



August 6, 2015

#5B23978-BG7

NMOCD District II
1301 W Grand Ave
Artesia, NM 88210

SUBJECT: FINAL CLOSURE REPORT FOR INCIDENT 2RP-2938 SRO STATE UNIT COM #13H, EDDY COUNTY, NEW MEXICO

Dear Ms. Patterson:

Souder Miller & Associates is pleased to submit the attached Final Closure Report of the remediation of the release site located on the SRO State Unit Com #13H in Eddy County, New Mexico. The purpose of the Final Report is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for the closure of the release that occurred on New Mexico State Land Office property on March 19, 2015.

Souder, Miller & Associates (SMA) responded at the request of COG Operating to assess and delineate the release of production fluids associated with the SRO State Unit Com #13H well location. The release was initially reported to NMOCD by COG Operating on April 6, 2015 and was a result of a flow line failure. The table below summarizes information regarding the release. Results of the assessment, delineation, and remedial activities follow in the attached closure report.

Table 1: Release information and Site Ranking					
Name	SRO State Unit Com #13H				
Location	Incident Number	API Number	Section, Township, Range		
		2RP-2938	30-015-37427	SW/NE (Unit D)	Section 15
Estimated Date of Release	19-Mar-15				
Date Reported to NMOCD	6-Apr-15				
Reported by	Amanda Trujillo, COG Operating LLC				
Land Owner	New Mexico State Land Office				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Flow line failure				
Released Material	Produced Water				
Released Volume	20 bbls Produced Water				
Recovered Volume	15 bbls Produced Water				
Net Release	5 bbl Produced Water				

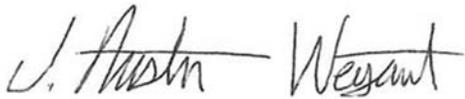


Nearest Waterway	The Pecos River is over one miles to the east of the location.
Depth to Groundwater	Estimated to be 120 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	Initial: May 11, 2015 Mitigation Activities: 7/11/15
Subcontractors	TCS
Disposal Facility	Lea Land, LLC
Estimated Yd ³ Contaminated Soil Excavated and Disposed	681 (Reported on Completed C-138)

Attached is a copy of the C-141 final located in Appendix B. For questions or comments pertaining to the release or the attached Closure Report please feel free to contact either of us.

Submitted by:

SOUDER, MILLER & ASSOCIATES



Austin Weyant
Project Scientist

Reviewed by:



Cynthia Gray, CHMM
Senior Scientist

FINAL CLOSURE REPORT FOR INCIDENT 2RP-2938

COG OPERATING LLC

SRO STATE UNIT COM #13H

API# 30-015-37427

SECTION 15, T26S R28E, NMPM

EDDY COUNTY, NM



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

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

August 6, 2015
SMA Reference
5B23978 BG7

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Appendix C: API Amigo Summary

1.0 Introduction

On behalf of COG Operating LLC (COG), SMA has prepared this report that describes the assessment, initial delineation, and mitigation of a release associated with the SRO State Unit Com #13H release site. The site is located in Section 15, T 26S, R 28 E NMPM, Eddy County, New Mexico, on land owned by the State of New Mexico. Figure 1 illustrates the vicinity and location of the site

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 3 miles west of the Pecos River, in an area owned by New Mexico State Land Office with an elevation of approximately 3,030 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be greater than 100 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. No 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 0 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 5000 ppm total petroleum hydrocarbons (TPH). Table 1 illustrates site ranking rationale.

3.0 Assessment and Initial Results

On May 7th, 2015 after receiving 811 clearance, SMA field personnel assessed the release area onsite using a gas powered auger, Photo Ionization Detector (PID), and a mobile chlorides titration kit. The potentially affected area was found to be approximately 95 feet long and 65 feet wide. The initial delineation of the site occurred on May 27, 2015 with samples taken to depths of three feet bsg. On July 7, 2015, a follow-up delineation was done with a backhoe, reaching a depth of 15 feet bsg (Table 3). Sample D1-15 indicates that the soils at 15 feet bsg return to background levels of chlorides. Sample locations are noted on Figure 2 Site Details and Sample Location Map. For additional information on the initial soil results and site assessment, please refer to the NMOCD approved work plan (Soil Remediation Work Plan for Incident 2RP-2938). Specific sample locations for all samples are depicted on Figure 2 (Sample Location Map) along with sampling details. Field screening results are noted in Table 2 in the appendices. All samples were collected and processed according to NMOCD soil sampling procedures. Because the spilled material was limited to produced water and field screening did not indicate the presence of petroleum, 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 Summary

SMA returned to the site on July 6, 2015 to begin excavation of affected soils, with approval from area utilities owners via 811 and the NMOCD. SMA continuously guided the excavation activities by collecting composite soil samples for field screening with a mobile titration unit (EPA 4500) and a calibrated PID. Samples were taken in the sidewalls of the excavation to ensure contaminated soils had been removed in the horizontal extent. Sample location SROD1 and

SROD2 are closure samples collected at three feet bsg in the excavation, with results shown in Table 2. Excavation was conducted to three feet bsg in the spill area to remove the soils affected by the release. An in-situ cap was constructed within the excavation. The construction of the in-situ cap (Figure #3) was designed to prevent both capillary and leaching movement of the brine affected soils contained beneath. Starting at three feet bsg, a plastic liner was added as a capillary break between the affected soils and the caliche cap. The cap consists of two feet of contaminant-free caliche material placed, and compacted. Then, a plastic liner was added along with hay above the compacted caliche cap to form an intrusion barrier. This barrier will prevent leaching and formation of deep root systems into the cap itself. Topsoil was placed on top of the cap. The plastic liner on both sides of the caliche cap will effectively break the communication of precipitation through the compacted cap. After excavation, installation of in-situ cap, and backfill, topsoil and hay were added to help with contouring of the area and to promote vegetation growth. Approximately 681 cubic yards of contaminated soil was removed and replaced with the cap and clean backfill material to bring the excavated area to surface grade. The contaminated soil was transported for disposal at Lea Land, near Carlsbad, NM.

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 0: 10 ppm (mg/kg) Benzene, 50 ppm total BTEX, and 5000 ppm TPH. The release consisted of produced water and evidence of petroleum impacts was not found during the initial assessment and delineation.

Laboratory analytical results for all final closure samples collected were below NMOCD action levels for Benzene, BTEX, and TPH as well as below laboratory detection limits for the methods used. No further remedial activities are recommended.

Soil contaminant concentrations are illustrated in Figure 2. A summary of laboratory analytical results is included in Table 3. Laboratory reports are included in Appendix C.

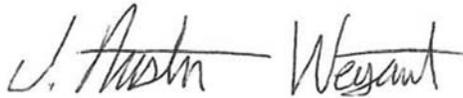
Photo documentation is available by request.

6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment, verification of release stabilization, regulatory liaison, preparation of a Remediation Work plan, implementation of the work plan, and verification of completion of the remedial activities. 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:
SOUDER, MILLER & ASSOCIATES


Austin Weyant
Project Scientist

Reviewed by:


Cynthia Gray, CHMM
Senior Scientist

Figures:

Figure 1: Vicinity Map

Figure 2: Detailed Site and Sample Map

Figure 3: In-situ Cap and Bio barrier Design

Tables:

Table 1: Release Information and Site Ranking

Table 2: Field Screening

Table 3: Summary of Laboratory Analyses

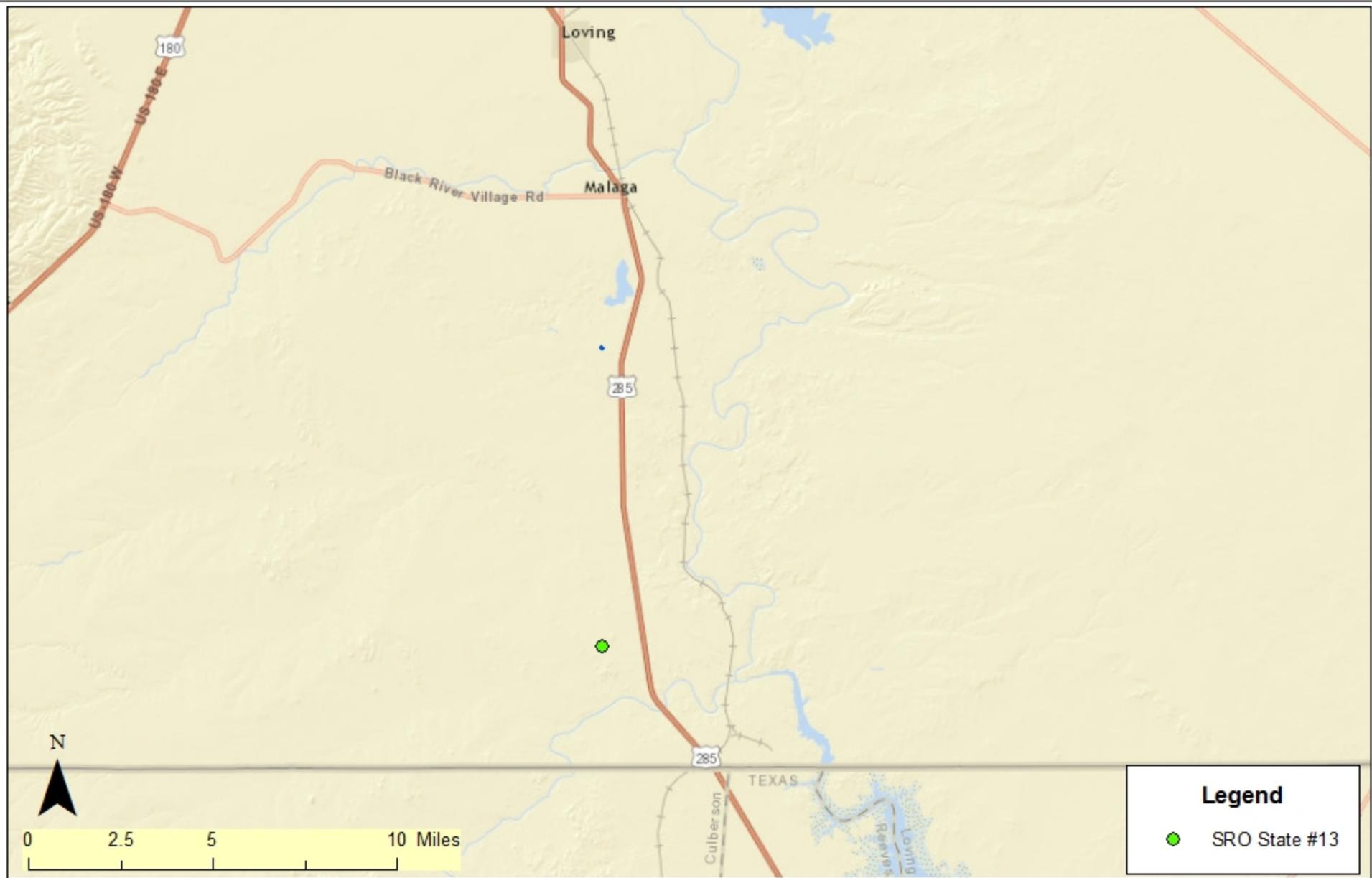
Appendices:

Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Final

Appendix C: API Amigo Summary

FIGURE 1 VICINITY MAP



Location Map
 Sro State #13
 Malaga, New Mexico

Figure 1

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

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Drawn Lucas Middleton
 Checked _____
 Approved _____



201 South Halaguena Street
 Carlsbad, New Mexico 88221
 (575) 689-3331
 www.soudermiller.com
 Service the Southwest & Rocky Mountains

FIGURE 2

DETAILED SITE AND SAMPLE MAP



Legend

- Samples
- ▭ Excavation
- ▭ Pipeline Right of Way

Detailed Site and Sample Map
 COG- SRO State Unit Com #1
 Malaga, New Mexico

Figure 2

Date Saved: 7/31/2015	By: _____	Date: _____	Revisions	Descr: _____
	By: _____	Date: _____		Descr: _____
Copyright 2015 Souder, Miller & Associates - All Rights Reserved				

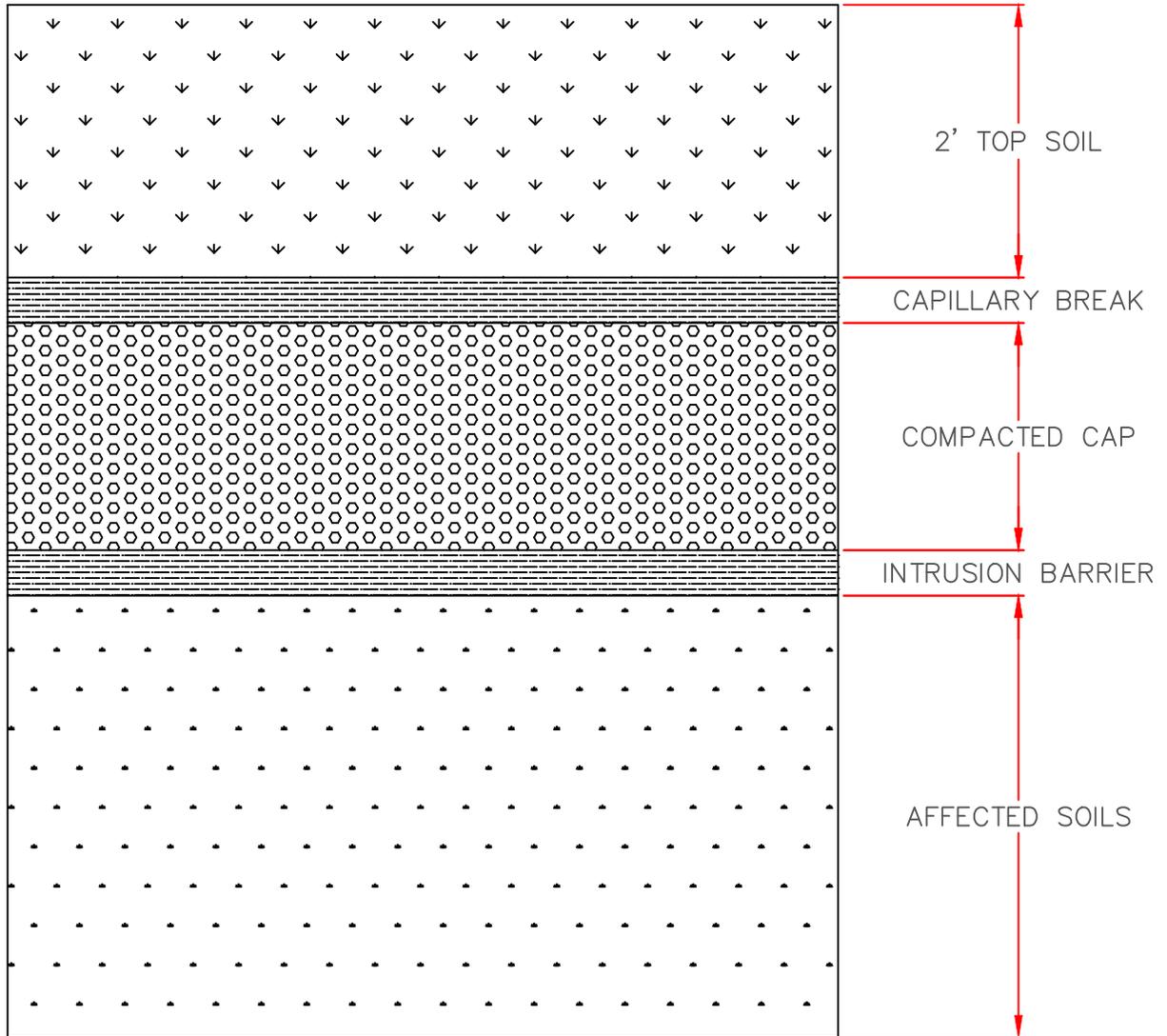
Drawn	<u>Lucas Middleton</u>
Checked	_____
Approved	_____



201 South Halaguena Street
 Carlsbad, New Mexico 88221
 (575) 689-7040
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FIGURE 3

IN-SITU CAP AND BIO BARRIER DESIGN



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COG

**IN-SITU CAP
 AND BIOBARRIER DESIGN
 COG SRO STATE UNIT #13H**

Designed LM	Drawn GJF	Checked KT
Date: July 2015		
Scale: Horiz: NA Vert: NA		
Project No: 5B23978		
Figure 3		

TABLE 1

RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking					
Name	SRO State Unit Com #13H				
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Land Owner	State				
Reported To	NM Oil Conservation Division (NMOCD)				
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NMOCD Ranking	0				
SMA Response Dates	Initial: May 11, 2015 Mitigation Activities:				
Subcontractors	TCS				
Disposal Facility	Lea Land, LLC				
Estimated Yd ³ Contaminated Soil Excavated and Disposed	681 (Reported on Completed C-138)				

TABLE 2

SUMMARY OF FIELD SCREENING

Table 3: Summary of Excavation Field Screening Results

FIELD SCREENING RESULTS SUMMARY					
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	Chlorides Results	Lab Sample Collected Y/N
5/27/2015	11:30	O1	surface	>2268	Y
5/27/2015	11:30	O1-1	15"	5100	Y
5/27/2015	11:30	O1-2	24"	>1700	Y
5/27/2015	11:30	O2	24"	>1900	Y
5/27/2015	11:30	O2-1	36"	5813	Y
5/27/2015	11:30	O1-3	36"	>3000	Y
5/27/2015	11:30	BG1	surface	212	Y
7/7/2015	1:30	D1-5	5'	9226	Y
7/7/2015	1:30	D1-7	7'	8937	Y
7/7/2015	1:30	D1-9	9'	8865	Y
7/7/2015	1:30	D1-11	11'	5806	Y
7/7/2015	1:30	D1-13	13'	4464	Y
7/7/2015	1:30	D1-14	14'	4074	Y
7/7/2015	1:30	D1-15	15'	856	Y
7/7/2015	1:30	D2-5	5'	7610	Y
7/7/2015	1:30	D2-7	7'	7278	Y
7/7/2015	1:30	D2-9	9'	8043	Y
7/7/2015	1:30	D2-11	11'	7841	Y
7/7/2015	1:30	D2-13	13'	3641	Y



TABLE 3

SUMMARY OF LABORATORY ANALYSES

Table 3: Summary of Laboratory Analyses

Analytical Report- 1506008/ 1507976 / 1507658	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	Cl- mg/Kg
1506008-001	O1	4/28/2015	Surface	N/A	N/A	N/A	N/A	22,000
1506008-002	O6	4/28/2015	Surface	BDL	BDL	BDL	BDL	9,100
1507976-001	SROC2	7/20/2015	1'	BDL	BDL	BDL	BDL	BDL
1507976-002	SROC3	7/21/2015	1'	BDL	BDL	BDL	BDL	37
1507976-003	SROC1	7/22/2015	1'	BDL	BDL	BDL	BDL	BDL
1507658-001	D1-5	7/7/2015	5'	BDL	BDL	BDL	BDL	11,000
1507658-002	D1-9	7/7/2015	9'	N/A	N/A	N/A	N/A	4800
1507658-003	D1-15	7/7/2015	15'	N/A	N/A	N/A	N/A	N/A
1507658-004	D2-7	7/7/2015	7'	N/A	N/A	N/A	N/A	800
1507658-005	D2-11	7/7/2015	11'	N/A	N/A	N/A	N/A	2100
1507658-006	D2-13	7/7/2015	13'	N/A	N/A	N/A	N/A	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

July 30, 2015

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

RE: SRO State

OrderNo.: 1507976

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 3 sample(s) on 7/22/2015 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 white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1507976

Date Reported: 7/30/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: SROC2

Project: SRO State

Collection Date: 7/20/2015 3:00:00 AM

Lab ID: 1507976-001

Matrix: SOIL

Received Date: 7/22/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	7/28/2015 11:01:25 AM	20481
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	7/23/2015 9:01:38 PM	20387
Surr: BFB	109	70-130		%REC	1	7/23/2015 9:01:38 PM	20387
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/25/2015 4:20:21 AM	20379
Surr: DNOP	93.2	57.9-140		%REC	1	7/25/2015 4:20:21 AM	20379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	7/23/2015 9:01:38 PM	20387
Benzene	ND	0.050		mg/Kg	1	7/23/2015 9:01:38 PM	20387
Toluene	ND	0.050		mg/Kg	1	7/23/2015 9:01:38 PM	20387
Ethylbenzene	ND	0.050		mg/Kg	1	7/23/2015 9:01:38 PM	20387
Xylenes, Total	ND	0.10		mg/Kg	1	7/23/2015 9:01:38 PM	20387
Surr: 1,2-Dichloroethane-d4	101	70-130		%REC	1	7/23/2015 9:01:38 PM	20387
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	7/23/2015 9:01:38 PM	20387
Surr: Dibromofluoromethane	114	70-130		%REC	1	7/23/2015 9:01:38 PM	20387
Surr: Toluene-d8	98.0	70-130		%REC	1	7/23/2015 9:01:38 PM	20387

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1507976

Date Reported: 7/30/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: SROC3

Project: SRO State

Collection Date: 7/20/2015 3:00:00 AM

Lab ID: 1507976-002

Matrix: SOIL

Received Date: 7/22/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	37	30		mg/Kg	20	7/28/2015 11:38:39 AM	20481
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/24/2015 1:08:51 AM	20387
Surr: BFB	104	70-130		%REC	1	7/24/2015 1:08:51 AM	20387
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	7/25/2015 4:47:21 AM	20379
Surr: DNOP	78.3	57.9-140		%REC	1	7/25/2015 4:47:21 AM	20379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Methyl tert-butyl ether (MTBE)	ND	0.049		mg/Kg	1	7/24/2015 1:08:51 AM	20387
Benzene	ND	0.049		mg/Kg	1	7/24/2015 1:08:51 AM	20387
Toluene	ND	0.049		mg/Kg	1	7/24/2015 1:08:51 AM	20387
Ethylbenzene	ND	0.049		mg/Kg	1	7/24/2015 1:08:51 AM	20387
Xylenes, Total	ND	0.097		mg/Kg	1	7/24/2015 1:08:51 AM	20387
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%REC	1	7/24/2015 1:08:51 AM	20387
Surr: 4-Bromofluorobenzene	101	70-130		%REC	1	7/24/2015 1:08:51 AM	20387
Surr: Dibromofluoromethane	111	70-130		%REC	1	7/24/2015 1:08:51 AM	20387
Surr: Toluene-d8	95.3	70-130		%REC	1	7/24/2015 1:08:51 AM	20387

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		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1507976

Date Reported: 7/30/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: SROC1

Project: SRO State

Collection Date: 7/20/2015 3:00:00 AM

Lab ID: 1507976-003

Matrix: SOIL

Received Date: 7/22/2015 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	7/28/2015 11:51:04 AM	20481
EPA METHOD 8015D MOD: GASOLINE RANGE							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	7/24/2015 1:36:15 AM	20387
Surr: BFB	107	70-130		%REC	1	7/24/2015 1:36:15 AM	20387
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	7/25/2015 5:14:23 AM	20379
Surr: DNOP	84.0	57.9-140		%REC	1	7/25/2015 5:14:23 AM	20379
EPA METHOD 8260B: VOLATILES SHORT LIST							Analyst: DJF
Methyl tert-butyl ether (MTBE)	ND	0.048		mg/Kg	1	7/24/2015 1:36:15 AM	20387
Benzene	ND	0.048		mg/Kg	1	7/24/2015 1:36:15 AM	20387
Toluene	ND	0.048		mg/Kg	1	7/24/2015 1:36:15 AM	20387
Ethylbenzene	ND	0.048		mg/Kg	1	7/24/2015 1:36:15 AM	20387
Xylenes, Total	ND	0.097		mg/Kg	1	7/24/2015 1:36:15 AM	20387
Surr: 1,2-Dichloroethane-d4	105	70-130		%REC	1	7/24/2015 1:36:15 AM	20387
Surr: 4-Bromofluorobenzene	102	70-130		%REC	1	7/24/2015 1:36:15 AM	20387
Surr: Dibromofluoromethane	114	70-130		%REC	1	7/24/2015 1:36:15 AM	20387
Surr: Toluene-d8	96.2	70-130		%REC	1	7/24/2015 1:36:15 AM	20387

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
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	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	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507976

30-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	MB-20481	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	20481	RunNo:	27833					
Prep Date:	7/28/2015	Analysis Date:	7/28/2015	SeqNo:	836878	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-20481	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	20481	RunNo:	27833					
Prep Date:	7/28/2015	Analysis Date:	7/28/2015	SeqNo:	836879	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.3	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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507976

30-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID MB-20379	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 20379		RunNo: 27723							
Prep Date: 7/22/2015	Analysis Date: 7/24/2015		SeqNo: 834383		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	10		10.00		105	57.9	140			

Sample ID LCS-20379	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 20379		RunNo: 27723							
Prep Date: 7/22/2015	Analysis Date: 7/24/2015		SeqNo: 834384		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49	10	50.00	0	97.1	57.4	139			
Surr: DNOP	5.5		5.000		111	57.9	140			

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507976

30-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	mb-20387	SampType:	MBLK	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	PBS	Batch ID:	20387	RunNo:	27718					
Prep Date:	7/22/2015	Analysis Date:	7/23/2015	SeqNo:	833184	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.050								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 1,2-Dichloroethane-d4	0.51		0.5000		102	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.5	70	130			
Surr: Dibromofluoromethane	0.58		0.5000		115	70	130			
Surr: Toluene-d8	0.47		0.5000		94.5	70	130			

Sample ID	ics-20387	SampType:	LCS	TestCode:	EPA Method 8260B: Volatiles Short List					
Client ID:	LCSS	Batch ID:	20387	RunNo:	27718					
Prep Date:	7/22/2015	Analysis Date:	7/23/2015	SeqNo:	833185	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.050	1.000	0	111	70	130			
Benzene	1.0	0.050	1.000	0	104	70	130			
Toluene	1.0	0.050	1.000	0	103	70	130			
Ethylbenzene	1.1	0.050	1.000	0	106	70	130			
Xylenes, Total	3.2	0.10	3.000	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	0.52		0.5000		104	70	130			
Surr: 4-Bromofluorobenzene	0.48		0.5000		96.7	70	130			
Surr: Dibromofluoromethane	0.58		0.5000		116	70	130			
Surr: Toluene-d8	0.49		0.5000		97.8	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 |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1507976

30-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	mb-20387	SampType:	MBLK	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	PBS	Batch ID:	20387	RunNo:	27718					
Prep Date:	7/22/2015	Analysis Date:	7/23/2015	SeqNo:	833250	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	540		500.0		108	70	130			

Sample ID	ics-20387	SampType:	LCS	TestCode:	EPA Method 8015D Mod: Gasoline Range					
Client ID:	LCSS	Batch ID:	20387	RunNo:	27718					
Prep Date:	7/22/2015	Analysis Date:	7/23/2015	SeqNo:	833278	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	106	70	123			
Surr: BFB	520		500.0		104	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



Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1507976

RcptNo: 1

Received by/date: JA 07/22/15

Logged By: Lindsay Mangin 7/22/2015 9:15:00 AM *Lindsay Mangin*

Completed By: Lindsay Mangin 7/22/2015 9:56:49 AM *Lindsay Mangin*

Reviewed By: CS 07/22/15

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° C to 6.0°C Yes No NA
Approved by client.
- 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: eMail Phone Fax In Person
 Regarding: _____
 Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	17.0	Good	Yes			



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 22, 2015

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

RE: SRO State

OrderNo.: 1507658

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 7/15/2015 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 qualifers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

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

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1507658

Date Reported: 7/22/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: D1-5

Project: SRO State

Collection Date: 7/7/2015 1:30:00 PM

Lab ID: 1507658-001

Matrix: SOIL

Received Date: 7/15/2015 9:13:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: KJH
Petroleum Hydrocarbons, TR	ND	19		mg/Kg	1	7/17/2015	20290
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	11000	300		mg/Kg	200	7/21/2015 1:59:20 PM	20336
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	7/17/2015 5:10:49 PM	20283
Benzene	ND	0.047		mg/Kg	1	7/17/2015 5:10:49 PM	20283
Toluene	ND	0.047		mg/Kg	1	7/17/2015 5:10:49 PM	20283
Ethylbenzene	ND	0.047		mg/Kg	1	7/17/2015 5:10:49 PM	20283
Xylenes, Total	ND	0.094		mg/Kg	1	7/17/2015 5:10:49 PM	20283
Surr: 4-Bromofluorobenzene	95.8	80-120		%REC	1	7/17/2015 5:10:49 PM	20283

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 1507658

Date Reported: 7/22/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: D1-9

Project: SRO State

Collection Date: 7/7/2015 1:30:00 PM

Lab ID: 1507658-002

Matrix: SOIL

Received Date: 7/15/2015 9:13:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	4800	300		mg/Kg	200	7/21/2015 2:11:44 PM	20336

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	Page 2 of 9
	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 1507658

Date Reported: 7/22/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: D1-15

Project: SRO State

Collection Date: 7/7/2015 1:30:00 PM

Lab ID: 1507658-003

Matrix: SOIL

Received Date: 7/15/2015 9:13:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: KJH
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	7/17/2015	20290
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	7/21/2015 11:30:27 AM	20336
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	7/17/2015 9:58:14 PM	20283
Benzene	ND	0.047		mg/Kg	1	7/17/2015 9:58:14 PM	20283
Toluene	ND	0.047		mg/Kg	1	7/17/2015 9:58:14 PM	20283
Ethylbenzene	ND	0.047		mg/Kg	1	7/17/2015 9:58:14 PM	20283
Xylenes, Total	ND	0.095		mg/Kg	1	7/17/2015 9:58:14 PM	20283
Surr: 4-Bromofluorobenzene	95.3	80-120		%REC	1	7/17/2015 9:58:14 PM	20283

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 1507658

Date Reported: 7/22/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: D2-7

Project: SRO State

Collection Date: 7/7/2015 1:30:00 PM

Lab ID: 1507658-004

Matrix: SOIL

Received Date: 7/15/2015 9:13:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	800	75		mg/Kg	50	7/21/2015 11:42:51 AM	20336

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	Page 4 of 9
	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 1507658

Date Reported: 7/22/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: D2-11

Project: SRO State

Collection Date: 7/7/2015 1:30:00 PM

Lab ID: 1507658-005

Matrix: SOIL

Received Date: 7/15/2015 9:13:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	2100	300		mg/Kg	200	7/21/2015 11:55:16 AM	20336

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	Page 5 of 9
	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 1507658

Date Reported: 7/22/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: D2-13

Project: SRO State

Collection Date: 7/7/2015 1:30:00 PM

Lab ID: 1507658-006

Matrix: SOIL

Received Date: 7/15/2015 9:13:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: KJH
Petroleum Hydrocarbons, TR	380	20		mg/Kg	1	7/17/2015	20290
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	5600	300		mg/Kg	200	7/21/2015 2:24:09 PM	20336
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.096		mg/Kg	1	7/17/2015 10:26:52 PM	20283
Benzene	ND	0.048		mg/Kg	1	7/17/2015 10:26:52 PM	20283
Toluene	ND	0.048		mg/Kg	1	7/17/2015 10:26:52 PM	20283
Ethylbenzene	ND	0.048		mg/Kg	1	7/17/2015 10:26:52 PM	20283
Xylenes, Total	ND	0.096		mg/Kg	1	7/17/2015 10:26:52 PM	20283
Surr: 4-Bromofluorobenzene	97.3	80-120		%REC	1	7/17/2015 10:26:52 PM	20283

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#: 1507658

22-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	MB-20336	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	20336	RunNo:	27627					
Prep Date:	7/20/2015	Analysis Date:	7/20/2015	SeqNo:	829641	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-20336	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	20336	RunNo:	27627					
Prep Date:	7/20/2015	Analysis Date:	7/20/2015	SeqNo:	829642	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.4	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#: 1507658

22-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	MB-20290	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	20290	RunNo:	27575					
Prep Date:	7/16/2015	Analysis Date:	7/17/2015	SeqNo:	827846	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-20290	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	20290	RunNo:	27575					
Prep Date:	7/16/2015	Analysis Date:	7/17/2015	SeqNo:	827847	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	88	20	100.0	0	87.7	83.6	116			

Sample ID	LCSD-20290	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	20290	RunNo:	27575					
Prep Date:	7/16/2015	Analysis Date:	7/17/2015	SeqNo:	827848	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	101	83.6	116	14.3	20	

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#: 1507658

22-Jul-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID: MB-20283	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 20283	RunNo: 27583								
Prep Date: 7/16/2015	Analysis Date: 7/17/2015	SeqNo: 828181	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	0.98		1.000		98.0	80	120			

Sample ID: LCS-20283	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 20283	RunNo: 27583								
Prep Date: 7/16/2015	Analysis Date: 7/17/2015	SeqNo: 828182	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.96	0.10	1.000	0	96.5	69.8	143			
Benzene	1.0	0.050	1.000	0	99.5	76.6	128			
Toluene	0.96	0.050	1.000	0	95.7	75	124			
Ethylbenzene	1.0	0.050	1.000	0	100	79.5	126			
Xylenes, Total	3.0	0.10	3.000	0	101	78.8	124			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

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 | |

Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1507658

RcptNo: 1

Received by/date:	<i>SA</i>	<i>07/15/15</i>	
Logged By:	Lindsay Mangin	7/15/2015 9:13:00 AM	<i>[Signature]</i>
Completed By:	Lindsay Mangin	7/15/2015 2:26:30 PM	<i>[Signature]</i>
Reviewed By:	<i>CS</i>	<i>07/15/15</i>	

Chain of Custody

- Custody seals intact on sample bottles? Yes No Not Present
- Is Chain of Custody complete? Yes No Not Present
- How was the sample delivered? Courier

Log In

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

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

Adjusted? _____

Checked by: _____

Special Handling (if applicable)

- 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:	_____		

- Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			

Chain-of-Custody Record

Client: Sander Miller & Associates

Mailing Address: 201 S Halsgen ave

Carlsbad, NM 88220

Phone #: 575-689-5351

email or Fax#: lucas.middlem@soundermiller.com

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

Accreditation:

NELAP Other

EDD (Type)

Turn-Around Time:

Standard Rush

Project Name:

SKO State

Project #:

Project Manager:

Austin Weyant

Sampler: Leg

On Ice: Yes No

Sample Temperature: 1.1

Date	Time	Matrix	Sample Request ID
7-14	1:30	soil	D1-5
			D1-9
			D1-15
			D2-7
			D2-11
			D2-13

Container Type and #	Preservative Type	HEAL No.
802		1507658
		-001
		-002
		-003
		-004
		-005
		-006

BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	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)
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				

Analysis Request

Remarks:

Received by: Jan. Pank Date: 07/15/15
 Received by: _____ Date: _____

Date: _____ Time: _____
 Date: _____ Time: _____

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.



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 09, 2015

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

RE: SRO State

OrderNo.: 1506008

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 2 sample(s) on 6/1/2015 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 white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1506008

Date Reported: 6/9/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: 01

Project: SRO State

Collection Date: 5/27/2015 11:00:00 AM

Lab ID: 1506008-001

Matrix: SOIL

Received Date: 6/1/2015 8:42:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	22000	1500		mg/Kg	1E	6/5/2015 6:51:09 PM	19567

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	Page 1 of 6
	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 1506008

Date Reported: 6/9/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: 06

Project: SRO State

Collection Date: 5/27/2015 11:00:00 AM

Lab ID: 1506008-002

Matrix: SOIL

Received Date: 6/1/2015 8:42:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 418.1: TPH							Analyst: TOM
Petroleum Hydrocarbons, TR	ND	20		mg/Kg	1	6/3/2015	19514
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	9100	750		mg/Kg	500	6/5/2015 7:03:33 PM	19567
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.099		mg/Kg	1	6/2/2015 8:15:18 PM	19486
Benzene	ND	0.050		mg/Kg	1	6/2/2015 8:15:18 PM	19486
Toluene	ND	0.050		mg/Kg	1	6/2/2015 8:15:18 PM	19486
Ethylbenzene	ND	0.050		mg/Kg	1	6/2/2015 8:15:18 PM	19486
Xylenes, Total	ND	0.099		mg/Kg	1	6/2/2015 8:15:18 PM	19486
Surr: 4-Bromofluorobenzene	93.3	80-120		%REC	1	6/2/2015 8:15:18 PM	19486

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#: 1506008

09-Jun-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	MB-19567	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	19567	RunNo:	26642					
Prep Date:	6/4/2015	Analysis Date:	6/4/2015	SeqNo:	793483	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-19567	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	19567	RunNo:	26642					
Prep Date:	6/4/2015	Analysis Date:	6/4/2015	SeqNo:	793484	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	101	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#: 1506008

09-Jun-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	MB-19514	SampType:	MBLK	TestCode:	EPA Method 418.1: TPH					
Client ID:	PBS	Batch ID:	19514	RunNo:	26593					
Prep Date:	6/2/2015	Analysis Date:	6/3/2015	SeqNo:	791547	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	ND	20								

Sample ID	LCS-19514	SampType:	LCS	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS	Batch ID:	19514	RunNo:	26593					
Prep Date:	6/2/2015	Analysis Date:	6/3/2015	SeqNo:	791548	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	100	20	100.0	0	105	86.7	126			

Sample ID	LCSD-19514	SampType:	LCSD	TestCode:	EPA Method 418.1: TPH					
Client ID:	LCSS02	Batch ID:	19514	RunNo:	26593					
Prep Date:	6/2/2015	Analysis Date:	6/3/2015	SeqNo:	791549	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Petroleum Hydrocarbons, TR	110	20	100.0	0	109	86.7	126	3.94	20	

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#: 1506008

09-Jun-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID MB-19486	SampType: MBLK		TestCode: EPA Method 8021B: Volatiles							
Client ID: PBS	Batch ID: 19486		RunNo: 26568							
Prep Date: 6/1/2015	Analysis Date: 6/2/2015		SeqNo: 790542		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	0.99		1.000		98.8	80	120			

Sample ID LCS-19486	SampType: LCS		TestCode: EPA Method 8021B: Volatiles							
Client ID: LCSS	Batch ID: 19486		RunNo: 26568							
Prep Date: 6/1/2015	Analysis Date: 6/2/2015		SeqNo: 790543		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.10	1.000	0	89.6	69.8	143			
Benzene	0.98	0.050	1.000	0	97.6	76.6	128			
Toluene	0.96	0.050	1.000	0	96.4	75	124			
Ethylbenzene	0.99	0.050	1.000	0	99.1	79.5	126			
Xylenes, Total	3.0	0.10	3.000	0	98.7	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID 1505D10-002AMS	SampType: MS		TestCode: EPA Method 8021B: Volatiles							
Client ID: BatchQC	Batch ID: 19486		RunNo: 26568							
Prep Date: 6/1/2015	Analysis Date: 6/2/2015		SeqNo: 790546		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.099	0.9881	0	104	71.8	123			
Benzene	1.1	0.049	0.9881	0	108	69.2	126			
Toluene	1.1	0.049	0.9881	0.01001	106	65.6	128			
Ethylbenzene	1.1	0.049	0.9881	0	110	65.5	138			
Xylenes, Total	3.2	0.099	2.964	0.01914	109	63	139			
Surr: 4-Bromofluorobenzene	1.1		0.9881		108	80	120			

Sample ID 1505D10-002AMSD	SampType: MSD		TestCode: EPA Method 8021B: Volatiles							
Client ID: BatchQC	Batch ID: 19486		RunNo: 26568							
Prep Date: 6/1/2015	Analysis Date: 6/2/2015		SeqNo: 790547		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.90	0.099	0.9862	0	91.0	71.8	123	13.3	21.2	
Benzene	0.99	0.049	0.9862	0	100	69.2	126	7.77	18.5	
Toluene	1.0	0.049	0.9862	0.01001	100	65.6	128	5.75	20.6	
Ethylbenzene	1.0	0.049	0.9862	0	104	65.5	138	5.51	20.1	

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#: 1506008

09-Jun-15

Client: Souder, Miller & Associates

Project: SRO State

Sample ID	1505D10-002AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	BatchQC	Batch ID:	19486	RunNo:	26568					
Prep Date:	6/1/2015	Analysis Date:	6/2/2015	SeqNo:	790547	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.1	0.099	2.959	0.01914	103	63	139	5.84	21.1	
Surr: 4-Bromofluorobenzene	1.0		0.9862		104	80	120	0	0	

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 | |

Sample Log-In Check List

Client Name: SMA-CARLSBAD

Work Order Number: 1506008

RcptNo: 1

Received by/date: JA 06/01/15

Logged By: Anne Thorne 6/1/2015 8:42:00 AM

Anne Thorne

Completed By: Anne Thorne 6/1/2015

Anne Thorne

Reviewed By: *[Signature]* 06/01/15

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° C to 6.0° C? Yes No NA
Approved by client.
- 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:	<u>AUSTIN WEYANT</u>	Date:	<u>6/1/2015</u>
By Whom:	<u>Anne Thorne</u>	Via:	<input type="checkbox"/> eMail <input checked="" type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<u>SAMPLE TEMPERATURE 22.9</u>		
Client Instructions:	<u>PROCEED WITH ANALYSIS</u>		

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	22.9	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:

GRO State

Project #:

Project Manager:

Austin Weyant

Sampler:

On Ice: Yes No

Sample Temperature: 22.9

Container Type and #

Preservative Type

HEAL No.

1506008

A02

A02

Date: 5-27-05 11:00

Date: 5-27-05 11:00

Time: 11:00

Time: 11:00

Matrix: Soil

Matrix: Soil

Sample Request ID: 01

Sample Request ID: 06

Date: 5-27-05

Date: 5-27-05

Time: 0842

Time: 0842

Received by: J.E. Galt

Received by:

Date: 5-27-05

Date: 5-27-05

Time: 0842

Time: 0842

Received by: J.E. Galt

Received by:

Date: 5-27-05

Date: 5-27-05

Time: 0842

Time: 0842

Received by: J.E. Galt

Received by:

Date: 5-27-05

Date: 5-27-05

Time: 0842

Time: 0842

Received by: J.E. Galt

Received by:

Date: 5-27-05

Date: 5-27-05

Time: 0842

Time: 0842

Received by: J.E. Galt

Received by:

Date: 5-27-05

Date: 5-27-05

Time: 0842

Time: 0842

Received by: J.E. Galt

Received by:

APPENDIX B

FORM C141 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

Form C-141
Revised August 8, 2011

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

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: COG Operating LLC	Contact: Robert McNeill
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077
Facility Name: SRO State Unit Com #13H	Facility Type: Well

Surface Owner: State	Mineral Owner: State	API No. 30-015-37427
----------------------	----------------------	----------------------

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	15	26S	28E	660	North	330'	West	Eddy

Latitude 32.0479055939123 Longitude -104.082877725172

NATURE OF RELEASE

Type of Release: Produced Water	Volume of Release: 20 bbls PW	Volume Recovered: 15 bbls PW
Source of Release: 4" Poly Flowline	Date and Hour of Occurrence: 3/19/2015 1:00 pm	Date and Hour of Discovery: 3/19/2015 1:00 pm
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 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.*

4" Poly connection on a flowline between two wells started to leak due to corrosion. Vacuum trucks were dispatched to the standing fluid and repairs were made.

Describe Area Affected and Cleanup Action Taken.*

The impacted area is approximately 40' x 20' in the pasture. This released was addressed under the guidance of NMOCD per the approved workplan.

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:	Expiration Date:
E-mail Address: atrujillo@concho.com	Conditions of Approval:	
Date: August 18, 2015 Phone: 575-748-6940	Attached <input type="checkbox"/>	

* Attach Additional Sheets If Necessary

Appendix C: API Amigo Summary

AMIGO

Units
 Metric (m) English (inches)

Climate
 Arid Hot (NM/W.Texas, Hobbs) ▾

Input for a Distant Well

Distance to Well [ft]

Source Width [ft]

Longitudinal Dispersivity [-]

Transverse Dispersivity [-]

Groundwater Characteristics

Background Cl Concentration in Aquifer $c_{GW} =$ [mg/L]

Aquifer porosity $n =$ [-]

Groundwater Table Depth $D =$ [ft]

Aquifer Thickness $H =$ [ft]

Slope of Water Table $i =$ [-]

Hydraulic Conductivity $K_s =$ [ft/d]

Groundwater Flux $Q =$ [ft²/d]

Source Characteristics

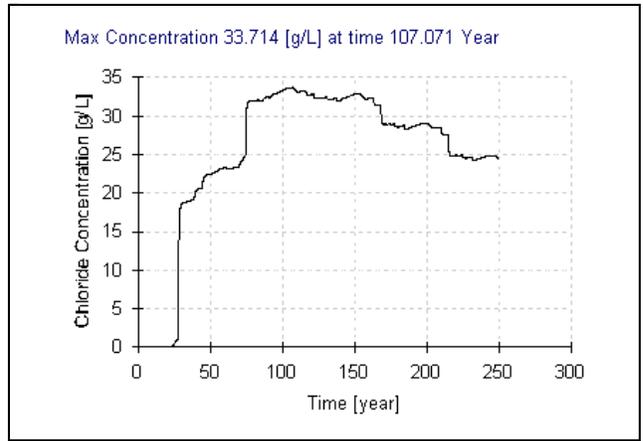
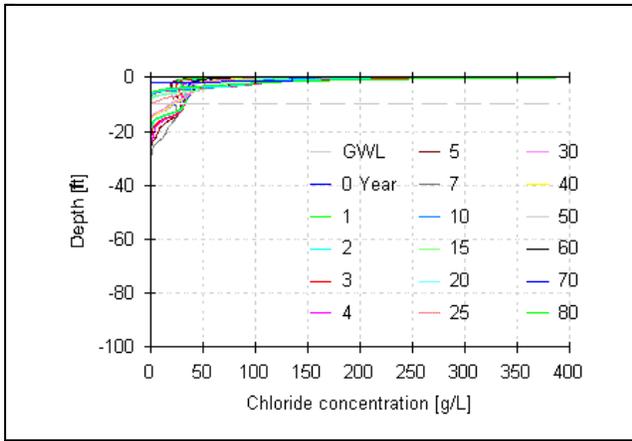
Chloride Load: Max. length of the spill in direction of GW flow:
 $M =$ [kg/m²] $L =$ [ft]

Plant Uptake Trigger
 1% Input Concentration
 10% Input Concentration

Soil Profiles
 Surface Layer: ▾
 Soil Profile: ▾

Output Charts

Quantity 1: ▾ Quantity 2: ▾



Legend

 Auto-Refresh