

# Lee Federal #94

## WORK PLAN

---

API No. 30-015-43365

NMOCD Case #: 2R-3378

Release Date: N/A

Unit Letter M, Section 17, Township 17 South, Range 31 East

April 25, 2016

**Prepared by:**

Michael Burton, Environmental Operations Director  
Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
Phone: (575)964-8394  
Fax: (575)393-8396

Mike Bratcher  
Environmental Specialist  
NM Oil Conservation District – Division 2  
811 S. First St.  
Artesia, NM 88210

RE: **Apache Corporation – Lee Federal #94 – Remediation Work Plan**  
UL/M, Section 17, T17S, R31E  
API No. 30-015-43365  
NMOCD Case #: 2R-3378

Mr. Bratcher,

Apache Corporation (Apache) has retained Diversified Field Service, Inc. (DFSI) to address environmental issues for the site detailed herein.

The site is located east of Loco Hills, NM, in Lea County. The spill site resulted from drilling activities and affected the southwest area of the pad and pasture south-southwest of the pad. An unknown amount was released with none recovered. An initial C-141 was submitted to the NMOCD on November 6, 2015 and approved on November 10, 2015 (Appendix I).

### **Site Assessment**

DFSI has conducted a groundwater study of the area and has determined, according to the New Mexico Office of the State Engineer, there is no known groundwater below this site (Appendix II).

Beginning November 30, 2015, DFSI personnel were on site to obtain samples within and the leak area (Figure 1). Four verticals were installed, resulting in decreasing chloride concentrations with depth (Appendix III). All clean field samples under NMOCD and BLM regulatory guidelines were submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM to obtain confirmation (Appendix IV).

To further delineate the site, DFSI personnel were on site December 3 and December 4, 2015 to obtain additional soil samples within the leak area. Two verticals were installed, resulting in low chloride and TPH concentrations. All clean field samples under NMOCD and BLM regulatory guidelines were submitted for laboratory analysis at Cardinal Laboratories of Hobbs, NM to obtain confirmation.

Due to inclement weather, DFSI personnel were on site April 4, 2016, to re-evaluate the chloride concentrations within the vadose zone. Three verticals were installed within the pad area of the release and three sample points were collected to various depths within the pasture area of the release. Constituent concentrations within the pad area decreased to below regulatory limits at the surface or 1'. Within the pastured area, concentrations within the vegetation zone were below NMOCD and BLM regulatory limits. All clean field samples under NMOCD and BLM regulatory guidelines were submitted for laboratory analysis at Hall Environmental of Albuquerque, NM to obtain confirmation.

## Conclusion

After careful review DFSI on behalf of Apache would like to propose the following:

Due to the safety concerns within the release area, the pad will be scraped 6" and backfilled with caliche from interim reclamation to ground surface and contoured to the surrounding area. Due to the chloride constituents being within regulatory limits for regrowth and vegetation of the site, the pasture area affected by the release will be tilled and seeded with a BLM and NMOCD approved mix.

Following the approval of the above plan, DFSI will submit all proper closure documentation to the NMOCD and BLM in accordance to the State and Federal Guidelines set forth.

Please feel free to contact me with any questions concerning this remediation plan request.

Sincerely,



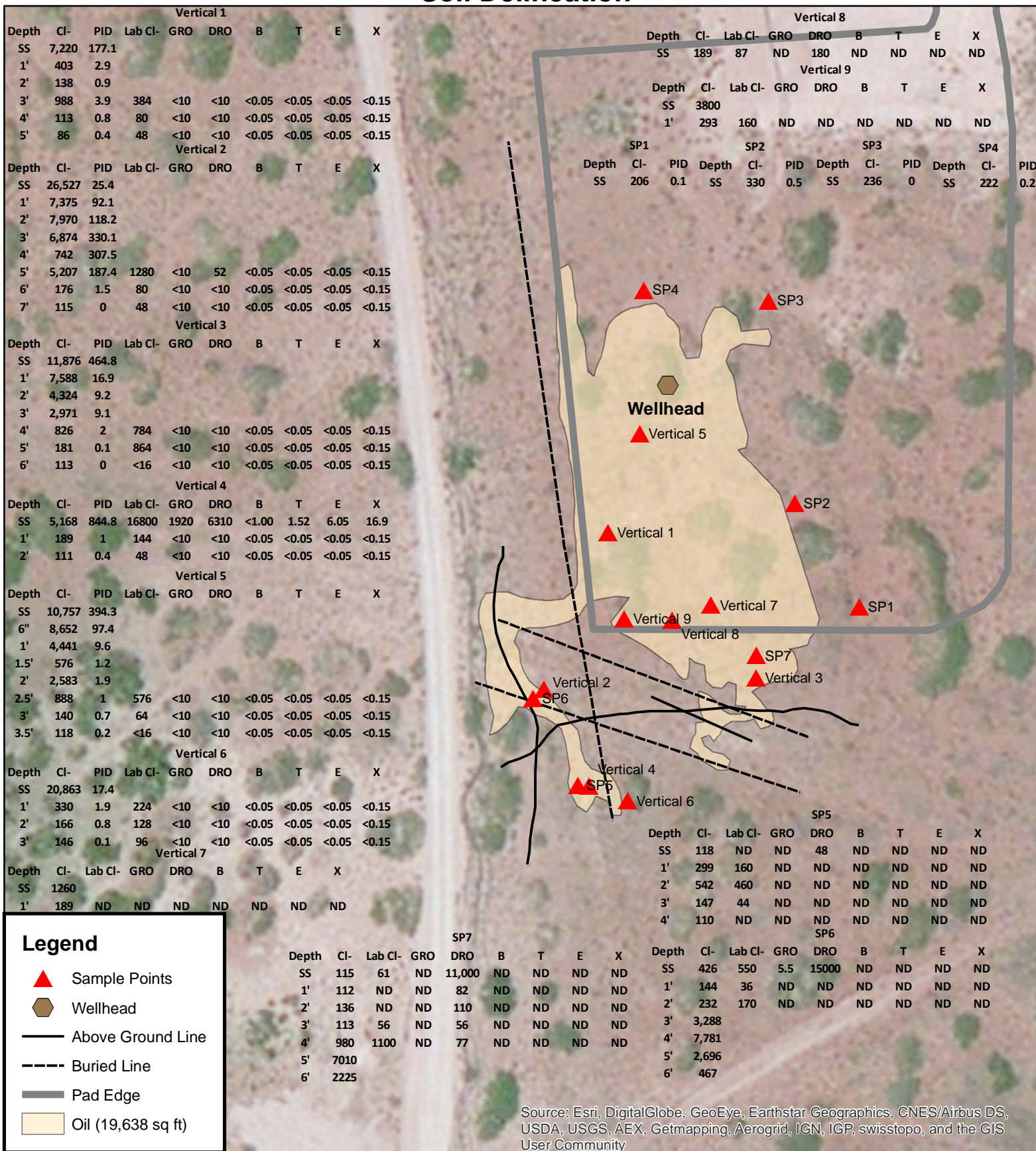
Michael Burton  
Environmental Operations Director | Diversified Field Service, Inc.  
206 West Snyder | Hobbs, NM 88240  
Office: (575)964-8394 | Mobile: (575)390-5454  
Fax: (575)964-8396 | Email: [mburton@diversifiedfsi.com](mailto:mburton@diversifiedfsi.com)

cc Shelly Tucker

Figure: Soil Delineation

Appendices: Initial Form C-141  
Groundwater Study  
Site Photos  
Laboratory Analyses

# Soil Delineation



**Apache**  
**Lee Federal #94**  
**Unit Letter M, Sec. 17, T17S, R31E**  
**Eddy County, NM**  
**NMOCD Case #: 2R-3378**

Mapped: 04/04/2016 CF  
 Drafted: L. Flores

012.525 50 75 100  
 Feet

# Appendix I

INITIAL C-141

---

Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394



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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised August 8, 2011  
Submit 1 Copy to appropriate District Office in  
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

**0AB1531453445**

Name of Company: Apache Corporation <b>873</b>		OPERATOR	<input checked="" type="checkbox"/> Initial Report <input type="checkbox"/> Final Report
Address: 2350 W Marland Blvd Hobbs, NM 88240		Contact: Bruce Baker	
Facility Name: Lee Federal 94		Telephone No.: (432) 631-6982	
		Facility Type: Oil Well	
Surface Owner: Federal		Mineral Owner	API No. 30-015-43365

LOCATION OF RELEASE

Unit Letter M	Section 17	Township 17S	Range 31E	Feet from the 105'	North/South Line FSL	Feet from the 850'	East/West Line FWL	County Eddy
------------------	---------------	-----------------	--------------	-----------------------	-------------------------	-----------------------	-----------------------	----------------

Latitude N32.827423 Longitude W103.897168

NATURE OF RELEASE

Type of Release: Oil and produced water	Volume of Release: Unknown	Volume Recovered: 0
Source of Release: Unknown	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery: 10/29/2015
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Mike Bratcher (NMOCD) Shelly Tucker (BLM) via email	
By Whom? Bruce Baker	Date and Hour: 10/30/2015 at 9:09 a.m. <b>2-mail 8:00am</b>	
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.\*

NM OIL CONSERVATION

ARTESIA DISTRICT

NOV 06 2015

Describe Cause of Problem and Remedial Action Taken.\*

The release was associated with drilling activities but the cause and source of the release is unknown.

RECEIVED

Describe Area Affected and Cleanup Action Taken.\*

The release affected the southwest area of the pad and the pasture south and southwest of the pad. The area was mapped and field samples were collected.

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>Bruce Baker</b>		OIL CONSERVATION DIVISION	
Printed Name: Bruce Baker		Approved by Environmental Specialist: <b>[Signature]</b>	
Title: Environmental Technician		Approval Date: <b>11/10/15</b>	Expiration Date: <b>N/A</b>
E-mail Address: larry.baker@apachecorp.com		Conditions of Approval: <b>Remediation per O.C.D. Rules &amp; Guidelines</b> <input type="checkbox"/> <b>SUBMIT REMEDIATION PROPOSAL NO</b>	
Date: 11/6/2015 Phone: (432) 631-6982		<b>LATER THAN: 12/12/15</b>	

\* Attach Additional Sheets If Necessary

2RP. 3378

# Appendix II

## GROUNDWATER STUDY

---

Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394





---

# *New Mexico Office of the State Engineer* **Water Column/Average Depth to Water**

---

No records found.

**PLSS Search:**

**Section(s):** 7, 8, 9, 16, 17,  
18, 19, 20, 21      **Township:** 17S      **Range:** 31E

# Appendix III

## SITE PHOTOS

---

# Apache Lee Federal #94

## PHOTO PAGE

---



Site prior, facing southeast

11/30/2015



Site prior, facing northeast

11/30/2015



Site prior, facing northwest

11/30/2015



Site prior, facing southwest

11/30/2015





Installing vertical, facing northeast 11/30/2015



Collecting sample, facing north 12/4/2015



Collecting sample, facing northwest 4/4/2016



Installing vertical, facing northeast 4/4/2016



Collecting sample by auger, facing north 4/4/2016



Collecting sample by auger, facing south 4/4/2016

# Appendix IV

## LABORATORY ANALYSES

---

Diversified Field Service, Inc.  
206 W. Snyder  
Hobbs, NM 88240  
(575) 964-8394



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

December 09, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: LEE FEDERAL #94

Enclosed are the results of analyses for samples received by the laboratory on 12/02/15 16:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 1 @ 3' (H503155-01)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84	
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957	
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833	
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46	
Total BTX	<0.300	0.300	12/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	12/04/2015	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 97.7 % 35-147

Surrogate: 1-Chlorooctadecane 109 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

 APACHE CORP - HOBBS  
 BRUCE BAKER  
 2350 W. MARLAND BLVD.  
 HOBBS NM, 88240  
 Fax To: (575) 393-2432

 Received: 12/02/2015  
 Reported: 12/09/2015  
 Project Name: LEE FEDERAL #94  
 Project Number: NONE GIVEN  
 Project Location: NOT GIVEN

 Sampling Date: 11/30/2015  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Judy Garcia

**Sample ID: VERTICAL 1 @ 4' (H503155-02)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 96.7 % 35-147

Surrogate: 1-Chlorooctadecane 106 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 1 @ 5' (H503155-03)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 98.0 % 35-147

Surrogate: 1-Chlorooctadecane 106 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 2 @ 5' (H503155-04)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1280	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	52.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 106 % 35-147

Surrogate: 1-Chlorooctadecane 121 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 2 @ 6' (H503155-05)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	12/04/2015	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 97.7 % 35-147

Surrogate: 1-Chlorooctadecane 107 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 2 @ 7' (H503155-06)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 92.4 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 3 @ 4' (H503155-07)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84	
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957	
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833	
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46	
Total BTX	<0.300	0.300	12/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	784	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 98.2 % 35-147

Surrogate: 1-Chlorooctadecane 109 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 3 @ 5' (H503155-08)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	864	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 96.4 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 11/30/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 3 @ 6' (H503155-09)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/04/2015	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/03/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/03/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 89.1 % 35-147

Surrogate: 1-Chlorooctadecane 96.5 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received:	12/02/2015	Sampling Date:	12/02/2015
Reported:	12/09/2015	Sampling Type:	Soil
Project Name:	LEE FEDERAL #94	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Judy Garcia
Project Location:	NOT GIVEN		

**Sample ID: VERTICAL 4 @ SURFACE (H503155-10)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	12/04/2015	ND	1.71	85.3	2.00	1.84	
Toluene*	1.52	1.00	12/04/2015	ND	1.70	85.0	2.00	0.957	
Ethylbenzene*	6.05	1.00	12/04/2015	ND	1.76	87.8	2.00	0.833	
Total Xylenes*	16.9	3.00	12/04/2015	ND	5.35	89.2	6.00	1.46	
Total BTX	24.4	6.00	12/04/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16800	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	1920	200	12/03/2015	ND	184	91.9	200	4.54		
DRO >C10-C28	6310	200	12/03/2015	ND	178	89.0	200	5.51		

Surrogate: 1-Chlorooctane 143 % 35-147

Surrogate: 1-Chlorooctadecane 191 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/01/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 4 @ 1' (H503155-11)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/04/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 94.6 % 35-147

Surrogate: 1-Chlorooctadecane 106 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/02/2015  
Reported: 12/09/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/01/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Judy Garcia

**Sample ID: VERTICAL 4 @ 2' (H503155-12)**

BTX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/04/2015	ND	1.71	85.3	2.00	1.84		
Toluene*	<0.050	0.050	12/04/2015	ND	1.70	85.0	2.00	0.957		
Ethylbenzene*	<0.050	0.050	12/04/2015	ND	1.76	87.8	2.00	0.833		
Total Xylenes*	<0.150	0.150	12/04/2015	ND	5.35	89.2	6.00	1.46		
Total BTX	<0.300	0.300	12/04/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/04/2015	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/04/2015	ND	184	91.9	200	4.54	
DRO >C10-C28	<10.0	10.0	12/04/2015	ND	178	89.0	200	5.51	

Surrogate: 1-Chlorooctane 100 % 35-147

Surrogate: 1-Chlorooctadecane 110 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: <u>Apache</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																			
Project Manager: <u>Bruce Baker</u>				P.O. #:																							
Address:				Company:																							
City:		State:		Zip:		Attn:																					
Phone #:		Fax #:		Address:																							
Project #:		Project Owner:		City:																							
Project Name: <u>Apache</u>		State:		Zip:		Phone #:																					
Project Location: <u>Lee Federal #94</u>		Fax #:																									
Sampler Name: <u>Chris Flores</u>																											
FOR LAB USE ONLY				MATRIX				PRESERV.		SAMPLING																	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	Chloride	BTEX	TPH										
<u>H503155</u>																											
1	Vertical 1 @ 3'	G	1			✓				✓			11-30-2015	11:30 AM	X	X	X										
2	Vertical 1 @ 4'	G	1			✓				✓				11:40 AM	X	X	X										
3	Vertical 1 @ 5'	G	1			✓				✓				11:50 AM	X	X	X										
4	Vertical 2 @ 5'	G	1			✓				✓				1:50 PM	X	X	X										
5	Vertical 2 @ 6'	G	1			✓				✓				2:00 PM	X	X	X										
6	Vertical 2 @ 7'	G	1			✓				✓				2:10 PM	X	X	X										
7	Vertical 3 @ 4'	G	1			✓				✓				3:00 PM	X	X	X										
8	Vertical 3 @ 5'	G	1			✓				✓				3:10 PM	X	X	X										
9	Vertical 3 @ 6'	G	1			✓				✓				3:20 PM	X	X	X										
10	Vertical 4 @ Surface	G	1			✓				✓			12-2-2015	3:10 PM	X	X	X										

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>[Signature]</u>	Date: <u>12-2-15</u>	Received By: <u>Judy Garcia</u>	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By: <u>[Signature]</u>	Time: <u>16:40</u>	Received By: <u>[Signature]</u>	Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Date:	Time:	REMARKS:	
Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	CHECKED BY: (Initials) <u>[Signature]</u>		Larry.baker@apachecorp.com	









PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

December 11, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: LEE FEDERAL #94

Enclosed are the results of analyses for samples received by the laboratory on 12/04/15 15:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received:	12/04/2015	Sampling Date:	12/03/2015
Reported:	12/11/2015	Sampling Type:	Soil
Project Name:	LEE FEDERAL #94	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: VERTICAL 5 @ 2.5' (H503170-01)**

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/07/2015	ND	1.92	96.0	2.00	0.931	
Toluene*	<0.050	0.050	12/07/2015	ND	1.92	95.8	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/07/2015	ND	1.99	99.7	2.00	1.44	
Total Xylenes*	<0.150	0.150	12/07/2015	ND	5.94	99.0	6.00	1.22	
Total BTX	<0.300	0.300	12/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	12/08/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/07/2015	ND	201	101	200	7.23	
DRO >C10-C28	<10.0	10.0	12/07/2015	ND	205	102	200	6.41	

Surrogate: 1-Chlorooctane 103 % 35-147

Surrogate: 1-Chlorooctadecane 108 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/04/2015  
Reported: 12/11/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/03/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: VERTICAL 5 @ 3' (H503170-02)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/07/2015	ND	1.92	96.0	2.00	0.931	
Toluene*	<0.050	0.050	12/07/2015	ND	1.92	95.8	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/07/2015	ND	1.99	99.7	2.00	1.44	
Total Xylenes*	<0.150	0.150	12/07/2015	ND	5.94	99.0	6.00	1.22	
Total BTEx	<0.300	0.300	12/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	12/08/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/07/2015	ND	201	101	200	7.23	
DRO >C10-C28	<10.0	10.0	12/07/2015	ND	205	102	200	6.41	

Surrogate: 1-Chlorooctane 93.7 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/04/2015  
Reported: 12/11/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/03/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: VERTICAL 5 @ 3.5' (H503170-03)**

BTEx 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/07/2015	ND	1.92	96.0	2.00	0.931		
Toluene*	<0.050	0.050	12/07/2015	ND	1.92	95.8	2.00	1.12		
Ethylbenzene*	<0.050	0.050	12/07/2015	ND	1.99	99.7	2.00	1.44		
Total Xylenes*	<0.150	0.150	12/07/2015	ND	5.94	99.0	6.00	1.22		
Total BTEx	<0.300	0.300	12/07/2015	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	12/08/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/07/2015	ND	201	101	200	7.23	
DRO >C10-C28	<10.0	10.0	12/07/2015	ND	205	102	200	6.41	

Surrogate: 1-Chlorooctane 93.4 % 35-147

Surrogate: 1-Chlorooctadecane 101 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received: 12/04/2015  
Reported: 12/11/2015  
Project Name: LEE FEDERAL #94  
Project Number: NONE GIVEN  
Project Location: NOT GIVEN

Sampling Date: 12/04/2015  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Jodi Henson

**Sample ID: VERTICAL 6 @ 1' (H503170-04)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/07/2015	ND	1.92	96.0	2.00	0.931	
Toluene*	<0.050	0.050	12/07/2015	ND	1.92	95.8	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/07/2015	ND	1.99	99.7	2.00	1.44	
Total Xylenes*	<0.150	0.150	12/07/2015	ND	5.94	99.0	6.00	1.22	
Total BTEx	<0.300	0.300	12/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.6-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	12/08/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/07/2015	ND	201	101	200	7.23	
DRO >C10-C28	<10.0	10.0	12/07/2015	ND	205	102	200	6.41	

Surrogate: 1-Chlorooctane 94.0 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received:	12/04/2015	Sampling Date:	12/04/2015
Reported:	12/11/2015	Sampling Type:	Soil
Project Name:	LEE FEDERAL #94	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: VERTICAL 6 @ 2' (H503170-05)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/07/2015	ND	1.92	96.0	2.00	0.931	
Toluene*	<0.050	0.050	12/07/2015	ND	1.92	95.8	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/07/2015	ND	1.99	99.7	2.00	1.44	
Total Xylenes*	<0.150	0.150	12/07/2015	ND	5.94	99.0	6.00	1.22	
Total BTEx	<0.300	0.300	12/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	12/08/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/07/2015	ND	201	101	200	7.23	
DRO >C10-C28	<10.0	10.0	12/07/2015	ND	205	102	200	6.41	

Surrogate: 1-Chlorooctane 93.8 % 35-147

Surrogate: 1-Chlorooctadecane 102 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

APACHE CORP - HOBBS  
BRUCE BAKER  
2350 W. MARLAND BLVD.  
HOBBS NM, 88240  
Fax To: (575) 393-2432

Received:	12/04/2015	Sampling Date:	12/04/2015
Reported:	12/11/2015	Sampling Type:	Soil
Project Name:	LEE FEDERAL #94	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: VERTICAL 6 @ 3' (H503170-06)**

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/07/2015	ND	1.92	96.0	2.00	0.931	
Toluene*	<0.050	0.050	12/07/2015	ND	1.92	95.8	2.00	1.12	
Ethylbenzene*	<0.050	0.050	12/07/2015	ND	1.99	99.7	2.00	1.44	
Total Xylenes*	<0.150	0.150	12/07/2015	ND	5.94	99.0	6.00	1.22	
Total BTEx	<0.300	0.300	12/07/2015	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.6-140

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	12/08/2015	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	12/08/2015	ND	201	101	200	7.23	
DRO >C10-C28	<10.0	10.0	12/08/2015	ND	205	102	200	6.41	

Surrogate: 1-Chlorooctane 96.8 % 35-147

Surrogate: 1-Chlorooctadecane 105 % 28-171

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



Celey D. Keene, Lab Director/Quality Manager



**Notes and Definitions**

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

---

Cardinal Laboratories

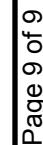
\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



---

Celey D. Keene, Lab Director/Quality Manager



## Page 9 of 9

Page 9 of 9

Page 9 of 9

Page 9 of 9

Page 9 of 9

Page 9 of 9



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)

April 14, 2016

Bruce Baker

Diversified Field Services, Inc

315 S. Leech St

Hobbs, NM 88240

TEL: (575) 964-8394

FAX

RE: Lee Federal

OrderNo.: 1604324

Dear Bruce Baker:

Hall Environmental Analysis Laboratory received 16 sample(s) on 4/7/2016 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 5 Surface

**Project:** Lee Federal

**Collection Date:** 4/4/2016 8:00:00 AM

**Lab ID:** 1604324-001

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/11/2016 9:51:19 PM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	48	9.4		mg/Kg	1	4/11/2016 10:30:08 AM	24695
Surr: DNOP	74.8	70-130		%Rec	1	4/11/2016 10:30:08 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/11/2016 11:08:12 AM	24697
Surr: BFB	101	80-120		%Rec	1	4/11/2016 11:08:12 AM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/11/2016 11:08:12 AM	24697
Toluene	ND	0.047		mg/Kg	1	4/11/2016 11:08:12 AM	24697
Ethylbenzene	ND	0.047		mg/Kg	1	4/11/2016 11:08:12 AM	24697
Xylenes, Total	ND	0.094		mg/Kg	1	4/11/2016 11:08:12 AM	24697
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	4/11/2016 11:08:12 AM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 5 @ 1'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 8:10:00 AM

**Lab ID:** 1604324-002

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/11/2016 10:16:08 PM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/8/2016 11:45:36 PM	24695
Surr: DNOP	89.9	70-130		%Rec	1	4/8/2016 11:45:36 PM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/11/2016 12:18:59 PM	24697
Surr: BFB	103	80-120		%Rec	1	4/11/2016 12:18:59 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 12:18:59 PM	24697
Toluene	ND	0.047		mg/Kg	1	4/11/2016 12:18:59 PM	24697
Ethylbenzene	ND	0.047		mg/Kg	1	4/11/2016 12:18:59 PM	24697
Xylenes, Total	ND	0.094		mg/Kg	1	4/11/2016 12:18:59 PM	24697
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	4/11/2016 12:18:59 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 5 @ 2'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 8:20:00 AM

**Lab ID:** 1604324-003

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	460	30		mg/Kg	20	4/11/2016 11:05:46 PM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	4/9/2016 12:06:55 AM	24695
Surr: DNOP	89.7	70-130		%Rec	1	4/9/2016 12:06:55 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/11/2016 12:42:29 PM	24697
Surr: BFB	104	80-120		%Rec	1	4/11/2016 12:42:29 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 12:42:29 PM	24697
Toluene	ND	0.049		mg/Kg	1	4/11/2016 12:42:29 PM	24697
Ethylbenzene	ND	0.049		mg/Kg	1	4/11/2016 12:42:29 PM	24697
Xylenes, Total	ND	0.098		mg/Kg	1	4/11/2016 12:42:29 PM	24697
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	4/11/2016 12:42:29 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 5 @ 3'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 8:30:00 AM

**Lab ID:** 1604324-004

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	44	30		mg/Kg	20	4/11/2016 11:30:36 PM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/9/2016 12:28:16 AM	24695
Surr: DNOP	88.8	70-130		%Rec	1	4/9/2016 12:28:16 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/11/2016 1:05:55 PM	24697
Surr: BFB	106	80-120		%Rec	1	4/11/2016 1:05:55 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 1:05:55 PM	24697
Toluene	ND	0.049		mg/Kg	1	4/11/2016 1:05:55 PM	24697
Ethylbenzene	ND	0.049		mg/Kg	1	4/11/2016 1:05:55 PM	24697
Xylenes, Total	ND	0.098		mg/Kg	1	4/11/2016 1:05:55 PM	24697
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	4/11/2016 1:05:55 PM	24697

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



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 6 @ Surface

**Project:** Lee Federal

**Collection Date:** 4/4/2016 9:00:00 AM

**Lab ID:** 1604324-005

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	550	30		mg/Kg	20	4/11/2016 11:55:25 PM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	15000	9900		mg/Kg	1E	4/9/2016 12:49:35 AM	24695
Surr: DNOP	0	70-130	S	%Rec	1E	4/9/2016 12:49:35 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	5.5	4.7		mg/Kg	1	4/11/2016 1:29:18 PM	24697
Surr: BFB	116	80-120		%Rec	1	4/11/2016 1:29:18 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 1:29:18 PM	24697
Toluene	ND	0.047		mg/Kg	1	4/11/2016 1:29:18 PM	24697
Ethylbenzene	ND	0.047		mg/Kg	1	4/11/2016 1:29:18 PM	24697
Xylenes, Total	ND	0.094		mg/Kg	1	4/11/2016 1:29:18 PM	24697
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	4/11/2016 1:29:18 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 6 @ 1'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 9:10:00 AM

**Lab ID:** 1604324-006

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	36	30		mg/Kg	20	4/12/2016 12:20:14 AM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/9/2016 1:10:56 AM	24695
Surr: DNOP	91.1	70-130		%Rec	1	4/9/2016 1:10:56 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/11/2016 2:16:22 PM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 2:16:22 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/11/2016 2:16:22 PM	24697
Toluene	ND	0.046		mg/Kg	1	4/11/2016 2:16:22 PM	24697
Ethylbenzene	ND	0.046		mg/Kg	1	4/11/2016 2:16:22 PM	24697
Xylenes, Total	ND	0.093		mg/Kg	1	4/11/2016 2:16:22 PM	24697
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	4/11/2016 2:16:22 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 6 @ 2'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 9:20:00 AM

**Lab ID:** 1604324-007

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	170	30		mg/Kg	20	4/12/2016 12:45:03 AM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/9/2016 1:32:14 AM	24695
Surr: DNOP	88.6	70-130		%Rec	1	4/9/2016 1:32:14 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/11/2016 2:39:54 PM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 2:39:54 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/11/2016 2:39:54 PM	24697
Toluene	ND	0.046		mg/Kg	1	4/11/2016 2:39:54 PM	24697
Ethylbenzene	ND	0.046		mg/Kg	1	4/11/2016 2:39:54 PM	24697
Xylenes, Total	ND	0.093		mg/Kg	1	4/11/2016 2:39:54 PM	24697
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	4/11/2016 2:39:54 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1604324**

Date Reported: **4/14/2016**

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 7 @ Surface

**Project:** Lee Federal

**Collection Date:** 4/4/2016 9:40:00 AM

**Lab ID:** 1604324-008

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	61	30		mg/Kg	20	4/12/2016 1:34:42 AM	24742
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	11000	970		mg/Kg	100	4/11/2016 11:34:39 AM	24695
Surr: DNOP	0	70-130	S	%Rec	100	4/11/2016 11:34:39 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/11/2016 3:03:26 PM	24697
Surr: BFB	110	80-120		%Rec	1	4/11/2016 3:03:26 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/11/2016 3:03:26 PM	24697
Toluene	ND	0.047		mg/Kg	1	4/11/2016 3:03:26 PM	24697
Ethylbenzene	ND	0.047		mg/Kg	1	4/11/2016 3:03:26 PM	24697
Xylenes, Total	ND	0.093		mg/Kg	1	4/11/2016 3:03:26 PM	24697
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	4/11/2016 3:03:26 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 7 @ 1'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 9:50:00 AM

**Lab ID:** 1604324-009

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/12/2016 7:36:57 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	82	9.3		mg/Kg	1	4/11/2016 11:56:06 AM	24695
Surr: DNOP	79.7	70-130		%Rec	1	4/11/2016 11:56:06 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/11/2016 3:50:38 PM	24697
Surr: BFB	106	80-120		%Rec	1	4/11/2016 3:50:38 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/11/2016 3:50:38 PM	24697
Toluene	ND	0.047		mg/Kg	1	4/11/2016 3:50:38 PM	24697
Ethylbenzene	ND	0.047		mg/Kg	1	4/11/2016 3:50:38 PM	24697
Xylenes, Total	ND	0.093		mg/Kg	1	4/11/2016 3:50:38 PM	24697
Surr: 4-Bromofluorobenzene	111	80-120		%Rec	1	4/11/2016 3:50:38 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 7 @ 2'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 10:00:00 AM

**Lab ID:** 1604324-010

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/12/2016 8:14:10 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	110	99		mg/Kg	10	4/9/2016 2:36:12 AM	24695
Surr: DNOP	0	70-130	S	%Rec	10	4/9/2016 2:36:12 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/11/2016 5:48:15 PM	24697
Surr: BFB	106	80-120		%Rec	1	4/11/2016 5:48:15 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 5:48:15 PM	24697
Toluene	ND	0.049		mg/Kg	1	4/11/2016 5:48:15 PM	24697
Ethylbenzene	ND	0.049		mg/Kg	1	4/11/2016 5:48:15 PM	24697
Xylenes, Total	ND	0.097		mg/Kg	1	4/11/2016 5:48:15 PM	24697
Surr: 4-Bromofluorobenzene	112	80-120		%Rec	1	4/11/2016 5:48:15 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 7 @ 3'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 10:10:00 AM

**Lab ID:** 1604324-011

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	56	30		mg/Kg	20	4/12/2016 8:51:22 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	56	9.9		mg/Kg	1	4/11/2016 12:17:42 PM	24695
Surr: DNOP	79.0	70-130		%Rec	1	4/11/2016 12:17:42 PM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/11/2016 6:11:47 PM	24697
Surr: BFB	104	80-120		%Rec	1	4/11/2016 6:11:47 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/11/2016 6:11:47 PM	24697
Toluene	ND	0.046		mg/Kg	1	4/11/2016 6:11:47 PM	24697
Ethylbenzene	ND	0.046		mg/Kg	1	4/11/2016 6:11:47 PM	24697
Xylenes, Total	ND	0.093		mg/Kg	1	4/11/2016 6:11:47 PM	24697
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	4/11/2016 6:11:47 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Pt 7 @ 4'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 10:20:00 AM

**Lab ID:** 1604324-012

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/12/2016 9:03:47 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	77	9.7		mg/Kg	1	4/11/2016 12:39:07 PM	24695
Surr: DNOP	80.1	70-130		%Rec	1	4/11/2016 12:39:07 PM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/11/2016 6:35:26 PM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 6:35:26 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 6:35:26 PM	24697
Toluene	ND	0.048		mg/Kg	1	4/11/2016 6:35:26 PM	24697
Ethylbenzene	ND	0.048		mg/Kg	1	4/11/2016 6:35:26 PM	24697
Xylenes, Total	ND	0.096		mg/Kg	1	4/11/2016 6:35:26 PM	24697
Surr: 4-Bromofluorobenzene	109	80-120		%Rec	1	4/11/2016 6:35:26 PM	24697

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



# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1604324**

Date Reported: **4/14/2016**

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Vertical 7 @ 1'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 10:50:00 AM

**Lab ID:** 1604324-013

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/12/2016 9:16:12 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/9/2016 3:39:56 AM	24695
Surr: DNOP	92.3	70-130		%Rec	1	4/9/2016 3:39:56 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/11/2016 6:59:00 PM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 6:59:00 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	4/11/2016 6:59:00 PM	24697
Toluene	ND	0.049		mg/Kg	1	4/11/2016 6:59:00 PM	24697
Ethylbenzene	ND	0.049		mg/Kg	1	4/11/2016 6:59:00 PM	24697
Xylenes, Total	ND	0.098		mg/Kg	1	4/11/2016 6:59:00 PM	24697
Surr: 4-Bromofluorobenzene	108	80-120		%Rec	1	4/11/2016 6:59:00 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1604324**

Date Reported: **4/14/2016**

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Vertical 8 @ Surface

**Project:** Lee Federal

**Collection Date:** 4/4/2016 11:20:00 AM

**Lab ID:** 1604324-014

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>LGT</b>
Chloride	97	30		mg/Kg	20	4/12/2016 9:28:36 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	180	96		mg/Kg	10	4/9/2016 4:01:11 AM	24695
Surr: DNOP	0	70-130	S	%Rec	10	4/9/2016 4:01:11 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/11/2016 7:22:38 PM	24697
Surr: BFB	103	80-120		%Rec	1	4/11/2016 7:22:38 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 7:22:38 PM	24697
Toluene	ND	0.048		mg/Kg	1	4/11/2016 7:22:38 PM	24697
Ethylbenzene	ND	0.048		mg/Kg	1	4/11/2016 7:22:38 PM	24697
Xylenes, Total	ND	0.097		mg/Kg	1	4/11/2016 7:22:38 PM	24697
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	4/11/2016 7:22:38 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order **1604324**

Date Reported: **4/14/2016**

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** Vertical 9 @ 1'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 11:50:00 AM

**Lab ID:** 1604324-015

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/12/2016 9:41:01 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/9/2016 4:22:22 AM	24695
Surr: DNOP	93.9	70-130		%Rec	1	4/9/2016 4:22:22 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/11/2016 7:46:01 PM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 7:46:01 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 7:46:01 PM	24697
Toluene	ND	0.048		mg/Kg	1	4/11/2016 7:46:01 PM	24697
Ethylbenzene	ND	0.048		mg/Kg	1	4/11/2016 7:46:01 PM	24697
Xylenes, Total	ND	0.095		mg/Kg	1	4/11/2016 7:46:01 PM	24697
Surr: 4-Bromofluorobenzene	106	80-120		%Rec	1	4/11/2016 7:46:01 PM	24697

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

# Hall Environmental Analysis Laboratory, Inc.

## Analytical Report

Lab Order 1604324

Date Reported: 4/14/2016

**CLIENT:** Diversified Field Services, Inc

**Client Sample ID:** PT5@4'

**Project:** Lee Federal

**Collection Date:** 4/4/2016 8:40:00 AM

**Lab ID:** 1604324-016

**Matrix:** SOIL

**Received Date:** 4/7/2016 9:20:00 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	4/12/2016 9:53:25 PM	24751
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>KJH</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/9/2016 4:43:40 AM	24695
Surr: DNOP	95.5	70-130		%Rec	1	4/9/2016 4:43:40 AM	24695
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/11/2016 8:09:22 PM	24697
Surr: BFB	105	80-120		%Rec	1	4/11/2016 8:09:22 PM	24697
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/11/2016 8:09:22 PM	24697
Toluene	ND	0.048		mg/Kg	1	4/11/2016 8:09:22 PM	24697
Ethylbenzene	ND	0.048		mg/Kg	1	4/11/2016 8:09:22 PM	24697
Xylenes, Total	ND	0.097		mg/Kg	1	4/11/2016 8:09:22 PM	24697
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	1	4/11/2016 8:09:22 PM	24697

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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1604324

14-Apr-16

Client: Diversified Field Services, Inc

Project: Lee Federal

Sample ID	MB-24742		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	24742		RunNo:	33467				
Prep Date:	4/11/2016		Analysis Date:	4/11/2016		SeqNo:	1029376		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-24742		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 24742		RunNo: 33467					
Prep Date:	4/11/2016		Analysis Date: 4/11/2016		SeqNo: 1029377		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

Sample ID	MB-24751		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	24751		RunNo:	33468				
Prep Date:	4/12/2016		Analysis Date:	4/12/2016		SeqNo:	1029424		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-24751		SampType:	LCS		TestCode:	EPA Method 300.0: Anions				
Client ID:	LCSS		Batch ID:	24751		RunNo:	33468				
Prep Date:	4/12/2016		Analysis Date:	4/12/2016		SeqNo:	1029425		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	14	1.5	15.00	0	93.2	90	110				

### Qualifiers:

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
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#: 1604324

14-Apr-16

Client: Diversified Field Services, Inc

Project: Lee Federal

Sample ID	LCS-24695		SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 24695		RunNo: 33385					
Prep Date:	4/8/2016		Analysis Date: 4/8/2016		SeqNo: 1027558		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	65.8	136			
Surr: DNOP	4.4		5.000		88.2	70	130			

Sample ID	MB-24695		SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 24695		RunNo: 33385					
Prep Date:	4/8/2016		Analysis Date: 4/8/2016		SeqNo: 1027559		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	9.5		10.00		94.5	70	130			

Sample ID	1604324-001AMS		SampType: MS		TestCode: EPA Method 8015M/D: Diesel Range Organics					
Client ID:	Pt 5 Surface		Batch ID: 24695		RunNo: 33431					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028117		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.5	47.48	47.84	45.4	31.2	162			
Surr: DNOP	4.0		4.748		84.8	70	130			

Sample ID	1604324-001AMSD		SampType:	MSD		TestCode:	EPA Method 8015M/D: Diesel Range Organics				
Client ID:	Pt 5 Surface		Batch ID:	24695		RunNo:	33431				
Prep Date:	4/8/2016		Analysis Date:	4/11/2016		SeqNo:	1028118		Units:	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	79	10	50.15	47.84	61.7	31.2	162	12.7	31.7		
Surr: DNOP	4.2		5.015		84.2	70	130	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

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1604324

14-Apr-16

Client: Diversified Field Services, Inc

Project: Lee Federal

Sample ID	MB-24697		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 24697		RunNo: 33445					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028431		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	1000		1000		104	80	120			

Sample ID	LCS-24697		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 24697		RunNo: 33445					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028432		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.4	80	120			
Surr: BFB	1100		1000		111	80	120			

Sample ID	1604324-001AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	Pt 5 Surface		Batch ID: 24697		RunNo: 33445					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028439		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.8	23.79	0	99.6	59.3	143			
Surr: BFB	1100		951.5		112	80	120			

Sample ID	1604324-001AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	Pt 5 Surface		Batch ID: 24697		RunNo: 33445					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028440		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	4.9	24.30	0	104	59.3	143	6.51	20	
Surr: BFB	1100		971.8		118	80	120	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



# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1604324

14-Apr-16

Client: Diversified Field Services, Inc

Project: Lee Federal

Sample ID	MB-24697		SampType: MBLK		TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS		Batch ID: 24697		RunNo: 33445					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028486		Units: mg/Kg			
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	1.1		1.000		109	80	120			

Sample ID	LCS-24697		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 24697		RunNo: 33445					
Prep Date:	4/8/2016		Analysis Date: 4/11/2016		SeqNo: 1028487		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.7	75.3	123			
Toluene	0.89	0.050	1.000	0	89.1	80	124			
Ethylbenzene	0.88	0.050	1.000	0	87.7	82.8	121			
Xylenes, Total	2.6	0.10	3.000	0	87.1	83.9	122			
Surr: 4-Bromofluorobenzene	1.1		1.000		114	80	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

# Sample Log-In Check List

Client Name: DIVERSIFIED FIELD SE

Work Order Number: 1604324

RcptNo: 1

Received by/date: JA 04/07/16

Logged By: Anne Thorne 4/7/2016 9:20:00 AM

Completed By: Anne Thorne 4/8/2016

Reviewed By: IO 01/08/16

*Anne Thorne*

*Anne Thorne*

## Chain of Custody

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

## Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
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: Per ST add sample PT5@4' to LOC/AT 04/08/16

## 18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.1	Good	Yes			

# Chain-of-Custody Record

ent: Diversified Environmental

illing Address: 206 W Snyder St  
Hobbs, NM 88240

one #: (575) 631-4661

ail or Fax#: \*

VQC Package:

Standard ☐ Level 4 (Full Validation)

creditation

NELAP ☐ Other

EDD (Type)

Turn-Around Time:

☒ Standard

☐ Rush

Project Name:

Lee Federal

Project #:

#94

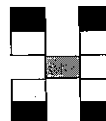
Project Manager:

Bruce Baker

Sampler: Chris Flores

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.1



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	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)
1/16	0800	Soil	p+5 surface	4oz glass	Ice	201	X		X					X				
	0810		PT 5 @ 1'			202												
	0820		PT 5 @ 2'			203												
	0830		PT 5 @ 3'			204												
	0900		PT 6 @ Surface			205												
	0910		PT 6 @ 1'			206												
	0920		PT 6 @ 2'			207												
	0940		PT 7 @ Surface			208												
	0950		PT 7 @ 1'			209												
	1000		PT 7 @ 2'			210												
	1010		PT 7 @ 3'			211												
	1020		PT 7 @ 4'			212												

ite: 1/16 Time: 1000 Relinquished by: [Signature]  
ite: 1/16 Time: 1900 Relinquished by: [Signature]

Received by: [Signature] Date: 4/6/16 Time: 1000  
Received by: [Signature] Date: 04/07/16 Time: 0920

Remarks: email to: Malves@diversifiedfsi.com  
\* mburton@  
mpatterson@  
cflores@  
Larry.baker@apache.com

# Chain-of-Custody Record

Client: Diversified Environmental

Billing Address: 2006 W Snyder St.

Hobbs, NM 88240

Phone #: (575) 631-4661

Email or Fax #: 1 Flores @ diversifiedfi.com

VQC Package:

☒ Standard ☐ Level 4 (Full Validation)

Creditation

☒ NELAP ☐ Other

EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush 5 day Turn

Project Name:

Lee Federal

Project #:

#94

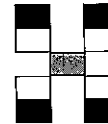
Project Manager:

Bruce Baker

Sampler: Chris Flores

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.1



**HALL ENVIRONMENTAL  
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

## Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	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)
4/20/16	1050	soi	vertical 7 @ 1'	4oz. glass	ice	1604324	X		X					X				
	1120		8 @ surface			013												
	1150		9 @ 1'			014												
4/20/16		L	PTS @ 4'			015												
			OUT OF 16			016												
			PER SS.															

Relinquished by:

4/20/16 1000 Chris Flores

Received by:

Spk

Date Time

4/6/16 100

Remarks:

Email to: malves @ diversifiedfi.com  
mburton @  
mpatterson @  
cflores @  
Larry.baker @ apache corp.com

Relinquished by:

6/16 1900 Spk

Received by:

Pat 04/07/16 0920

Date Time