

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised August 8, 2011

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

## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company <b>Enterprise Field Services LLC</b>	Contact <b>Alena Miro</b>
<b>PO Box 4324, Houston, TX 77210</b>	Telephone No. <b>575-628-6802</b>
Facility Name <b>Poker Lake Discharge Line</b>	Facility Type: <b>Natural Gas Pipeline</b>
Surface Owner <b>BLM</b>	Mineral Owner <b>NA</b>
	Lease No. <b>NA</b>

### LOCATION OF RELEASE


Unit Letter <b>H</b>	Section <b>19</b>	Township <b>24S</b>	Range <b>30E</b>	Feet from the <b>465</b>	North/South Line <b>South</b>	Feet from the <b>431</b>	East/West Line <b>East</b>	County <b>Eddy</b>
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Latitude: N 32.204391 Longitude: W -103.913601

### NATURE OF RELEASE

Type of Release <b>Natural Gas and Pipeline Liquids</b>	Volume of Release: <b>230 MSCF and 4 bbls liquids</b>	Volume Recovered: <b>3 bbls liquids</b>
Source of Release <b>Pipeline release</b>	Date and Hour of Occurrence <b>11/06/2016 @ 11:45 MST</b>	Date and Hour of Discovery <b>11/06/2016 @ 11:45 MST</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* <b>Natural gas and pipeline liquids were released due to a pipeline leak. Pipeline segment was isolated, blown down, and repaired following a standard one-call. Approximately 4 bbls of liquid was released and 3 bbls were recovered during initial remediation activities.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>A liquid spill of approximately 4bbls of pipeline liquids occurred as part of the leak and 3 bbls were recovered. Remediation actions followed the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015).</b>		
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.		

### OIL CONSERVATION DIVISION

Signature: 	Approved by District Supervisor:	
Printed Name: <b>Jon E. Fields</b>	Approval Date:	Expiration Date:
Title: <b>Director, Field Environmental</b>	Conditions of Approval:	
E-mail Address: <b>jefields@eprod.com</b>	Attached <input type="checkbox"/>	
Date: <b>5-9-19</b> Phone: <b>713-381-6684</b>		

\* Attach Additional Sheets If Necessary

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## Release Notification and Corrective Action

### OPERATOR

☐ Initial Report ☒ Final Report

Name of Company <b>Enterprise Field Services, LLC</b>	Contact <b>Alena Miro</b>
<b>PO Box 4324, Houston, TX 77210</b>	Telephone No. <b>575-628-6802</b>
Facility Name <b>Poker Lake Discharge ROW</b>	Facility Type: <b>Natural Gas Pipeline</b>
Surface Owner <b>BLM</b>	Mineral Owner <b>NA</b>
	Lease No. <b>NA</b>

### LOCATION OF RELEASE

Unit Letter <b>I</b>	Section <b>19</b>	Township <b>24S</b>	Range <b>30E</b>	Feet from the <b>350</b>	North/South Line <b>North</b>	Feet from the <b>600</b>	East/West Line <b>East</b>	County <b>Eddy</b>
-------------------------	----------------------	------------------------	---------------------	-----------------------------	----------------------------------	-----------------------------	-------------------------------	-----------------------

Latitude: N 32.202058 Longitude: W -103.914086

### NATURE OF RELEASE

Type of Release <b>Natural Gas and Pipeline Liquids</b>	Volume of Release: <b>235 MSCF and 10 bbls</b>	Volume Recovered: <b>NA</b>
Source of Release <b>Pipeline release</b>	Date and Hour of Occurrence <b>4/27/2017 @ 14:40 MST</b>	Date and Hour of Discovery <b>4/27/2017 @ 14:40 MST</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*



Describe Cause of Problem and Remedial Action Taken.\*

**Natural gas and pipeline liquids were released due to a pipeline leak. Pipeline segment was isolated, blown down, and repaired following a standard one-call. Approximately 10 bbls of liquid were released.**

Describe Area Affected and Cleanup Action Taken.\*

**A liquid spill of approximately 10bbls of pipeline liquids occurred as part of the leak. Remediation actions followed the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015).**

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Jon E. Fields</b>	Approved by District Supervisor: 	
Title: <b>Director, Field Environmental</b>	Approval Date: <b>5/4/2023</b>	Expiration Date:
E-mail Address: <b>jefields@eprod.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>5-9-19</b> Phone: <b>713-381-6684</b>		

\* Attach Additional Sheets If Necessary



Souder, Miller & Associates ♦ 201 S. Halagueno St. ♦ Carlsbad, NM 88220  
(575) 689-8801

November 29, 2017

#5E26025 BG6

NMOCD District II  
Mike Bratcher  
811 S. 1<sup>st</sup> Street  
Artesia, New Mexico 88210

SUBJECT: SOIL REMEDIATION CLOSURE REPORT FOR INCIDENT 2RP-3997 and 2RP-4204  
POKER LAKE DISCHARGE LINE, EDDY COUNTY, NEW MEXICO

Dear Mr. Bratcher:

On behalf of Enterprise Field Services, LLC, Souder, Miller & Associates (SMA) has prepared this CLOSURE REPORT that describes the assessment, initial delineation and remediation for a release associated with the Poker Lake Discharge Line. The site is located in UNIT LETTER I, SECTION 19, TOWNSHIP 24S, RANGE 30E, NMPM, Eddy County, New Mexico, on federal 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	Poker Lake Discharge Line
Company	Enterprise Field Services, LLC
Incident Numbers	2RP-3997, 2RP-4204
Facility Numbers	fAB1632138322, fAB1713229995
Location	32.201, -103.914
Estimated Date of Release	11/6/2016, 4/27/2017
Date Reported to NMOCD	11/14/2016, 5/9/2017
Land Owner	Federal
Reported To	NM Oil Conservation Division (NMOCD)
Source of Release	Buried Pipeline
Released Material	Natural Gas and Pipeline Liquids
Released Volume	465 MSCF and 14 bbls Pipeline Liquids
Recovered Volume	3 bbls Pipeline liquid
Net Release	465 MSCF and 11 bbls Pipeline Liquids
Nearest Waterway	Pecos River is approximately 3 miles West
Depth to Groundwater	Estimated to be greater than 100'
Nearest Domestic Water Source	Less than 1,000 feet
NMOCD Ranking	10
SMA Response Dates	Multiple

Poker Lake 12" Discharge Line  
November 29, 2017

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## **1.0 Background**

On November 6, 2016, the Enterprise discharge line failed causing the release of 4 bbls of produced water and 230 MSCF of gas. On April 27, 2017, on the same line approximately 400 feet North of the initial release, 10 bbls of produced water and 235 MSCF were released due to failure. The combined release area was approximately 400 feet long by less than 5 feet wide. Both releases, and their flow paths, are shown in Figure 2a. The initial C-141 forms are included in Appendix A.

## **2.0 Site Ranking and Land Jurisdiction**

The release site is located approximately 9.29 miles southeast of the Town of Malaga, New Mexico at an elevation of approximately 3,204 feet above sea level. The first release point occurred within an unnamed arroyo, that is not a tributary of the Pecos River. After evaluation of the site using aerial photography and topographic maps, and searching the New Mexico Office of the State Engineer's water well database, depth to groundwater is estimated to be greater than 100 feet below ground surface (bgs). Figure 1 depicts the site vicinity and Figures 2a-2c depict the site location.

SMA searched the New Mexico State Engineer's Office (NMOSE) online database for water wells in the vicinity of the release. One domestic water well is located within 1,000 feet but greater than 200 feet from the release site. The primary use of the water well is to provide stock water for stock of less than five households. The physical location of this release is on BLM property and under the jurisdiction of the New Mexico Oil Conservation Division (NMOCD).

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 in Table 2 are 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.

<b>Soil Remediation Standards</b>	<b>0 to 9</b>	<b>10 to 19</b>	<b>&gt;19</b>
<b>Benzene</b>	<b>10 PPM</b>	<b>10 PPM</b>	<b>10 PPM</b>
<b>BTEX</b>	<b>50 PPM</b>	<b>50 PPM</b>	<b>50 PPM</b>
<b>TPH</b>	<b>5000 PPM</b>	<b>1000 PPM</b>	<b>100 PPM</b>

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

Poker Lake 12" Discharge Line  
November 29, 2017

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### **3.0 Release Characterization**


#### **A. First Release (2RP-3997)**

On November 6, 2016, at the request of Enterprise, SMA responded to the release, and worked with the initial emergency action Enterprise Field Services crew, collecting assessment samples and stabilizing the release. Figure 2b depicts the path of the release, all pipelines located in the vicinity of the release, and soil and water sample collection points as described below. The pipeline liquid release flowed down the right of way (ROW) into a small arroyo that crosses multiple buried pipeline ROWs and under four surface production flowlines. The arroyo or unnamed surface drainage terminates into an earthen cattle stock tank approximately 500ft from the release point.

The first action taken was to excavate the area of the release, to repair the damaged pipeline. While that was occurring, SMA collected background and downstream samples, to determine whether the release had traveled down the arroyo. Samples BG1 and BG2 were collected at surface grade and are background samples collected from the unaffected ROW. The initial samples collected, soil samples L1, L2 and SW1 are from the pipeline ROW in the area of potential impact associated with the release beyond the immediate location of the pipeline. Sample SW1 was collected from approximately 2 feet below ground surface (bgs) in the initial excavation made to repair the 12" pipeline. Aliquots of Samples L1 and L2 were field screened with a calibrated Photo Ionization Detector (PID), with the remainder of the samples sent under standard chain of custody protocol to Hall Environmental Analysis Laboratory. Table 3a, First Release Summary of Laboratory Results provides the results of the summary of the laboratory analytical results for all samples.

As part of the initial actions, an intercept berm was placed across the drainage to prevent any flow into the earthen stock tank. A collection sump was constructed up gradient of the intercept berm to collect any flowing liquids. At 6:45pm, SMA field personnel placed a call to Shelly Tucker at the BLM and notified her that vacuum trucks could not drive into the arroyo to recover the lost fluids to prevent pipeline liquids from flowing further down the drainage. With a gathering thunderstorm to the east of the location, SMA requested that a vacuum truck with fresh water be mobilized to the site. At that time, SMA and Enterprise Field Service field personnel used approximately 75BBL of fresh water (Field EC of 0.02mS) to flush the released pipeline liquids down the arroyo into the sump excavated downgradient. The pipeline liquids and water were recovered from the sump and sent to an SWD for proper disposal. The release point was excavated and a clamp placed over the affected pipe. All affected soils were placed on plastic and a berm was placed at sample point L2 to prevent any further migration of remaining pipeline liquids down the ROW.

On November 16, 2016, after the rain events of the prior week, SMA field personnel returned to the location to resample around the pipeline at the source of the release, down the pipeline ROW, the arroyo, and in the cattle stock tank. Assessment samples at the location were taken by courier under a chain of custody to Hall Environmental Analysis Laboratories on November 21, 2016. As recorded in Table 3a, assessment samples were collected at approximately 0.5 feet bgs, with samples from the arroyo and pipeline ROW. Aqueous sample W1 was collected from the sump, W2 was collected from the flow path during flush, and W3 from the cattle stock tank.

After these initial responses, and laboratory results were received, SMA and Enterprise determined that the arroyo between the excavation and flush point had been impacted as far as sample L3 (approximately XX  from release). This is a very rocky area, which crosses two buried pipelines. Laboratory analysis also indicated that soils downstream from the flush point (where the fresh water was put in to flush down the draw) meet regulatory standards. Field soil samples collected, both pre-flush and post-flush showed



Poker Lake 12" Discharge Line  
November 29, 2017

Page 4 of 5

a reduction in chlorides by a factor of 10 (see Table 3a).

The water samples collected from the accumulated water in the sump and cattle stock tank yielded results below NMOCD closure standards for benzene, combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and TPH, noted in table 3a.

It was determined that further excavation was necessary in the area of the release. The excavation work was scheduled for Spring of 2017, and is discussed in Section 4.0, Soil Remediation Summary, below.

### **B. Second Release (2RP-4204)**

On April 27, 2017, a second release occurred as a rupture along the same pipeline approximately 400 feet North of the first release. This release pooled in the unnamed arroyo and flowed west along it, stopping short of the sump from the first release. This area is characterized by deep, moist, sandy soils typically found in bottom lands and drainage features. The release followed along the Enterprise pipeline for approximately 100 feet, then flowed west down the draw (see Figure 2c) where it crossed five more buried pipelines. The deepest pooling areas along the flow path were found at sample points L7 and L8.

On May 10<sup>th</sup>, 2017 SMA field personnel was onsite to assess the second release after the pipeline had been repaired. Samples L5 through L9 were collected and analyzed per NMOCD standards. Table 3b, Second Release Summary of Laboratory Results, provides the results of the field screening as well as the summary of the laboratory analytical results for all samples. Hall Environmental Analysis Laboratories Analytical Reports are included in Appendix A.

Since the impacted area had pooled in the arroyo, flushing was not an option. Therefore, it was determined that further excavation was necessary in the area of the release, and following the flow path, as possible. The excavation work was conducted in May, 2017, and is discussed in Section 4.0, Soil Remediation Summary, below.

## **4.0 Soil Remediation Summary**

### **A. First Release**

Clean confirmation samples from the sidewalls and bottom of the excavation around the ruptured pipeline have been collected. Three samples exceed regulatory standards, L1, L2 and L3, which is a very rocky area that crosses two buried pipelines, and cannot be safely excavated. However, with the exception of sample L1, all meet RRAL's. In addition, water samples from the stock tank indicate that it was not impacted at any time during the release or remedial activities.

### **B. Second Release**

After 811 clearance, the guided excavation began on May 15, 2017. The pipeline was excavated to ten feet bgs, while the rest of the impacted soils were excavated to a maximum of five feet bgs. The release path crossed five more buried pipelines, impeding the excavation in a number of locations. Within the arroyo, all impacted soils met RRAL's except for sample point L8, which was directly over a high-pressure water line. This area was delineated and found to clean up at six feet bgs, but was only excavated two feet bgs, due to safety concerns. Soils were also left in place on four feet to either side of the pipeline as per the pipeline owners' request.

Poker Lake 12" Discharge Line  
November 29, 2017

Page 5 of 5

This excavation is characterized by sample points L5 through L9, with L5 being at the release point and represents the bottom hole of the excavation. Sidewalls were extended until RRALs were met at SW5 through SW9. See figure 2c and table 3b for details.

## **5.0 Scope and Limitations**

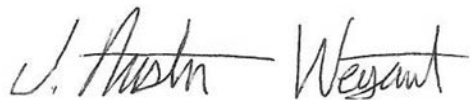
The scope of our services consisted of the performance of assessment sampling, verification of release stabilization, regulatory liaison, and preparation of this work plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas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

Reviewed by:

SOUDER, MILLER & ASSOCIATES



Austin Weyant  
Project Scientist

Shawna Chubbuck  
Senior Scientist

## **ATTACHMENTS:**

### **Figures:**

Figure 1: Vicinity and Well Head Protection Map

Figure 2: Site and Sample Location Maps

### **Tables:**

Table 3: Summary of Sample Results

### **Appendices:**

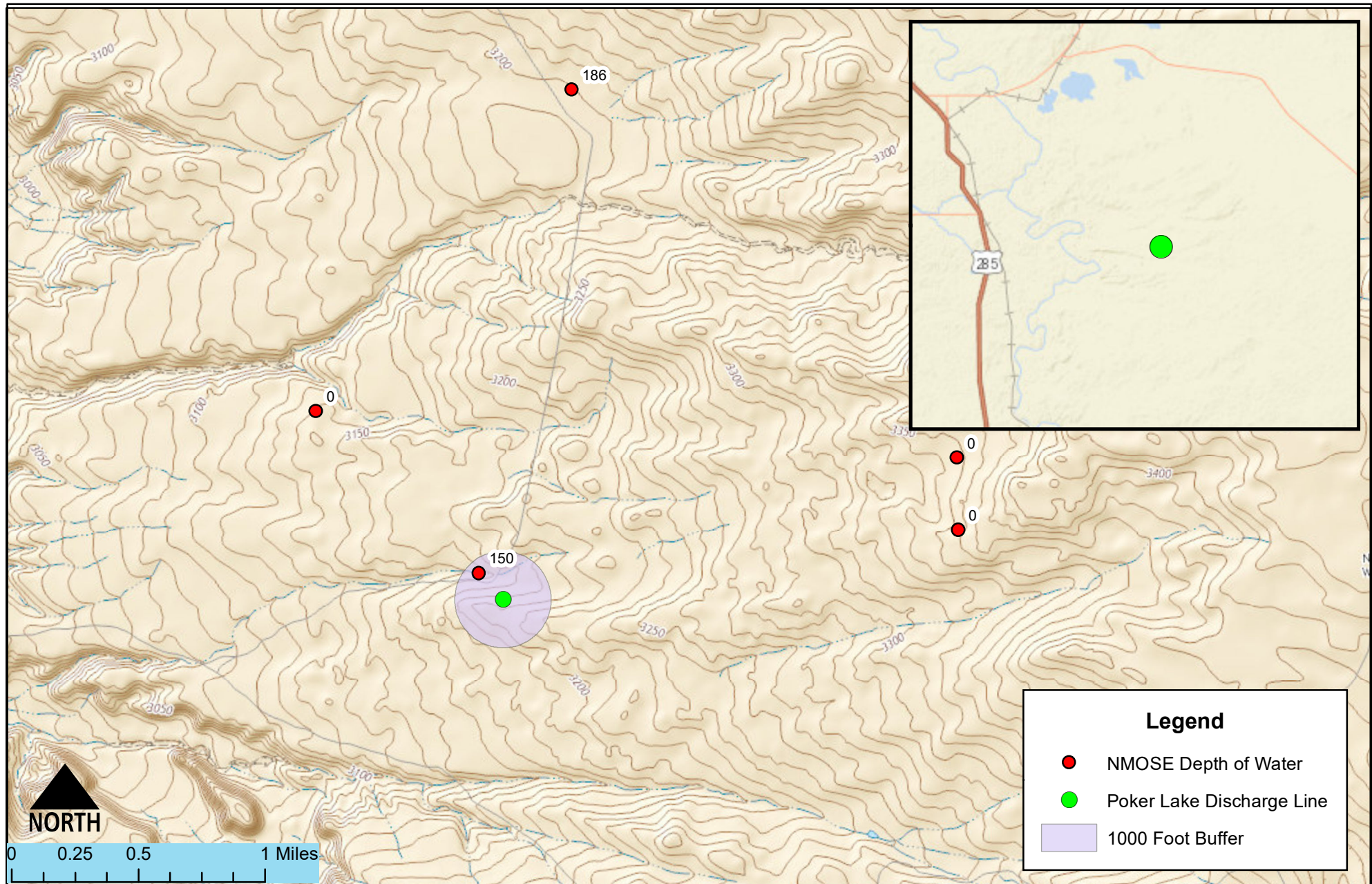
Appendix A: Form C141 Initial

Appendix B: NMOSE Wells Report

Appendix C: Laboratory Analytical Reports

# FIGURE 1 VICINITY AND NMOSE DATA MAP





Vicinity and Well Head Protection Map  
 Poker Lake Discharge Line - Enterprise Field Services  
 I 19-T24S-R30E, New Mexico

Figure 1

Date Saved:  
6/8/2017

Revisions  
 By: \_\_\_\_\_ Date: \_\_\_\_\_ Descr: \_\_\_\_\_  
 By: \_\_\_\_\_ Date: \_\_\_\_\_ Descr: \_\_\_\_\_  
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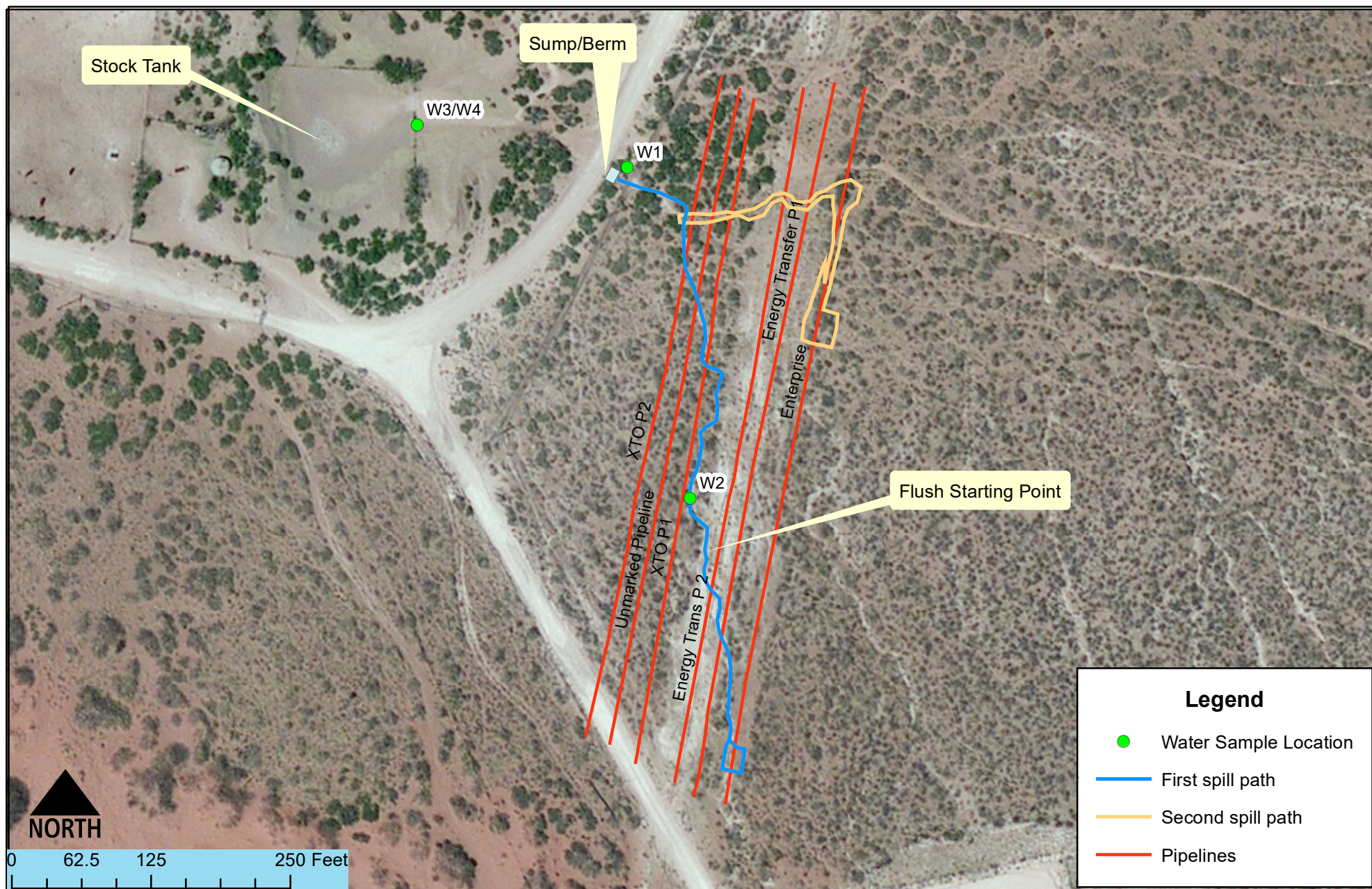
Drawn **Heather Patterson**  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_



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# FIGURE 2 SITE AND SAMPLE LOCATION MAPS





Site and Sample Location Map  
Poker Lake Discharge Line - Enterprise Field Services  
I 19-T24S-R30E, New Mexico

Figure 2a

Date Saved:  
7/12/2017

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

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Drawn **Heather Patterson**

Checked \_\_\_\_\_

Approved \_\_\_\_\_



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Figure 2b

Date Saved:  
6/5/2017

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

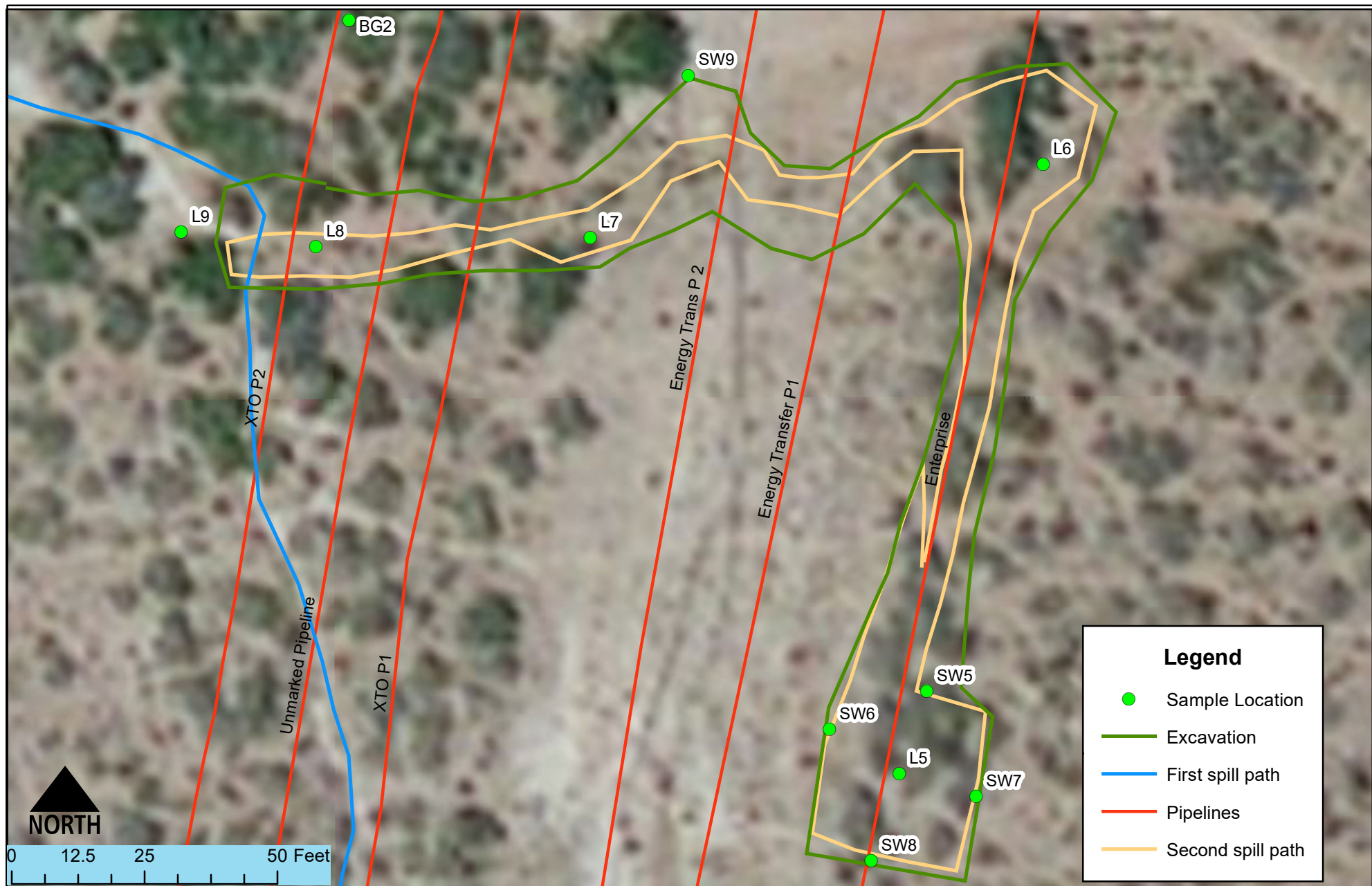
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Drawn	Heather Patterson
Checked	
Approved	



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Site and Sample Location Map, Release #2  
 Poker Lake Discharge Line - Enterprise Field Services  
 I 19-T24S-R30E, New Mexico

Figure 2c

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6/5/2017

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

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Drawn	<b>Heather Patterson</b>
Checked	_____
Approved	_____



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## TABLE 3

# SUMMARY SAMPLE RESULTS



Table 3a  
Poker Lake Discharge Line - First Release

## Pre-Flush Sampling

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	CI- Field Screens (ppm)	CI- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 10				50 mg/Kg	10 mg/Kg				1000 mg/Kg		
L1	11/6/2016	0.5	flushed	135.9	2.9	1600	3900	--	5500	--	19000
L2	11/6/2016	0.5	flushed	24.57	0.17	690	1300	--	1990	--	3700
SW1	11/6/2016	2	excavated	<0.064	<0.016	220	41	--	261	--	1700
BG1	11/6/2016	0.5	in-situ	<0.080	<0.018	5.9	<9.8	--	6	--	<30
BG2	11/6/2016	0.5	in-situ	<0.060	<0.015	15	<9.1	--	15	--	<30

## Post-Flush/Excavation

L1	4/12/2017	0.5	in-situ	--	--	<4.9	570	900	1470	--	810
L2	8/7/2017	0.5	in-situ	--	--	<4.8	<9.4	<47	0	--	<30
L3	8/7/2017	0.5	in-situ	<0.095	<0.024	<4.8	210	620	830	--	67
L4	4/12/2017	0.5	in-situ	--	--	<4.8	<10	<50	0	--	<30
L10	5/17/2017	6	in-situ	<0.095	<0.024	<4.8	<10	<50	0	4	75
SW1	4/12/2017	comp	excavated	--	--	11	1,100	1,000	2,111	--	7400
	5/17/2017	comp	in-situ	<0.098	<0.025	--	--	--	--	175	560
SW2	4/12/2017	comp	excavated	--	--	<4.8	14	72	86	--	1600
	5/17/2017	comp	in-situ	<0.093	<0.023	--	--	--	--	130	90
SW3	4/12/2017	comp	excavated	--	--	<4.9	<9.5	<48	0	--	9300
	5/17/2017	comp	in-situ	<0.097	<0.024	--	--	--	--	267	61
SW4	4/12/2017	comp	excavated	--	--	<4.9	<10	<50	0	--	950
	5/17/2017	comp	in-situ	<0.10	<0.025	--	--	--	--	--	<30

## Water Samples

W1	11/16/2016	sump	disposed	<1.5	<1.0	<0.05	1.80	--	1.8	--	--
W2	11/16/2016	during flush	disposed	22	6.3	0.18	<1.0	--	0.18	--	--
W3	11/16/2016	stock tank	in-situ	<1.5	<1.0	<0.05	<1.0	--	0	--	--
W4	5/17/2017	stock tank	in-situ	<1.5	<1.0	<0.05	<1.0	<5.0	0	--	--

Table 3b  
Poker Lake Discharge Line - Second Release

Sample Number on Figure 2	Sample Date	Depth (feet bgs)	Proposed Action	BTEX ppm	Benzene mg/Kg	GRO mg/Kg	DRO mg/Kg	MRO mg/Kg	Total TPH mg/Kg	Cl- Field Screens (ppm)	Cl- Laboratory mg/Kg
NMOCD RRAL's for Site Ranking 10				50 mg/Kg	10 mg/Kg				1000 mg/Kg		
L5	5/10/2017	6	excavated	31	0.56	3100	3700	3200	10000	3240	3800
	5/15/2017	10	excavated	--	--	--	--	--	--	3863	--
	8/7/2017	11	in-situ	--	--	<5.0	<10	<50	0	--	120
	8/7/2017	18	in-situ	--	--	--	--	--	--	--	110
L6	5/10/2017	1.5	excavated	--	--	<4.6	53	60	113	3178	2800
	5/15/2017	2	in-situ	<0.094	<0.023	--	--	--	--	210	330
L7	5/10/2017	0.5	excavated	--	--	530	13000	7700	21230	1580	1100
	5/15/2017	2.5	excavated	--	--	--	--	--	--	1237	--
	5/17/2017	3.5	excavated	--	--	--	--	--	--	2322	--
	5/17/2017	5	in-situ	<0.097	<0.024	<4.9	<9.8	<49	0	75	<30
L8	5/10/2017	1	excavated	--	--	--	--	--	--	18	--
	5/10/2017	2	excavated	140	9.7	4300	10000	5000	19300	95	78
	5/17/2017	6	in-situ	<0.208	<0.023	<4.6	<9.7	<48	<62.3	--	--
L9	5/10/2017	0.5	in-situ	--	--	<5.0	68	98	166	18	50
SW5	5/10/2017	comp	excavated	--	--	--	--	--	--	6946	4900
	5/15/2017	comp	in-situ	--	--	<4.7	<10	<50	0	95	71
SW6	5/10/2017	comp	excavated	--	--	--	--	--	--	2379	2500
	5/15/2017	comp	in-situ	--	--	8.3	110	170	288	780	740
SW7	5/10/2017	comp	excavated	--	--	--	--	--	--	4091	5500
	5/15/2017	comp	in-situ	--	--	<4.6	<9.3	<46	0	324	160
SW8	5/15/2017	comp	in-situ	--	--	<4.9	<9.4	<47	0	210	<30
SW9	5/15/2017	comp	in-situ	--	--	--	--	--	--	0	<30
W4	5/17/2017	stock tank	in-situ	<1.5	<1.0	<0.05	<1.0	<5.0	0	--	--

"--" = Not Analyzed

# APPENDIX A FORM C141 INITIAL

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

## NM OIL CONSERVATION

ARTESIA DISTRICT

NOV 14 2016

Form C-141  
Revised August 8, 2011

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

RECEIVED

**PAB1632138355 Release Notification and Corrective Action**

**NAB1632137183**

## OPERATOR

☒ Initial Report ☐ Final Report

Name of Company <b>Enterprise Field Services LLC 1000347</b>	Contact <b>Alena Miro</b>
<b>PO Box 4324, Houston, TX 77210</b>	Telephone No. <b>575-628-6802</b>
Facility Name <b>Poker Lake Discharge Line</b>	Facility Type: <b>Natural Gas Pipeline</b>

Surface Owner <b>BLM</b>	Mineral Owner <b>NA</b>	Lease No. <b>NA</b>
--------------------------	-------------------------	---------------------

## LOCATION OF RELEASE

Unit Letter <b>H</b>	Section <b>19</b>	Township <b>24S</b>	Range <b>30E</b>	Feet from the <b>465</b>	North/South Line <b>South</b>	Feet from the <b>431</b>	East/West Line <b>East</b>	County <b>Eddy</b>
-------------------------	----------------------	------------------------	---------------------	-----------------------------	----------------------------------	-----------------------------	-------------------------------	-----------------------

Latitude: N 32.204391 Longitude: W -103.913601

## NATURE OF RELEASE

Type of Release <b>Natural Gas and Pipeline Liquids</b>	Volume of Release: <b>230 MSCF and 4 bbls liquids</b>	Volume Recovered: <b>3 bbls liquids</b>
Source of Release <b>Pipeline release</b>	Date and Hour of Occurrence <b>11/06/2016 @ 11:45 MST</b>	Date and Hour of Discovery <b>11/06/2016 @ 11:45 MST</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

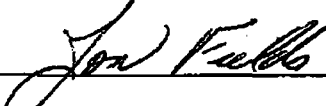
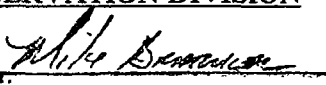
Describe Cause of Problem and Remedial Action Taken.\*

**Natural gas and pipeline liquids were released due to a pipeline leak. Pipeline segment was isolated, blown down, and will be repaired following standard one-call. Approximately 4 bbls of liquid was released and 3 bbls were recovered during initial remediation activities.**

Describe Area Affected and Cleanup Action Taken.\*

**A liquid spill of approximately 4bbls of pipeline liquids occurred as part of the leak and 3 bbls were recovered. Remediation actions will follow the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015).**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Jon E. Fields</b>	Approved by District Supervisor: 	
Title: <b>Director, Field Environmental</b>	Approval Date: <b>11/16/16</b>	Expiration Date: <b>N/A</b>
E-mail Address: <b>jefields@eprod.com</b>	Conditions of Approval:	Attached <input checked="" type="checkbox"/>
Date: <b>11-14-2016</b> Phone: <b>713-381-6684</b>		

\* Attach Additional Sheets If Necessary

2AP-3997

**NM OIL CONSERVATION**  
**ARTESIA DISTRICT**

**District I**  
 1625 N. French Dr., Hobbs, NM 88240  
**District II**  
 1301 W. Grand Avenue, Artesia, NM 88210  
**District III**  
 1000 Rio Brazos Road, Aztec, NM 87410  
**District IV**  
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
 Energy Minerals and Natural Resources

MAY 09 2017

Form C-141  
 Revised August 8, 2011

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

**RECEIVED** to appropriate District Office in  
 accordance with 19.15.29 NMAC.

**PAB 1713229995 Release Notification and Corrective Action**
**PAB 1713230240**
**OPERATOR**
☒ Initial Report ☐ Final Report

Name of Company <b>Enterprise Field Services, LLC</b>	Contact <b>Alena Miro</b>
<b>PO Box 4324, Houston, TX 77210</b>	Telephone No. <b>575-628-6802</b>
Facility Name <b>Poker Lake Discharge ROW</b>	Facility Type: <b>Natural Gas Pipeline</b>
Surface Owner <b>BLM</b>	Mineral Owner <b>NA</b> Lease No. <b>NA</b>

**LOCATION OF RELEASE**

Unit Letter <b>I</b>	Section <b>19</b>	Township <b>24S</b>	Range <b>30E</b>	Feet from the <b>350</b>	North/South Line <b>North</b>	Feet from the <b>600</b>	East/West Line <b>East</b>	County <b>Eddy</b>
-------------------------	----------------------	------------------------	---------------------	-----------------------------	----------------------------------	-----------------------------	-------------------------------	-----------------------

Latitude: **N 32.202058** Longitude: **W -103.914086**

**NATURE OF RELEASE**

Type of Release <b>Natural Gas and Pipeline Liquids</b>	Volume of Release: <b>235 MSCF and 10 bbls</b>	Volume Recovered: <b>NA</b>
Source of Release <b>Pipeline release</b>	Date and Hour of Occurrence <b>4/27/2017 @ 14:40 MST</b>	Date and Hour of Discovery <b>4/27/2017 @ 14:40 MST</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.\*

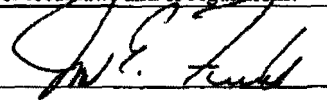
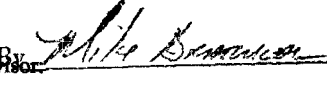
Describe Cause of Problem and Remedial Action Taken.\*

**Natural gas and pipeline liquids were released due to a pipeline leak. Pipeline segment was isolated, blown down, and will be repaired following standard one-call. Approximately 10 bbls of liquid were released.**

Describe Area Affected and Cleanup Action Taken.\*

**A liquid spill of approximately 10bbls of pipeline liquids occurred as part of the leak. Remediation actions will follow the Enterprise Products, General Release Notification, Response and Remediation Plan (March 9, 2015). Potential remediation activities include excavation, flushing on rock areas that prevent excavation, and microbial application.**

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: 	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Jon E. Fields</b>	Approved by District Supervisor: 	
Title: <b>Director, Field Environmental</b>	Approval Date: <b>5/10/17</b>	Expiration Date: <b>N/A</b>
E-mail Address: <b>jefields@eprod.com</b>	Conditions of Approval: <b>See attached</b>	Attached <input type="checkbox"/>
Date: <b>5/9/2017</b> Phone: <b>713-381-6684</b>		

\* Attach Additional Sheets If Necessary

New forms can be found in the  
 New Mexico State Website in forms:  
[http://www.emnrd.state.nm.us/  
 OCD/forms.html](http://www.emnrd.state.nm.us/OCD/forms.html)

2RP-4204

Operator/Responsible Party,

The OCD has received the form C-141 you provided on 5/9/17 regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number 2RP-1204 has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

*The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC. [emphasis added]*

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District 2 office in ARTESIA on or before 6/9/17. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

- Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

- Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C<sub>6</sub> thru C<sub>36</sub>), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

- Nominal detection limits for field and laboratory analyses must be provided.

- Composite sampling is not generally allowed.

- Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted



for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

- Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

- If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

- Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

**Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.**

**Jim Griswold**

OCD Environmental Bureau Chief

1220 South St. Francis Drive

Santa Fe, New Mexico 87505

505-476-3465

jim.griswold@state.nm.us

# APPENDIX B

## NMOSE WELLS REPORT



# New Mexico Office of the State Engineer

## Point of Diversion Summary

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


(quarters are smallest to largest)

(NAD83 UTM in meters)

**POD Number****Q64 Q16 Q4 Sec Tws Rng****X****Y**

C 02109

1 2 4 19 24S 30E

602130 3563412 **Driller License:****Driller Company:****Driller Name:** UNKNOWN**Drill Start Date:****Drill Finish Date:** 12/31/1963**Plug Date:****Log File Date:****PCW Rcv Date:****Source:****Pump Type:****Pipe Discharge Size:****Estimated Yield:** 40 GPM**Casing Size:** 7.00**Depth Well:** 130 feet**Depth Water:** 150 feet

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.

12/5/16 1:29 PM

Page 1 of 1

POD SUMMARY - C 02109

# 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](http://www.hallenvironmental.com)

May 24, 2017

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

RE: Poker Lake

OrderNo.: 1705A29

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/18/2017 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](http://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 Report

Lab Order 1705A29

Date Reported: 5/24/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW5

Project: Poker Lake

Collection Date: 5/15/2017 2:30:00 PM

Lab ID: 1705A29-001

Matrix: SOIL

Received Date: 5/18/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	71	30		mg/Kg	20	5/23/2017 3:25:40 PM	31903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/23/2017 6:17:25 PM	31879
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/23/2017 6:17:25 PM	31879
Surr: DNOP	82.6	70-130		%Rec	1	5/23/2017 6:17:25 PM	31879
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	5/22/2017 1:11:25 PM	31844
Surr: BFB	105	54-150		%Rec	1	5/22/2017 1:11:25 PM	31844

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

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

Page 1 of 10



## Analytical Report

Lab Order 1705A29

Date Reported: 5/24/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW6

Project: Poker Lake

Collection Date: 5/15/2017 2:17:00 PM

Lab ID: 1705A29-002

Matrix: SOIL

Received Date: 5/18/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	740	30		mg/Kg	20	5/23/2017 3:38:05 PM	31903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	110	9.6		mg/Kg	1	5/23/2017 6:39:33 PM	31879
Motor Oil Range Organics (MRO)	170	48		mg/Kg	1	5/23/2017 6:39:33 PM	31879
Surr: DNOP	96.4	70-130		%Rec	1	5/23/2017 6:39:33 PM	31879
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	8.3	4.9		mg/Kg	1	5/22/2017 5:10:46 PM	31844
Surr: BFB	172	54-150	S	%Rec	1	5/22/2017 5:10:46 PM	31844

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

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

Page 2 of 10

## Analytical Report

Lab Order 1705A29

Date Reported: 5/24/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW7

Project: Poker Lake

Collection Date: 5/15/2017 2:30:00 PM

Lab ID: 1705A29-003

Matrix: SOIL

Received Date: 5/18/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	160	30		mg/Kg	20	5/23/2017 3:50:30 PM	31903
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	5/23/2017 7:01:49 PM	31879
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	5/23/2017 7:01:49 PM	31879
Surr: DNOP	95.4	70-130		%Rec	1	5/23/2017 7:01:49 PM	31879
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/22/2017 5:34:43 PM	31844
Surr: BFB	94.3	54-150		%Rec	1	5/22/2017 5:34:43 PM	31844

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

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

Page 3 of 10

## Analytical Report

Lab Order 1705A29

Date Reported: 5/24/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW8

Project: Poker Lake

Collection Date: 5/15/2017 2:59:00 PM

Lab ID: 1705A29-004

Matrix: SOIL

Received Date: 5/18/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	ND	30		mg/Kg	20	5/23/2017 4:27:43 PM	31923
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	5/23/2017 7:24:00 PM	31879
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	5/23/2017 7:24:00 PM	31879
Surr: DNOP	71.3	70-130		%Rec	1	5/23/2017 7:24:00 PM	31879
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/22/2017 5:58:38 PM	31844
Surr: BFB	98.5	54-150		%Rec	1	5/22/2017 5:58:38 PM	31844

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

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

Page 4 of 10

## Analytical Report

Lab Order 1705A29

Date Reported: 5/24/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW9

Project: Poker Lake

Collection Date: 5/15/2017 1:15:00 PM

Lab ID: 1705A29-005

Matrix: SOIL

Received Date: 5/18/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	30		mg/Kg	20	5/23/2017 5:04:58 PM	31923

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

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

Page 5 of 10

## Analytical Report

Lab Order 1705A29

Date Reported: 5/24/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L6-2

Project: Poker Lake

Collection Date: 5/15/2017 12:00:00 PM

Lab ID: 1705A29-006

Matrix: SOIL

Received Date: 5/18/2017 10:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	330	30		mg/Kg	20	5/23/2017 5:42:12 PM	31923
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	5/22/2017 6:46:45 PM	31844
Toluene	ND	0.047		mg/Kg	1	5/22/2017 6:46:45 PM	31844
Ethylbenzene	ND	0.047		mg/Kg	1	5/22/2017 6:46:45 PM	31844
Xylenes, Total	ND	0.094		mg/Kg	1	5/22/2017 6:46:45 PM	31844
Surr: 4-Bromofluorobenzene	110	66.6-132		%Rec	1	5/22/2017 6:46:45 PM	31844

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

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705A29

24-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID	MB-31903		SampType: MBLK		TestCode: EPA Method 300.0: Anions					
Client ID:	PBS		Batch ID: 31903		RunNo: 42994					
Prep Date:	5/23/2017		Analysis Date: 5/23/2017		SeqNo: 1353923		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-31903		SampType:	LCS		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS		Batch ID:	31903		RunNo:	42994				
Prep Date:	5/23/2017		Analysis Date:	5/23/2017		SeqNo:	1353924		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	92.2	90	110				

Sample ID	MB-31923		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	31923		RunNo:	42994				
Prep Date:	5/23/2017		Analysis Date:	5/23/2017		SeqNo:	1353951		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-31923		SampType:	LCS		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS		Batch ID:	31923		RunNo:	42994				
Prep Date:	5/23/2017		Analysis Date:	5/23/2017		SeqNo:	1353952		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	92.0	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  
W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705A29

24-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID	<b>LCS-31879</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>31879</b>	RunNo:	<b>42983</b>					
Prep Date:	<b>5/22/2017</b>	Analysis Date:	<b>5/23/2017</b>	SeqNo:	<b>1352953</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	88.2	73.2	114			
Surr: DNOP	4.7		5.000		94.9	70	130			

Sample ID	<b>MB-31879</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>31879</b>	RunNo:	<b>42983</b>					
Prep Date:	<b>5/22/2017</b>	Analysis Date:	<b>5/23/2017</b>	SeqNo:	<b>1352954</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		100	70	130			

Sample ID	<b>LCS-31889</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>31889</b>	RunNo:	<b>42983</b>					
Prep Date:	<b>5/22/2017</b>	Analysis Date:	<b>5/23/2017</b>	SeqNo:	<b>1353523</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		91.3	70	130			

Sample ID	<b>MB-31889</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>31889</b>	RunNo:	<b>42983</b>					
Prep Date:	<b>5/22/2017</b>	Analysis Date:	<b>5/23/2017</b>	SeqNo:	<b>1353524</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.3	70	130			

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705A29

24-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>MB-31844</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>31844</b>		RunNo: <b>42956</b>							
Prep Date: <b>5/19/2017</b>	Analysis Date: <b>5/22/2017</b>		SeqNo: <b>1352236</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	970		1000		97.4	54	150			

Sample ID <b>LCS-31844</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>31844</b>		RunNo: <b>42956</b>							
Prep Date: <b>5/19/2017</b>	Analysis Date: <b>5/22/2017</b>		SeqNo: <b>1352237</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	94.1	76.4	125			
Surr: BFB	1000		1000		103	54	150			

Sample ID <b>1705A29-001AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>SW5</b>	Batch ID: <b>31844</b>		RunNo: <b>42956</b>							
Prep Date: <b>5/19/2017</b>	Analysis Date: <b>5/22/2017</b>		SeqNo: <b>1352239</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.8	23.92	1.490	98.6	77.8	128			
Surr: BFB	1200		956.9		128	54	150			

Sample ID <b>1705A29-001AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>SW5</b>	Batch ID: <b>31844</b>		RunNo: <b>42956</b>							
Prep Date: <b>5/19/2017</b>	Analysis Date: <b>5/22/2017</b>		SeqNo: <b>1352240</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.7	23.63	1.490	83.0	77.8	128	17.3	20	
Surr: BFB	1100		945.2		116	54	150	0	0	

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705A29

24-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>MB-31844</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>PBS</b>	Batch ID: <b>31844</b>		RunNo: <b>42956</b>							
Prep Date: <b>5/19/2017</b>	Analysis Date: <b>5/22/2017</b>		SeqNo: <b>1352252</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.2		1.000		115	66.6	132			

Sample ID <b>LCS-31844</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8021B: Volatiles</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>31844</b>		RunNo: <b>42956</b>							
Prep Date: <b>5/19/2017</b>	Analysis Date: <b>5/22/2017</b>		SeqNo: <b>1352253</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.6	80	120			
Toluene	1.0	0.050	1.000	0	101	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	103	80	120			
Surr: 4-Bromofluorobenzene	1.2		1.000		116	66.6	132			

**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

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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: 1705A29

RcptNo: 1

Received By: Erin Melendrez 5/18/2017 10:00:00 AM

Completed By: Andy Jansson 5/18/2017 4:24:26 PM

Reviewed By: ENM/as 5/19/17

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  $6.0^{\circ}\text{C}$ ? 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 ☐ # of preserved bottles checked for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? \_\_\_\_\_
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 ☐ 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	4.6	Good	Yes			

## Chain-of-Custody Record

Client: SMA

Turn-Around Time: ☒ Standard ☐ Rush

Project Name: Poker Lake

Project #: \_\_\_\_\_

Project Manager: Austin Weyant

Sampler: \_\_\_\_\_

On Ice: ☒ Yes ☐ No

Sample Temperature: 5.1 - 0.5 (CF) = 4.6°C

Container Type and # 4oz

Preservative Type HEAL No. 1705A29

Sample Request ID SW5

Date Time 5/15/17 2:30

Matrix soil

Relinquished by: [Signature]

Date Time 5/17/17 1900



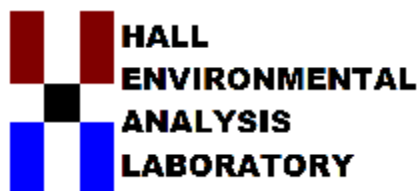
www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

BTEX + MTBE + TMBs (8021)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 31, 2017

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

RE: Poker Lake

OrderNo.: 1705C15

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/23/2017 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](http://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 Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L7-5

Project: Poker Lake

Collection Date: 5/17/2017 11:00:00 AM

Lab ID: 1705C15-001

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	5/26/2017 6:30:38 PM	32004
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/25/2017 9:23:47 PM	31932
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/25/2017 9:23:47 PM	31932
Surr: DNOP	83.7	70-130		%Rec	1	5/25/2017 9:23:47 PM	31932
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/24/2017 8:57:50 PM	31921
Surr: BFB	98.0	54-150		%Rec	1	5/24/2017 8:57:50 PM	31921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/24/2017 8:57:50 PM	31921
Toluene	ND	0.049		mg/Kg	1	5/24/2017 8:57:50 PM	31921
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2017 8:57:50 PM	31921
Xylenes, Total	ND	0.097		mg/Kg	1	5/24/2017 8:57:50 PM	31921
Surr: 4-Bromofluorobenzene	113	66.6-132		%Rec	1	5/24/2017 8:57:50 PM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L8-6

Project: Poker Lake

Collection Date: 5/17/2017 10:15:00 AM

Lab ID: 1705C15-002

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	5/25/2017 9:51:55 PM	31932
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/25/2017 9:51:55 PM	31932
Surr: DNOP	84.2	70-130		%Rec	1	5/25/2017 9:51:55 PM	31932
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/24/2017 9:21:44 PM	31921
Surr: BFB	98.7	54-150		%Rec	1	5/24/2017 9:21:44 PM	31921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	5/24/2017 9:21:44 PM	31921
Toluene	ND	0.046		mg/Kg	1	5/24/2017 9:21:44 PM	31921
Ethylbenzene	ND	0.046		mg/Kg	1	5/24/2017 9:21:44 PM	31921
Xylenes, Total	ND	0.093		mg/Kg	1	5/24/2017 9:21:44 PM	31921
Surr: 4-Bromofluorobenzene	114	66.6-132		%Rec	1	5/24/2017 9:21:44 PM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW2

Project: Poker Lake

Collection Date: 5/17/2017 11:30:00 AM

Lab ID: 1705C15-003

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	90	30		mg/Kg	20	5/26/2017 7:07:53 PM	32004
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.093		mg/Kg	1	5/24/2017 9:45:44 PM	31921
Benzene	ND	0.023		mg/Kg	1	5/24/2017 9:45:44 PM	31921
Toluene	ND	0.047		mg/Kg	1	5/24/2017 9:45:44 PM	31921
Ethylbenzene	ND	0.047		mg/Kg	1	5/24/2017 9:45:44 PM	31921
Xylenes, Total	ND	0.093		mg/Kg	1	5/24/2017 9:45:44 PM	31921
Surr: 4-Bromofluorobenzene	114	66.6-132		%Rec	1	5/24/2017 9:45:44 PM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW3

Project: Poker Lake

Collection Date: 5/17/2017 12:15:00 PM

Lab ID: 1705C15-004

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	61	30		mg/Kg	20	5/26/2017 7:20:17 PM	32004
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	5/24/2017 10:09:50 PM	31921
Benzene	ND	0.024		mg/Kg	1	5/24/2017 10:09:50 PM	31921
Toluene	ND	0.048		mg/Kg	1	5/24/2017 10:09:50 PM	31921
Ethylbenzene	ND	0.048		mg/Kg	1	5/24/2017 10:09:50 PM	31921
Xylenes, Total	ND	0.097		mg/Kg	1	5/24/2017 10:09:50 PM	31921
Surr: 4-Bromofluorobenzene	114	66.6-132		%Rec	1	5/24/2017 10:09:50 PM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW4

Project: Poker Lake

Collection Date: 5/17/2017 12:10:00 PM

Lab ID: 1705C15-005

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	5/26/2017 7:32:42 PM	32004
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	5/24/2017 10:33:57 PM	31921
Benzene	ND	0.025		mg/Kg	1	5/24/2017 10:33:57 PM	31921
Toluene	ND	0.050		mg/Kg	1	5/24/2017 10:33:57 PM	31921
Ethylbenzene	ND	0.050		mg/Kg	1	5/24/2017 10:33:57 PM	31921
Xylenes, Total	ND	0.10		mg/Kg	1	5/24/2017 10:33:57 PM	31921
Surr: 4-Bromofluorobenzene	117	66.6-132		%Rec	1	5/24/2017 10:33:57 PM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW1

Project: Poker Lake

Collection Date: 5/17/2017 12:45:00 PM

Lab ID: 1705C15-006

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	560	30		mg/Kg	20	5/26/2017 8:09:56 PM	32004
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.098		mg/Kg	1	5/24/2017 10:58:04 PM	31921
Benzene	ND	0.025		mg/Kg	1	5/24/2017 10:58:04 PM	31921
Toluene	ND	0.049		mg/Kg	1	5/24/2017 10:58:04 PM	31921
Ethylbenzene	ND	0.049		mg/Kg	1	5/24/2017 10:58:04 PM	31921
Xylenes, Total	ND	0.098		mg/Kg	1	5/24/2017 10:58:04 PM	31921
Surr: 4-Bromofluorobenzene	111	66.6-132		%Rec	1	5/24/2017 10:58:04 PM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L10-2.5

Project: Poker Lake

Collection Date: 5/17/2017 1:05:00 PM

Lab ID: 1705C15-007

Matrix: SOIL

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	75	30		mg/Kg	20	5/26/2017 8:22:21 PM	32004
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	5/25/2017 10:19:56 PM	31932
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	5/25/2017 10:19:56 PM	31932
Surr: DNOP	74.4	70-130		%Rec	1	5/25/2017 10:19:56 PM	31932
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/25/2017 12:33:50 AM	31921
Surr: BFB	101	54-150		%Rec	1	5/25/2017 12:33:50 AM	31921
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	5/25/2017 12:33:50 AM	31921
Toluene	ND	0.048		mg/Kg	1	5/25/2017 12:33:50 AM	31921
Ethylbenzene	ND	0.048		mg/Kg	1	5/25/2017 12:33:50 AM	31921
Xylenes, Total	ND	0.095		mg/Kg	1	5/25/2017 12:33:50 AM	31921
Surr: 4-Bromofluorobenzene	117	66.6-132		%Rec	1	5/25/2017 12:33:50 AM	31921

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

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

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## Analytical Report

Lab Order 1705C15

Date Reported: 5/31/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: W4

Project: Poker Lake

Collection Date: 5/17/2017 9:30:00 AM

Lab ID: 1705C15-008

Matrix: AQUEOUS

Received Date: 5/23/2017 9:50:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: TOM
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	5/25/2017 11:36:27 AM	31918
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	5/25/2017 11:36:27 AM	31918
Surr: DNOP	116	72.4-157		%Rec	1	5/25/2017 11:36:27 AM	31918
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	5/24/2017 10:46:50 PM	G43027
Surr: BFB	91.9	52.3-138		%Rec	1	5/24/2017 10:46:50 PM	G43027
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: RAA
Benzene	ND	1.0		µg/L	1	5/25/2017 11:48:00 PM	SL43095
Toluene	2.7	1.0		µg/L	1	5/25/2017 11:48:00 PM	SL43095
Ethylbenzene	ND	1.0		µg/L	1	5/25/2017 11:48:00 PM	SL43095
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/25/2017 11:48:00 PM	SL43095
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/25/2017 11:48:00 PM	SL43095
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/25/2017 11:48:00 PM	SL43095
Xylenes, Total	ND	1.5		µg/L	1	5/25/2017 11:48:00 PM	SL43095
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	5/25/2017 11:48:00 PM	SL43095
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	5/25/2017 11:48:00 PM	SL43095
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/25/2017 11:48:00 PM	SL43095
Surr: Toluene-d8	102	70-130		%Rec	1	5/25/2017 11:48:00 PM	SL43095

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

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1705C15****31-May-17****Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>MB-32004</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>	Batch ID: <b>32004</b>			RunNo: <b>43101</b>						
Prep Date: <b>5/26/2017</b>	Analysis Date: <b>5/26/2017</b>			SeqNo: <b>1356954</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID <b>LCS-32004</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>32004</b>			RunNo: <b>43101</b>						
Prep Date: <b>5/26/2017</b>	Analysis Date: <b>5/26/2017</b>			SeqNo: <b>1356955</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	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  
W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705C15

31-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID	LCS-31956		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 31956		RunNo: 43052					
Prep Date:	5/25/2017		Analysis Date: 5/25/2017		SeqNo: 1354925		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.3		5.000		85.7	70	130			

Sample ID	MB-31956		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 31956		RunNo: 43052					
Prep Date:	5/25/2017		Analysis Date: 5/25/2017		SeqNo: 1354926		Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.1		10.00		81.3	70	130			

Sample ID	LCS-31932		SampType:	LCS		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	LCSS		Batch ID:	31932		RunNo:	43051				
Prep Date:	5/24/2017		Analysis Date:	5/25/2017		SeqNo:	1355829		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	41	10	50.00	0	82.8	73.2	114				
Surr: DNOP	4.5		5.000		89.3	70	130				

Sample ID	MB-31932	SampType: MBLK			TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID: 31932			RunNo: 43051					
Prep Date:	5/24/2017	Analysis Date: 5/25/2017			SeqNo: 1355830		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.4	70	130			

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705C15

31-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID	<b>LCS-31918</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range</b>					
Client ID:	<b>LCSW</b>	Batch ID:	<b>31918</b>	RunNo:	<b>43021</b>					
Prep Date:	<b>5/23/2017</b>	Analysis Date:	<b>5/24/2017</b>	SeqNo:	<b>1354586</b>	Units:	<b>mg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.4	1.0	5.000	0	109	82.8	146			
Surr: DNOP	0.51		0.5000		103	72.4	157			

Sample ID	<b>MB-31918</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range</b>					
Client ID:	<b>PBW</b>	Batch ID:	<b>31918</b>	RunNo:	<b>43021</b>					
Prep Date:	<b>5/23/2017</b>	Analysis Date:	<b>5/24/2017</b>	SeqNo:	<b>1354587</b>	Units:	<b>mg/L</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0								
Motor Oil Range Organics (MRO)	ND	5.0								
Surr: DNOP	0.98		1.000		98.2	72.4	157			

**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  
W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1705C15  
31-May-17

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	MB-31921	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range						
Client ID:	PBS	Batch ID:	31921	RunNo:	43026						
Prep Date:	5/23/2017	Analysis Date:	5/24/2017	SeqNo:	1354470	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	980		1000		97.8	54	150				

Sample ID	LCS-31921	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range						
Client ID:	LCSS	Batch ID:	31921	RunNo:	43026						
Prep Date:	5/23/2017	Analysis Date:	5/24/2017	SeqNo:	1354471	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	23	5.0	25.00	0	93.8	76.4	125				
Surr: BFB	1100		1000		106	54	150				

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

W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705C15

31-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>RB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBW</b>	Batch ID: <b>G43027</b>		RunNo: <b>43027</b>							
Prep Date:	Analysis Date: <b>5/24/2017</b>		SeqNo: <b>1354521</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050								
Surr: BFB	20		20.00		99.8	52.3	138			

Sample ID <b>2.5UG GRO LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSW</b>	Batch ID: <b>G43027</b>		RunNo: <b>43027</b>							
Prep Date:	Analysis Date: <b>5/24/2017</b>		SeqNo: <b>1354522</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.54	0.050	0.5000	0	107	79.1	123			
Surr: BFB	23		20.00		114	52.3	138			

Sample ID <b>1705C15-008AMS</b>	SampType: <b>MS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>W4</b>	Batch ID: <b>G43027</b>		RunNo: <b>43027</b>							
Prep Date:	Analysis Date: <b>5/24/2017</b>		SeqNo: <b>1354524</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.46	0.050	0.5000	0	92.8	64.8	129			
Surr: BFB	20		20.00		102	52.3	138			

Sample ID <b>1705C15-008AMSD</b>	SampType: <b>MSD</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>W4</b>	Batch ID: <b>G43027</b>		RunNo: <b>43027</b>							
Prep Date:	Analysis Date: <b>5/24/2017</b>		SeqNo: <b>1354525</b>		Units: <b>mg/L</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.45	0.050	0.5000	0	90.7	64.8	129	2.22	20	
Surr: BFB	20		20.00		101	52.3	138	0	0	

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705C15

31-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>MB-31921</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>31921</b>	RunNo: <b>43026</b>								
Prep Date: <b>5/23/2017</b>	Analysis Date: <b>5/24/2017</b>	SeqNo: <b>1354496</b> Units: <b>mg/Kg</b>								
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	1.2		1.000		117	66.6	132			

Sample ID <b>LCS-31921</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>31921</b>	RunNo: <b>43026</b>								
Prep Date: <b>5/23/2017</b>	Analysis Date: <b>5/24/2017</b>	SeqNo: <b>1354497</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.98	0.10	1.000	0	98.1	66.5	120			
Benzene	1.0	0.025	1.000	0	100	80	120			
Toluene	1.0	0.050	1.000	0	103	80	120			
Ethylbenzene	1.0	0.050	1.000	0	104	80	120			
Xylenes, Total	3.2	0.10	3.000	0	106	80	120			
Surr: 4-Bromofluorobenzene	1.3		1.000		127	66.6	132			

Sample ID <b>1705C15-001AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>L7-5</b>	Batch ID: <b>31921</b>	RunNo: <b>43026</b>								
Prep Date: <b>5/23/2017</b>	Analysis Date: <b>5/24/2017</b>	SeqNo: <b>1354500</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.92	0.093	0.9320	0	99.1	42.5	143			
Benzene	0.98	0.023	0.9320	0	106	61.5	138			
Toluene	1.0	0.047	0.9320	0	109	71.4	127			
Ethylbenzene	1.1	0.047	0.9320	0	113	70.9	132			
Xylenes, Total	3.2	0.093	2.796	0	115	76.2	123			
Surr: 4-Bromofluorobenzene	1.1		0.9320		122	66.6	132			

Sample ID <b>1705C15-001AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>L7-5</b>	Batch ID: <b>31921</b>	RunNo: <b>43026</b>								
Prep Date: <b>5/23/2017</b>	Analysis Date: <b>5/24/2017</b>	SeqNo: <b>1354501</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.99	0.094	0.9416	0	105	42.5	143	7.06	20	
Benzene	1.0	0.024	0.9416	0	108	61.5	138	3.69	20	
Toluene	1.1	0.047	0.9416	0	114	71.4	127	5.03	20	
Ethylbenzene	1.1	0.047	0.9416	0	117	70.9	132	4.50	20	

**Qualifiers:**

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1705C15  
31-May-17

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	1705C15-001AMSD			SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	L7-5		Batch ID:		31921		RunNo:	43026			
Prep Date:	5/23/2017		Analysis Date:		5/24/2017		SeqNo:	1354501		Units:	mg/Kg
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Xylenes, Total	3.3	0.094	2.825	0	118	76.2	123	3.81	20		
Surr: 4-Bromofluorobenzene	1.1		0.9416		119	66.6	132	0	0		

Qualifiers:

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705C15

31-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>100ng lcs</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8260: Volatiles Short List</b>						
Client ID: <b>LCSW</b>	Batch ID: <b>SL43095</b>			RunNo: <b>43095</b>						
Prep Date:	Analysis Date: <b>5/25/2017</b>			SeqNo: <b>1356263</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.8	70	130			
Toluene	20	1.0	20.00	0	98.7	70	130			
Ethylbenzene	20	1.0	20.00	0	99.7	70	130			
Methyl tert-butyl ether (MTBE)	33	1.0	40.00	0	82.2	70	130			
1,2,4-Trimethylbenzene	20	1.0	20.00	0	99.4	70	130			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	99.0	70	130			
Xylenes, Total	59	1.5	60.00	0	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		106	70	130			

Sample ID <b>rb</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8260: Volatiles Short List</b>						
Client ID: <b>PBW</b>	Batch ID: <b>SL43095</b>			RunNo: <b>43095</b>						
Prep Date:	Analysis Date: <b>5/25/2017</b>			SeqNo: <b>1356266</b>		Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

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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: 1705C15

RcptNo: 1

Received By: Richie Eriacho 5/23/2017 9:50:00 AM

Completed By: Andy Jansson 5/23/2017 12:47:55 PM

Reviewed By: SRE 05/23/17

### 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  $6.0^{\circ}\text{C}$ ? 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	1.1	Good	Yes			



## Chain-of-Custody Record

Client: SMA

Turn-Around Time:

☒ Standard ☐ Rush

Project Name:

Poker Lake

Mailing Address:

Project #:

Phone #:

email or Fax#:

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other☐ EDD (Type)

Project Manager:

Austin Weyant

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.1°C

Date Time Matrix Sample Request ID

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
5/17/17	11:00	Soil	L7-5	402		1705C15
	16:15		L8-6			-001
	11:30		SW2			-002
	12:15		SW3			-003
	12:10		SW4			-004
	12:45		SW1			-005
	1:05		L10-2.5			-006
	9:30	Water	W4	Various		-007
						-008

Date: Time:

5/24/17 0830

Relinquished by:

[Signature]

Date: Time:

5/24/17 1200

Relinquished by:

[Signature]

Received by:

[Signature]

Date:

5/24/17

Time:

0830

Received by:

[Signature]

Date:

5/23/17

Time:

0950

Remarks:

## 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, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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



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

May 23, 2017

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

RE: Poker Lake 12"

OrderNo.: 1705852

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 8 sample(s) on 5/16/2017 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](http://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 Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L5-6

Project: Poker Lake 12"

Collection Date: 5/10/2017 9:00:00 AM

Lab ID: 1705852-001

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	3800	150		mg/Kg	100	5/22/2017 10:32:11 PM	31842
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	3700	98		mg/Kg	10	5/19/2017 8:24:26 AM	31800
Motor Oil Range Organics (MRO)	3200	490		mg/Kg	10	5/19/2017 8:24:26 AM	31800
Surr: DNOP	0	70-130	S	%Rec	10	5/19/2017 8:24:26 AM	31800
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	3100	96		mg/Kg	20	5/18/2017 10:11:46 AM	31781
Surr: BFB	770	54-150	S	%Rec	20	5/18/2017 10:11:46 AM	31781
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	1.9		mg/Kg	20	5/18/2017 10:11:46 AM	31781
Benzene	0.56	0.48		mg/Kg	20	5/18/2017 10:11:46 AM	31781
Toluene	2.1	0.96		mg/Kg	20	5/18/2017 10:11:46 AM	31781
Ethylbenzene	ND	0.96		mg/Kg	20	5/18/2017 10:11:46 AM	31781
Xylenes, Total	31	1.9		mg/Kg	20	5/18/2017 10:11:46 AM	31781
Surr: 4-Bromofluorobenzene	149	66.6-132	S	%Rec	20	5/18/2017 10:11:46 AM	31781

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L6-1.5

Project: Poker Lake 12"

Collection Date: 5/10/2017 9:15:00 AM

Lab ID: 1705852-002

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	2800	150		mg/Kg	100	5/22/2017 10:44:36 PM	31842
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	53	9.7		mg/Kg	1	5/18/2017 5:19:02 PM	31800
Motor Oil Range Organics (MRO)	60	49		mg/Kg	1	5/18/2017 5:19:02 PM	31800
Surr: DNOP	108	70-130		%Rec	1	5/18/2017 5:19:02 PM	31800
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	5/18/2017 5:40:01 PM	31781
Surr: BFB	110	54-150		%Rec	1	5/18/2017 5:40:01 PM	31781

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L7-0.5

Project: Poker Lake 12"

Collection Date: 5/10/2017 9:30:00 AM

Lab ID: 1705852-003

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	1100	75		mg/Kg	50	5/22/2017 10:57:01 PM	31842
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	13000	950		mg/Kg	100	5/18/2017 7:31:23 PM	31800
Motor Oil Range Organics (MRO)	7700	4800		mg/Kg	100	5/18/2017 7:31:23 PM	31800
Surr: DNOP	0	70-130	S	%Rec	100	5/18/2017 7:31:23 PM	31800
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	530	96		mg/Kg	20	5/19/2017 9:51:56 PM	31781
Surr: BFB	282	54-150	S	%Rec	20	5/19/2017 9:51:56 PM	31781

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L8-2

Project: Poker Lake 12"

Collection Date: 5/10/2017 10:00:00 AM

Lab ID: 1705852-004

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	78	30		mg/Kg	20	5/19/2017 1:51:40 PM	31842
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	10000	960		mg/Kg	100	5/18/2017 3:06:20 PM	31800
Motor Oil Range Organics (MRO)	5000	4800		mg/Kg	100	5/18/2017 3:06:20 PM	31800
Surr: DNOP	0	70-130	S	%Rec	100	5/18/2017 3:06:20 PM	31800
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	4300	96		mg/Kg	20	5/18/2017 10:58:58 AM	31781
Surr: BFB	673	54-150	S	%Rec	20	5/18/2017 10:58:58 AM	31781
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	1.9		mg/Kg	20	5/18/2017 10:58:58 AM	31781
Benzene	9.1	0.48		mg/Kg	20	5/18/2017 10:58:58 AM	31781
Toluene	73	0.96		mg/Kg	20	5/18/2017 10:58:58 AM	31781
Ethylbenzene	28	0.96		mg/Kg	20	5/18/2017 10:58:58 AM	31781
Xylenes, Total	140	1.9		mg/Kg	20	5/18/2017 10:58:58 AM	31781
Surr: 4-Bromofluorobenzene	162	66.6-132	S	%Rec	20	5/18/2017 10:58:58 AM	31781

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L9-0.5

Project: Poker Lake 12"

Collection Date: 5/10/2017 10:30:00 AM

Lab ID: 1705852-005

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	50	30		mg/Kg	20	5/19/2017 2:04:05 PM	31842
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	68	10		mg/Kg	1	5/18/2017 6:03:21 PM	31800
Motor Oil Range Organics (MRO)	98	50		mg/Kg	1	5/18/2017 6:03:21 PM	31800
Surr: DNOP	95.6	70-130		%Rec	1	5/18/2017 6:03:21 PM	31800
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	5/18/2017 6:27:08 PM	31781
Surr: BFB	116	54-150		%Rec	1	5/18/2017 6:27:08 PM	31781

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW7

Project: Poker Lake 12"

Collection Date: 5/10/2017 8:30:00 AM

Lab ID: 1705852-006

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	5500	300		mg/Kg	200	5/22/2017 11:09:25 PM	31842

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW5

Project: Poker Lake 12"

Collection Date: 5/10/2017 8:37:00 AM

Lab ID: 1705852-007

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	4900	300		mg/Kg	200	5/22/2017 11:21:50 PM	31842

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

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

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## Analytical Report

Lab Order 1705852

Date Reported: 5/23/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: SW6

Project: Poker Lake 12"

Collection Date: 5/10/2017 8:42:00 AM

Lab ID: 1705852-008

Matrix: SOIL

Received Date: 5/16/2017 9:35:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	2500	150		mg/Kg	100	5/22/2017 11:34:14 PM	31842

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1705852

23-May-17

Client: Souder, Miller & Associates

Project: Poker Lake 12"

Sample ID	MB-31842	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions					
Client ID:	PBS	Batch ID:	31842	RunNo:	42953					
Prep Date:	5/19/2017	Analysis Date:	5/19/2017	SeqNo:	1351558	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID	LCS-31842	SampType:	LCS	TestCode:	EPA Method 300.0: Anions					
Client ID:	LCSS	Batch ID:	31842	RunNo:	42953					
Prep Date:	5/19/2017	Analysis Date:	5/19/2017	SeqNo:	1351559	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.3	90	110			

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 9 of 12
D Sample Diluted Due to Matrix	E Value above quantitation range	
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
R RPD outside accepted recovery limits	RL Reporting Detection Limit	
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705852

23-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake 12"

Sample ID <b>MB-31800</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>PBS</b>	Batch ID: <b>31800</b>		RunNo: <b>42868</b>							
Prep Date: <b>5/17/2017</b>	Analysis Date: <b>5/18/2017</b>		SeqNo: <b>1349094</b>		Units: <b>mg/Kg</b>					
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		88.6	70	130			

Sample ID <b>LCS-31800</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>31800</b>		RunNo: <b>42868</b>							
Prep Date: <b>5/17/2017</b>	Analysis Date: <b>5/18/2017</b>		SeqNo: <b>1349095</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	92.0	73.2	114			
Surr: DNOP	4.0		5.000		80.6	70	130			

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705852

23-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake 12"

Sample ID <b>MB-31781</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>31781</b>		RunNo: <b>42889</b>							
Prep Date: <b>5/17/2017</b>	Analysis Date: <b>5/18/2017</b>		SeqNo: <b>1349815</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		94.7	54	150			

Sample ID <b>LCS-31781</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>31781</b>		RunNo: <b>42889</b>							
Prep Date: <b>5/17/2017</b>	Analysis Date: <b>5/18/2017</b>		SeqNo: <b>1349816</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.3	76.4	125			
Surr: BFB	1100		1000		106	54	150			

**Qualifiers:**

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1705852

23-May-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake 12"

Sample ID: <b>MB-31781</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>31781</b>	RunNo: <b>42889</b>								
Prep Date: <b>5/17/2017</b>	Analysis Date: <b>5/18/2017</b>	SeqNo: <b>1349834</b>	Units: <b>mg/Kg</b>							
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	1.1		1.000		109	66.6	132			

Sample ID: <b>LCS-31781</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>31781</b>	RunNo: <b>42889</b>								
Prep Date: <b>5/17/2017</b>	Analysis Date: <b>5/18/2017</b>	SeqNo: <b>1349835</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.93	0.10	1.000	0	93.5	66.5	120			
Benzene	0.97	0.025	1.000	0	97.2	80	120			
Toluene	1.0	0.050	1.000	0	99.5	80	120			
Ethylbenzene	1.0	0.050	1.000	0	100	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	66.6	132			

**Qualifiers:**

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

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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: 1705852

RcptNo: 1

Received By: Erin Melendrez 5/16/2017 9:35:00 AM

Completed By: Ashley Gallegos 5/16/2017 6:13:34 PM

Reviewed By: SKC 05/17/17

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  $6.0^{\circ}\text{C}$ ? 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 # of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No Adjusted?
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 Checked by:

Special Handling (if applicable)

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

Person Notified:

Date

By Whom:

Via:

eMail

Phone

Fax

In Person

Regarding:

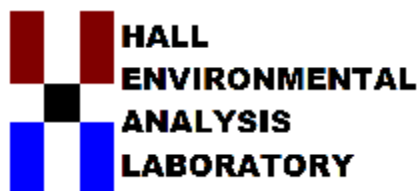
Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.1	Good	Yes			





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

December 05, 2016

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

RE: Poker Lake

OrderNo.: 1611B03

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/19/2016 for the analyses presented in the following report.

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

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

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

Sincerely,

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

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: W1

Project: Poker Lake

Collection Date: 11/16/2016 9:30:00 AM

Lab ID: 1611B03-001

Matrix: AQUEOUS

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: TOM
Diesel Range Organics (DRO)	1.8	1.0		mg/L	1	11/28/2016 4:06:15 PM	28817
Surr: DNOP	119	77.1-144		%Rec	1	11/28/2016 4:06:15 PM	28817
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/29/2016 9:53:35 AM	G39018
Surr: BFB	93.9	66.4-120		%Rec	1	11/29/2016 9:53:35 AM	G39018
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: DJF
Benzene	ND	1.0		µg/L	1	11/28/2016 11:10:58 AM	W38995
Toluene	ND	1.0		µg/L	1	11/28/2016 11:10:58 AM	W38995
Ethylbenzene	ND	1.0		µg/L	1	11/28/2016 11:10:58 AM	W38995
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2016 11:10:58 AM	W38995
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2016 11:10:58 AM	W38995
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2016 11:10:58 AM	W38995
Xylenes, Total	ND	1.5		µg/L	1	11/28/2016 11:10:58 AM	W38995
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	1	11/28/2016 11:10:58 AM	W38995
Surr: 4-Bromofluorobenzene	97.3	70-130		%Rec	1	11/28/2016 11:10:58 AM	W38995
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	11/28/2016 11:10:58 AM	W38995
Surr: Toluene-d8	101	70-130		%Rec	1	11/28/2016 11:10:58 AM	W38995

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

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

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## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: W2

Project: Poker Lake

Collection Date: 11/16/2016 9:50:00 AM

Lab ID: 1611B03-002

Matrix: AQUEOUS

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2016 4:33:17 PM	28817
Surr: DNOP	121	77.1-144		%Rec	1	11/28/2016 4:33:17 PM	28817
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	0.18	0.050		mg/L	1	11/29/2016 10:18:01 AM	G39018
Surr: BFB	99.1	66.4-120		%Rec	1	11/29/2016 10:18:01 AM	G39018
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	6.3	2.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
Toluene	25	2.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
Ethylbenzene	4.5	2.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
Methyl tert-butyl ether (MTBE)	ND	2.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
1,2,4-Trimethylbenzene	6.5	2.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
1,3,5-Trimethylbenzene	ND	2.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
Xylenes, Total	22	3.0		µg/L	2	11/28/2016 12:08:00 PM	W38995
Surr: 1,2-Dichloroethane-d4	98.3	70-130		%Rec	2	11/28/2016 12:08:00 PM	W38995
Surr: 4-Bromofluorobenzene	98.7	70-130		%Rec	2	11/28/2016 12:08:00 PM	W38995
Surr: Dibromofluoromethane	99.6	70-130		%Rec	2	11/28/2016 12:08:00 PM	W38995
Surr: Toluene-d8	101	70-130		%Rec	2	11/28/2016 12:08:00 PM	W38995

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

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

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## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: W3

Project: Poker Lake

Collection Date: 11/16/2016 11:20:00 AM

Lab ID: 1611B03-003

Matrix: AQUEOUS

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	11/28/2016 5:00:34 PM	28817
Surr: DNOP	120	77.1-144		%Rec	1	11/28/2016 5:00:34 PM	28817
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/29/2016 11:06:49 AM	G39018
Surr: BFB	92.5	66.4-120		%Rec	1	11/29/2016 11:06:49 AM	G39018
<b>EPA METHOD 8260: VOLATILES SHORT LIST</b>							Analyst: <b>DJF</b>
Benzene	ND	1.0		µg/L	1	11/28/2016 11:39:27 AM	W38995
Toluene	ND	1.0		µg/L	1	11/28/2016 11:39:27 AM	W38995
Ethylbenzene	ND	1.0		µg/L	1	11/28/2016 11:39:27 AM	W38995
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2016 11:39:27 AM	W38995
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2016 11:39:27 AM	W38995
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2016 11:39:27 AM	W38995
Xylenes, Total	ND	1.5		µg/L	1	11/28/2016 11:39:27 AM	W38995
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%Rec	1	11/28/2016 11:39:27 AM	W38995
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	11/28/2016 11:39:27 AM	W38995
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	11/28/2016 11:39:27 AM	W38995
Surr: Toluene-d8	99.5	70-130		%Rec	1	11/28/2016 11:39:27 AM	W38995

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

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

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## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: 1

Project: Poker Lake

Collection Date: 11/16/2016 10:00:00 AM

Lab ID: 1611B03-004

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	290	30		mg/Kg	20	11/29/2016 2:58:54 PM	28901
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	1600	95		mg/Kg	10	11/23/2016 12:56:19 PM	28807
Surr: DNOP	0	70-130	S	%Rec	10	11/23/2016 12:56:19 PM	28807
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	46	19		mg/Kg	4	11/23/2016 1:43:42 PM	28828
Surr: BFB	142	68.3-144		%Rec	4	11/23/2016 1:43:42 PM	28828

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

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

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## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: 2

Project: Poker Lake

Collection Date: 11/16/2016 10:10:00 AM

Lab ID: 1611B03-005

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	320	30		mg/Kg	20	11/29/2016 3:36:08 PM	28901
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	5600	97		mg/Kg	10	11/23/2016 1:18:06 PM	28807
Surr: DNOP	0	70-130	S	%Rec	10	11/23/2016 1:18:06 PM	28807
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	310	50		mg/Kg	10	11/23/2016 2:07:13 PM	28828
Surr: BFB	235	68.3-144	S	%Rec	10	11/23/2016 2:07:13 PM	28828

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

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

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## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: 3

Project: Poker Lake

Collection Date: 11/16/2016 10:20:00 AM

Lab ID: 1611B03-006

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	1400	75		mg/Kg	50	11/30/2016 9:37:58 PM	28901
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	3800	95		mg/Kg	10	11/23/2016 2:01:17 PM	28807
Surr: DNOP	0	70-130	S	%Rec	10	11/23/2016 2:01:17 PM	28807
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	230	23		mg/Kg	5	11/23/2016 2:30:40 PM	28828
Surr: BFB	302	68.3-144	S	%Rec	5	11/23/2016 2:30:40 PM	28828

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

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

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## Analytical Report

Lab Order 1611B03

Date Reported: 12/5/2016

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: 4

Project: Poker Lake

Collection Date: 11/16/2016 10:30:00 AM

Lab ID: 1611B03-007

Matrix: SOIL

Received Date: 11/19/2016 8:15:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	1100	30		mg/Kg	20	11/29/2016 4:00:58 PM	28901
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	1900	93		mg/Kg	10	11/23/2016 2:44:54 PM	28807
Surr: DNOP	0	70-130	S	%Rec	10	11/23/2016 2:44:54 PM	28807
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	50	5.0		mg/Kg	1	11/22/2016 7:12:18 PM	28828
Surr: BFB	302	68.3-144	S	%Rec	1	11/22/2016 7:12:18 PM	28828

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

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

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611B03  
05-Dec-16

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	MB-28901	SampType:	MBLK	TestCode:	EPA Method 300.0: Anions						
Client ID:	PBS	Batch ID:	28901	RunNo:	39040						
Prep Date:	11/29/2016	Analysis Date:	11/29/2016	SeqNo:	1221142	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-28901	SampType:	LCS	TestCode:	EPA Method 300.0: Anions						
Client ID:	LCSS	Batch ID:	28901	RunNo:	39040						
Prep Date:	11/29/2016	Analysis Date:	11/29/2016	SeqNo:	1221143	Units:	mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	95.4	90	110				

Qualifiers:

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank	Page 8 of 13
D Sample Diluted Due to Matrix	E Value above quantitation range	
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits	
ND Not Detected at the Reporting Limit	P Sample pH Not In Range	
R RPD outside accepted recovery limits	RL Reporting Detection Limit	
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611B03  
05-Dec-16

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	LCS-28807	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	28807	RunNo:	38942					
Prep Date:	11/22/2016	Analysis Date:	11/23/2016	SeqNo:	1217667	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	44	10	50.00	0	87.8	62.6	124			
Surr: DNOP	4.4		5.000		88.8	70	130			

Sample ID	MB-28807	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	28807	RunNo:	38942					
Prep Date:	11/22/2016	Analysis Date:	11/23/2016	SeqNo:	1217668	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Surr: DNOP	9.6		10.00		96.4	70	130			

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Detection Limit

W Sample container temperature is out of limit as specified

Page 9 of 13

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1611B03

05-Dec-16

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID	LCS-28817		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range					
Client ID:	LCSW		Batch ID: 28817		RunNo: 38976					
Prep Date:	11/22/2016		Analysis Date: 11/28/2016		SeqNo: 1218930		Units: mg/L			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.4	1.0	5.000	0	127	63.2	155			
Surr: DNOP	0.55		0.5000		111	77.1	144			

Sample ID	MB-28817		SampType:	MBLK		TestCode:	EPA Method 8015M/D: Diesel Range				
Client ID:	PBW		Batch ID:	28817		RunNo:	38976				
Prep Date:	11/22/2016		Analysis Date:	11/28/2016		SeqNo:	1218931		Units: mg/L		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	ND	1.0									
Surr: DNOP	1.1		1.000		114	77.1	144				

**Qualifiers:**

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

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611B03  
05-Dec-16

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	MB-28828	SampType:	MBLK	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	PBS	Batch ID:	28828	RunNo:	38913					
Prep Date:	11/21/2016	Analysis Date:	11/22/2016	SeqNo:	1216601	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	860		1000		85.9	68.3	144			

Sample ID	LCS-28828	SampType:	LCS	TestCode:	EPA Method 8015D: Gasoline Range					
Client ID:	LCSS	Batch ID:	28828	RunNo:	38913					
Prep Date:	11/21/2016	Analysis Date:	11/22/2016	SeqNo:	1216602	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	74.6	123			
Surr: BFB	910		1000		91.4	68.3	144			

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

W Sample container temperature is out of limit as specified

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QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1611B03  
05-Dec-16

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	RB	SampType: MBLK			TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	PBW	Batch ID: G39018			RunNo: 39018						
Prep Date:		Analysis Date: 11/29/2016			SeqNo: 1220836		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND	0.050								
Surr: BFB		18		20.00		91.8	66.4	120			

Sample ID	2.5UG GRO LCS	SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID:	LCSW	Batch ID: G39018			RunNo: 39018						
Prep Date:		Analysis Date: 11/29/2016			SeqNo: 1220837		Units: mg/L				
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		0.42	0.050	0.5000	0	84.5	80	120			
Surr: BFB		22		20.00		109	66.4	120			

Qualifiers:

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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1611B03

05-Dec-16

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>rb</b>	SampType: <b>MBLK</b>				TestCode: <b>EPA Method 8260: Volatiles Short List</b>					
Client ID: <b>PBW</b>	Batch ID: <b>W38995</b>				RunNo: <b>38995</b>					
Prep Date:	Analysis Date: <b>11/28/2016</b>				SeqNo: <b>1219467</b>	Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.6	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.0	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.1	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	70	130			

Sample ID <b>100ng lcs</b>	SampType: <b>LCS</b>				TestCode: <b>EPA Method 8260: Volatiles Short List</b>					
Client ID: <b>LCSW</b>	Batch ID: <b>W38995</b>				RunNo: <b>38995</b>					
Prep Date:	Analysis Date: <b>11/28/2016</b>				SeqNo: <b>1219468</b>	Units: <b>µg/L</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.6	70	130			
Toluene	20	1.0	20.00	0	99.1	70	130			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.0	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.2	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.6	70	130			
Surr: Toluene-d8	9.4		10.00		94.1	70	130			

**Qualifiers:**

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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified

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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: 1611B03

RcptNo: 1

Received by/date: *LM 11/19/16*

Logged By: Anne Thorne 11/19/2016 8:15:00 AM

*Anne Thorne*

Completed By: Anne Thorne 11/21/2016 10:39:23 AM

*Anne Thorne*Reviewed By: *AT* 11/21/16**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  $6.0^{\circ}\text{C}$ ? 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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.8	Good	Yes			

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: SMA - Carlsbad	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush
Mailing Address:	Project Name: Potter Lake
Phone #:	Project #:
Email or Fax#:	Project Manager: Austin Weynt
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)	Sampler: MRS
Accreditation: <input type="checkbox"/> NELAP <input type="checkbox"/> Other	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type)	Sample Temperature: 18

[illegible]

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



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

September 08, 2017

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

RE: Poker Lake

OrderNo.: 1708674

Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/9/2017 for the analyses presented in the following report.

This report is a revised report and it replaces the original report issued August 28, 2017.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. 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. All samples are reported as received unless otherwise indicated.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', with a stylized flourish at the end.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1708674

Date Reported: 9/8/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L2-0.5

Project: Poker Lake

Collection Date: 8/7/2017 10:47:00 AM

Lab ID: 1708674-002

Matrix: SOIL

Received Date: 8/9/2017 8:53:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	ND	30		mg/Kg	20	8/18/2017 12:08:10 AM	33438
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	8/14/2017 6:24:09 PM	33337
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	8/14/2017 6:24:09 PM	33337
Surr: DNOP	91.5	70-130		%Rec	1	8/14/2017 6:24:09 PM	33337
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/15/2017 6:31:04 PM	33329
Surr: BFB	87.0	54-150		%Rec	1	8/15/2017 6:31:04 PM	33329

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 8
	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	

## Analytical Report

Lab Order 1708674

Date Reported: 9/8/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L3-0.5

Project: Poker Lake

Collection Date: 8/7/2017 10:50:00 AM

Lab ID: 1708674-003

Matrix: SOIL

Received Date: 8/9/2017 8:53:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	67	30		mg/Kg	20	8/21/2017 5:25:21 PM	33475
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	210	100		mg/Kg	10	8/14/2017 2:17:57 PM	33337
Motor Oil Range Organics (MRO)	620	500		mg/Kg	10	8/14/2017 2:17:57 PM	33337
Surr: DNOP	0	70-130	S	%Rec	10	8/14/2017 2:17:57 PM	33337
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/15/2017 6:54:41 PM	33329
Surr: BFB	88.4	54-150		%Rec	1	8/15/2017 6:54:41 PM	33329
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	8/15/2017 6:54:41 PM	33329
Benzene	ND	0.024		mg/Kg	1	8/15/2017 6:54:41 PM	33329
Toluene	ND	0.048		mg/Kg	1	8/15/2017 6:54:41 PM	33329
Ethylbenzene	ND	0.048		mg/Kg	1	8/15/2017 6:54:41 PM	33329
Xylenes, Total	ND	0.095		mg/Kg	1	8/15/2017 6:54:41 PM	33329
Surr: 4-Bromofluorobenzene	98.5	66.6-132		%Rec	1	8/15/2017 6:54:41 PM	33329

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

<b>Qualifiers:</b>	*	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

Page 2 of 8



## Analytical Report

Lab Order 1708674

Date Reported: 9/8/2017

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller &amp; Associates

Client Sample ID: L5-11

Project: Poker Lake

Collection Date: 8/7/2017 10:03:00 AM

Lab ID: 1708674-004

Matrix: SOIL

Received Date: 8/9/2017 8:53:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Chloride	120	30		mg/Kg	20	8/21/2017 6:27:26 PM	33475
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>TOM</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/14/2017 2:40:20 PM	33337
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/14/2017 2:40:20 PM	33337
Surr: DNOP	94.4	70-130		%Rec	1	8/14/2017 2:40:20 PM	33337
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/15/2017 7:18:22 PM	33329
Surr: BFB	88.9	54-150		%Rec	1	8/15/2017 7:18:22 PM	33329

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 8
	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	

Analytical Report

Lab Order 1708674

Date Reported: 9/8/2017

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates

Client Sample ID: L5-18

Project: Poker Lake

Collection Date: 8/7/2017

Lab ID: 1708674-005

Matrix: SOIL

Received Date: 8/9/2017 8:53:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	110	30		mg/Kg	20	8/21/2017 6:39:51 PM	33475

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 4 of 8
	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#: 1708674

08-Sep-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID	MB-33438		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	33438		RunNo:	45061				
Prep Date:	8/17/2017		Analysis Date:	8/17/2017		SeqNo:	1426672		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-33438		SampType: Ics		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 33438		RunNo: 45061					
Prep Date:	8/17/2017		Analysis Date: 8/17/2017		SeqNo: 1426673		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID	MB-33475		SampType:	mblk		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	33475		RunNo:	45096				
Prep Date:	8/21/2017		Analysis Date:	8/21/2017		SeqNo:	1428808		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-33475		SampType: lcs		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 33475		RunNo: 45096					
Prep Date:	8/21/2017		Analysis Date: 8/21/2017		SeqNo: 1428809		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.2	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

Page 5 of 8

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1708674  
08-Sep-17

Client: Souder, Miller & Associates  
Project: Poker Lake

Sample ID	LCS-33337	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	33337	RunNo:	44937					
Prep Date:	8/11/2017	Analysis Date:	8/14/2017	SeqNo:	1421453	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45	10	50.00	0	90.5	73.2	114			
Surr: DNOP	4.5		5.000		90.8	70	130			

Sample ID	MB-33337	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	33337	RunNo:	44937					
Prep Date:	8/11/2017	Analysis Date:	8/14/2017	SeqNo:	1421454	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	8.8		10.00		87.9	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

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WO#: 1708674

08-Sep-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID <b>MB-33329</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>33329</b>		RunNo: <b>44964</b>							
Prep Date: <b>8/11/2017</b>	Analysis Date: <b>8/15/2017</b>		SeqNo: <b>1422905</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.6	54	150			

Sample ID <b>LCS-33329</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>33329</b>		RunNo: <b>44964</b>							
Prep Date: <b>8/11/2017</b>	Analysis Date: <b>8/15/2017</b>		SeqNo: <b>1422907</b>		Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	76.4	125			
Surr: BFB	970		1000		97.0	54	150			

**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

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1708674

08-Sep-17

**Client:** Souder, Miller & Associates**Project:** Poker Lake

Sample ID: <b>MB-33329</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>33329</b>	RunNo: <b>44964</b>								
Prep Date: <b>8/11/2017</b>	Analysis Date: <b>8/15/2017</b>	SeqNo: <b>1422933</b>	Units: <b>mg/Kg</b>							
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	0.99		1.000		99.2	66.6	132			

Sample ID: <b>LCS-33329</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>33329</b>	RunNo: <b>44964</b>								
Prep Date: <b>8/11/2017</b>	Analysis Date: <b>8/15/2017</b>	SeqNo: <b>1422935</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.81	0.10	1.000	0	81.1	66.5	120			
Benzene	0.89	0.025	1.000	0	89.1	80	120			
Toluene	0.87	0.050	1.000	0	86.8	80	120			
Ethylbenzene	0.87	0.050	1.000	0	86.9	80	120			
Xylenes, Total	2.7	0.10	3.000	0	88.3	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	66.6	132			

**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
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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: 1708674

RptNo: 1

Received By: Erin Melendrez

8/9/2017 8:53:00 AM

Completed By: Ashley Gallegos

8/10/2017 12:15:43 PM

Reviewed By:

IMO

8/11/

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

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

Special Handling (if applicable)

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

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

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good	Yes			



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources  
Oil Conservation Division  
1220 S. St Francis Dr.  
Santa Fe, NM 87505

CONDITIONS  
  
Action 206751

CONDITIONS

Operator: ENTERPRISE PRODUCTS OPERATING, LLC P.O. BOX 4324 HOUSTON, TX 77210	OGRID: 374092
	Action Number: 206751
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	5/4/2023