Souder, Miller & Associates♦201 S. Halagueno St.♦Carlsbad, NM 88220
(575) 689-8801

APPROVED
By Olivia Yu at 2:58 pm, Jul 20, 2018

June 13, 2018

#5E27122-BG2 & BG6

NMOCD District I
Olivia Yu
1625 N French Dr
Hobbs, NM 88240

NMOCD grants closure to 1RP-4755 & 1RP-4848.

SUBJECT: SOIL REMEDIATION CLOSURE REPORT FOR THE INCIDENTS AT THE MADERA WELLS GAS LINES (1RP-4755, 1RP-4848), LEA COUNTY, NEW MEXICO

Dear Ms. Yu:

On behalf of Marathon Oil Company (Marathon), Souder, Miller & Associates (SMA) has prepared this CLOSURE REPORT that describes the assessment, and remediation for two releases associated with the Madera Wells Gas Lines. The site is in UNIT G, SECTION 20, TOWNSHIP 26S, RANGE 35E, NMPM, Lea County, New Mexico, on State land. Figure 1 illustrates the vicinity and location of the site. Table 1, below, summarizes information regarding the release.

Table 1: Release information and Site Ranking	
Name	Madera Wells Gas Lines
Company	Marathon Oil Company
Incident Number	1RP-4755 1RP-4848
API Number	1RP-4755-fOY1719549313 1RP-4848-fOY1730029144
Location	32.0313, -103.3858 32.0313, -103.3864
Estimated Date of Release	1RP-4755-June 27, 2017 1RP-4848-October 4, 2017
Date Reported to NMOCD	1RP-4755-June 28, 2017 1RP-4848-October 5, 2017
Land Owner	BLM
Reported To	NMOCD District I
Source of Release	Six-inch gas sales lines
Released Material	Natural Gas
Released Volume	Unknown
Recovered Volume	Unknown
Net Release	Unknown
Nearest Waterway	An unnamed drainage feature is approximately 2,500 feet northeast of the location
Depth to Groundwater	Estimated to be greater than 250 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	5/23/2018

1.0 Background

On June 27, 2017, a fire occurred alongside a lease road that involved multiple six-inch gas sales lines (1RP-4755). The fire self-extinguished.

On October 4, 2017, a fire occurred alongside a lease road that involved multiple six-inch gas sales lines (1RP-4848). The local fire department responded and extinguished the fire. Neither incident caused a release of fluids.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 12.5 miles southwest of Jal, New Mexico with an elevation of approximately 3,175 feet above sea level. SMA searched the New Mexico State Engineer's Office (NMOSE) online water well database for water wells in the vicinity of the release. Several wells are located within a three-mile radius of the site. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be greater than 250 feet below ground surface (bgs).

Recommended Remediation Action Levels (RRALs) are determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). Below in Table 2 are the remediation standards and the site ranking for this location. Justification for this site ranking is found in Figure 1 and Appendix B.

Table 2.

Soil Remediation Standards	0 to 9	10 to 19	>19
Benzene	10 PPM	10 PPM	10 PPM
BTEX	50 PPM	50 PPM	50 PPM
TPH	5000 PPM	1000 PPM	100 PPM

Depth to Groundwater	NMOCD Numeric Rank
< 50 BGS = 20	
50' to 99' = 10	
>100' = 0	0
Distance to Nearest Surface Water	**NMOCD Numeric Rank**
< 200' = 20	
200' - 1000' = 10	
>1000' = 0	0
Well Head Protection	**NMOCD Numeric Rank**
<1000' (or <200' domestic) = 20	
> 1000' = 0	0
Total Site Ranking	**0**

3.0 Release Characterization

May 23, 2018, SMA field personnel assessed the location of the fires. The soil visually appeared unaffected, but several shrubs were charred. Five sample locations were collected at 6 inches bgs. 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 MRO, DRO, and GRO by EPA Method 8015D, BTEX by EPA Method 8021, and Chlorides by Method 300. Sample locations are depicted on Figure 2. All laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

All samples returned minimal results or were below laboratory detection limits for both chloride and hydrocarbons.

4.0 Soil Remediation Summary

Sampling performed by SMA indicates that initial actions taken by Marathon remediated soils to within NMOCD RRAL's. No further action is recommended at this time.

5.0 Scope and Limitations

The scope of our services consisted of the performance of assessment sampling, verification of release stabilization, regulatory liaison, and preparation of this closure report. 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 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Austin Weyant
Project Scientist

Reviewed by:

Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map
Figure 2: Site and Sample Location Map

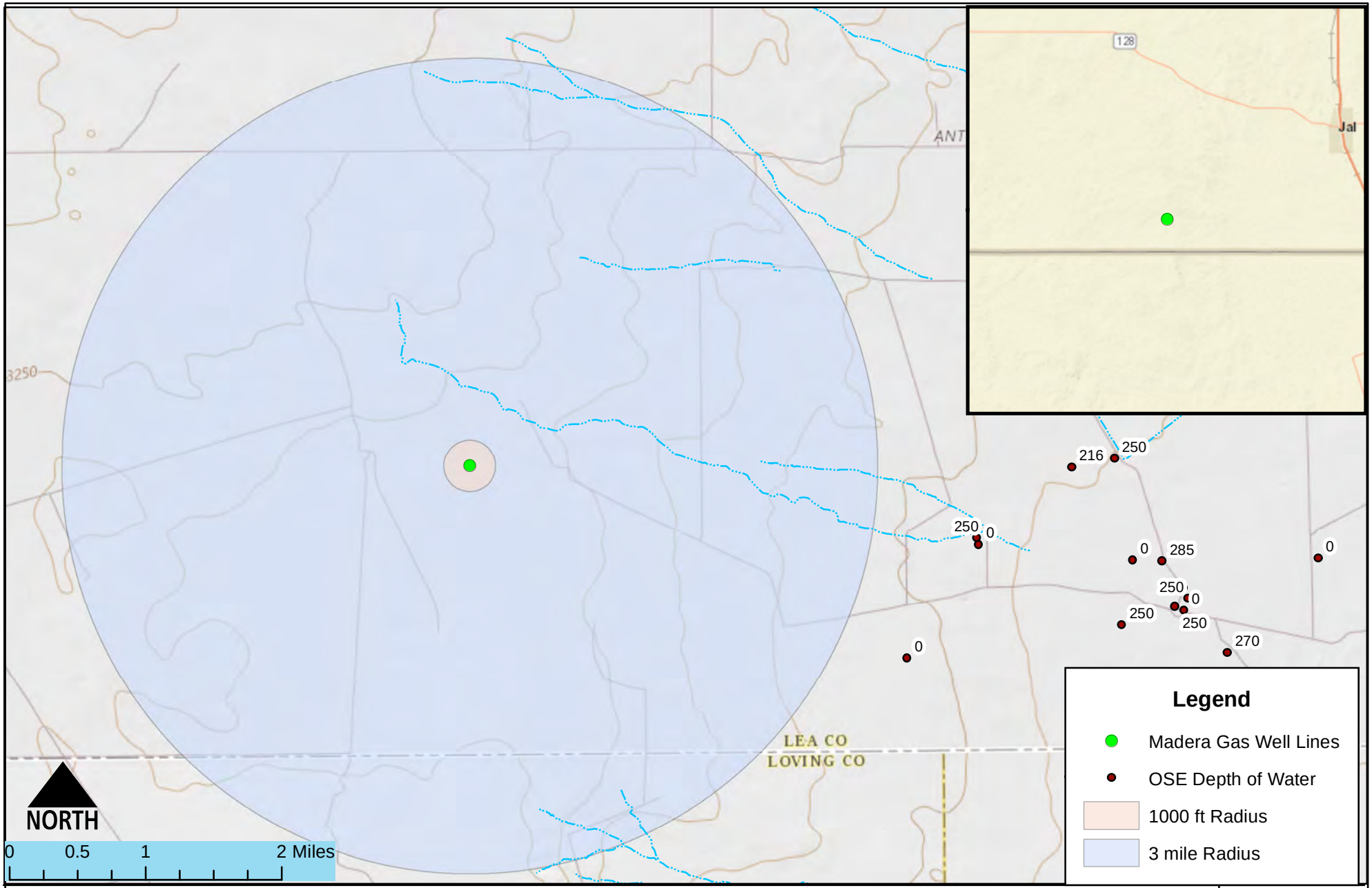
Tables:

Table 3: Summary of Sample Results

Appendices:

Appendix A: Form C141 Initial and Final
Appendix B: NMOSE Wells Report
Appendix C: Laboratory Analytical Reports

FIGURE 1
VICINITY AND NMOSE DATA MAP



Vicinity and Well Head Protection Map
Madera Gas Wells- Marathon
S 20-T26S-R35E, New Mexico

Figure 1

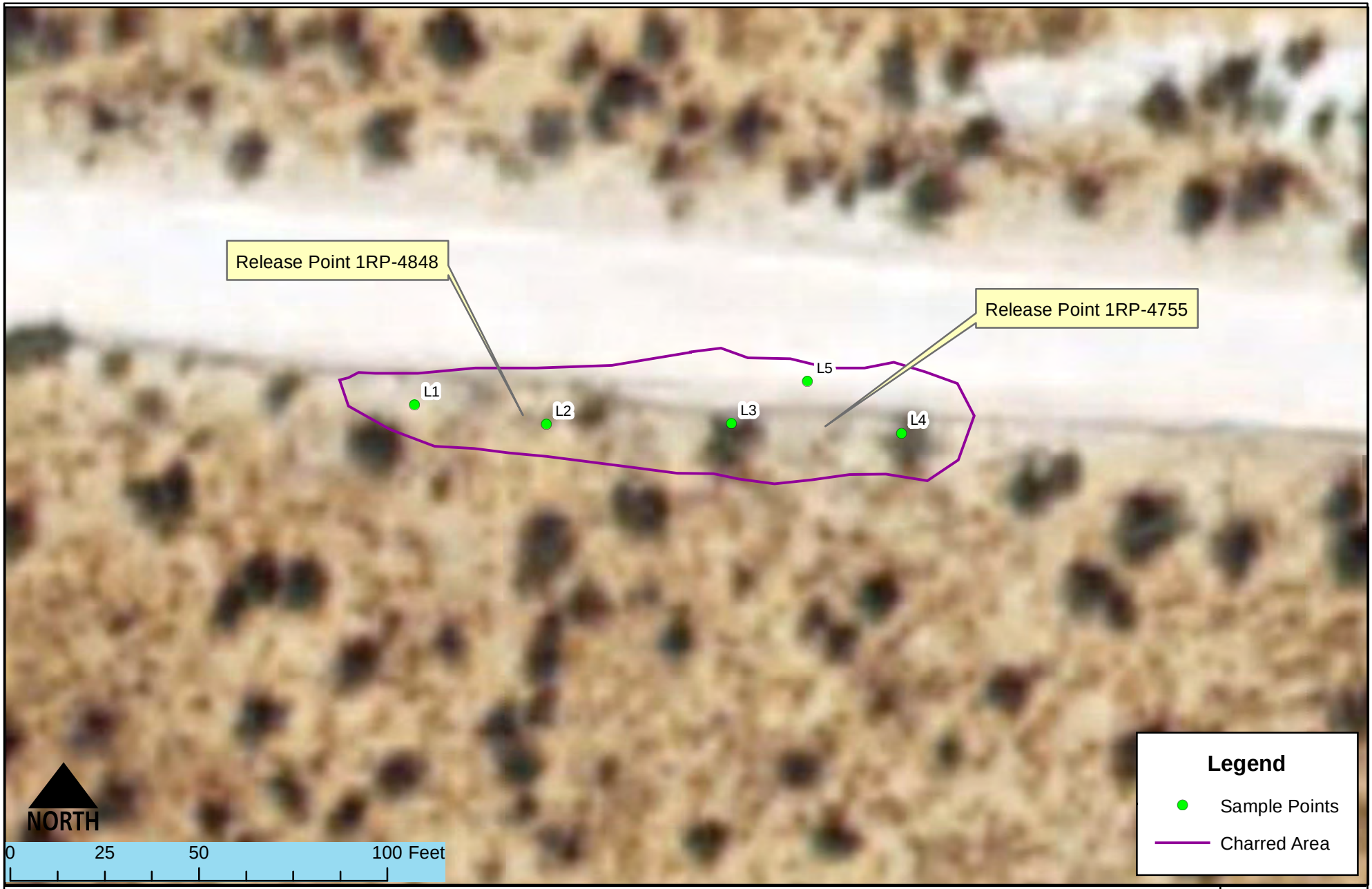
Date Saved: 5/28/2018

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

Drawn Heather Patterson
Checked
Approved

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

FIGURE 2
SITE AND SAMPLE LOCATION MAP



Site and Sample Location Map
Madera Gas Wells- Marathon
S 20-T26S-R35E, New Mexico

Figure 2

Date Saved: 6/13/2018

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

Drawn Heather Patterson
Checked
Approved

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TABLE 3
SUMMARY SAMPLE RESULTS

Madera Wells Sample Summary

Table 3.

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	**Total TPH** mg/Kg	Cl- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 0				50 mg/Kg	10 mg/Kg				5000 mg/Kg	
L1	5/23/2018	0.5	in-situ	<0.23	<0.024	<4.9	<10	<50	<65	35
L2	5/23/2018	0.5	in-situ	<0.23	<0.024	<4.8	<9.9	<49	<64	45
L3	5/23/2018	0.5	in-situ	<0.23	<0.024	<4.8	24	<50	24	34
L4	5/23/2018	0.5	in-situ	<0.23	<0.024	<4.8	<10	<50	<65	39
L5	5/23/2018	0.5	in-situ	<0.23	<0.024	<4.9	<9.9	<50	<65	76

"--" = Not Analyzed

APPENDIX A
FORM C141 INITIAL AND FINAL

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 April 3, 2017

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

Release Notification and Corrective Action

Initial Only

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company Marathon Oil Permian LLC	Contact Raquel Chacon
Address 5555 San Felipe Street, Houston, Texas 77056	Telephone No. 281-910-0441 (cell) 575-297-0988 (office)
Facility Name: Madera Wells	Facility Type Oil and gas production facilities

Surface: Owner Various see list	Mineral: Owner Various see list	API No.: Various see list

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
See list	See list	See list	See list	See list	See list	See list	See list	Lea

Latitude See list **Longitude** See list NAD83

NATURE OF RELEASE

Type of Release Fire	Volume of Release Not applicable	Volume Recovered Not applicable
Source of Release: flow line	Date and Hour of Occurrence 10/4/2017 3:00 pm	Date and Hour of Discovery 10/4/2017 3:00 pm
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu via email	
By Whom? Jason Wardell	Date and Hour 10/5/2017 9:17 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
Not applicable.

RECEIVED
By Olivia Yu at 8:30 am, Oct 27, 2017

Describe Cause of Problem and Remedial Action Taken.*
Marathon operator notified that there was a fire involving multiple six-inch gas sales lines alongside the lease road. The operator shut in the wells, and the local fire department responded and extinguished fire.

Describe Area Affected and Cleanup Action Taken.*
Removed damaged lines and replaced lines.

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.

Raquel Chacon Signature:	OIL CONSERVATION DIVISION Approved by Environmental Specialist:	
Printed Name: Raquel Chacon		
Title: Sr. HES Environmental Professional	Approval Date: 10/27/2017	Expiration Date:
E-mail Address: rchacon@marathonoil.com	Conditions of Approval: see attached directive	Attached ☑
Date: October 18, 2017 Phone: 281-910-0441(cell) 575-297-0988 (office)		

* Attach Additional Sheets If Necessary

1RP-4848

nOY1730029665

fOY1730029144

pOY1730030050

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _10/19/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4848__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _11/27/2017_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

C-141 Form Supplemental Information - Maratho

Well Name	API Number	Section	Township	Range	NMOCD Unit	Latitude
Madera 19 Federal #1	30-025-36645	19	26S	35E	L	32.0269737
Madera 19 Federal Com #4H	30-025-41492	19	26S	35E	N	32.0224342
Madera 24 Federal #1	30-025-36666	24	26S	34E	M	32.0251656
Madera 24 Federal #2H	30-025-40277	24	26S	34E	P	32.0215645
Madera 24 Federal #3H	30-025-40632	24	26S	34E	B	32.0351563
Madera 25 Federal Com #2H	30-025-40633	25	26S	34E	B	32.0206413
Madera 36 State #1	30-025-36087	36	26s	34E	A	32.0052147
Beckham 19 #1	30-025-37080	19	26S	35E	I	32.0260544

n Oil Company - Sales Lines Fire

Longitude	North/ South Line	East/ West Line	Surface Owner	Mineral Owner
-103.4119415	1980' FSL	1000' FWL	Beckham Ranch Inc.	BLM
-103.408783	330' FSL	1980' FWL	Beckham Ranch Inc.	BLM
-103.4279709	1310' FSL	1310' FWL	BLM	BLM
-103.4167862	10' FSL	500' FEL	Unknown	BLM
-103.4215393	330' FNL	1980' FEL	Unknown	BLM
-103.4218903	330' FNL	2080' FEL'	Unknown	BLM
-103.4173355	660' FNL	660' FEL	Unknown	State of New Mexico
-103.4022217	1650' FSL	1310' FEL	Beckham Ranch Inc.	Private

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Form C-141
Revised April 3, 2017

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 Marathon Oil Company	Contact Wendy Gram
Address 5555 San Felipe Street, Houston, Texas 77056	Telephone No. 701-690-6519 (cell) 713-296-2862 (office)
Facility Name Various see list	Facility Type Oil and gas production facilities

Surface Owner Various see list	Mineral Owner Various see list	API No.Various see list

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
See list	See list	See list	See list	See list	See list	See list	See list	Lea

Latitude See list **Longitude** See list NAD83

NATURE OF RELEASE

Type of Release Fire	Volume of Release Not applicable	Volume Recovered Not applicable
Source of Release Produced water tank	Date and Hour of Occurrence 6/27/2017 4:00 PM	Date and Hour of Discovery 6/27/2017 4:00 PM.
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Olivia Yu via email	
By Whom? Wendy Gram	Date and Hour 6/28/2017 10:23 AM.	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*
Not applicable.

RECEIVED
By Olivia Yu at 1:38 pm, Jul 14, 2017

Describe Cause of Problem and Remedial Action Taken.*
Marathon operator notified by Devon personnel that there was a fire involving multiple six-inch gas sales lines alongside the lease road. The operator shut in the wells, and the fire extinguished itself.

Describe Area Affected and Cleanup Action Taken.*
Removed damaged lines and replaced lines.

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.

Wendy Gram
Signature:

Printed Name: Wendy Gram

Title: Sr. HES Professional

E-mail Address: wwgram@marathonoil.com

Date: July 12, 2017
Phone: 701-690-6519 (cell) 713-296-2862 (office)

OIL CONSERVATION DIVISION

Approved by Environmental Specialist: JJ

Approval Date: 7/14/2017 Expiration Date:

Conditions of Approval:
NMOCD requests confirmatory laboratory analyses of discrete soil samples (0-6 in) from impacted areas.

Attached ☑

fOY1719549313

1RP-4755

nOY1719549649

pOY1719549905

* Attach Additional Sheets If Necessary

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _7/12/2017_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-4755__ has been assigned. **Please refer to this case number in all future correspondence.**

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Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

APPENDIX B
NMOSE WELLS REPORT

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
C 03795 POD1	C	LE	4	4	3	24	26S	35E	658419	3544221	6249	496	250	246
CP 01305 POD1	CP	LE		1	4	31	25S	37E	655628	3551065	6850	420	230	190

Average Depth to Water: **240 feet**

Minimum Depth: **230 feet**

Maximum Depth: **250 feet**

Record Count: 2

UTMNAD83 Radius Search (in meters):

Easting (X): 652233.49 **Northing (Y):** 3545114.77 **Radius:** 7000

APPENDIX C

LABORATORY ANALYTICAL REPORTS

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

June 01, 2018

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

RE: Madera Wells OrderNo.: 1805E15

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/25/2018 for the analyses presented in the following report.

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

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

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

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates
Client Sample ID: L1-0.5
Project: Madera Wells
Collection Date: 5/23/2018 3:15:00 PM
Lab ID: 1805E15-001
Matrix: SOIL
Received Date: 5/25/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	35	30		mg/Kg	20	5/31/2018 5:19:27 AM	38393
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/30/2018 12:35:50 PM	38367
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/30/2018 12:35:50 PM	38367
Surr: DNOP	112	70-130		%Rec	1	5/30/2018 12:35:50 PM	38367
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/30/2018 3:09:31 AM	38338
Surr: BFB	91.0	15-316		%Rec	1	5/30/2018 3:09:31 AM	38338
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/30/2018 3:09:31 AM	38338
Toluene	ND	0.049		mg/Kg	1	5/30/2018 3:09:31 AM	38338
Ethylbenzene	ND	0.049		mg/Kg	1	5/30/2018 3:09:31 AM	38338
Xylenes, Total	ND	0.097		mg/Kg	1	5/30/2018 3:09:31 AM	38338
Surr: 4-Bromofluorobenzene	99.8	80-120		%Rec	1	5/30/2018 3:09:31 AM	38338

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
PQL	Practical Quanitative Limit	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: L2-0.5
Project: Madera Wells
Collection Date: 5/23/2018 3:20:00 PM
Lab ID: 1805E15-002 **Matrix:** SOIL **Received Date:** 5/25/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	45	30		mg/Kg	20	5/31/2018 5:31:51 AM	38393
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	20	9.9		mg/Kg	1	5/30/2018 1:00:02 PM	38367
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/30/2018 1:00:02 PM	38367
Surr: DNOP	105	70-130		%Rec	1	5/30/2018 1:00:02 PM	38367
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/30/2018 3:32:57 AM	38338
Surr: BFB	88.8	15-316		%Rec	1	5/30/2018 3:32:57 AM	38338
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/30/2018 3:32:57 AM	38338
Toluene	ND	0.048		mg/Kg	1	5/30/2018 3:32:57 AM	38338
Ethylbenzene	ND	0.048		mg/Kg	1	5/30/2018 3:32:57 AM	38338
Xylenes, Total	ND	0.096		mg/Kg	1	5/30/2018 3:32:57 AM	38338
Surr: 4-Bromofluorobenzene	98.1	80-120		%Rec	1	5/30/2018 3:32:57 AM	38338

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
PQL	Practical Quanitative Limit	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: L3-0.5
Project: Madera Wells
Collection Date: 5/23/2018 3:25:00 PM
Lab ID: 1805E15-003 **Matrix:** SOIL **Received Date:** 5/25/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	34	30		mg/Kg	20	5/31/2018 5:44:16 AM	38393
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	24	10		mg/Kg	1	5/30/2018 1:24:12 PM	38367
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/30/2018 1:24:12 PM	38367
Surr: DNOP	107	70-130		%Rec	1	5/30/2018 1:24:12 PM	38367
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/30/2018 8:27:33 PM	38338
Surr: BFB	92.5	15-316		%Rec	1	5/30/2018 8:27:33 PM	38338
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/30/2018 8:27:33 PM	38338
Toluene	ND	0.048		mg/Kg	1	5/30/2018 8:27:33 PM	38338
Ethylbenzene	ND	0.048		mg/Kg	1	5/30/2018 8:27:33 PM	38338
Xylenes, Total	ND	0.095		mg/Kg	1	5/30/2018 8:27:33 PM	38338
Surr: 4-Bromofluorobenzene	99.9	80-120		%Rec	1	5/30/2018 8:27:33 PM	38338

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
PQL	Practical Quanitative Limit	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: L4-0.5
Project: Madera Wells
Collection Date: 5/23/2018 3:30:00 PM
Lab ID: 1805E15-004
Matrix: SOIL
Received Date: 5/25/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	39	30		mg/Kg	20	5/31/2018 5:56:40 AM	38393
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/30/2018 1:48:25 PM	38367
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/30/2018 1:48:25 PM	38367
Surr: DNOP	105	70-130		%Rec	1	5/30/2018 1:48:25 PM	38367
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/30/2018 8:51:06 PM	38338
Surr: BFB	93.6	15-316		%Rec	1	5/30/2018 8:51:06 PM	38338
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/30/2018 8:51:06 PM	38338
Toluene	ND	0.048		mg/Kg	1	5/30/2018 8:51:06 PM	38338
Ethylbenzene	ND	0.048		mg/Kg	1	5/30/2018 8:51:06 PM	38338
Xylenes, Total	ND	0.097		mg/Kg	1	5/30/2018 8:51:06 PM	38338
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	1	5/30/2018 8:51:06 PM	38338

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
PQL	Practical Quanitative Limit
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: L5-0.5
Project: Madera Wells
Collection Date: 5/23/2018 3:35:00 PM
Lab ID: 1805E15-005 **Matrix:** SOIL **Received Date:** 5/25/2018 9:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: **MRA**	
Chloride	76	30		mg/Kg	20	5/31/2018 6:09:04 AM	38393
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS						Analyst: **TOM**	
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	5/30/2018 2:12:45 PM	38367
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/30/2018 2:12:45 PM	38367
Surr: DNOP	106	70-130		%Rec	1	5/30/2018 2:12:45 PM	38367
EPA METHOD 8015D: GASOLINE RANGE						Analyst: **NSB**	
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/30/2018 9:14:23 PM	38338
Surr: BFB	94.3	15-316		%Rec	1	5/30/2018 9:14:23 PM	38338
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**	
Benzene	ND	0.024		mg/Kg	1	5/30/2018 9:14:23 PM	38338
Toluene	ND	0.049		mg/Kg	1	5/30/2018 9:14:23 PM	38338
Ethylbenzene	ND	0.049		mg/Kg	1	5/30/2018 9:14:23 PM	38338
Xylenes, Total	ND	0.097		mg/Kg	1	5/30/2018 9:14:23 PM	38338
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	1	5/30/2018 9:14:23 PM	38338

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
PQL	Practical Quanitative Limit	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#: **1805E15**

01-Jun-18

Client: Souder, Miller & Associates

Project: Madera Wells

Sample ID	**MB-38393**	SampType:	**mblk**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**PBS**	Batch ID:	**38393**	RunNo:	**51601**					
Prep Date:	**5/30/2018**	Analysis Date:	**5/31/2018**	SeqNo:	**1683711**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	**LCS-38393**	SampType:	**lcs**	TestCode:	**EPA Method 300.0: Anions**					
Client ID:	**LCSS**	Batch ID:	**38393**	RunNo:	**51601**					
Prep Date:	**5/30/2018**	Analysis Date:	**5/31/2018**	SeqNo:	**1683712**	Units:	**mg/Kg**			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

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
PQL	Practical Quanitative Limit	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#: **1805E15**

01-Jun-18

Client: Souder, Miller & Associates

Project: Madera Wells

Sample ID	**LCS-38367**	SampType:	**LCS**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**LCSS**	Batch ID:	**38367**		RunNo:	**51593**				
Prep Date:	**5/29/2018**	Analysis Date:	**5/30/2018**		SeqNo:	**1682090**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	105	70	130			
Surr: DNOP	4.6		5.000		91.8	70	130			

Sample ID	**MB-38367**	SampType:	**MBLK**		TestCode:	**EPA Method 8015M/D: Diesel Range Organics**				
Client ID:	**PBS**	Batch ID:	**38367**		RunNo:	**51593**				
Prep Date:	**5/29/2018**	Analysis Date:	**5/30/2018**		SeqNo:	**1682091**	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	9.9		10.00		99.4	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
PQL	Practical Quanitative Limit	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#: **1805E15**

01-Jun-18

Client: Souder, Miller & Associates

Project: Madera Wells

Sample ID	**MB-38338**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**38338**		RunNo:	**51580**				
Prep Date:	**5/25/2018**	Analysis Date:	**5/29/2018**		SeqNo:	**1681351**	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	950		1000		95.1	15	316			

Sample ID	**LCS-38338**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**38338**		RunNo:	**51580**				
Prep Date:	**5/25/2018**	Analysis Date:	**5/29/2018**		SeqNo:	**1681352**	Units:	**mg/Kg**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	5.0	25.00	0	114	75.9	131			
Surr: BFB	1100		1000		112	15	316			

Sample ID	**MB-38366**	SampType:	**MBLK**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**PBS**	Batch ID:	**38366**		RunNo:	**51603**				
Prep Date:	**5/29/2018**	Analysis Date:	**5/30/2018**		SeqNo:	**1682799**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	930		1000		92.9	15	316			

Sample ID	**LCS-38366**	SampType:	**LCS**		TestCode:	**EPA Method 8015D: Gasoline Range**				
Client ID:	**LCSS**	Batch ID:	**38366**		RunNo:	**51603**				
Prep Date:	**5/29/2018**	Analysis Date:	**5/30/2018**		SeqNo:	**1682800**	Units:	**%Rec**		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		106	15	316			

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
PQL	Practical Quanitative Limit	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#: **1805E15**

01-Jun-18

Client: Souder, Miller & Associates

Project: Madera Wells

Sample ID	**MB-38338**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**PBS**	Batch ID:	**38338**		RunNo:	**51580**				
Prep Date:	**5/25/2018**	Analysis Date:	**5/29/2018**		SeqNo:	**1681394**	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	1.0		1.000		105	80	120			

Sample ID	**LCS-38338**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**LCSS**	Batch ID:	**38338**		RunNo:	**51580**				
Prep Date:	**5/25/2018**	Analysis Date:	**5/29/2018**		SeqNo:	**1681396**	Units:	**mg/Kg**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	91.3	77.3	128			
Toluene	0.94	0.050	1.000	0	93.6	79.2	125			
Ethylbenzene	0.93	0.050	1.000	0	93.2	80.7	127			
Xylenes, Total	2.8	0.10	3.000	0	94.5	81.6	129			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	**MB-38366**	SampType:	**MBLK**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**PBS**	Batch ID:	**38366**		RunNo:	**51603**				
Prep Date:	**5/29/2018**	Analysis Date:	**5/30/2018**		SeqNo:	**1682840**	Units:	**%Rec**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	**LCS-38366**	SampType:	**LCS**		TestCode:	**EPA Method 8021B: Volatiles**				
Client ID:	**LCSS**	Batch ID:	**38366**		RunNo:	**51603**				
Prep Date:	**5/29/2018**	Analysis Date:	**5/30/2018**		SeqNo:	**1682841**	Units:	**%Rec**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		109	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
PQL	Practical Quanitative Limit	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: 1805E15 | RcptNo: 1

Received By: Isaiah Ortiz 5/25/2018 9:15:00 AM

Completed By: Erin Melendrez 5/25/2018 9:44:27 AM

Reviewed By: JMO 5/25/18

Labled By: JB 05/25/18

Chain of Custody

1. Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2. How was the sample delivered?	Courier		

Log In

3. Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C	Yes ☑	No ☐	NA ☐
5. Sample(s) in proper container(s)?	Yes ☑	No ☐	
6. Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
7. Are samples (except VOA and ONG) properly preserved?	Yes ☑	No ☐	
8. Was preservative added to bottles?	Yes ☐	No ☑	NA ☐
9. VOA vials have zero headspace?	Yes ☐	No ☐	No VOA Vials ☑
10. Were any sample containers received broken?	Yes ☐	No ☑	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)	Yes ☑	No ☐	# of preserved bottles checked for pH: (<2 or >12 unless noted)
12. Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	Adjusted? 05/25/18
13. Is it clear what analyses were requested?	Yes ☑	No ☐	
14. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes ☑	No ☐	Checked by: JB

Special Handling (if applicable)

15. 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:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.9	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address:

Phone #:

email or Fax#:

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: 5 day turn
☐ Standard ☐ Rush

Project Name: Madera Wells

Project #:

Project Manager: Austin Weyant

Sampler: Heath Patterson

On Ice: ~~☐~~ Yes ☐ No

Sample Temperature: 0.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
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Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 1805E15	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	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)
5/3/18	3:15	Soil	L1-0.5	4oz		-001			X					X				
	3:20		L2-0.5			-002			X					X				
	3:25		L3-0.5			-003			X					X				
	3:30		L4-0.5			-004			X					X				
	3:35		L5-0.5			-005			X					X				

Date	Time	Relinquished by:	Received by:	Date	Time
5/4/18	1030			5/4/18	1030
5/4/18	1900			5/5/18	915

Remarks:

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.