

By Kellie Jones at 8:02 am, Jan 06, 2016

October 10, 2015

NMOCD District I 1625 N. French Drive Hobbs, New Mexico 88240

# APPROVED

By Kellie Jones at 8:02 am, Jan 06, 2016

#5B23978-BG3

# SUBJECT: FINAL CLOSURE REPORT FOR INCIDENT 1RP-TBD GUNNER 16 STATE SWD #1, LEA COUNTY, NEW MEXICO

Dear Ms. Jones:

On behalf of Maverick Coating Services, LLC. and COG Operating (COG), Souder Miller & Associates (SMA) is pleased to submit the attached Final Closure Report summarizing the initial findings regarding the release site located on the Gunner 16 State SWD #1 in Lea County, New Mexico. The purpose of the Final Report is to obtain approval from the New Mexico Oil Conservation Division (NMOCD) for remediation and closure of the release that occurred on September 25, 2015.

At the request of COG, SMA responded to assess and delineate the production fluids release associated with the Gunner 16 State SWD #1 well location. The release was initially reported to NMOCD by COG on September 25, 2015 and is a result of an illegal dumping incident. 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		Gunner 16 State SWD #1					
	Incident Number	API Number	Section, Township, Rang				
Location	TBD, not assigned	30-025- 40890	SW/NE (Unit D)	Section 16	T 26S, R 34E NMPM		
Estimated Date of Release	Septembe	er 25, 2015					
Date Reported to NMOCD	October 9, 2015						
Reported by	Amanda Trujillo , COG Operating LLC						
Land Owner	New Mex	ico State La	nd Office				
Reported To	NM Oil Co	onservation	Division (N	NMOCD)			
Source of Release	Illegal dur	nping					
Released Material	Oil and Ra	inwater					
Released Volume	0.25 bbls	oil and 35 k	obls rainwa	ter			
Recovered Volume	0 bbls oil and 0 bbls rainwater						
Net Release	0.25 bbls	oil and 35 b	obls rainwa	ter			
Nearest Waterway	Bobcat Draw is 0.28 miles to the south of the location.						



Depth to Groundwater	Estimated to be 110 feet
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	Initial: October, 1st 2015
Estimated Yd <sup>3</sup> Contaminated Soil Excavated and Disposed	None

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

Submitted by:

SOUDER, MILLER & ASSOCIATES

! Austr Weyant

Austin Weyant Project Scientist

Reviewed by:

Cynthia Gray, CHMM Senior Scientist

# FINAL CLOSURE REPORT FOR INCIDENT TBD NOT ASSIGNED

# COG OPERATING LLC

GUNNER 16 STATE SWD #1 API# 30-025-40890 SECTION 16, T16S R34E, NMPM LEA COUNTY, NM



Prepared for: Maverick Coating Services, LLC. 1507 W Fairgrounds Rd. Artesia, NM 88210 Prepared by: Souder, Miller & Associates 201 S. Halagueno Carlsbad, NM 88221 575-689-7040

October 10, 2015 SMA Reference 5B23978 BG3

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#### 1.0 Introduction

On behalf of Maverick Coating Services, LLC. and COG Operating LLC (COG), SMA has prepared this report that describes the assessment and initial delineation of a release associated with the Gunner 16 State SWD #1 location. The site is located in Section 16, T 16S, R 34E NMPM, Lea 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 30 mile east of the Pecos River, in an area owned by the State of New Mexico with an elevation of approximately 3,700 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 domestic or agricultural wells are located within a 1000 foot radius of the release site. Figure 1 depicts the site vicinity and Figure 2 depicts the site location.

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 October 1<sup>st</sup>, 2015 after receiving 811 clearance, SMA field personnel assessed the release area onsite with a gas powered auger, Photo Ionization Detector (PID), and a mobile chlorides titration kit. The proposed affected area marked with flags was found to be approximately 250 square yards. Surface samples were taken and, by field testing, indicated results at or below the action levels for constituents of concern. Delineation samples were taken to depths of 3 ft. bgs. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for Total Chlorides using EPA Method 300.0, Total Petroleum Hydrocarbons (DRO-GRO) by EPA Method SW846 8015M/D, and BTEX using EPA Method SW846 8260B, as required by NMOCD closure requirements. After initial sampling and field screening of the area, SMA has determined that no further action is recommended for this location, subsequently confirmed by laboratory analytical results. Specific sample locations for all samples are depicted on Figure 2 (Sample Location Map) along with sampling details. Laboratory analytical results are noted in Table 2 in the appendices. All samples were collected and processed according to NMOCD soil sampling procedures.

#### 4.0 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 with little evidence of petroleum impacts found during the assessment and delineation.

Soil sample locations in the initial delineation are illustrated in Figure 2. A summary of laboratory analytical results is included in Table 4. Laboratory analytical reports are included in Appendix A.

The analytical results for this site are at or below the action levels for constituents of concern. No further remedial activities are recommended.

#### 5.0 Closure and Limitations

The scope of our services consisted of the performance of a spill assessment and delineation, verification of release stabilization, regulatory liaison, sampling for closure, and preparation of this Final Closure Report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this Work Plan, 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 Location Map

#### Tables:

Table 1: Release Information and Site Ranking Table 2: Summary of Field Screening Results for Chlorides Table 3: Summary of Field Screening Results for Hydrocarbons Table 4: Summary of Laboratory Analyses

#### Appendices:

Appendix A: Laboratory Analytical Reports Appendix B: Form C141 INITIAL/FINAL

Gunner 16 State SWD #1 Final Closure SMA Ref 5B24422 BG1 10/10/15

# FIGURE 1 VICINITY MAP



# Figure 2: Site Details and Sample Location Map



Gunner 16 State SWD #1 Final Closure SMA Ref 5B24422 BG1 10/10/15

# TABLE 1 RELEASE INFORMATION AND SITE RANKING

Table 1: Release information and Site Ranking					
Name		Gunner 16 State SWD #1			
	Incident API Section, Township, Range				
Location	TBD, not assigned	30-025- 40890	SW/NE (Unit D)	Section 16	T 26S, R 34E NMPM
Estimated Date of Release	September	25, 2015			
Date Reported to NMOCD	October 9,	2015			
Reported by	Amanda Tr	ujillo , COG	Operating L	LC	
Land Owner	New Mexic	o State Lan	d Office		
Reported To	NM Oil Cor	servation D	ivision (NN	IOCD)	
Source of Release	Illegal dum	ping			
Released Material	Oil and Rai	nwater			
Released Volume	0.25 bbls o	il and 35 bb	ls rainwate	r	
Recovered Volume	0 bbls oil a	nd 0 bbls rai	inwater		
Net Release	0.25 bbls o	il and 35 bb	ls rainwate	r	
Nearest Waterway	Bobcat Dra	w is 0.28 m	iles to the s	outh of the	location.
Depth to Groundwater	Estimated 1	to be 110 fe	et		
Nearest Domestic Water Source	Greater tha	an 1,000 fee	et		
NMOCD Ranking	0				
SMA Response Dates	Initial: October, 1st 2015				
Estimated Yd <sup>3</sup> Contaminated Soil Excavated and Disposed	None				

# TABLE 2 SUMMARY OF FIELD SCREENING RESULTS FOR CHLORIDES

FIELD SCREENING RESULTS SUMMARY							
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	Chlorides Results	Lab Sample Collected Y/N		
10/1/2015	11:00	Gun BG	1'-3'	0	Y		
10/1/2015	11:00	Gun L1	Surface	0	Y		
10/1/2015	11:00	Gun L2	Surface	0	Y		
10/1/2015	11:00	Gun L3	Surface	0	Y		
10/1/2015	11:00	Gun L4	Surface	0	Y		
10/1/2015	11:00	Gun H W	Surface	0	Y		
10/1/2015	11:00	Gun H E	1'	143	Y		



# TABLE 3 SUMMARY OF FIELD SCREENING RESULTS FOR HYDROCARBONS

FIELD SCREENING RESULTS SUMMARY							
Date	Time	Field Screening Reference	Sample Depth (Feet BGS)	PID Reading	Lab Sample Collected Y/N		
10/1/2015	11:00	Gun BG	1'-3'	0.0	Y		
10/1/2015	11:00	Gun L1	Surface	0.0	Y		
10/1/2015	11:00	Gun L2	Surface	0.4	Y		
10/1/2015	11:00	Gun L3	Surface	0.2	Y		
10/1/2015	11:00	Gun L4	Surface	0.2	Y		
10/1/2015	11:00	Gun H W	Surface	17.5	Y		
10/1/2015	11:00	Gun H E	1'	23.4	Y		



# TABLE 4 SUMMARY OF LABORATORY ANALYSES

Analytical Report- 1510259	Sample Number on Figure 2 Map	Sample Date	Depth	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	CI- mg/Kg
1510259-001	Gun 1	10/1/2015	1'	BDL	BDL	BDL	BDL	BDL
1510259-002	Gun 2	10/1/2015	2'	BDL	BDL	BDL	BDL	BDL
1510259-003	Gun 3	10/1/2015	3'	BDL	BDL	BDL	BDL	BDL
1510259-004	Gun 5	10/1/2015	4'	BDL	BDL	BDL	62	BDL
1510259-005	Gun- H	10/1/2015	1'	BDL	BDL	BDL	5000	BDL

## Table 4: Summary of Laboratory Analyses

# APPENDIX A LABORATORY ANALYTICAL REPORTS



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

October 13, 2015

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

OrderNo.: 1510259

RE: Gunner 16

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 5 sample(s) on 10/6/2015 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 <u>www.hallenvironmental.com</u> 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,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates

Project: Gunner 16

Client Sample ID: Gun-1 Collection Date: 10/1/2015 10:00:00 AM

Lab ID: 1510259-001	Matrix:	Matrix: SOIL		Received Date: 10/6/2015 9:13:00 AM			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analysi	: LGT	
Chloride	ND	30	mg/Kg	20	10/9/2015 2:25:24 PM	21767	
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S			Analyst	: KJH	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 6:16:45 AM	21719	
Surr: DNOP	105	57.9-140	%REC	1	10/9/2015 6:16:45 AM	21719	
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/8/2015 2:46:41 PM	21716	
Surr: BFB	87.7	75.4-113	%REC	1	10/8/2015 2:46:41 PM	21716	
EPA METHOD 8021B: VOLATILES					Analyst	: NSB	
Methyl tert-butyl ether (MTBE)	ND	0.096	mg/Kg	1	10/8/2015 2:46:41 PM	21716	
Benzene	ND	0.048	mg/Kg	1	10/8/2015 2:46:41 PM	21716	
Toluene	ND	0.048	mg/Kg	1	10/8/2015 2:46:41 PM	21716	
Ethylbenzene	ND	0.048	mg/Kg	1	10/8/2015 2:46:41 PM	21716	
Xylenes, Total	ND	0.096	mg/Kg	1	10/8/2015 2:46:41 PM	21716	
Surr: 4-Bromofluorobenzene	105	80-120	%REC	1	10/8/2015 2:46:41 PM	21716	

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

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 Page 1 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates

Project: Gunner 16

Client Sample ID: Gun-2 Collection Date: 10/1/2015 10:00:00 AM

Lab ID: 1510259-002	Matrix: SOIL		Received 1	<b>Received Date:</b> 10/6/2015 9:13:00 AM			
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch	
EPA METHOD 300.0: ANIONS					Analys	t: LGT	
Chloride	ND	30	mg/Kg	20	10/9/2015 2:37:49 PM	21767	
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANIC	S			Analys	t: KJH	
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 6:43:35 AM	21719	
Surr: DNOP	108	57.9-140	%REC	1	10/9/2015 6:43:35 AM	21719	
EPA METHOD 8015D: GASOLINE RA	NGE				Analys	t: NSB	
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/8/2015 3:56:01 PM	21716	
Surr: BFB	87.3	75.4-113	%REC	1	10/8/2015 3:56:01 PM	21716	
EPA METHOD 8021B: VOLATILES					Analys	t: NSB	
Methyl tert-butyl ether (MTBE)	ND	0.096	mg/Kg	1	10/8/2015 3:56:01 PM	21716	
Benzene	ND	0.048	mg/Kg	1	10/8/2015 3:56:01 PM	21716	
Toluene	ND	0.048	mg/Kg	1	10/8/2015 3:56:01 PM	21716	
Ethylbenzene	ND	0.048	mg/Kg	1	10/8/2015 3:56:01 PM	21716	
Xylenes, Total	ND	0.096	mg/Kg	1	10/8/2015 3:56:01 PM	21716	
Surr: 4-Bromofluorobenzene	104	80-120	%REC	1	10/8/2015 3:56:01 PM	21716	

Qualifiers:	*
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- \* 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 Page 2 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates

Project: Gunner 16

Client Sample ID: Gun-3 Collection Date: 10/1/2015 10:00:00 AM

Lab ID: 1510259-003	Matrix: SOIL		Received I			
Analyses	Result	RL Qu	al Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	LGT
Chloride	ND	30	mg/Kg	20	10/9/2015 2:50:14 PM	21767
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S			Analyst	: KJH
Diesel Range Organics (DRO)	ND	10	mg/Kg	1	10/9/2015 7:10:59 AM	21719
Surr: DNOP	99.4	57.9-140	%REC	1	10/9/2015 7:10:59 AM	21719
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/8/2015 4:19:07 PM	21716
Surr: BFB	86.4	75.4-113	%REC	1	10/8/2015 4:19:07 PM	21716
EPA METHOD 8021B: VOLATILES					Analyst	: NSB
Methyl tert-butyl ether (MTBE)	ND	0.096	mg/Kg	1	10/8/2015 4:19:07 PM	21716
Benzene	ND	0.048	mg/Kg	1	10/8/2015 4:19:07 PM	21716
Toluene	ND	0.048	mg/Kg	1	10/8/2015 4:19:07 PM	21716
Ethylbenzene	ND	0.048	mg/Kg	1	10/8/2015 4:19:07 PM	21716
Xylenes, Total	ND	0.096	mg/Kg	1	10/8/2015 4:19:07 PM	21716
Surr: 4-Bromofluorobenzene	102	80-120	%REC	1	10/8/2015 4:19:07 PM	21716

Qualifiers:	*
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- \* 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 Page 3 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates

Project: Gunner 16

Client Sample ID: Gun-5 Collection Date: 10/1/2015 10:00:00 AM

<b>Lab ID:</b> 1510259-004	Matrix:	SOIL	Received I	Date: 10	/6/2015 9:13:00 AM	
Analyses	Result	RL Q	ual Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS					Analyst	t: LGT
Chloride	ND	30	mg/Kg	20	10/9/2015 3:02:38 PM	21767
EPA METHOD 8015M/D: DIESEL RAN	IGE ORGANIC	S			Analyst	t: KJH
Diesel Range Organics (DRO)	62	9.9	mg/Kg	1	10/9/2015 7:38:06 AM	21719
Surr: DNOP	107	57.9-140	%REC	1	10/9/2015 7:38:06 AM	21719
EPA METHOD 8015D: GASOLINE RA	NGE				Analyst	t: NSB
Gasoline Range Organics (GRO)	ND	4.8	mg/Kg	1	10/8/2015 4:42:13 PM	21716
Surr: BFB	87.5	75.4-113	%REC	1	10/8/2015 4:42:13 PM	21716
EPA METHOD 8021B: VOLATILES					Analyst	t: NSB
Methyl tert-butyl ether (MTBE)	ND	0.096	mg/Kg	1	10/8/2015 4:42:13 PM	21716
Benzene	ND	0.048	mg/Kg	1	10/8/2015 4:42:13 PM	21716
Toluene	ND	0.048	mg/Kg	1	10/8/2015 4:42:13 PM	21716
Ethylbenzene	ND	0.048	mg/Kg	1	10/8/2015 4:42:13 PM	21716
Xylenes, Total	ND	0.096	mg/Kg	1	10/8/2015 4:42:13 PM	21716
Surr: 4-Bromofluorobenzene	103	80-120	%REC	1	10/8/2015 4:42:13 PM	21716

Qualifiers:	*
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- \* 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 Page 4 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates

Project: Gunner 16

Client Sample ID: Gun-H Collection Date: 10/1/2015 10:00:00 AM

Lab ID: 1510259-005	Matrix:	SOIL		<b>Received</b>	Date: 10	/6/2015 9:13:00 AM	
Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analys	t: LGT
Chloride	ND	30		mg/Kg	20	10/9/2015 3:39:51 PM	21767
EPA METHOD 8015M/D: DIESEL RA	NGE ORGANIC	s				Analys	t: KJH
Diesel Range Organics (DRO)	5000	98		mg/Kg	10	10/9/2015 2:03:46 PM	21719
Surr: DNOP	0	57.9-140	S	%REC	10	10/9/2015 2:03:46 PM	21719
EPA METHOD 8015D: GASOLINE RA	ANGE					Analys	t: NSB
Gasoline Range Organics (GRO)	ND	48	D	mg/Kg	10	10/8/2015 5:05:18 PM	21716
Surr: BFB	101	75.4-113	D	%REC	10	10/8/2015 5:05:18 PM	21716
EPA METHOD 8021B: VOLATILES						Analys	t: NSB
Methyl tert-butyl ether (MTBE)	ND	0.97	D	mg/Kg	10	10/8/2015 5:05:18 PM	21716
Benzene	ND	0.24	D	mg/Kg	10	10/8/2015 5:05:18 PM	21716
Toluene	ND	0.48	D	mg/Kg	10	10/8/2015 5:05:18 PM	21716
Ethylbenzene	ND	0.48	D	mg/Kg	10	10/8/2015 5:05:18 PM	21716
Xylenes, Total	ND	0.97	D	mg/Kg	10	10/8/2015 5:05:18 PM	21716
Surr: 4-Bromofluorobenzene	106	80-120	D	%REC	10	10/8/2015 5:05:18 PM	21716

Qualifiers:	*
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- \* 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 Page 5 of 10
- P Sample pH Not In Range
- RL Reporting Detection Limit

Client: Project:	Souc Gun	ler, Miller & A ner 16	ssociate	es							
Sample ID	MB-21767	SampT	ype: ME	BLK	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	PBS	Batch	n ID: <b>21</b>	767	F	lunNo: 29	9458				
Prep Date:	10/9/2015	Analysis D	ate: 10	0/9/2015	S	eqNo: 89	95859	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		ND	1.5								
Sample ID	LCS-21767	SampT	ype: LC	s	Tes	tCode: EF	PA Method	300.0: Anion	s		
Client ID:	LCSS	Batch	n ID: 21	767	R	lunNo: 29	9458				
Prep Date:	10/9/2015	Analysis D	ate: 10	0/9/2015	S	eqNo: 89	95860	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride		14	1.5	15.00	0	93.0	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

WO#: 1510259

13-Oct-15

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Client:	Souder,	Miller & As	ssociate	es							
Project:	Gunner	16									
Sample ID	MB-21652	SampT	уре: <b>М</b> І	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: 21	652	F	RunNo: 2	9273				
Prep Date:	10/5/2015	Analysis D	ate: 1	0/5/2015	\$	SeqNo: 8	90900	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOF	)	7.9		10.00		78.7	57.9	140			
Sample ID	LCS-21652	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	LCSS	Batch	ID: <b>21</b>	652	F	RunNo: 2	9273				
Prep Date:	10/5/2015	Analysis D	ate: 1	0/5/2015	\$	SeqNo: 8	90901	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOF	)	4.7		5.000		94.7	57.9	140			
Sample ID	MB-21679	SampT	уре: <b>М</b> І	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Client ID:	PBS	Batch	ID: <b>21</b>	679	F	RunNo: 2	9273				
Prep Date:	10/6/2015	Analysis D	ate: 1	0/8/2015	S	SeqNo: 8	94236	Units: %RE	С		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOF	)	10		10.00		105	57.9	140			
								1.10			
Sample ID	MB-21719	SampT	ype: MI	BLK	Tes	tCode: E	PA Method	8015M/D: Di	esel Rang	e Organics	
Sample ID Client ID:	MB-21719 PBS	SampT Batch	ype: <b>M</b> I ID: <b>21</b>	BLK 719	Tes	tCode: El	PA Method 9273	8015M/D: Di	esel Rang	e Organics	
Sample ID Client ID: Prep Date:	MB-21719 PBS 10/7/2015	SampT Batch Analysis D	ype: <b>M</b> I ID: <b>21</b> ate: <b>1</b>	BLK 719 0/8/2015	Tes F	atCode: El RunNo: 2 SeqNo: 8	PA Method 9273 94237	8015M/D: Di	esel Rango (g	e Organics	
Sample ID Client ID: Prep Date: Analyte	MB-21719 PBS 10/7/2015	SampT Batch Analysis D Result	ype: <b>M</b> I ID: <b>21</b> ate: <b>1</b> PQL	BLK 719 0/8/2015 SPK value	Tes F SPK Ref Val	tCode: E RunNo: 2 SeqNo: 8 %REC	PA Method 9273 94237 LowLimit	8015M/D: Di Units: mg/k HighLimit	esel Rango (g %RPD	e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range	MB-21719 PBS 10/7/2015 Organics (DRO)	SampT Batch Analysis D Result ND	ype: <b>M</b> I ID: <b>21</b> ate: <b>1</b> PQL 10	BLK 719 0/8/2015 SPK value	Tes F SPK Ref Val	tCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 9273 94237 LowLimit	8015M/D: Di Units: mg/F HighLimit	esel Rang (g %RPD	e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF	MB-21719 PBS 10/7/2015 Organics (DRO)	SampT Batch Analysis D Result ND 10	ype: <b>M</b> I ID: <b>21</b> ate: <b>1</b> PQL 10	BLK 719 0/8/2015 SPK value 10.00	Tes F SPK Ref Val	ttCode: E RunNo: 2 SeqNo: 8 %REC 104	PA Method 9273 94237 LowLimit 57.9	8015M/D: Di Units: mg/k HighLimit 140	esel Rang Kg %RPD	e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOP Sample ID	MB-21719 PBS 10/7/2015 Organics (DRO)	SampT Batch Analysis D Result ND 10 SampT	ype: <b>M</b> I ID: <b>21</b> ate: <b>1</b> PQL 10 ype: <b>LC</b>	BLK 719 0/8/2015 SPK value 10.00	Tes F SPK Ref Val	stCode: E RunNo: 2 SeqNo: 8 %REC 104 stCode: E	PA Method 9273 94237 LowLimit 57.9 PA Method	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di	esel Rang (g %RPD esel Rang	e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOP Sample ID Client ID:	MB-21719 PBS 10/7/2015 Organics (DRO)	SampT Batch Analysis D Result ND 10 SampT Batch	ype: <b>M</b> ID: <b>21</b> ate: <b>1</b> PQL 10 ype: <b>L(</b>	BLK 719 0/8/2015 SPK value 10.00 CS 679	Tes F SPK Ref Val Tes F	ttCode: El RunNo: 2 SeqNo: 8 %REC 104 ttCode: El RunNo: 2	PA Method 9273 94237 LowLimit 57.9 PA Method 9273	8015M/D: Di Units: mg/F HighLimit 140 8015M/D: Di	esel Rang (g %RPD esel Rang	e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF Sample ID Client ID: Prep Date:	MB-21719 PBS 10/7/2015 Organics (DRO) CORD UCS-21679 LCSS 10/6/2015	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D	ype: <b>M</b> ID: <b>21</b> ate: <b>1</b> PQL 10 ype: <b>LC</b> ID: <b>21</b> ate: <b>1</b>	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015	Tes F SPK Ref Val Tes F	stCode: E RunNo: 2 SeqNo: 8 %REC 104 stCode: E RunNo: 2 SeqNo: 8	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di Units: %RE	esel Rang (g %RPD esel Rang	e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOP Sample ID Client ID: Prep Date: Analyte	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCSS 10/6/2015	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result	ype: <b>M</b> ID: <b>21</b> ate: <b>1</b> PQL 10 ype: <b>LC</b> ID: <b>21</b> ate: <b>1</b> PQL	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value	Tes F SPK Ref Val Tes F SPK Ref Val	ttCode: El RunNo: 2 SeqNo: 8 %REC 104 ttCode: El RunNo: 2 SeqNo: 8 %REC	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit	8015M/D: Di Units: mg/F HighLimit 140 8015M/D: Di Units: %RE HighLimit	esel Rang (g %RPD esel Rang C %RPD	e Organics RPDLimit e Organics	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF Sample ID Client ID: Prep Date: Analyte Surr: DNOF	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCSS 10/6/2015	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result 5.6	ype: <b>M</b> ate: <b>1</b> PQL 10 ype: <b>LC</b> 1D: <b>21</b> ate: <b>1</b> PQL	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value 5.000	Tes F SPK Ref Val Tes F SPK Ref Val	tCode: E RunNo: 2 SeqNo: 8 %REC 104 tCode: E RunNo: 2 SeqNo: 8 %REC 112	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit 57.9	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di Units: %RE HighLimit 140	esel Rang (g %RPD esel Rang C %RPD	e Organics RPDLimit e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF Sample ID Client ID: Prep Date: Analyte Surr: DNOF Sample ID	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCSS 10/6/2015	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result 5.6	ype: <b>M</b> ID: <b>21</b> ate: <b>1</b> PQL 10 ype: <b>LC</b> ID: <b>21</b> ate: <b>1</b> PQL ype: <b>LC</b>	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value 5.000	Tes SPK Ref Val Tes SPK Ref Val SPK Ref Val	ttCode: E RunNo: 2 SeqNo: 8 %REC 104 ttCode: E RunNo: 2 SeqNo: 8 %REC 112	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit 57.9 PA Method	8015M/D: Di Units: mg/P HighLimit 140 8015M/D: Di Units: %RE HighLimit 140 8015M/D: Di	esel Rang Kg %RPD esel Rang %RPD esel Rang	e Organics RPDLimit e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF Sample ID Client ID: Prep Date: Analyte Surr: DNOF Sample ID Client ID:	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCSS 10/6/2015 CCS-21719 LCSS	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result 5.6 SampT Batch	ype: <b>M</b> ate: <b>1</b> PQL 10 ype: <b>LC</b> ate: <b>1</b> PQL ype: <b>LC</b> ype: <b>LC</b>	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value 5.000 CS 719	Tes F SPK Ref Val Tes SPK Ref Val Tes F	ttCode: E RunNo: 2 SeqNo: 8 %REC 104 ttCode: E RunNo: 2 SeqNo: 8 %REC 112 ttCode: E RunNo: 2	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit 57.9 PA Method 9273	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di Units: %RE HighLimit 140 8015M/D: Di	esel Rang (g %RPD esel Rang C %RPD esel Rang	e Organics RPDLimit e Organics RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF Sample ID Client ID: Prep Date: Analyte Surr: DNOF Sample ID Client ID: Prep Date:	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCSS 10/6/2015 LCS-21719 LCSS 10/7/2015	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result 5.6 SampT Batch Analysis D	ype: Mi ate: 1 PQL 10 ype: L0 1D: 21 ate: 1 ype: L0 1D: 21 ate: 1	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value 5.000 CS 719 0/8/2015	Tes SPK Ref Val	ttCode: E RunNo: 2 SeqNo: 8 %REC 104 ttCode: E RunNo: 2 SeqNo: 8 %REC 112 ttCode: E RunNo: 2 SeqNo: 8	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit 57.9 PA Method 9273 94239	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di Units: %RE HighLimit 140 8015M/D: Di 8015M/D: Di	esel Rango (g %RPD esel Rango C %RPD esel Rango	e Organics RPDLimit e Organics RPDLimit e Organics	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOF Sample ID Client ID: Prep Date: Analyte Surr: DNOF Sample ID Client ID: Prep Date: Analyte	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCS-21679 LCSS 10/6/2015 DCS-21719 LCSS 10/7/2015	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result 5.6 SampT Batch Analysis D Result	ype: Mi ate: 1 PQL 10 ype: LC D: 21 ate: 1 PQL ype: LC 1D: 21 ate: 1 PQL	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value 5.000 CS 719 0/8/2015 SPK value	Tes SPK Ref Val Tes SPK Ref Val SPK Ref Val SPK Ref Val	ttCode: E RunNo: 2 SeqNo: 8 %REC 104 ttCode: E RunNo: 2 SeqNo: 8 %REC 112 ttCode: E RunNo: 2 SeqNo: 8 %REC	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit 57.9 PA Method 9273 94239 LowLimit	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di Units: %RE HighLimit 140 8015M/D: Di Units: mg/k HighLimit	esel Rang (g %RPD esel Rang (g %RPD	e Organics RPDLimit COMPARIENT RPDLimit RPDLimit RPDLimit	Qual
Sample ID Client ID: Prep Date: Analyte Diesel Range Surr: DNOP Client ID: Prep Date: Analyte Surr: DNOP Client ID: Prep Date: Analyte Diesel Range	MB-21719 PBS 10/7/2015 Organics (DRO) CCS-21679 LCSS 10/6/2015 DCSS 10/7/2015 Organics (DRO)	SampT Batch Analysis D Result ND 10 SampT Batch Analysis D Result Analysis D Batch Analysis D Result	ype: Mi ate: 1 PQL 10 ype: L0 1D: 21 ate: 1 ype: L0 1D: 21 ate: 1 PQL 1D: 21 ate: 1 10	BLK 719 0/8/2015 SPK value 10.00 CS 679 0/8/2015 SPK value 5.000 CS 719 0/8/2015 SPK value 50.00	Tes SPK Ref Val Tes SPK Ref Val SPK Ref Val SPK Ref Val 0	ttCode: El RunNo: 2 SeqNo: 8 %REC 104 ttCode: El RunNo: 2 SeqNo: 8 %REC 112 ttCode: El RunNo: 2 SeqNo: 8 %REC 81.9	PA Method 9273 94237 LowLimit 57.9 PA Method 9273 94238 LowLimit 57.9 PA Method 9273 94239 LowLimit 57.4	8015M/D: Di Units: mg/k HighLimit 140 8015M/D: Di Units: %RE HighLimit 140 8015M/D: Di Units: mg/k HighLimit 139	esel Rang (g %RPD esel Rang (g %RPD (g %RPD	e Organics RPDLimit e Organics RPDLimit e Organics RPDLimit	Qual

#### **Qualifiers:**

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- D Sample Diluted Due to Matrix
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- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit

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13-Oct-15

Client: Soude Project: Gunne	r, Miller & Asso er 16	ociate	es								
Sample ID MB-21716	SampTyp	e: ME	BLK	Tes	tCode: El	PA Method	8015D: Gasc	oline Rang	e		
Client ID: PBS	Batch ID	): <b>21</b>	716	R	RunNo: 2	9394					
Prep Date: 10/7/2015	Analysis Date	e: 10	0/8/2015	S	SeqNo: 8	94381	Units: <b>mg/k</b>	٢g			
Analyte	Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0									
Surr: BFB	890		1000		88.5	75.4	113				
Sample ID LCS-21716	SampTyp	e: LC	s	Tes	tCode: El	PA Method	8015D: Gasc	line Rang	е		
Client ID: LCSS	Batch ID	): <b>21</b>	716	R	RunNo: 2	9394					
Prep Date: 10/7/2015	Analysis Date	e: 10	0/8/2015	S	SeqNo: 8	94382	Units: mg/k	ζg			
Analyte	Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	26	5.0	25.00	0	105	79.6	122				
Surr: BFB	950		1000		95.3	75.4	113				

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- S % Recovery outside of range due to dilution or matrix
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- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Client:	Souder, N	Miller & A	ssociate	es							
Project:	Gunner 1	6									
Sample ID	MB-21716	SampT	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	PBS	Batcl	h ID: 21	716	F	RunNo: 2	9394				
Prep Date:	10/7/2015	Analysis D	Date: 10	)/8/2015	S	SeqNo: 8	94406	Units: <b>mg/k</b>	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-but	yl ether (MTBE)	ND	0.10								
Benzene		ND	0.050								
Toluene		ND	0.050								
Ethylbenzene		ND	0.050								
Xylenes, Total		ND	0.10								
Surr: 4-Bron	nofluorobenzene	1.1		1.000		106	80	120			
Sample ID	LCS-21716	SampT	Type: LC	S	Tes	tCode: E	PA Method	8021B: Vola	tiles		
Client ID:	LCSS	Batcl	h ID: <b>21</b>	716	F	RunNo: <b>2</b> 9	9394				
Prep Date:	10/7/2015	Analysis D	Date: 10	0/8/2015	S	SeqNo: <b>8</b>	94407	Units: <b>mg/H</b>	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-but	yl ether (MTBE)	1.1	0.10	1.000	0	110	67.2	121			
Benzene		0.99	0.050	1.000	0	99.2	80	120			
Toluene		0.95	0.050	1.000	0	95.5	80	120			
Ethylbenzene		0.96	0.050	1.000	0	96.4	80	120			
Xylenes, Total		2.9	0.10	3.000	0	97.1	80	120			
Surr: 4-Bron	nofluorobenzene	1.1		1.000		112	80	120			
Sample ID	1510259-001AMS	SampT	Гуре: М	6	Tes	tCode: El	PA Method	8021B: Volat	tiles		
Client ID:	Gun-1	Batcl	h ID: 21	716	F	RunNo: 2	9394				
Prep Date:	10/7/2015	Analysis D	Date: 10	)/8/2015	S	SeqNo: <b>8</b> 9	94411	Units: mg/k	(g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-but	yl ether (MTBE)	1.1	0.096	0.9625	0	112	53.6	133			
Benzene		1.0	0.048	0.9625	0	105	69.6	136			
Toluene		1.0	0.048	0.9625	0	104	76.2	134			
Ethylbenzene		1.0	0.048	0.9625	0	105	75.8	137			
Xylenes, Total		3.0	0.096	2.887	0	106	78.9	133			
Surr: 4-Bron	nofluorobenzene	1.1		0.9625		109	80	120			
Sample ID	1510259-001AMS	D SampT	Гуре: М	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles		
Client ID:	Gun-1	Batcl	h ID: 21	716	F	RunNo: 29	9394				
Prep Date:	10/7/2015	Analysis D	Date: 10	0/8/2015	S	SeqNo: 8	94412	Units: mg/k	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-but	yl ether (MTBE)	1.1	0.097	0.9709	0	114	53.6	133	2.35	20	
Benzene		1.0	0.049	0.9709	0	104	69.6	136	0.480	20	
Toluene		1.0	0.049	0.9709	0	103	76.2	134	0.493	20	
Ethylbenzene		1.0	0.049	0.9709	0	104	75.8	137	0.138	20	

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- RL Reporting Detection Limit

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13-Oct-15

Souder, Miller & Associates

Project:	Gunner 16	5									
Sample ID	1510259-001AMSD	SampTyp	e: MS	SD	Test	Code: El	PA Method	8021B: Volat	iles		
Client ID:	Gun-1	Batch IE	): <b>21</b>	716	R	unNo: <b>2</b>	9394				
Prep Date:	10/7/2015	Analysis Date	e: 10	0/8/2015	S	eqNo: 8	94412	Units: mg/k	g		
Analyte		Result F	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total		3.1 0	.097	2.913	0	105	78.9	133	0.129	20	
Surr: 4-Brom	nofluorobenzene	1.0		0.9709		108	80	120	0	0	

#### **Qualifiers:**

**Client:** 

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- 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

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ENVIRONMENTAL ANALYSIS LABORATORY Website	4901 Hawkins Albuquerque, NM 87 -345-3975 FAX: 505-345-4 e: www.hallenvironmenial.e	NE 109 <b>Sam</b> 107 com	ple Log-In C	heck List
Client Name: SMA-CARLSBAD Work Order	Number 1510259		ReptNo:	1
Received by/date:	15			
Logged By: Lindsay Mangin 10/6/2015 9:1	3:00 AM	Julythe		
Completed By: Lindsay Mangin 10/6/2015 3:4	7:48 PM	Julythan		
Reviewed By: TO to 07/15	>	0.00		
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 🗌	
<ol> <li>Were all samples received at a temperature of &gt;0° C to 6.</li> </ol>	0°C Yes	No 🔽		
6. Sample(s) in proper container(s)?	Yes V	No		
7. Sufficient sample volume for indicated test(s)?	Yes 🗸	No 🗌		
8. Are samples (except VOA and ONG) properly preserved?	Yes 🗹	No 🗌	1 - 000 T1 - 11	
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 🔽		
	27.5	- 200	# of preserved bottles checked	
12. Does paperwork match bottle labels?	Yes 🔽	No 🗌	for pH:	v >12 unlose noted)
(Note discrepancies on chain of custody)	Vec V	No 🗍	Adjusted?	- 12 uniess noted)
13. Are manyes conectly identified on on aim of custody?	Yes V	No 🗆		
45 Mars all baldies deserable to be made	You W	No 🗌	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 _ F	Phone E 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	6.8	Good	Yes			

Initial Accession     Under State     Lefendure     Rush       Initial Accession     Project Name:     Www.hallerwrormental.com       Initial Accession     Project Name:     MALYSIS LADORATORY       Initial Accession     Project Name:     Project Nameser:       Voc Descubled     Project Nameser:     Project Nameser:       Voc Description     Project Nameser:     Project Nameser:       Voc Description     Barter Nameser:     Inition     Project Nameser:       Voc Description     Barter Nameser:     Droject Nameser:     Project Nameser:       Voc Description     Droject Nameser:     Droject Nameser:     Project Nameser:       Voc Description     Droject Nameser:     Droject Nameser:     Project Nameser:       Voc Description     Droject Nameser:     Droject Nameser:     Project Nameser:       Nameser:     Droject Nameser:     Droject Nameser:     Droject Nameser:	iont. Condor	the state of the s							1							
Project Name:     Project Name:       Image:     Carlabed. NM 68220       Constant     Carlabed. NM 68220       Constant     Carlabed. NM 68220       Project Hanger:     Trakences RE - Albourgene. NM 67 105       Constant     Carlabed. NM 68220       Project Hanger:     Trakences RE - Albourgene. NM 67 105       Constant     Carlabed. NM 68220       Project Hanger:     Traken Negrant       Constant     Distribution       Distribution     Distribution       Constant     Distribution       Constant     Distribution       Distribution     Distr       Distr     Distribution	IGHT. COURSE	Miller And Ast	sociates	D Standard	C Rush			T		AL F	SI	SLA	BO	RAT	ORY	
aling         Address         201 S. Haleguero         Curuxu S. I.           Carisbaut. NM 882201         Project Hanger:         57 Samole Four         58 Soc Subscription         69 Hawkins NE         Address         201 Hawkins NE         Address         78 Soc Subscription         49 Hawkins NE         Address         69 Hawkins NE         Address         Address         69 Hawkins NE         Address         Addres         Addres         Addres				Project Name					Ň	w.hall	enviror	menta	Lcom			
Carlebed NM 6820     Carlebed NM 6820       Ooline H:     575-680-5531       Ooline H:     575-680-5531       Sampler Kindenengesoutemiliet.com     Project Hit       Sampler Kindenengesoutemiliet.com     Sampler Kindenengesoutemiliet.com       Sampler Kindenengesoutemiliet.com     Dolner       Sampler Kindenengesouten     Sampler Kindenengesouten       Sampler Kindenengesouten     Level A Full Validation       Sampler Kindenengesouten     Dolner       Sampler Kindenengesouten     Bartolie Kindenengesouten       Sampler Kindenengesouten     Local       A F     Local </td <td>alling Address:</td> <td>201 S. Halaç</td> <td>gueno</td> <td>(sund</td> <td>les 16</td> <td></td> <td>4</td> <td>901 Ha</td> <td>wkins</td> <td>' BN</td> <td>Albuqi</td> <td>'enbuer</td> <td>NM 8</td> <td>7109</td> <td></td> <td></td>	alling Address:	201 S. Halaç	gueno	(sund	les 16		4	901 Ha	wkins	' BN	Albuqi	'enbuer	NM 8	7109		
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Initial C-Taxit:         Incerning Incommission Coordination:         Project Manager:           VGC Preedeo::         VGC Preedeo::         VGC Preedeo::         VGC Preedeo::           VGC Preedeo::         VGC Preedeo::         VGC Preedeo::         VGC           VGC Preedeo::         VGC Preedeo::         VGC         VGC         VGC           VGC Preedeo::         VGC         VGC         VGC         VGC         VGC           VGC Preedeo::         VGC         VGC         VGC         VGC         VGC         VGC	none #:	575-689-535	-							Ar	alysis	Reque	est			
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Standard         Level A Full Validation           Correctiation:         Concertiation:           Date         Time           NETCA         Sample:           Sample:         Sample: <td>A/QC Package:</td> <td></td> <td></td> <td>Austin Weyar</td> <td>ŧ</td> <td></td> <td>1208 1921</td> <td>:əiQ/</td> <td></td> <td></td> <td>)S'*(</td> <td>s,80</td> <td></td> <td></td> <td></td> <td></td>	A/QC Package:			Austin Weyar	ŧ		1208 1921	:əiQ/			)S'*(	s,80				
Condition:         NELAP         Other         Sampler:         LCM           NELAP         Onlies:         X/es         NiciAP         Onlies:         X/es           NELAP         Onlies:         X/es         NiciAP         Onlies:         X/es           NELAP         Onlies:         X/es         NiciAP         Onlies:         X/es           Sample Request ID         Container         Preservative         L.3 of         Kentod 60.410.11           Tipe and #         Tipe         Tipe         Kentod 60.410.11         Kentod 60.416.11           Container         Container         Preservative         L.3 of         Kentod 60.416.11           Container         Container         Preservative         L.4 deducest 1D         Container           Container         Container         Preservative         L.4 deducest 1D         Container           Container         Container         Container         Preservative         L.4 deducest 00.56           Container         Container         Container         Preservative         L.4 deducest 10.00.50           Container         Container         Container         Verstrance         V         V           Container         Container         Container         Tranon	Standard		Level 4 (Full Validation)				3) s'	/sec			0dʻ	S PC				
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# APPENDIX B FORM C141 INITIAL/FINAL

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**

	<b>OPERATOR</b>	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: Gunner 16 State SWD #1	Facility Type: SWD		

Surface Owner: State	Mineral Owner: State	API No. 30-025-40890
	LOCATION OF RELEASE	

				LUCI				
Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
D	16	26S	34E	330'	North	330'	West	Lea

Latitude 32.0497322 Longitude -103.4822998

#### NATURE OF RELEASE

Type of Release:	Volume of Release:	Volume Re	covered:
Oil & Rain Water	0.25 bbls oil; 35 bbls rain	0 bbls oil;	0 bbls rain water
	water		
Source of Release:	Date and Hour of Occurrence:	Date and H	our of Discovery:
Illegal Dump	9/25/2015 10:00 am	9/25/2015	10:00 am
Was Immediate Notice Given?	If YES, To Whom?		
🛛 Yes 🗌 No 🗌 Not Required	Kellie Jones – NMOCD		
By Whom? Amanda Trujillo Davis	Date and Hour: Fri 9/25/2015 4:58	PM	
Was a Watercourse Reached?	If YES, Volume Impacting the Wa	tercourse.	
🗌 Yes 🖾 No			
If a Weters and I was stad Describe Fully, *			
If a watercourse was impacted, Describe Fully.*			
Describe Cause of Problem and Remedial Action Taken.*			
This release was caused by water hauler with Maverick Coating Services.	The driver was tasked with removing	g standing wa	ter from a recent rain from
containments and disposing at the SWD. The driver chose not to wait and	discharged the contents in his truck i	n the pasture 1	next to the SWD. Witnesses
reported the incident to the security department.			
Describe Area Affected and Cleanup Action Taken.*			
The release impacted the pasture adjacent to the pad. Soil samples were ta	ken from the impacted area.		
I hereby certify that the information given above is true and complete to the	he best of my knowledge and understa	and that nursu	ant to NMOCD rules and
regulations all operators are required to report and/or file certain release no	otifications and perform corrective ac	tions for relea	uses which may endanger
public health or the environment. The acceptance of a C-141 report by the	e NMOCD marked as "Final Report"	does not relie	ve the operator of liability
should their operations have failed to adequately investigate and remediate	e contamination that pose a threat to s	ground water,	surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report d	oes not relieve the operator of respon	sibility for con	npliance with any other
federal, state, or local laws and/or regulations.		·	
	OIL CONSER	VATION I	DIVISION
Atinille			<u> </u>
Signature:			
	Approved by Environmental Speciali	st:	
Printed Name: Amanda Trujillo Davis			
		<b>F</b> · · · <b>F</b>	
Ittle: Senior Environmental Coordinator	Approval Date:	Expiration D	ate:
E mail Address: atmiille@conche.com	Conditions of Approval		
E-man Audress. altumo@concho.com	Conditions of Approvar.		Attached
Date: October 9, 2015 Phone: 575-748-6040			

\* Attach Additional Sheets If Necessary



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

December 30, 2015

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

OrderNo.: 1512798

RE: Ganner 16 SWD

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 1 sample(s) on 12/16/2015 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 <u>www.hallenvironmental.com</u> 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,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

Analytical Report Lab Order 1512798

#### Hall Environmental Analysis Laboratory, Inc.

Date Reported: 12/30/2015

CLIENT: Souder, Miller & Associates			Client Sampl	e ID: GC	C-S	
Project: Ganner 16 SWD			Collection 1	Date: 12/	/10/2015 8:00:00 A	М
Lab ID: 1512798-001	Matrix:	SOIL	<b>Received</b>	Date: 12/	/16/2015 9:10:00 A	М
Analyses	Result	RL Qua	l Units	DF	Date Analyzed	Batch
EPA METHOD 8015M/D: DIESEL RANG	E ORGANIC	S			Anal	yst: <b>JME</b>
Diesel Range Organics (DRO)	210	100	mg/Kg	10	12/22/2015 1:10:44	PM 22852
Motor Oil Range Organics (MRO)	1000	510	mg/Kg	10	12/22/2015 1:10:44	PM 22852
Surr: DNOP	0	70-130 S	%REC	10	12/22/2015 1:10:44	PM 22852
EPA METHOD 8015D: GASOLINE RANG	GE				Anal	yst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	12/21/2015 12:12:37	PM 22857
Surr: BFB	82.2	66.2-112	%REC	1	12/21/2015 12:12:37	PM 22857
EPA METHOD 8021B: VOLATILES					Anal	yst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.099	mg/Kg	1	12/21/2015 12:12:37	PM 22857
Benzene	ND	0.050	mg/Kg	1	12/21/2015 12:12:37	PM 22857
Toluene	ND	0.050	mg/Kg	1	12/21/2015 12:12:37	PM 22857
Ethylbenzene	ND	0.050	mg/Kg	1	12/21/2015 12:12:37	PM 22857
Xylenes, Total	ND	0.099	mg/Kg	1	12/21/2015 12:12:37	PM 22857
Surr: 4-Bromofluorobenzene	108	80-120	%REC	1	12/21/2015 12:12:37	PM 22857

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

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 Page 1 of 5
- P Sample pH Not In Range
- RL Reporting Detection Limit

Client:	Souder,	Miller & As	ssociate	es							
Project:	Ganner	16 SWD									
Sample ID	MB-22852	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch	n ID: 22	852	F	RunNo: 3	1000				
Prep Date:	12/17/2015	Analysis D	ate: 12	2/22/2015	S	SeqNo: 9	48209	Units: <b>mg/K</b>	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	ND	10								
Motor Oil Rang	je Organics (MRO)	ND	50								
Surr: DNOP		9.6		10.00		95.7	70	130			
Sample ID	LCS-22852	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	n ID: 22	852	F	RunNo: 3	1000				
Prep Date:	12/17/2015	Analysis D	ate: 12	2/22/2015	S	SeqNo: 9	48239	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	57	10	50.00	0	114	65.8	136			
Surr: DNOP		5.0		5.000		99.1	70	130			
Sample ID	MB-22922	SampT	ype: ME	BLK	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	PBS	Batch	n ID: 22	922	F	RunNo: 3	1000				
Prep Date:	12/22/2015	Analysis D	ate: 12	2/22/2015	S	SeqNo: 9	48736	Units: %RE	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		9.3		10.00		93.0	70	130			
Sample ID	LCS-22922	SampT	ype: LC	s	Tes	tCode: E	PA Method	8015M/D: Die	esel Rang	e Organics	
Client ID:	LCSS	Batch	n ID: 22	922	F	RunNo: 3	1000				
Prep Date:	12/22/2015	Analysis D	ate: 12	2/22/2015	S	SeqNo: 9	48737	Units: %RE	C		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP		4.3		5.000		85.7	70	130			

#### **Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н 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
- В Analyte detected in the associated Method Blank
- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit

Client:	Souder, N	Miller & A	ssociate	es							
Project:	Ganner 1	6 SWD									
Sample ID	MB-22857	SampT	ype: MI	BLK	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID:	PBS	Batch	n ID: 22	857	F	RunNo: 3	0983				
Prep Date:	12/17/2015	Analysis D	Date: 12	2/21/2015	S	SeqNo: 94	47868	Units: mg/ł	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	ND	5.0					-			
Surr: BFB		870		1000		87.2	66.2	112			
Sample ID	LCS-22857	SampT	ype: LC	s	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID:	LCSS	Batch	n ID: 22	857	F	RunNo: 3	0983				
Prep Date:	12/17/2015	Analysis D	Date: 1	2/21/2015	S	SeqNo: 94	47869	Units: <b>mg/ł</b>	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	26	5.0	25.00	0	105	79.6	122			
Surr: BFB		950		1000		94.9	66.2	112			
Sample ID	1512798-001AMS	SampT	ype: M	S	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID:	GC-S	Batch	n ID: 22	857	F	RunNo: 3	0983				
Prep Date:	12/17/2015	Analysis D	Date: 12	2/21/2015	S	SeqNo: 94	47871	Units: <b>mg/ł</b>	٨g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Rang	ge Organics (GRO)	23	5.0	24.85	0	92.5	62.5	151			
Surr: BFB		980		994.0		98.1	66.2	112			
Sample ID	1512798-001AMS	D SampT	ype: M	SD	Tes	tCode: El	PA Method	8015D: Gase	oline Rang	e	
Client ID:	GC-S	Batch	n ID: 22	857	F	RunNo: 3	0983				
Prep Date:	12/17/2015	Analysis D	Date: 1	2/21/2015	S	SeqNo: 94	47872	Units: <b>mg/ł</b>	٨g		
											- ·
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Analyte Gasoline Rang	ge Organics (GRO)	Result 23	PQL 5.0	SPK value 24.85	SPK Ref Val	%REC 92.5	LowLimit 62.5	HighLimit 151	%RPD 0.0432	RPDLimit 22.1	Qual

#### **Qualifiers:**

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- 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

Client: Project:	Souder, N Ganner 1	Ailler & A 6 SWD	ssociate	es								
Sample ID	MB-22857	Samp	Гуре: МЕ	BLK	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	PBS	Batc	h ID: 22	857	F	RunNo: 3	0983					
Prep Date:	12/17/2015	Analysis [	Date: 12	2/21/2015	\$	SeqNo: 9	47896	Units: <b>mg/k</b>	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-but	yl ether (MTBE)	ND	0.10									
Benzene		ND	0.050									
Foluene		ND	0.050									
Ethylbenzene		ND	0.050									
Kylenes, Total		ND	0.10									
Surr: 4-Bron	nofluorobenzene	1.2		1.000		121	80	120			S	
Sample ID	LCS-22857	Samp	Гуре: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	LCSS	Batc	h ID: 22	857	F	RunNo: 3	0983					
Prep Date:	12/17/2015	Analysis [	Date: 12	2/21/2015	5	SeqNo: 9	47897	Units: mg/k	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-but	yl ether (MTBE)	1.1	0.10	1.000	0	107	67.2	121				
Benzene		0.98	0.050	1.000	0	97.6	80	120				
Foluene		0.98	0.050	1.000	0	98.0	80	120				
Ethylbenzene		0.99	0.050	1.000	0	98.8	80	120				
Kylenes, Total		3.0	0.10	3.000	0	100	80	120				
Surr: 4-Bron	nofluorobenzene	1.2		1.000		118	80	120				
Sample ID	1512798-001AMS	SampT	Гуре: <b>МS</b>	3	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	GC-S	Batc	h ID: 22	857	F	RunNo: 3	0983					
Prep Date:	12/17/2015	Analysis I	Date: 12	2/21/2015	S	SeqNo: <b>9</b>	47899	Units: <b>mg/k</b>	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-but	yl ether (MTBE)	0.98	0.099	0.9940	0	98.3	53.6	133				
Benzene		0.87	0.050	0.9940	0	87.9	69.6	136				
Foluene		0.96	0.050	0.9940	0	96.7	76.2	134				
Ethylbenzene		0.99	0.050	0.9940	0.006262	98.9	75.8	137				
Kylenes, Total		3.0	0.099	2.982	0.01660	101	78.9	133				
Surr: 4-Bron	nofluorobenzene	1.3		0.9940		127	80	120			S	
Sample ID	1512798-001AMS	<b>)</b> Samp1	Гуре: <b>МS</b>	SD	Tes	tCode: El	PA Method	8021B: Vola	tiles			
Client ID:	GC-S	Batc	h ID: 228	857	F	RunNo: 3	0983					
Prep Date:	12/17/2015	Analysis I	Date: 12	2/21/2015	S	SeqNo: 9	47900	Units: mg/k	٢g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-but	yl ether (MTBE)	0.91	0.099	0.9940	0	91.3	53.6	133	7.46	20		
Benzene		0.84	0.050	0.9940	0	84.1	69.6	136	4.48	20		
Foluene		0.89	0.050	0.9940	0	89.2	76.2	134	8.01	20		
		0 92	0.050	0 00/0	0 006262	Q1 Q	75.8	137	7 20	20		

#### **Qualifiers:**

Ethylbenzene

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Holding times for preparation or analysis exceeded Η
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- В Analyte detected in the associated Method Blank

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- Е Value above quantitation range
- J Analyte detected below quantitation limits
- Р Sample pH Not In Range
- RL Reporting Detection Limit

Souder, Miller & Associates

Project:	Ganner 16	5 SWD									
Sample ID	1512798-001AMSE	<b>)</b> SampTyp	e: M\$	SD	Test	Code: E	PA Method	8021B: Volat	tiles		
Client ID:	GC-S	Batch II	): <b>22</b>	857	R	unNo: 3	0983				
Prep Date:	12/17/2015	Analysis Dat	e: 12	2/21/2015	S	eqNo: 9	47900	Units: mg/k	ζg		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total		2.8	).099	2.982	0.01660	93.0	78.9	133	8.53	20	
Surr: 4-Brom	nofluorobenzene	1.2		0.9940		120	80	120	0	0	S

#### **Qualifiers:**

**Client:** 

- \* 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

ENVIRONMENTAL ANALYSIS LABORATORY Website:	4901 Aibuquerqu 45-3975 FAX: 5 www.hallenviro	Hawkins) 2, NM 871 05-345-41 pmental.co	NE 09 <b>St</b> 07 07	am	ple Log-In Check List	
Client Name: SMA-CARLSBAD Work Order I	Number: 15127	98			ReptNo: 1	
Received by/date: A 12/11/	15					1
Logged By: Ashley Gallegos 12/16/2015 9:1	0:00 AM		AZ			
Completed By: Ashley Gallegos 12/16/2015 4:2	5:35 PM		Ar			
Reviewed By:			0 1			
Chain of Custody						
A Custody	Vor		No		Not Present	
Custody seals intact on sample dottes?	Yes		No		Not Present	
2. How was the sample delivered?	Cour	ier	107-0			
3. How was the sample derivered:	000	net.				
Log In					10252	
4. Was an attempt made to cool the samples?	Yes	¥	No	Π.	NA 🗌	
		12			NA 🗍	
<ol><li>Were all samples received at a temperature of &gt;0° C to 6.0</li></ol>	°C Yes		NO I			
6. Sample(s) in proper container(s)?	Yes	~	No			
23 - 0495 - 25 - 24	11 a. a. 1. 1.	17				
7. Sufficient sample volume for indicated test(s)?	Yes		No			
Are samples (except VOA and ONG) property preserved?     Mas preserved;	Yes		No	~	NA 🗌	
2. Was preservative added to contest	165			19224		
10. VOA vials have zero headspace?	Yes		No		No VOA Vials 🗹	
<ol> <li>Were any sample containers received broken?</li> </ol>	Yes		No	~	# of preserved	
12 Dece paperuptic match battle labels?	Yes		No		bottles checked for pH:	
(Note discrepancies on chain of custody)	165	<u>(</u>			(<2 or >12 unless not	ed)
13. Are matrices correctly identified on Chain of Custody?	Yes		No		Adjusted?	
14, Is it clear what analyses were requested?	Yes		No		Chadred by:	
15. Were all holding times able to be met? (If no, notify customer for authorization.)	Yes		NO		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: eM	all 🗌 P	hone 🗌	Fax	In Person	
Regarding:						
Client Instructions:						
17. Additional remarks:						
18. Cooler Information						
Cooler No   Temp °C   Condition   Seal Intact   Sea	I No Seal D	ate	Signed E	Зу	4	
1 2.9 Good Yes					1	

ITAL	FORY							(N )	0 /	() s	Air Bubble		_				 	 			toos
		www.hallenvironmental.com	4901 Hawkins NE - Albuquerque, NM 87109	Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	s, (*09 (/) (/) (/) (/) (/) (/) (/) (/)	5 bCB 'bO <sup>4'</sup> ? (G98 c (G98 c (805	1, 8082 1, 8082 1, 10 1,	+ + + + + + + + + + + + + + + + + + +	181 182 3 (C bod bod bod bod bod bod bod bod bod f f f f f f f f f f f f f f f f f f f	M + X3T8 M + X3T8 R + X3T8 R + X978 R + X978 M + X378 M +	X							Remarks:		a lovib dana add an bootadan ubacıla ad III att butanının turun adır. a
Turn-Around Time:	tu standard 🗆 Rush	Project Name:		Project #:	CUMPRE 16 SWU	Project Manager:	Austin Weyant	Sampler: LCM	On lce: 🛛 🗹 Yes 🔄 🔲 No	Sample Temperature: 2. 4	ContainerPreservativeHEAL No.TypeType1000000000000000000000000000000000000	100- Zeb							Received by: Date Time Dec. Plant 12/10/15 09/10	Received by: Date Time	
Chain-of-Custody Record	Yurs :		19 Address: 28 ( 5, Halachan	The Contract, NM	e#: 574 661-5351	or Fax#:	C Package: ۲ ا evel 4 (Full Validation)	Aditation	ELAP 🗆 Other	JD (Type)	e Time Matrix Sample Request ID	6800 Sal GC-5							Time: Relinquished by:	Time: Relinquished by:	
J	Client:		Mailinç		Phone	email	QA/QC	Accre			Date	10-10-10-	·						Date:	Date:	

data will be clearly notated on the analytical repo If necessary, samples submitted to Hail Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted