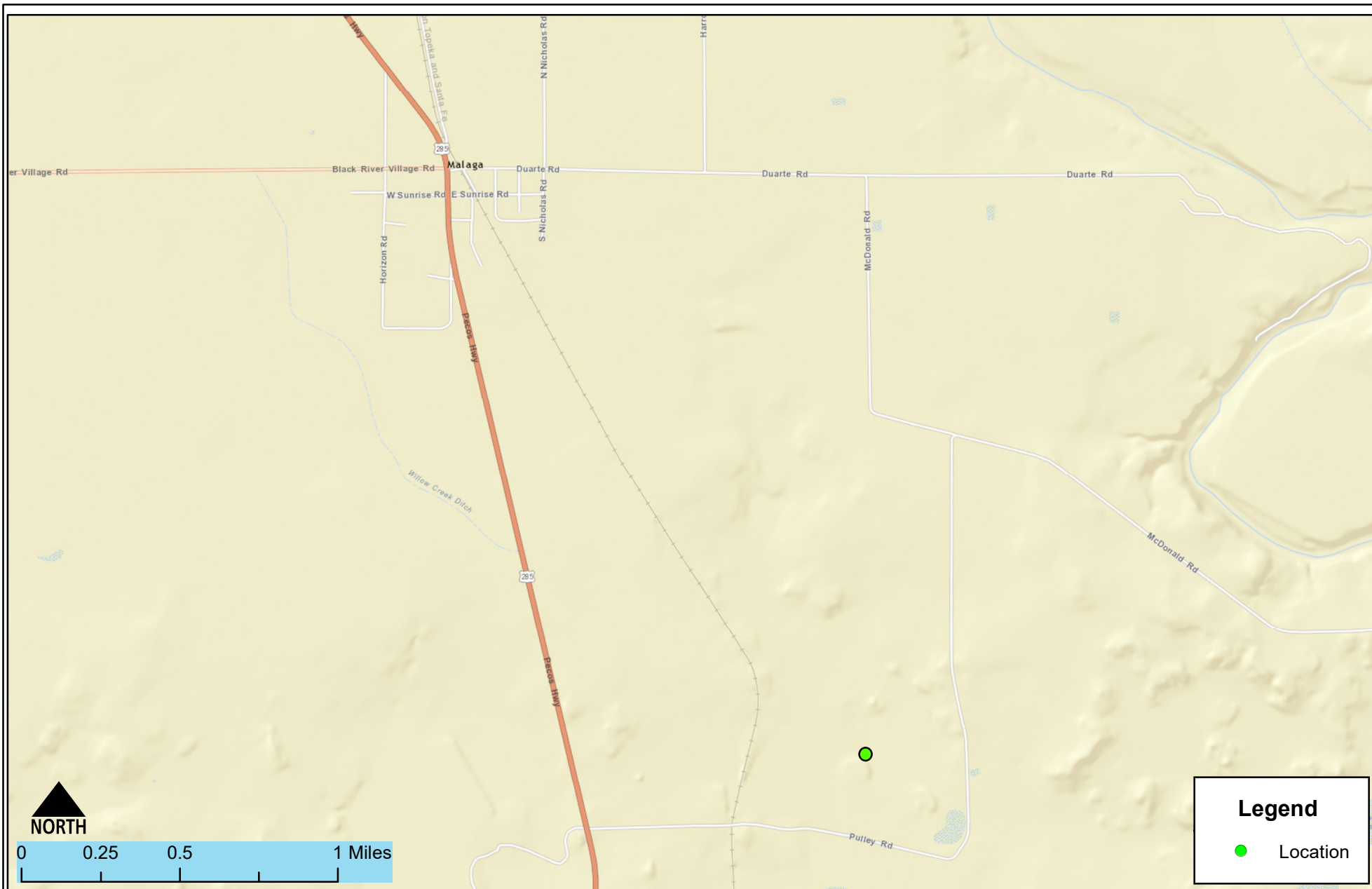
Table 3: Summary of Laboratory Analyses

Appendices:

Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Initial

FIGURE 1 VICINITY MAP



Detailed Site and Sample Map
Paul 221H- Matador
Malaga, New Mexico

Figure 1

Date Saved: 12/5/2016	By: _____	Date: _____	Revisions	Descr: _____
	By: _____	Date: _____		Descr: _____
Copyright 2015 Souder, Miller & Associates - All Rights Reserved				

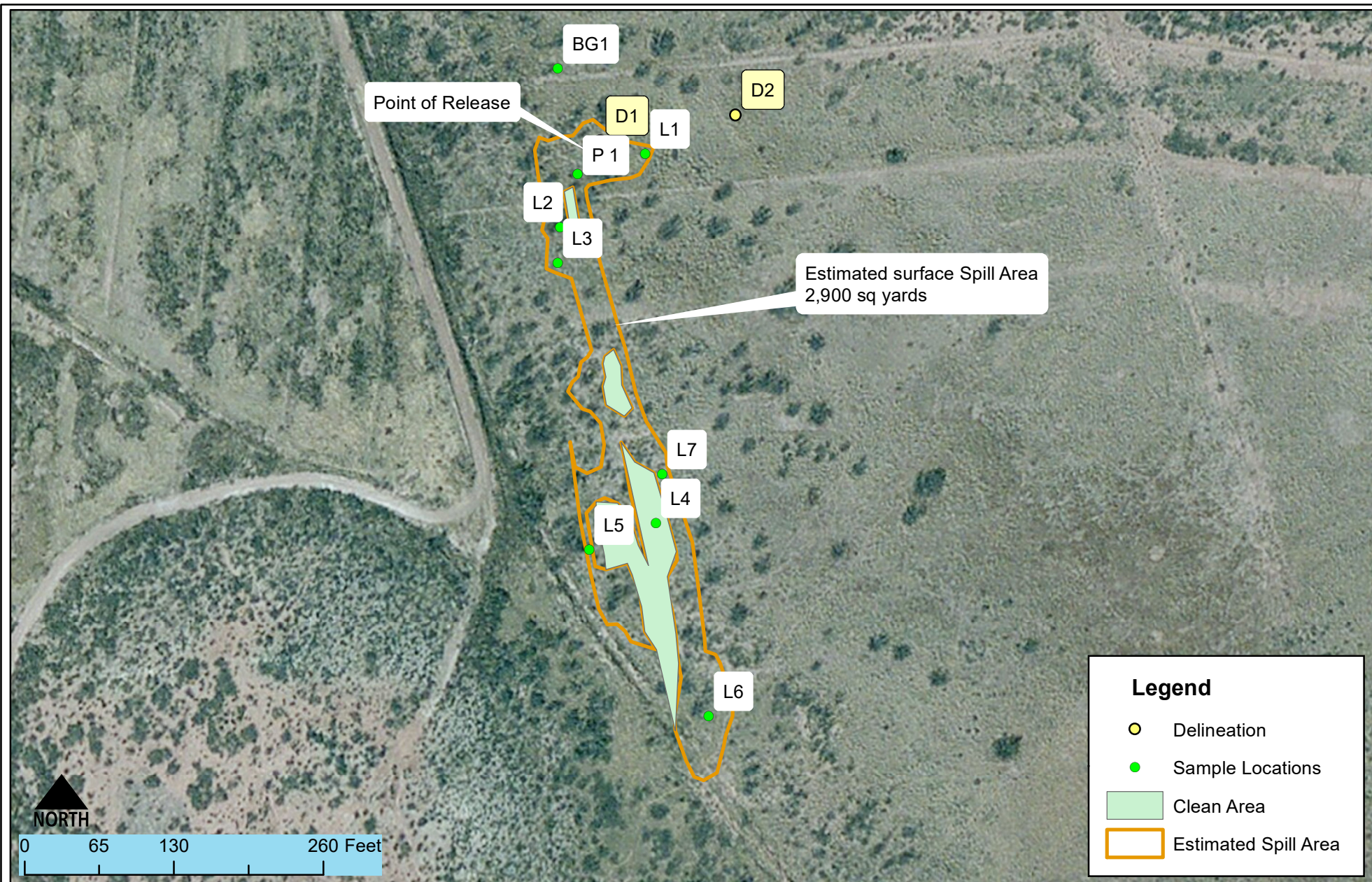
Drawn	Lucas Middleton
Checked	_____
Approved	_____



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 LOCATION MAP



Detailed Site and Sample Map
 Paul 25 24S 28E RB #221H- Matador Resources
 Malaja , New Mexico

Figure 2

Date Saved:
 12/5/2016

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

TABLE 1

RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking					
Name	Paul 25 24S 28E RB #221H				
Location	Incident Number	API Number	Section, Township, Range		
	2RP-4008	30-015-43018	NW/NE (Unit D)	Section 25	T24S, R28E NMPM
Estimated Date of Release	November 22, 2016				
Date Reported to NMOCD	November 22, 2016				
Reported by	Catherine Green				
Land Owner	Private				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Equipment Failure				
Released Material	Produced Water				
Released Volume	~560 bbls Produced Water				
Recovered Volume	240 bbls Produced Water				
Net Release	320 bbls Produced Water				
Nearest Waterway	1.4 miles north of the location				
Depth to Groundwater	Estimated to be 49 feet				
Nearest Domestic Water Source	Greater than 1,000 feet				
NMOCD Ranking	20				
SMA Response Dates	Initial: 11/23/16				
Subcontractors					
Disposal Facility					
Estimated Yd3 Contaminated Soil Excavated and Disposed	5,800				

TABLE 2

SUMMARY OF CHLORIDE FIELD SCREENING RESULTS

Table 2: Summary of Site Chloride Field Screening Results

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	Chloride Reading	Lab Sample Collected Y/N
11/23/2016	10:00	BG1	Surface	1,569	Y
11/23/2016	10:00	P1	Surface	14,732	Y
11/23/2016	10:00	P1-3	3'	7,791	Y
11/23/2016	10:00	L1	1'	2,984	Y
11/23/2016	10:00	L2	1'	5,530	Y
11/23/2016	10:00	L2	3'	2,939	Y
11/23/2016	10:00	L3	1'	7,277	Y
11/23/2016	10:00	L3	4'	5,450	Y
11/23/2016	10:00	L4	Surface	1,123	Y
11/23/2016	10:00	L5	1.5'	5,816	Y
11/23/2016	10:00	L6	2'	5,839	Y
11/23/2016	10:00	L7	3'	6,980	Y
11/30/2016	2:00pm	D1-6	6'	1785	Y
11/30/2016	2:00pm	D1-8	8'	1602	Y
11/30/2016	2:00pm	D1-10	10'	1420	Y
11/30/2016	2:00pm	D1-12	12'	1009	Y
11/30/2016	2:00pm	D2-6	6'	1237	Y
11/30/2016	2:00pm	D2-12	12'	1000	Y



TABLE 3

SUMMARY OF LABORATORY ANALYSES

APPENDIX A

LABORATORY ANALYTICAL REPORTS

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

NM OIL CONSERVATION
APPROX District
Nov 24, 2016
RECEIVED
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

NAB 1633632758 **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company Matador Production Company 228937	Contact Catherine Green
Address 500 N Main St Ste 1 Roswell NM 88201	Telephone No. 575-627-2453
Facility Name Paul 25 24S 28E RB #221H	Facility Type Oil

Surface Owner Private	Mineral Owner Fee	API No. 30-015-43018
-----------------------	-------------------	----------------------

LOCATION OF RELEASE

Unit Letter D	Section 25	Township 24S	Range 28E	Feet from the 359	North/South Line N	Feet from the 217	East/West Line W	County Eddy
------------------	---------------	-----------------	--------------	----------------------	-----------------------	----------------------	---------------------	----------------

Latitude 32.19484171 Longitude -104.0487226

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release ~560 bbls	Volume Recovered 240 bbls
Source of Release Line Split	Date and Hour of Occurrence Nov. 22, 2016 11am	Date and Hour of Discovery Nov. 22, 2016 10:30am
Was Immediate Notice Given? Required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not	If YES, To Whom? Telephoned Mike Bratcher and Randy Bayliss. Left voicemails.	
By Whom? Catherine Green	Date and Hour Nov. 22, 2016 3pm	
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.*

Lease Operator observed 0 pressure on water line. Investigated by walking the line. Discovered severed pipe. Shut off well. Called for vacuum trucks. Line will be replaced.

Describe Area Affected and Cleanup Action Taken.*

See picture attached. Soil samples will be collected. Contaminated soil will be remediated/removed/replaced. Line will be fixed/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 CONSERVATION DIVISION

Signature: Catherine Green	Approved by Environmental Specialist: <i>[Signature]</i>	
Printed Name: Catherine Green	Approval Date: 11/23/16 Expiration Date: N/A	
Title: Regulatory Analyst	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
E-mail Address: cgreen@matadorresources.com		
Date: Nov. 22, 2016 Phone: 575-627-2453		

2RP-4008