



January 8, 2016

NMOCD District II
Attn. Heather Patterson
1301 W Grand Ave
Artesia, NM 88210

SUBJECT: FINAL CLOSURE REPORT FOR INCIDENT 2RP-3356 BRUTUS 12 FEDERAL COM #2H, API #30-015-40823 EDDY COUNTY, NEW MEXICO

Dear Ms. Patterson:

On behalf of COG Operating (COG), Souder Miller & Associates (SMA) is pleased to submit the attached Final Closure Report summarizing the soil remediation activities performed for the release at the Brutus 12 Federal COM #002H in Eddy County, New Mexico. The purpose of the final closure report is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for remediation of the release discovered on October 2, 2015.

At the request of COG, SMA assessed, delineated and remediated soil affected by produced oil at the Brutus 12 Federal COM #002H well location. The release was initially reported to NMOCD by COG Operating on October 16, 2015 as a release from a steel flowline leak. The table below summarizes information regarding the release. Results of the assessment and delineation follow in the attached report.

Table 1: Release information and Site Ranking					
Name	Brutus 12 Federal COM 2H				
Location	Incident Number	API Number	Section, Township, Range		
	2RP-3356	30-015-40823	SW/SE (UL O)	Section 12	T 26S, R 28E NMPM
Estimated Date of Release	Discovered October 2, 2015				
Date Reported to NMOCD	October 16, 2015				
Reported by	Amanda Trujillo, COG Operating LLC				
Land Owner	Federal				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Steel Flowline Leak				
Released Material	Crude Oil				
Released Volume	85 bbls Crude Oil				
Recovered Volume	59 bbls Crude Oil				

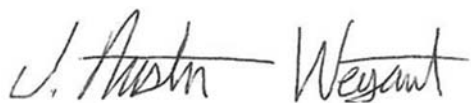


Net Release	26 bbls Crude Oil
Nearest Waterway	Pecos River is over 1 mile east of the location
Depth to Groundwater	Estimated to be 76 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	10
SMA Response Dates	Initial: November 2, 2015 Mitigation Activities: December 4, 2015
Subcontractors	TCS
Disposal Facility	Lea Land, LLC
Estimated Yd ³ Contaminated Soil Excavated and Disposed	24

A copy of the C-141 Initial is located in Appendix B. For questions or comments pertaining to the release or the attached Work Plan, please feel free to contact either of us.

Submitted by:

SOUDER, MILLER & ASSOCIATES



Austin Weyant
Project Scientist

Reviewed by:



Cynthia Gray, CHMM
Senior Scientist



Souder, Miller & Associates ♦ 201 S. Halagueno ♦ Carlsbad, NM 88221
(575) 689-7040

SOIL REMEDIATION FINAL CLOSURE REPORT FOR INCIDENT 2RP-3356

COG OPERATING LLC

BRUTUS 12 FEDERAL COM 2H

API# 30-015-40823

UL O SECTION 12, 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

January 08, 2015
SMA Reference
5B23978 BG8



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Figure 2: Site Map

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Table 1: Release Information and Site Ranking

Table 2: Summary of Laboratory Analyses

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1.0 Introduction

On behalf of COG Operating LLC (COG), SMA has prepared this report describing the assessment, initial delineation and mitigation of the crude oil release 2RP-3356 associated with the Brutus 12 Federal COM #2H well site. The site is located in UL O, Section 12, T 26S, R 28 E NMPM, Eddy County, New Mexico, on federal land administered by the Bureau of Land Management (BLM).

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 1.4 miles (> 1,000 feet) west of Pecos River, in an area managed by BLM with an elevation of approximately 2,950 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be less than 100 feet but greater than 50 feet below ground surface (bgs). Figure 1 illustrates the location and site vicinity and Figure 2 depicts the site details and sample locations. SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. No water supply well is located within a 1000 foot radius of the site. The physical location of this release is within the jurisdiction of NMOCD.

This release location has been assigned a NMOCD ranking of 10 for which "Guidelines for Remediation" require a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 1000 ppm total petroleum hydrocarbons (TPH). Table 1 shows site ranking rationale.

3.0 Assessment and Initial Results

On November 2nd, 2015, after receiving 811 clearance, SMA personnel assessed the release site with hand tools, a Photo Ionization Detector (PID), and a mobile chlorides titration kit. The affected area was found to be 200 feet long and 12 feet wide. Four composite samples (C1-4) and two location specific samples were taken to depths of 2 feet bgs. Using field screening, samples were found to exhibit only background levels of chloride. 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-3356.) All samples were collected and processed utilizing 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.

4.0 Soil Remediation Work Plan

SMA begin the excavation of affected soils, with approval from area utilities owners via 811 and NMOCD. The composite sample locations C3 and C4 are within a crude oil pipeline right of way (ROW), no excavation occurred in this area. 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. Delineation occur to depths of 2 foot bgs to sufficiently delineate the plume by NMOCD Division 1 standards. Excavation was done to affectively remove hydrocarbon contaminated soil located south and east of the tank battery. In this area contaminated soil was removed to 1 foot bgs of and no further excavation occurred due to the plastic liner from the tank battery berm. Confirmation samples were collected under the plastic liner to confirm that no hydrocarbon contamination was under the plastic. Closure samples were collected at final depth

of excavation and on sidewalls to show that contaminated soil was removed on a vertical and horizontal extent. Approximately 24 cubic yards of hydrocarbon contaminated soil was removed and replaced with clean backfill material to bring the contours to surface grade. The contaminated soil was transported for proper disposal at Lea Land, near Carlsbad, NM an NMOCD permitted facility.

5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 10: 10 ppm (mg/kg) Benzene, 50 ppm total BTEX, and 1000 ppm TPH. The release consisted of crude oil found during the initial assessment and delineation.

All closure confirmation samples were taken as discrete samples to ensure that the contaminated soil was removed.

Soil sample location are illustrated in Figure 2. A summary of the laboratory analyses is included in Table 2. Laboratory reports are included in Appendix A.

6.0 Closure and Limitations

Closure standards have been achieved for the crude oil release 2RP-3356 on the Brutus 12 Federal COM 2H well pad.

The scope of our services consisted of the performance of a preliminary spill assessment, verification of release stabilization, regulatory liaison, and preparation of a Remediation Work Plan and a Request for Closure. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-7040 or Cindy Gray at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES



Austin Weyant
Project Scientist



Cynthia Gray, CHMM
Senior Scientist

Figures:

Figure 1: Vicinity Map

Figure 2: Site Details and Sample Locations Map

Tables:

Table 1: Release Information and Site Ranking

Table 2: Summary of Laboratory Analyses

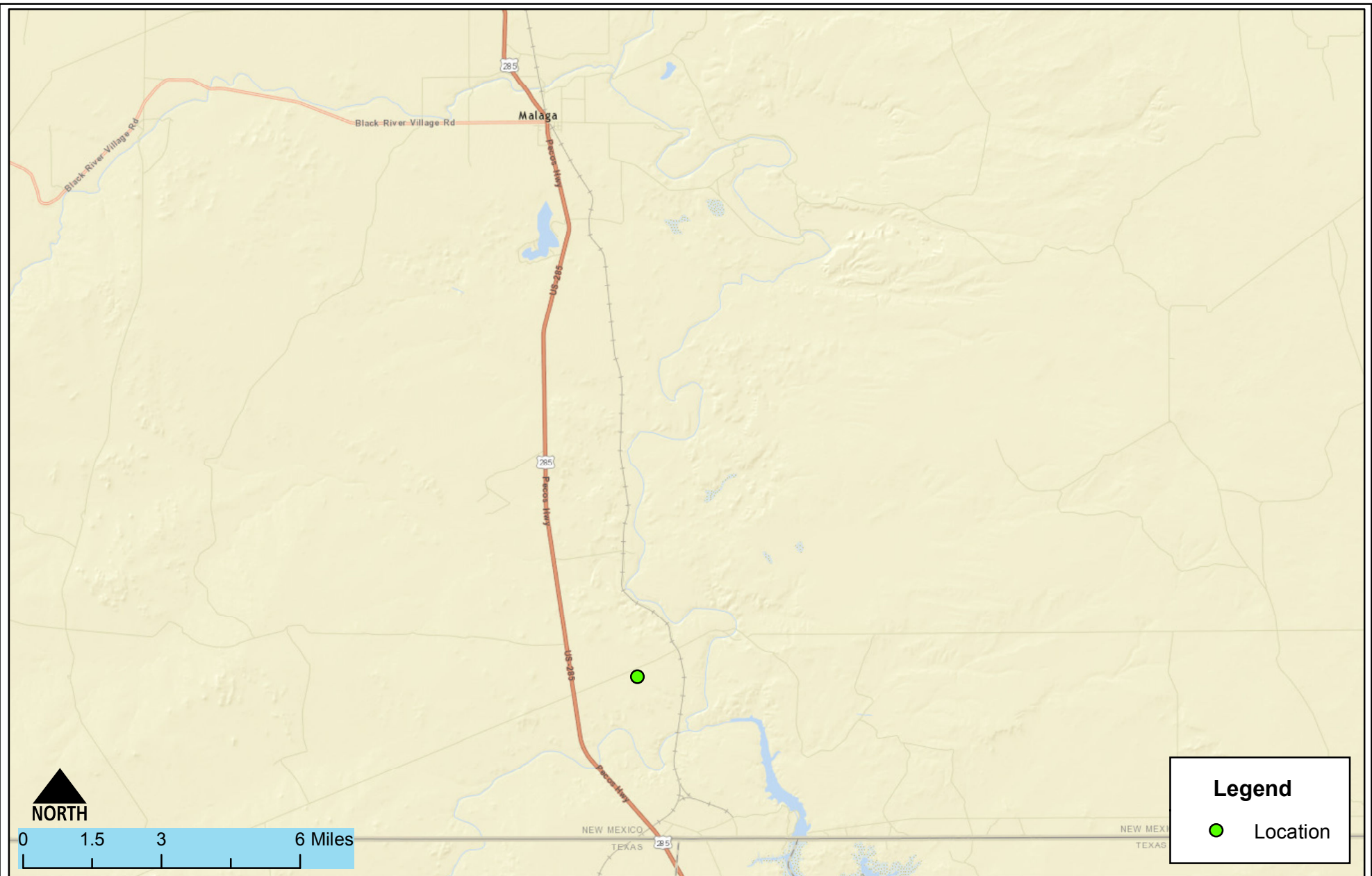
Appendices:

Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Final

FIGURE 1

VICINITY MAP



Vicinity Map
COG- Brutus 12 Federal Com 2H
Malaga, New Mexico

Figure 1

Date Saved:
11/17/2015

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
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FIGURE 2

SITE DETAILS AND SAMPLE LOCATIONS MAP



Site Detail and Sample Locations
COG Brutus 12 Federal Com 2H
Malaga, New Mexico

Figure 2

Date Saved: 1/7/2016	By: _____	Date: _____	Revisions	Descr: _____
	By: _____	Date: _____		Descr: _____
	Copyright 2015 Souder, Miller & Associates - All Rights Reserved			

Drawn	Lucas Middleton
Checked	_____
Approved	_____



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TABLE 1

RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking					
Name	Brutus 12 Federal COM 2H				
Location	Incident Number	API Number	Section, Township, Range		
	2RP-3356	30-015-40823	SW/SE (ULO)	Section 12	T 26S, R 28E NMPM
Estimated Date of Release	Discovered October 2, 2015				
Date Reported to NMOCD	16-Oct-15				
Reported by	Amanda Trujillo, COG Operating LLC				
Land Owner	Federal				
Reported To	NM Oil Conservation Division (NMOCD)				
Source of Release	Steel Flowline Leak				
Released Material	Crude Oil				
Released Volume	85 bbls Crude Oil				
Recovered Volume	59 bbls Crude Oil				
Net Release	26 bbls Crude Oil				
Nearest Waterway	Pecos River is over 1 mile east of the location				
Depth to Groundwater	Estimated to be 76 feet				
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NMOCD Ranking	10				
SMA Response Dates	Initial: November 2, 2015 Mitigation Activities: December 4, 2015				
Subcontractors	TCS				
Disposal Facility	Lea Land, LLC				
Estimated Yd ³ Contaminated Soil Excavated and Disposed	24				

TABLE 2

SUMMARY OF LABORATORY ANALYSES

Table 2: Summary of Laboratory Analyses

Analytical Report- 1506542 1601181	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	Cl- mg/Kg
1511206-001	C1	11/2/2015	Surface	25.2	BDL	870	26,000	N/A
1511206-002	C2	11/2/2015	Surface	6.6	BDL	310	23,000	N/A
1511206-003	C3	11/2/2015	Surface	BDL	BDL	BDL	28	N/A
1511206-004	C4	11/2/2015	Surface	BDL	BDL	BDL	13	N/A
1601181-001	L1	1/5/2015	1.5'	N/A	N/A	BDL	BDL	N/A
1601181-002	L2	1/5/2015	1.5'	N/A	N/A	21	290	N/A
1601181-003	L3	1/5/2015	1.5'	N/A	N/A	BDL	780	N/A

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

November 11, 2015

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

RE: Brutus 12 Fed Com 2H

OrderNo.: 1511206

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 11/4/2015 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 1511206

Date Reported: 11/11/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: C1

Project: Brutus 12 Fed Com 2H

Collection Date: 11/2/2015 3:13:00 PM

Lab ID: 1511206-001

Matrix: SOIL

Received Date: 11/4/2015 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: KJH		
Diesel Range Organics (DRO)	26000	980		mg/Kg	100	11/9/2015 2:47:55 PM	22209
Surr: DNOP	0	70-130	S	%REC	100	11/9/2015 2:47:55 PM	22209
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB		
Gasoline Range Organics (GRO)	870	50		mg/Kg	10	11/6/2015 11:40:23 AM	22214
Surr: BFB	270	75.4-113	S	%REC	10	11/6/2015 11:40:23 AM	22214
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	ND	0.25		mg/Kg	10	11/6/2015 11:40:23 AM	22214
Toluene	1.2	0.50		mg/Kg	10	11/6/2015 11:40:23 AM	22214
Ethylbenzene	ND	0.50		mg/Kg	10	11/6/2015 11:40:23 AM	22214
Xylenes, Total	24	1.0		mg/Kg	10	11/6/2015 11:40:23 AM	22214
Surr: 4-Bromofluorobenzene	137	80-120	S	%REC	10	11/6/2015 11:40:23 AM	22214

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 1511206

Date Reported: 11/11/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: C2

Project: Brutus 12 Fed Com 2H

Collection Date: 11/2/2015 3:15:00 PM

Lab ID: 1511206-002

Matrix: SOIL

Received Date: 11/4/2015 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	23000	930		mg/Kg	100	11/9/2015 3:51:55 PM	22209
Surr: DNOP	0	70-130	S	%REC	100	11/9/2015 3:51:55 PM	22209
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	310	4.9		mg/Kg	1	11/6/2015 12:03:36 PM	22214
Surr: BFB	852	75.4-113	S	%REC	1	11/6/2015 12:03:36 PM	22214
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	11/6/2015 12:03:36 PM	22214
Toluene	0.086	0.049		mg/Kg	1	11/6/2015 12:03:36 PM	22214
Ethylbenzene	ND	0.049		mg/Kg	1	11/6/2015 12:03:36 PM	22214
Xylenes, Total	6.6	0.098		mg/Kg	1	11/6/2015 12:03:36 PM	22214
Surr: 4-Bromofluorobenzene	266	80-120	S	%REC	1	11/6/2015 12:03:36 PM	22214

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 1511206

Date Reported: 11/11/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: C3

Project: Brutus 12 Fed Com 2H

Collection Date: 11/2/2015 3:17:00 PM

Lab ID: 1511206-003

Matrix: SOIL

Received Date: 11/4/2015 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	28	9.6		mg/Kg	1	11/9/2015 4:55:50 PM	22209
Surr: DNOP	102	70-130		%REC	1	11/9/2015 4:55:50 PM	22209
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/6/2015 1:19:09 PM	22214
Surr: BFB	97.3	75.4-113		%REC	1	11/6/2015 1:19:09 PM	22214
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	11/6/2015 1:19:09 PM	22214
Toluene	ND	0.047		mg/Kg	1	11/6/2015 1:19:09 PM	22214
Ethylbenzene	ND	0.047		mg/Kg	1	11/6/2015 1:19:09 PM	22214
Xylenes, Total	ND	0.094		mg/Kg	1	11/6/2015 1:19:09 PM	22214
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	11/6/2015 1:19:09 PM	22214

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 1511206

Date Reported: 11/11/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: C4

Project: Brutus 12 Fed Com 2H

Collection Date: 11/2/2015 3:19:00 PM

Lab ID: 1511206-004

Matrix: SOIL

Received Date: 11/4/2015 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	13	9.9		mg/Kg	1	11/9/2015 5:59:37 PM	22209
Surr: DNOP	92.7	70-130		%REC	1	11/9/2015 5:59:37 PM	22209
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	11/6/2015 1:42:28 PM	22214
Surr: BFB	90.2	75.4-113		%REC	1	11/6/2015 1:42:28 PM	22214
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	11/6/2015 1:42:28 PM	22214
Toluene	ND	0.049		mg/Kg	1	11/6/2015 1:42:28 PM	22214
Ethylbenzene	ND	0.049		mg/Kg	1	11/6/2015 1:42:28 PM	22214
Xylenes, Total	ND	0.098		mg/Kg	1	11/6/2015 1:42:28 PM	22214
Surr: 4-Bromofluorobenzene	115	80-120		%REC	1	11/6/2015 1:42:28 PM	22214

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 1511206

Date Reported: 11/11/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: L1

Project: Brutus 12 Fed Com 2H

Collection Date: 11/2/2015 3:21:00 PM

Lab ID: 1511206-005

Matrix: SOIL

Received Date: 11/4/2015 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	14000	960		mg/Kg	100	11/10/2015 2:39:48 PM	22209
Surr: DNOP	0	70-130	S	%REC	100	11/10/2015 2:39:48 PM	22209
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	3400	250		mg/Kg	50	11/6/2015 11:16:55 AM	22214
Surr: BFB	218	75.4-113	S	%REC	50	11/6/2015 11:16:55 AM	22214
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	4.7	2.5		mg/Kg	50	11/6/2015 11:16:55 AM	22214
Toluene	94	2.5		mg/Kg	50	11/6/2015 11:16:55 AM	22214
Ethylbenzene	26	2.5		mg/Kg	50	11/6/2015 11:16:55 AM	22214
Xylenes, Total	200	5.0		mg/Kg	50	11/6/2015 11:16:55 AM	22214
Surr: 4-Bromofluorobenzene	137	80-120	S	%REC	50	11/6/2015 11:16:55 AM	22214

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
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	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1511206

Date Reported: 11/11/2015

CLIENT: Souder, Miller & Associates

Client Sample ID: L2

Project: Brutus 12 Fed Com 2H

Collection Date: 11/2/2015 3:23:00 PM

Lab ID: 1511206-006

Matrix: SOIL

Received Date: 11/4/2015 12:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	1700	97		mg/Kg	10	11/10/2015 3:22:25 PM	22209
Surr: DNOP	0	70-130	S	%REC	10	11/10/2015 3:22:25 PM	22209
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	11/6/2015 2:05:43 PM	22214
Surr: BFB	89.2	75.4-113		%REC	1	11/6/2015 2:05:43 PM	22214
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.047		mg/Kg	1	11/6/2015 2:05:43 PM	22214
Toluene	ND	0.047		mg/Kg	1	11/6/2015 2:05:43 PM	22214
Ethylbenzene	ND	0.047		mg/Kg	1	11/6/2015 2:05:43 PM	22214
Xylenes, Total	ND	0.093		mg/Kg	1	11/6/2015 2:05:43 PM	22214
Surr: 4-Bromofluorobenzene	113	80-120		%REC	1	11/6/2015 2:05:43 PM	22214

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511206

11-Nov-15

Client: Souder, Miller & Associates

Project: Brutus 12 Fed Com 2H

Sample ID	MB-22209		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 22209		RunNo: 30094					
Prep Date:	11/5/2015		Analysis Date: 11/9/2015		SeqNo: 916768		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		99.6	70	130			

Sample ID	LCS-22209		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 22209		RunNo: 30094					
Prep Date:	11/5/2015		Analysis Date: 11/9/2015		SeqNo: 917044		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.7	57.4	139			
Surr: DNOP	5.2		5.000		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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1511206

11-Nov-15

Client: Souder, Miller & Associates

Project: Brutus 12 Fed Com 2H

Sample ID	MB-22214		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 22214		RunNo: 30084					
Prep Date:	11/5/2015		Analysis Date: 11/6/2015		SeqNo: 916449		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	850		1000		85.1	75.4	113			

Sample ID	LCS-22214		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 22214		RunNo: 30084					
Prep Date:	11/5/2015		Analysis Date: 11/6/2015		SeqNo: 916450		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.6	79.6	122			
Surr: BFB	930		1000		92.6	75.4	113			

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#: 1511206

11-Nov-15

Client: Souder, Miller & Associates

Project: Brutus 12 Fed Com 2H

Sample ID	MB-22214		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	22214		RunNo:	30084			
Prep Date:	11/5/2015		Analysis Date:	11/6/2015		SeqNo:	916463		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	LCS-22214		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	22214		RunNo:	30084			
Prep Date:	11/5/2015		Analysis Date:	11/6/2015		SeqNo:	916464		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.99	0.050	1.000	0	99.1	80	120			
Toluene	0.96	0.050	1.000	0	96.2	80	120			
Ethylbenzene	0.98	0.050	1.000	0	98.1	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.8	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		115	80	120			

Sample ID	1511206-002AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	C2		Batch ID:	22214		RunNo:	30084			
Prep Date:	11/5/2015		Analysis Date:	11/6/2015		SeqNo:	916468		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.049	0.9794	0.04442	99.5	69.6	136			
Toluene	1.1	0.049	0.9794	0.08588	99.1	76.2	134			
Ethylbenzene	1.1	0.049	0.9794	0	117	75.8	137			
Xylenes, Total	9.3	0.098	2.938	6.601	92.6	78.9	133			
Surr: 4-Bromofluorobenzene	2.2		0.9794		228	80	120			S

Sample ID	1511206-002AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	C2		Batch ID:	22214		RunNo:	30084			
Prep Date:	11/5/2015		Analysis Date:	11/6/2015		SeqNo:	916469		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.049	0.9775	0.04442	105	69.6	136	5.08	20	
Toluene	1.1	0.049	0.9775	0.08588	106	76.2	134	6.15	20	
Ethylbenzene	1.2	0.049	0.9775	0	124	75.8	137	5.53	20	
Xylenes, Total	9.7	0.098	2.933	6.601	104	78.9	133	3.63	20	
Surr: 4-Bromofluorobenzene	2.7		0.9775		273	80	120	0	0	S

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: 1511206

RcptNo: 1

Received by/date:

AT

11/04/15

Logged By: Lindsay Mangin

11/4/2015 12:15:00 PM

Lindsay Mangin

Completed By: Lindsay Mangin

11/5/2015 9:31:31 AM

Lindsay Mangin

Reviewed By:

AT

11/04/15

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:

☐ eMail

☐ Phone

☐ Fax

☐ 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	5.4	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: Carlsbad

Phone #: _____

Mail or Fax#: _____

A/QC Package: ☒ Standard ☐ Level 4 (Full Validation) ☐ Other _____

Accreditation: ☒ NELAP ☐ Other _____

EDD (Type): _____

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: Brutus 12 FED Cam 2H

Project #: _____

Project Manager: Austin Weyant

Sampler: Lisa

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.4

Container Type and #

Preservative Type

HEAL No.

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
12/15	1513	Soil	C1	4025074	None	1511206
12/15	1515		C2			-001
12/15	1517		C3			-002
12/15	1519		C4			-003
12/15	1521		L1			-004
12/15	1523		L2			-005
						-006

Relinquished by: [Signature] Date: 12/15 Time: 1215

Received by: [Signature] Date: 12/15 Time: 1215



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

BTEX + MTBE + TMBs (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAHs (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / 8082 PCBs	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"/>

Remarks: Send MRO via email only. Do not include in report.
Send a copy of results to Lisa.gaston@seviermill.com



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

January 11, 2016

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

RE: Brutus 12 Fed

OrderNo.: 1601181

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 3 sample(s) on 1/7/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1601181**

Date Reported: **1/11/2016**

CLIENT: Souder, Miller & Associates

Client Sample ID: B-L1-1.5

Project: Brutus 12 Fed

Collection Date: 1/5/2016 10:00:00 AM

Lab ID: 1601181-001

Matrix: SOIL

Received Date: 1/7/2016 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	1/8/2016 10:09:00 AM	23121
Surr: DNOP	84.2	70-130		%REC	1	1/8/2016 10:09:00 AM	23121
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/8/2016 8:51:18 AM	23122
Surr: BFB	91.4	66.2-112		%REC	1	1/8/2016 8:51:18 AM	23122

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 1601181

Date Reported: 1/11/2016

CLIENT: Souder, Miller & Associates

Client Sample ID: B-L2-1.5

Project: Brutus 12 Fed

Collection Date: 1/5/2016 10:00:00 AM

Lab ID: 1601181-002

Matrix: SOIL

Received Date: 1/7/2016 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	290	9.9		mg/Kg	1	1/8/2016 10:30:28 AM	23121
Surr: DNOP	102	70-130		%REC	1	1/8/2016 10:30:28 AM	23121
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	21	4.9		mg/Kg	1	1/8/2016 9:14:59 AM	23122
Surr: BFB	180	66.2-112	S	%REC	1	1/8/2016 9:14:59 AM	23122

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 1601181

Date Reported: 1/11/2016

CLIENT: Souder, Miller & Associates

Client Sample ID: B-L3-1.5

Project: Brutus 12 Fed

Collection Date: 1/5/2016 10:00:00 AM

Lab ID: 1601181-003

Matrix: SOIL

Received Date: 1/7/2016 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	780	100		mg/Kg	10	1/8/2016 1:44:16 PM	23121
Surr: DNOP	0	70-130	S	%REC	10	1/8/2016 1:44:16 PM	23121
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	1/8/2016 9:38:27 AM	23122
Surr: BFB	93.0	66.2-112		%REC	1	1/8/2016 9:38:27 AM	23122

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		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1601181

11-Jan-16

Client: Souder, Miller & Associates

Project: Brutus 12 Fed

Sample ID	MB-23121		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range Organics			
Client ID:	PBS		Batch ID:	23121		RunNo:	31321			
Prep Date:	1/7/2016		Analysis Date:	1/8/2016		SeqNo:	958746		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.1		10.00		91.4	70	130			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1601181

11-Jan-16

Client: Souder, Miller & Associates

Project: Brutus 12 Fed

Sample ID	MB-23122		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 23122		RunNo: 31332					
Prep Date:	1/7/2016		Analysis Date: 1/8/2016		SeqNo: 959506		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	930		1000		93.2	66.2	112			

Sample ID	LCS-23122		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 23122		RunNo: 31332					
Prep Date:	1/7/2016		Analysis Date: 1/8/2016		SeqNo: 959507		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.4	79.6	122			
Surr: BFB	980		1000		98.3	66.2	112			

Sample ID	1601181-001AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	B-L1-1.5		Batch ID: 23122		RunNo: 31332					
Prep Date:	1/7/2016		Analysis Date: 1/8/2016		SeqNo: 959508		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	30	4.9	24.51	0	122	62.5	151			
Surr: BFB	1000		980.4		102	66.2	112			

Sample ID	1601181-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	B-L1-1.5		Batch ID:	23122		RunNo:	31332				
Prep Date:	1/7/2016		Analysis Date:	1/8/2016		SeqNo:	959509		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	29	4.9	24.61	0	118	62.5	151	3.54	22.1		
Surr: BFB	1000		984.3		104	66.2	112	0	0		

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



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: 1601181

RcptNo: 1

Received by/date:	<i>SA</i>	<i>01/07/16</i>
Logged By:	Lindsay Mangin	1/7/2016 10:00:00 AM
Completed By:	Lindsay Mangin	1/7/2016 12:25:22 PM
Reviewed By:	<i>AG</i>	<i>01/07/16</i>

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

- | | | | |
|---|------------------------------|-----------------------------|--|
| 16. Was client notified of all discrepancies with this order? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
|---|------------------------------|-----------------------------|--|

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	5.7	Good	Yes			

APPENDIX B

FORM C141 FINIAL

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised August 8, 2011

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

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: COG Operating LLC	Contact: Robert McNeill	
Address: 600 West Illinois Avenue, Midland TX 79701	Telephone No. 432-230-0077	
Facility Name: BRUTUS 12 FEDERAL COM #002H	Facility Type: 30-015-40823	
Surface Owner: Federal	Mineral Owner:	API No. 30-015-40823

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	12	26S	28E	370'	South	2260'	East	Eddy

Latitude 32.0508652 Longitude -104.0394058

NATURE OF RELEASE

Type of Release: Oil	Volume of Release: 85 bbls Oil	Volume Recovered: 59 bbls Oil
Source of Release: Steel Flowline	Date and Hour of Occurrence: 10/2/2015 7:00 pm	Date and Hour of Discovery: 10/2/2015 7:00 pm
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher – NMOCD	
By Whom? Lupe Carrasco	Date and Hour: Sat 10/3/2015 8:40 PM	
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.*

This release was caused by a corroded steel flowline. A vacuum truck was dispatched to recover all standing fluid.

Describe Area Affected and Cleanup Action Taken.*

The corroded flow line broke on the edge of the containment. Impact did occur to the nearby pasture. This release was addressed per the approved workplan and under the guidance of NMOCD and the BLM.

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: 	<u>OIL CONSERVATION DIVISION</u>		
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:		Attached <input type="checkbox"/>
Date: December 29, 2015 Phone: 575-748-6940			

* Attach Additional Sheets If Necessary