



February 7, 2018

#5E26784-BG4

NMOCD District II
Mike Bratcher
811 S. First St.
Artesia, NM 88210

SUBJECT: SOIL REMEDIATION WORK PLAN FOR THE GOLDEN D FEDERAL #004 (2RP-4551)
RELEASE SITE, EDDY COUNTY, NEW MEXICO

Dear Mr. Bratcher:

On behalf of XTO Energy, Inc. (XTO), Souder, Miller & Associates (SMA) has prepared this WORK PLAN that describes the assessment, initial delineation and proposed remediation for a release associated with the Golden D Federal #004 (2RP-4551). The site is in UNIT E, SECTION 16, TOWNSHIP 21S, RANGE 29E, NMPM, Eddy County, New Mexico, on Federal and State land. Figure 1 illustrates the vicinity and location of the site. Table 1, below, summarizes information regarding the release.

Table 1: Release Information and Site Ranking	
Name	Golden D Federal #004
Company	XTO Energy Inc
Incident Number	2RP-4551
API Number	30-015-35636
Location	32.481906, -103.9908092
Estimated Date of Release	12/21/2017
Date Reported to NMOCD	12/21/2017
Land Owner	BLM/State
Reported To	NMOCD District II
Source of Release	Flow Line
Released Material	Produced Water
Released Volume	26 bbl
Recovered Volume	0 bbl
Net Release	26 bbl
Nearest Waterway	Old Indian Draw is approximately 5 miles south of location
Depth to Groundwater	Estimated to be greater than 100'
Nearest Domestic Water Source	Greater than 1,000 feet
NMOCD Ranking	0
SMA Response Dates	12/21/2017 & 1/15/2018

1.0 Background

On December 21, 2017, a leak formed on the steel surface flowline of the Golden D Federal #004 pipeline due to a loose hammer union. The release impacted approximately 4,988 square feet of lease road that includes both federal and state surface.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 13 miles east of Carlsbad, with an elevation of approximately 3,344 feet above sea level. SMA searched the New Mexico State Engineer's Office (NMOSE) online water well database for water wells in the vicinity of the release. Several wells are located within a three-mile radius of the site, all of which have a depth of groundwater greater than 100 feet. After further 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).

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

Table 2.

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

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

3.0 Release Characterization

On December 21, 2017, SMA field personnel assessed the release area and collected delineation samples. Four sample locations along the flow path were augured by hand to a maximum depth of two feet bgs. Soil samples were field-screened for chlorides with a mobile titration unit (EPA 4500).

On January 15, 2018, SMA field personnel returned to the site to further delineate vertical contamination at sample locations L1 and L2. These locations were augured by hand to a maximum of three feet bgs due to the confining layer of caliche. The soil samples were again field-screened for chlorides with a mobile titration unit (EPA 4500).

All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for MRO, DRO, and GRO by EPA Method 8015D (L1 at 0.5 feet), BTEX by EPA Method 8021 (L1 at 0.5 feet), and Chlorides by Method 300. Sample locations are depicted on Figure 2. All laboratory results are summarized in Table 3. Laboratory reports are included in Appendix C.

Hydrocarbon impacts are below NMOCD screening RRLs, and chloride impacts appear to decrease with depth. Soil contaminant concentrations are illustrated in Figure 2.

4.0 Proposed Soil Remediation Work Plan

SMA proposes, after approval from area utilities via 811, to excavate the impacted area to approximately 4 feet bgs surrounding the sample points L1 and L2 and approximately 1-foot bgs for the remainder of the release area. SMA will continuously guide the excavation activities by collecting soil samples for field screening with a mobile EC unit (EPA 4500). All contaminated soils will be removed and replaced with clean backfill material to return the surface to previous contours. The contaminated soil will be transported for proper disposal at an NMOCD permitted disposal facility. Closure samples will be collected at the final depth of excavation. Upon confirmation of remediation, SMA will submit a closure report to NMOCD.

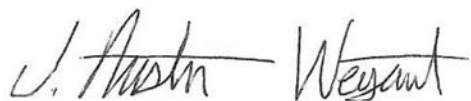
5.0 Scope and Limitations

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

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-8801 or Shawna Chubbuck at 505-325-7535.

Submitted by:
SOUDER, MILLER & ASSOCIATES

Reviewed by:



Austin Weyant
Project Scientist



Shawna Chubbuck
Senior Scientist

ATTACHMENTS:

Figures:

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Site and Sample Location Map

Tables:

Table 3: Summary of Sample Results

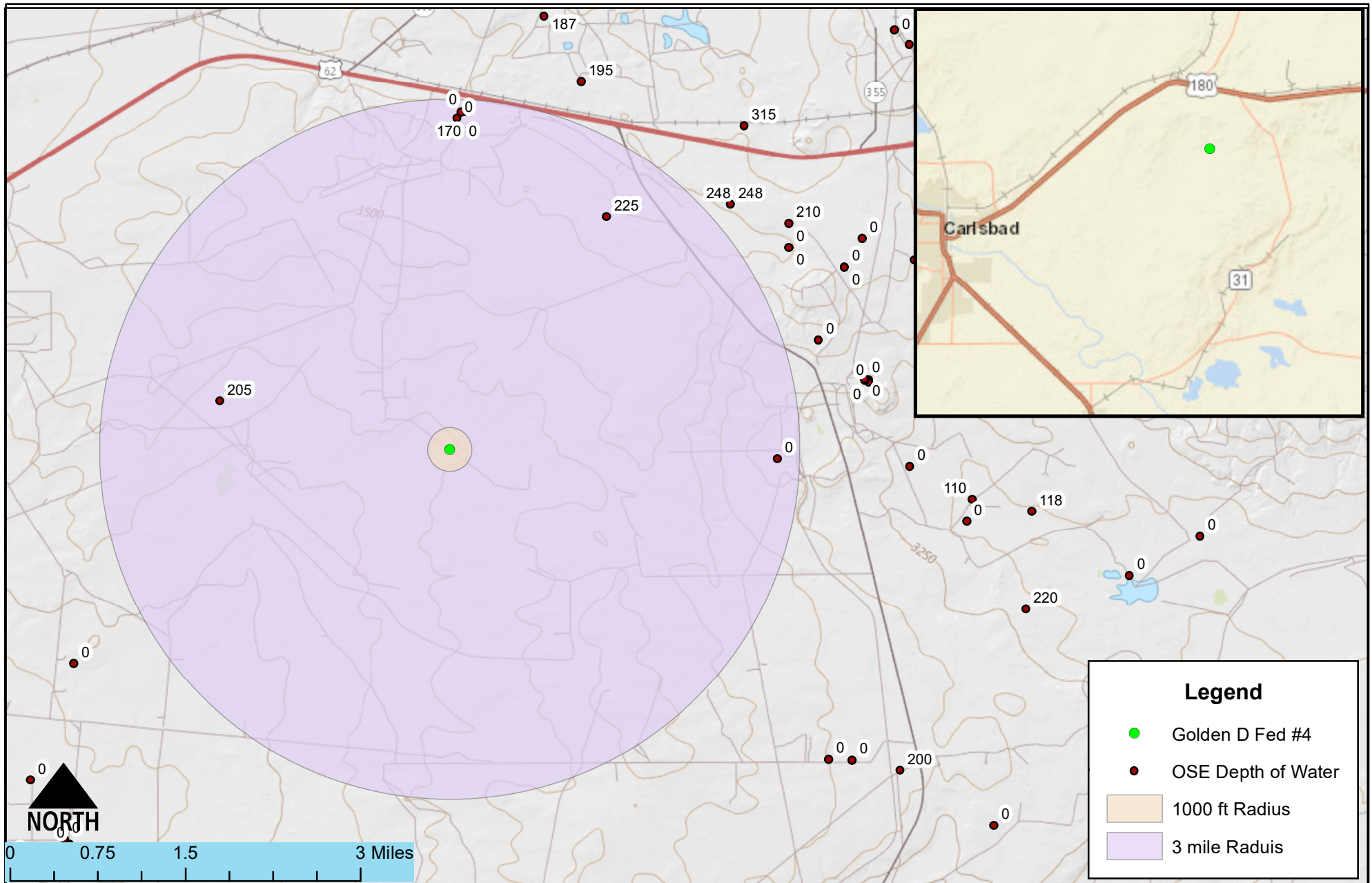
Appendices:

Appendix A: Form C141 Initial

Appendix B: NMOSE Wells Report

Appendix C: Laboratory Analytical Reports

FIGURE 1
VICINITY AND NMOSE
DATA MAP



Vicinity and Well Head Protection Map
Golden D Federal #4 - XTO
S 16-T21S-R29E, New Mexico

Figure 1

Date Saved:
1/10/2018

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

Drawn **Heather Patterson**
Checked _____
Approved _____



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

FIGURE 2
SITE AND SAMPLE
LOCATION MAP



Legend

- Sample Locations
- Release Area


Site and Sample Location Map Golden D4 Road- XTO S16,17 T21S ,R29E Eddy County, New Mexico					Figure 2	
Date Swed: 1/25/2018	By: _____		Date: _____		Revisions	
	By: _____		Date: _____		Descr: _____	
	By: _____		Date: _____		Descr: _____	
	By: _____		Date: _____		Descr: _____	
Copyright 2015 Souder, Miller & Associates - All Rights Reserved			Drawn <u>Lucas Middleton</u>		 201 South Halaguena Street Carlsbad, New Mexico 88221 (575) 689-7040 www.soudermiller.com Serving the Southwest & Rocky Mountains	
Checked _____						
Approved _____						



TABLE 3
SUMMARY SAMPLE RESULTS

Golden D Federal #004

Table 3.

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX mg/Kg	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 0				50 mg/Kg	10 mg/Kg				5000 mg/Kg	
L1	12/21/2017	0.5	excavate	<0.24	<0.24	14	150	71	235	14000
	12/21/2017	1	excavate	--	--	--	--	--	--	7000
	1/15/2018	2	excavate	--	--	--	--	--	--	1700
	1/15/2018	3	excavate	--	--	--	--	--	--	940
L2	12/21/2017	0.5	excavate	--	--	--	--	--	--	8400
	12/21/2017	1	excavate	--	--	--	--	--	--	8700
	12/21/2017	2	excavate	--	--	--	--	--	--	4900
	1/15/2018	2.5	excavate	--	--	--	--	--	--	2500
	1/15/2018	3	excavate	--	--	--	--	--	--	800
L3	12/21/2017	0.5	excavate	--	--	--	--	--	--	7600
	12/21/2017	1	excavate	--	--	--	--	--	--	980
	12/21/2017	2	in-situ	--	--	--	--	--	--	380
L4	12/21/2017	0.5	excavate	--	--	--	--	--	--	7100
	12/21/2017	1	excavate	--	--	--	--	--	--	750
	12/21/2017	2	in-situ	--	--	--	--	--	--	460
BG1	12/21/2017	1	in-situ	--	--	--	--	--	--	<30

"--" = Not Analyzed

APPENDIX A
FORM C141 INITIAL

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

NM OIL CONSERVATION

ARTESIA DISTRICT

State of New Mexico

Energy Minerals and Natural Resources

JAN 04 2018

Oil Conservation Division

1220 South St. Francis Dr.

Santa Fe, NM 87505

RECEIVED

NM OIL CONSERVATION

ARTESIA DISTRICT

Form C-141

Revised April 3, 2017

JAN 04 2018
Submit Copy to appropriate District Office in accordance with 19.15.29 NMAC.

RECEIVED

Release Notification and Corrective Action

NAB1800936367

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: XTO Energy	Contact: Amy C. Ruth
Address: 522 W. Mermod, Suite 704 Carlsbad, N.M. 88220	Telephone No: 432-661-0571
Facility Name: Golden D Federal #004 (location of well is on Federal, location of release point is on NM State Land)	Facility Type: Exploration and Production

Surface Owner: Federal	Mineral Owner: Federal	API No: 30-015-35636
------------------------	------------------------	----------------------

see above - release on SLO land + BLM?

LOCATION OF RELEASE

Unit Letter E	Section 16	Township 21S	Range 29E	Feet from the 1745	North/South Line North	Feet from the 18	East/West Line West	County Eddy
------------------	---------------	-----------------	--------------	-----------------------	---------------------------	---------------------	------------------------	----------------

Latitude 32.481906° Longitude -103.998092° NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 26 bbls	Volume Recovered 0 bbls
Source of Release Flow Line	Date and Hour of Occurrence 12/21/2017 time unknown	Date and Hour of Discovery 12/21/2017 9 am
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher/Crystal Weaver (NMOCD), Shelly Tucker/Jim Amos (BLM)	
By Whom? Kyle Littrell	Date and Hour: 12/21/2017 3:35 pm by email	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.*
N/A

Describe Cause of Problem and Remedial Action Taken.*
Steel surface flow line developed a leak due to a loose hammer union. The connection was tightened.

Describe Area Affected and Cleanup Action Taken.*
The release impacted approximately 4,988 square feet of lease road running NW to SE on the northeast side of the Golden Lane 17 Federal #1 well pad. The release extended into NM State land at its east end across the road intersection. A remediation contractor has been contacted to assist with the delineation and remediation effort.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:		OIL CONSERVATION DIVISION	
Printed Name: Amy C. Ruth		Approved by Environmental Specialist:	
Title: Environmental Coordinator		Approval Date: 1/8/18	Expiration Date: N/A
E-mail Address: Amy_Ruth@xtoenergy.com		Conditions of Approval: see attached	Attached: 3RP-4551
Date: 1/4/2018 Phone: 432-661-0571			

* Attach Additional Sheets If Necessary

1/8/18 AB

APPENDIX B

NMOSE WELLS REPORT



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

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

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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

(In feet)

POD Number	POD Sub-Code	basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth Well	Depth Water	Water Column
CP 00516	CP	ED		4	4	4	12	21S	28E	590901	3594984*	3277	275	205	70
CP 00430	CP	ED		1	4	1	03	21S	29E	596221	3597558*	3874	360	225	135
CP 00419	CP	ED			4	3	32	20S	30E	594250	3599003*	4694	262	170	92

Average Depth to Water: **200 feet**

Minimum Depth: **170 feet**

Maximum Depth: **225 feet**

Record Count: 3

UTMNAD83 Radius Search (in meters):

Easting (X): 594108.67

Northing (Y): 3594310.44

Radius: 5000

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

APPENDIX C
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

January 05, 2018

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

RE: Golden D4 Road

OrderNo.: 1712E24

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 11 sample(s) on 12/23/2017 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 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L1-0.5

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-001

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	14000	750		mg/Kg	500	1/3/2018 7:21:31 PM	35804
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	150	10		mg/Kg	1	12/28/2017 8:49:02 PM	35723
Motor Oil Range Organics (MRO)	71	51		mg/Kg	1	12/28/2017 8:49:02 PM	35723
Surr: DNOP	95.9	70-130		%Rec	1	12/28/2017 8:49:02 PM	35723
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	14	4.8		mg/Kg	1	12/29/2017 1:57:50 AM	35711
Surr: BFB	123	15-316		%Rec	1	12/29/2017 1:57:50 AM	35711
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	12/29/2017 1:57:50 AM	35711
Benzene	ND	0.024		mg/Kg	1	12/29/2017 1:57:50 AM	35711
Toluene	ND	0.048		mg/Kg	1	12/29/2017 1:57:50 AM	35711
Ethylbenzene	ND	0.048		mg/Kg	1	12/29/2017 1:57:50 AM	35711
Xylenes, Total	ND	0.097		mg/Kg	1	12/29/2017 1:57:50 AM	35711
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	12/29/2017 1:57:50 AM	35711

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L1-1

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-002

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7000	300		mg/Kg	200	1/3/2018 7:33:56 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-0.5

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-003

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	8400	750		mg/Kg	500	1/3/2018 7:46:21 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-1

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-004

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	8700	750		mg/Kg	500	1/3/2018 7:58:45 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L2-2

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-005

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	4900	300		mg/Kg	200	1/3/2018 8:11:10 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-0.5

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-006

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7600	750		mg/Kg	500	1/3/2018 8:23:34 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1712E24**

Date Reported: **1/5/2018**

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-1

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-007

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	980	30		mg/Kg	20	1/2/2018 8:03:05 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L3-2

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-008

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	380	30		mg/Kg	20	1/2/2018 8:15:30 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-0.5

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-009

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	7100	750		mg/Kg	500	1/3/2018 8:35:59 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1712E24

Date Reported: 1/5/2018

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-1

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-010

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	750	30		mg/Kg	20	1/2/2018 8:40:19 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1712E24**

Date Reported: **1/5/2018**

CLIENT: Souder, Miller & Associates

Client Sample ID: L4-2

Project: Golden D4 Road

Collection Date: 12/21/2017 10:50:00 AM

Lab ID: 1712E24-011

Matrix: SOIL

Received Date: 12/23/2017 8:30:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst: CJS	
Chloride	460	30		mg/Kg	20	1/2/2018 8:52:43 PM	35804

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712E24

05-Jan-18

Client: Souder, Miller & Associates

Project: Golden D4 Road

Sample ID	MB-35804		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	35804		RunNo:	48126				
Prep Date:	1/2/2018		Analysis Date:	1/2/2018		SeqNo:	1545516		Units:		mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-35804		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 35804		RunNo: 48126					
Prep Date:	1/2/2018		Analysis Date: 1/2/2018		SeqNo: 1545517		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.4	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
PQL Practical Quantitative Limit
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
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712E24

05-Jan-18

Client: Souder, Miller & Associates

Project: Golden D4 Road

Sample ID	LCS-35723		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 35723		RunNo: 48061					
Prep Date:	12/27/2017		Analysis Date: 12/28/2017		SeqNo: 1540950		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	95.6	73.2	114			
Surr: DNOP	4.4		5.000		87.5	70	130			

Sample ID	MB-35723		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 35723		RunNo: 48061					
Prep Date:	12/27/2017		Analysis Date: 12/28/2017		SeqNo: 1540955		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	8.9		10.00		88.7	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
PQL Practical Quantitative Limit
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
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712E24

05-Jan-18

Client: Souder, Miller & Associates

Project: Golden D4 Road

Sample ID	MB-35711		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 35711		RunNo: 48084					
Prep Date:	12/26/2017		Analysis Date: 12/28/2017		SeqNo: 1541238		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	780		1000		77.6	15	316			

Sample ID	LCS-35711		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 35711		RunNo: 48084					
Prep Date:	12/26/2017		Analysis Date: 12/28/2017		SeqNo: 1541239		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	108	75.9	131			
Surr: BFB	980		1000		97.5	15	316			

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
PQL Practical Quantitative Limit
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
W Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1712E24

05-Jan-18

Client: Souder, Miller & Associates

Project: Golden D4 Road

Sample ID	MB-35711		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 35711		RunNo: 48084					
Prep Date:	12/26/2017		Analysis Date: 12/28/2017		SeqNo: 1541278		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.90		1.000		90.4	80	120			

Sample ID	LCS-35711		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 35711		RunNo: 48084					
Prep Date:	12/26/2017		Analysis Date: 12/28/2017		SeqNo: 1541279		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.92	0.10	1.000	0	91.7	70.1	121			
Benzene	0.89	0.025	1.000	0	88.7	77.3	128			
Toluene	0.91	0.050	1.000	0	90.5	79.2	125			
Ethylbenzene	0.89	0.050	1.000	0	89.5	80.7	127			
Xylenes, Total	2.7	0.10	3.000	0	91.2	81.6	129			
Surr: 4-Bromofluorobenzene	1.0		1.000		101	80	120			

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
PQL Practical Quantitative Limit
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
W Sample container temperature is out of limit as specified



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: 1712E24

RcptNo: 1

Received By: Andy Freeman 12/23/2017 8:30:00 AM

Completed By: Michelle Garcia 12/26/2017 9:30:08 AM

Reviewed By:

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	2.0	Good	Yes			



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

January 24, 2018

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

RE: Golden Federal Road

OrderNo.: 1801836

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 1/17/2018 for the analyses presented in the following report.

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

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

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

Analytical ReportLab Order: **1801836**Date Reported: **1/24/2018****Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Souder, Miller & Associates
Project: Golden Federal Road**Lab Order:** 1801836**Lab ID:** 1801836-001**Collection Date:** 1/15/2018 10:08:00 AM**Client Sample ID:** L1-2'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	1700	75		mg/Kg	50	1/23/2018 7:56:47 PM	36110

Lab ID: 1801836-002**Collection Date:** 1/15/2018 10:47:00 AM**Client Sample ID:** L1-3'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	940	30		mg/Kg	20	1/19/2018 4:10:35 PM	36110

Lab ID: 1801836-003**Collection Date:** 1/15/2018 11:34:00 AM**Client Sample ID:** L2-2.5'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	2500	75		mg/Kg	50	1/23/2018 8:09:11 PM	36110

Lab ID: 1801836-004**Collection Date:** 1/15/2018 12:04:00 PM**Client Sample ID:** L2-3'**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch ID
EPA METHOD 300.0: ANIONS Analyst: MRA							
Chloride	800	30		mg/Kg	20	1/19/2018 4:35:24 PM	36110

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1801836

24-Jan-18

Client: Souder, Miller & Associates

Project: Golden Federal Road

Sample ID	MB-36110		SampType: mblk		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 36110		RunNo: 48569					
Prep Date:	1/19/2018		Analysis Date: 1/19/2018		SeqNo: 1563719		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-36110		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 36110		RunNo: 48569					
Prep Date:	1/19/2018		Analysis Date: 1/19/2018		SeqNo: 1563721		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.2	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
PQL Practical Quantitative Limit
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
W Sample container temperature is out of limit as specified



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: 1801836

RcptNo: 1

Received By: Isaiah Ortiz

1/17/2018 9:50:00 AM

IO

Completed By: Sophia Campuzano

1/17/2018 10:19:31 AM

Sophia Campuzano

Reviewed By:

And

1/17/18

Chain of Custody

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

Log In

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

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

Special Handling (if applicable)

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

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Yes			

Chain-of-Custody Record

Client: SMA - Carlsbad

Mailing Address: 201 S. Haragueno

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush

Project Name:

Golden Federal Road

Project #:

Project Manager:

Austin Weyant

Sampler: MPS

On Ice: ☒ Yes ☐ No

Sample Temperature: 16-10 (F) 0.4

Container Type and #

Preservative Type

HEAL No.

1801836

-001

-002

-003

-004

Date: 11/15/18 Time: 10:08

Date: " Time: 10:47

Date: " Time: 11:34

Date: " Time: 12:04

Relinquished by: M. T. Arrian

Relinquished by: "

Relinquished by: "

Relinquished by: "

Received by: [Signature]

Received by: "

Received by: "

Received by: "

Date: 11/16/18 Time: 0800

Date: 11/17/18 Time: 0950

Remarks: XTO



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 + TMB's (8021)

BTEX + MTBE + TPH (Gas only)

TPH 8015B (GRO / DRO / MRO)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

