

SOIL REMEDIATION WORKPLAN FOR INCIDENT 2RP-2809

COG OPERATING LLC
MCINTYRE A WEST #16
API# 30-015-31855
SECTION 20, T17S R30E, NM
EDDY COUNTY, NM



Prepared by:
Souder, Miller & Associates
201 S. Halagueno
Carlsbad, NM 88221
575-689-7040

Prepared for:
COG Operating LLC
2407 Pecos Ave
Artesia, NM 88210

June 11, 2015
Reference 5B23978 BG2



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INTRODUCTION

On behalf of Cog Operating LLC (COG), Souder Miller & Associates (SMA) has prepared this report of closure activities related to incident #2RP-2809, providing a summary of the releases and spill response efforts at the MCINTYRE A WEST #16, a lease held by COG Operating. For #2RP-2809, on January 27, 2015, according to the Release Notification and Corrective Action Form C-141, all standing fluid was recovered by vacuum trucks and disposed of at an NMOCD approved facility. According to the initial C-141, "The impacted area in the pasture off the east side of the pad. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work." (Appendix B). The total volume of the release was estimated at 5 bbls of oil and 15 bbls of produced water. A vacuum truck removed 3 bbls of oil and 15 of produced water according to the Release Notification and Corrective Action Form C-141.

The site is located in Unit O, Section 20, Township 17 South, Range 30 East, Eddy County, New Mexico. Figure 1, Site Location Map, illustrates the location of the release.

This document presents the results of the initial assessment and soil sampling performed at the Site, the regulatory framework for existing activities, and a summary of work done at the location to facilitate incident mitigation and closure. Site details, sampling locations and the remedial excavation area are presented in Figure 2. Appendices include the laboratory analytical reports for the initial sampling, New Mexico Oil Conservation Division (NMOCD) form C-141 (final), and the manifest for the transport and disposal of RCRA exempt soils generated from the initial response to the NMOCD approved facility Lea Land Inc.

REGULATORY FRAMEWORK AND SITE CLASSIFICATION

This project was conducted under the regulatory jurisdiction of the NMOCD, which requires the vadose zone to be abated so that water contaminants in the vadose zone will not, with reasonable probability, contaminate groundwater or surface water (toxic pollutants as defined in 20.6.2.7 New Mexico Administration Code shall not be present) through leaching, percolation, or other transport mechanisms (19.15.1.19 NMAC, Subsection B, Paragraphs 1 and 2). The NMOCD hydrocarbon soil remediation levels are determined by ranking criteria on a site-by-site basis, as outlined in the NMOCD "Guidelines for Remediation of Spills, Leaks, and Releases", dated August 13, 1993. The ranking criteria are based on three site characteristics: depth to groundwater, wellhead protection, and distance to surface water.

According to the Office of the State Engineer's records, no water wells are located within 1,000 feet of the well pad and tank battery. The estimated depth to groundwater is greater than 100 feet below ground surface. No surface water bodies are located within 1,000 feet of the well pad and battery. The table below illustrates the ranking criteria, used by the NMOCD, and includes site specific characteristics at the McIntyre A West #16 location.

Criteria Site Characteristics	Ranking Score
Depth to Ground Water	<100 feet (80ft) 10
Wellhead Protection Area	>1000 feet 0
Distance to Surface Water	>1000 feet <u>0</u>
Total Ranking Score	10

Based on the site characteristics and the NMOCD guidelines, the site has a ranking score of 10. Consequently, Recommended Remediation Action Levels (RRALs) of 10 milligrams per kilogram (mg/Kg)

Benzene, 50 mg/Kg total Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX); and 1000 mg/Kg Total Petroleum Hydrocarbons (TPH) are proposed for remediation at the site.

INITIAL SOIL SAMPLING RESULTS

Soil samples were taken at depths ranging from 1 foot below surface grade (bsg) to 18 inches bsg. Specific sample locations for all samples are depicted on Figure 2 (Sample Location Map) along with sampling details. All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for Benzene and Total BTEX using EPA Method 8021B, DRO and GRO by EPA Method 8015D, and total Chlorides using EPA Method 300.0.

TABLE 1 INITIAL SAMPLES

Analytical Report- 1505720	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	Cl- mg/Kg
001	MC1	4/28/15	18"	N/A	BDL	BDL	BDL	54
002	MC2	4/28/15	18"	N/A	BDL	BDL	BDL	120
003	MC3	4/28/15	12"	0.54	BDL	BDL	BDL	8600

N/A – Not Analyzed BDL – Below Detection Limits for the Method. Refer to Analytical Reports Appendix A

All laboratory analytical results are below the site specific NMOCD RRALs based on the ranking criteria.

SOIL REMEDIATION WORKPLAN

The initial soil assessment activities performed by SMA effectively delineated the horizontal and vertical extent of Chloride and hydrocarbon affected soils in accordance to NMOCD regulatory guidance. The excavation will be guided by SMA personnel in the field, using EPA Method 4500 titrations along with the PID meter in accordance to the NMOCD Guidelines for Remediation of Leaks, Spills and Releases.

The spill area shown in Figure 2 will be excavated to remove the chloride and hydrocarbons contaminated soil. The North area of the excavation will remove 18" bsg. The south area will be excavated to 24" bsg. Samples will then be taken in the sidewalls and bottom to ensure contaminated soils have been removed. These samples will help confirm that all contaminated soil had been removed in the horizontal and vertical plane. All soil will be hauled to a NMOCD approved waste facility. A tractor will rip the bottom of the excavation and incorporate clean soil to bring to surface grade to improve vegetation growth.

CONFIRMATION SAMPLING

Side-wall and bottom holes samples will be taken to confirm that the contaminated soils have been removed on a horizontal and vertical extent. Each sample container will be labeled, placed on ice in an

insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The cooler was sealed for shipment to the laboratory, accompanied by proper chain-of-custody documentation. The soil samples were delivered to Hall Environmental Analysis Laboratory, Inc., in Albuquerque, New Mexico for analysis for Benzene and Total BTEX using EPA Method 8021B, DRO and GRO by EPA Method 8015D, and total Chlorides using EPA Method 300.0.

SITE CLOSURE

All excavated impacted soils will be transported to an NMOCD approved facility for disposal. Clean top soil will be used to fill the excavation. The soils remaining will be sampled by SMA and tested by a third party laboratory confirming that the soil left in place meets the site-specific NMOCD closure levels of 10 mg/Kg Benzene, 50 mg/Kg total BTEX and 1000 mg/Kg TPH (DRO and GRO). A closure request was submitted to the NMOCD as a C-141 final.

LIST OF FIGURES

FIGURE 1 SITE LOCATION MAP

FIGURE 2 SITE DETAILS AND SAMPLE LOCATION MAP

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APPENDIX B FORM C141 FINAL

FIGURE 1

SITE LOCATION MAP



Site Location Map
McIntyre A West #16 - COG
Loco Hills, New Mexico

Figure 1

Date Saved:
6/2/2015

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

Copyright 2014 Souder, Miller & Associates - All Rights Reserved

Drawn Lucas Middleton
Checked _____
Approved _____



201 South Halaguena Street
Carlsbad, New Mexico 88221
(575) 689-3351
www.soudermiller.com
Service the Southwest & Rocky Mountains

FIGURE 2

SITE DETAILS AND SAMPLE LOCATIONS MAP



Site Sample Map
McIntyre A West #16 - COG
Loco Hills, New Mexico

Figure 2

Date Saved:
6/2/2015

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

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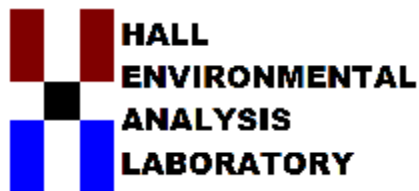
Drawn Lucas Middleton
Checked _____
Approved _____



201 South Hualapena Street
Carlsbad, New Mexico 88221
(575) 689-3331
www.soudermiller.com
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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

May 22, 2015

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

RE: McIntyre

OrderNo.: 1505720

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/15/2015 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 **1505720**

Date Reported: **5/22/2015**

CLIENT: Souder, Miller & Associates

Client Sample ID: W1

Project: McIntyre

Collection Date: 5/13/2015 9:00:00 AM

Lab ID: 1505720-001

Matrix: SOIL

Received Date: 5/15/2015 9:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	54	30		mg/Kg	20	5/19/2015 3:05:08 PM	19298
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	5/18/2015 10:10:49 PM	19255
Benzene	ND	0.049		mg/Kg	1	5/18/2015 10:10:49 PM	19255
Toluene	ND	0.049		mg/Kg	1	5/18/2015 10:10:49 PM	19255
Ethylbenzene	ND	0.049		mg/Kg	1	5/18/2015 10:10:49 PM	19255
Xylenes, Total	ND	0.099		mg/Kg	1	5/18/2015 10:10:49 PM	19255
Surr: 4-Bromofluorobenzene	114	80-120		%REC	1	5/18/2015 10:10:49 PM	19255

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
	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
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1505720**

Date Reported: **5/22/2015**

CLIENT: Souder, Miller & Associates

Client Sample ID: W3

Project: McIntyre

Collection Date: 5/13/2015 9:00:00 AM

Lab ID: 1505720-002

Matrix: SOIL

Received Date: 5/15/2015 9:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	120	30		mg/Kg	20	5/19/2015 3:42:21 PM	19298
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	5/18/2015 10:39:30 PM	19255
Benzene	ND	0.049		mg/Kg	1	5/18/2015 10:39:30 PM	19255
Toluene	ND	0.049		mg/Kg	1	5/18/2015 10:39:30 PM	19255
Ethylbenzene	ND	0.049		mg/Kg	1	5/18/2015 10:39:30 PM	19255
Xylenes, Total	ND	0.098		mg/Kg	1	5/18/2015 10:39:30 PM	19255
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	5/18/2015 10:39:30 PM	19255

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	Page 2 of 6
	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	
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1505720**

Date Reported: **5/22/2015**

CLIENT: Souder, Miller & Associates

Client Sample ID: X2

Project: McIntyre

Collection Date: 5/13/2015 9:00:00 AM

Lab ID: 1505720-003

Matrix: SOIL

Received Date: 5/15/2015 9:08:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	8600	300		mg/Kg	200	5/20/2015 5:24:26 PM	19298
EPA METHOD 8021B: VOLATILES							Analyst: RAA
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	5/20/2015 12:49:16 PM	19269
Benzene	ND	0.25		mg/Kg	5	5/20/2015 12:49:16 PM	19269
Toluene	ND	0.25		mg/Kg	5	5/20/2015 12:49:16 PM	19269
Ethylbenzene	0.27	0.25		mg/Kg	5	5/20/2015 12:49:16 PM	19269
Xylenes, Total	0.54	0.50		mg/Kg	5	5/20/2015 12:49:16 PM	19269
Surr: 4-Bromofluorobenzene	135	80-120	S	%REC	5	5/20/2015 12:49:16 PM	19269

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
	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
	O	RSD is greater than RSDlimit	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	Spike Recovery outside accepted recovery limits		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505720

22-May-15

Client: Souder, Miller & Associates

Project: McIntyre

Sample ID	MB-19298		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	19298		RunNo:	26305				
Prep Date:	5/19/2015		Analysis Date:	5/19/2015		SeqNo:	781402		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-19298		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 19298		RunNo: 26305					
Prep Date:	5/19/2015		Analysis Date: 5/19/2015		SeqNo: 781403		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505720

22-May-15

Client: Souder, Miller & Associates

Project: McIntyre

Sample ID	MB-19255		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 19255		RunNo: 26255					
Prep Date:	5/15/2015		Analysis Date: 5/18/2015		SeqNo: 779647		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	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

Sample ID	LCS-19255		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 19255		RunNo: 26255					
Prep Date:	5/15/2015		Analysis Date: 5/18/2015		SeqNo: 779908		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	69.8	143			
Benzene	1.2	0.050	1.000	0	115	76.6	128			
Toluene	1.1	0.050	1.000	0	110	75	124			
Ethylbenzene	1.1	0.050	1.000	0	113	79.5	126			
Xylenes, Total	3.4	0.10	3.000	0	113	78.8	124			
Surr: 4-Bromofluorobenzene	1.2		1.000		117	80	120			

Sample ID	MB-19269		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 19269		RunNo: 26270					
Prep Date:	5/16/2015		Analysis Date: 5/19/2015		SeqNo: 780317		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	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

Sample ID	LCS-19269		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 19269		RunNo: 26270					
Prep Date:	5/16/2015		Analysis Date: 5/19/2015		SeqNo: 781904		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	108	69.8	143			
Benzene	1.1	0.050	1.000	0	106	76.6	128			
Toluene	1.0	0.050	1.000	0	101	75	124			
Ethylbenzene	1.0	0.050	1.000	0	104	79.5	126			

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505720

22-May-15

Client: Souder, Miller & Associates

Project: McIntyre

Sample ID	LCS-19269		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 19269		RunNo: 26270					
Prep Date:	5/16/2015		Analysis Date: 5/19/2015		SeqNo: 781904		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.1	0.10	3.000	0	103	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		112	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit



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: 1505720

RcptNo: 1

Received by/date:	CS	05/15/15	
Logged By:	Ashley Gallegos	5/15/2015 9:08:00 AM	AG
Completed By:	Ashley Gallegos	5/15/2015 11:45:21 AM	AG
Reviewed By:	CS	05/15/15	

Chain of Custody

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

Log In

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

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<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	5.5	Good	Yes			

Chain-of-Custody Record

Client: Souder Miller and Associates

Mailing Address:

201 S Halagueno Carlsbad, NM 88220

Phone #: 575-689-5351

email or Fax#: lucas.middleton@soudermiller.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Metatype

Project #:

582303-1362

Project Manager:

Austin Weyant

Sampler:

LCF

On Ice:

☒ Yes ☐ No

Sample Temperature:

5.5°C

Container Type and #

Preservative Type

HEAL No.

1305720

402

402

402

5-13-15 900 W1

5-13-15 900 W3

5-13-15 900 X2

Sample Request ID

Matrix

Time

Date

5-13-15

5-13-15

5-13-15

TPH Method 8015B (Gas/D)

TPH (Method 418.1)

RCRA 8 Metals

Anions (Cl)

BTEX + MTBE + TPH (Gas on

BTEX + MTBE + TMB's (8021

Analysis Request

Remarks:

0908

Received by: *William Sum* Date: *5/15/15*

Received by:

Relinquished by:

Time:

Date:

Relinquished by:

Time:

Date:

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

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

ARTESIA DISTRICT

FEB 12 2015

Form C-141
Revised August 8, 2011

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

RECEIVED

Release Notification and Corrective Action

NAB1504355361		OPERATOR		<input checked="" type="checkbox"/> Initial Report	<input type="checkbox"/> Final Report
Name of Company: COG Operating LLC 229137		Contact: Robert McNeill			
Address: 600 West Illinois Avenue, Midland TX 79701		Telephone No. 432-230-0077			
Facility Name: McIntyre A West 16		Facility Type: Well			
Surface Owner: Fed		Mineral Owner:		API No. 30-015-31855	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	20	17S	30E	330	South	2160	East	Eddy

Latitude 32.8137613030574 Longitude -103.992641972529

NATURE OF RELEASE

Type of Release: Oil and Produced Water	Volume of Release: 5 bbls oil; 15 bbls PW	Volume Recovered: 3 bbls oil; 15 bbls PW
Source of Release: flowline	Date and Hour of Occurrence: 1/27/2015 10:00 am	Date and Hour of Discovery: 1/27/2015 10:00 am
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour:	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* This release was caused by a corrosion on a steel flowline. Vacuum trucks were dispatched to recover all standing fluid.		
Describe Area Affected and Cleanup Action Taken.* The impacted area in the pasture off the east side of the pad. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Amanda Trujillo	Approved by Environmental Specialist: 	
Title: Senior Environmental Coordinator	Approval Date: 2/12/15	Expiration Date: N/A
E-mail Address: atrujillo@concho.com	Conditions of Approval: Rules & Guidelines	
Date: February 12, 2015 Phone: 575-748-6940	SUBMIT REMEDIATION PROPOSAL NO	
* Attach Additional Sheets If Necessary		Attached <input type="checkbox"/>

Remediation per O.C.D. Rules & Guidelines
SUBMIT REMEDIATION PROPOSAL NO
LATER THAN: 3/12/15

2RP-2809