

July 09, 2014

BRUCE BAKER

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: E. L. FEDERAL #8

Enclosed are the results of analyses for samples received by the laboratory on 07/02/14 8:20.

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.

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,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

APACHE - EUNICE
BRUCE BAKER
P. O. BOX 1849
EUNICE NM, 88231
Fax To: 394-2425

Received: 07/02/2014
Reported: 07/09/2014
Project Name: E. L. FEDERAL #8
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 06/27/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: VERTICAL 1 @ 11' (H402011-01)

BTEX 8260B			mg/kg		Analyzed By: ms/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2014	ND	2.16	108	2.00	1.57		
Toluene*	<0.050	0.050	07/07/2014	ND	1.78	89.0	2.00	2.82		
Ethylbenzene*	<0.050	0.050	07/07/2014	ND	1.69	84.3	2.00	3.97		
Total Xylenes*	<0.150	0.150	07/07/2014	ND	5.25	87.5	6.00	2.78		
Total BTEX	<0.300	0.300	07/07/2014	ND						

Surrogate: Dibromofluoromethane 93.4 % 61.3-142

Surrogate: Toluene-d8 99.7 % 71.3-129

Surrogate: 4-Bromofluorobenzene 96.8 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5680	16.0	07/09/2014	ND	416	104	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	07/04/2014	ND	180	90.2	200	1.72	
DRO >C10-C28	<10.0	10.0	07/04/2014	ND	193	96.4	200	0.0794	

Surrogate: 1-Chlorooctane 114 % 65.2-140

Surrogate: 1-Chlorooctadecane 122 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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EUNICE NM, 88231
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Received: 07/02/2014
Reported: 07/09/2014
Project Name: E. L. FEDERAL #8
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 06/27/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: VERTICAL 1 @ 14' (H402011-02)

BTEX 8260B			mg/kg		Analyzed By: ms/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2014	ND	2.16	108	2.00	1.57		
Toluene*	<0.050	0.050	07/07/2014	ND	1.78	89.0	2.00	2.82		
Ethylbenzene*	<0.050	0.050	07/07/2014	ND	1.69	84.3	2.00	3.97		
Total Xylenes*	<0.150	0.150	07/07/2014	ND	5.25	87.5	6.00	2.78		
Total BTEX	<0.300	0.300	07/07/2014	ND						

Surrogate: Dibromofluoromethane 99.2 % 61.3-142

Surrogate: Toluene-d8 103 % 71.3-129

Surrogate: 4-Bromofluorobenzene 96.0 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	07/09/2014	ND	416	104	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	07/04/2014	ND	180	90.2	200	1.72	
DRO >C10-C28	<10.0	10.0	07/04/2014	ND	193	96.4	200	0.0794	

Surrogate: 1-Chlorooctane 117 % 65.2-140

Surrogate: 1-Chlorooctadecane 128 % 63.6-154

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Reported: 07/09/2014
Project Name: E. L. FEDERAL #8
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 06/27/2014
Sampling Type: Soil
Sampling Condition: Cool & Intact
Sample Received By: Jodi Henson

Sample ID: VERTICAL 1 @ 15' (H402011-03)

BTX 8260B			mg/kg		Analyzed By: ms/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/07/2014	ND	2.16	108	2.00	1.57		
Toluene*	<0.050	0.050	07/07/2014	ND	1.78	89.0	2.00	2.82		
Ethylbenzene*	<0.050	0.050	07/07/2014	ND	1.69	84.3	2.00	3.97		
Total Xylenes*	<0.150	0.150	07/07/2014	ND	5.25	87.5	6.00	2.78		
Total BTX	<0.300	0.300	07/07/2014	ND						

Surrogate: Dibromofluoromethane 93.5 % 61.3-142
Surrogate: Toluene-d8 105 % 71.3-129
Surrogate: 4-Bromofluorobenzene 98.4 % 65.7-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/09/2014	ND	416	104	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	07/04/2014	ND	180	90.2	200	1.72	
DRO >C10-C28	<10.0	10.0	07/04/2014	ND	193	96.4	200	0.0794	

Surrogate: 1-Chlorooctane 117 % 65.2-140
Surrogate: 1-Chlorooctadecane 127 % 63.6-154

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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

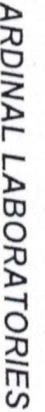
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Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2336 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

ANALYSIS REQUEST

Company Name: **Arch**
Project Manager: **Archer Beck**
Address:
City: Hobbs State: NM Zip: 88240
Phone #: Fax #:
Project #: Project Owner:
Project Name:
Project Location: **E.L. Federal #8**
Sample Name: **Kyle Humphrey**
FOR LAB USE ONLY
Lab I.D. Sample I.D. **H402011**
1 **VER-1, 2 @ 11 ft.**
2 **VER-1, 2 @ 14 ft.**
3 **VER-1, 2 @ 15 ft.**
(G)RAB OR (C)OMP. # CONTAINERS
GROUNDWATER WASTEWATER
MATRIX SOIL OIL SLUDGE OTHER:
PRESERV ACID/BASE: ICE / COOL OTHER:
SAMPLING DATE TIME
Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS
Phone Result: Yes No Add'l Phone #: Add'l Fax #:
REMARKS:
email results
Knorrman@rice-ecs.com
Kjones@riceswd.com; jkamlain@rice-ecs.com hconder@rice-ecs.com;
Lweinheimer@rice-ecs.com
Khumphrey@rice-ecs.com
sedwards@rice-ecs.com; flores@rice-ecs.com