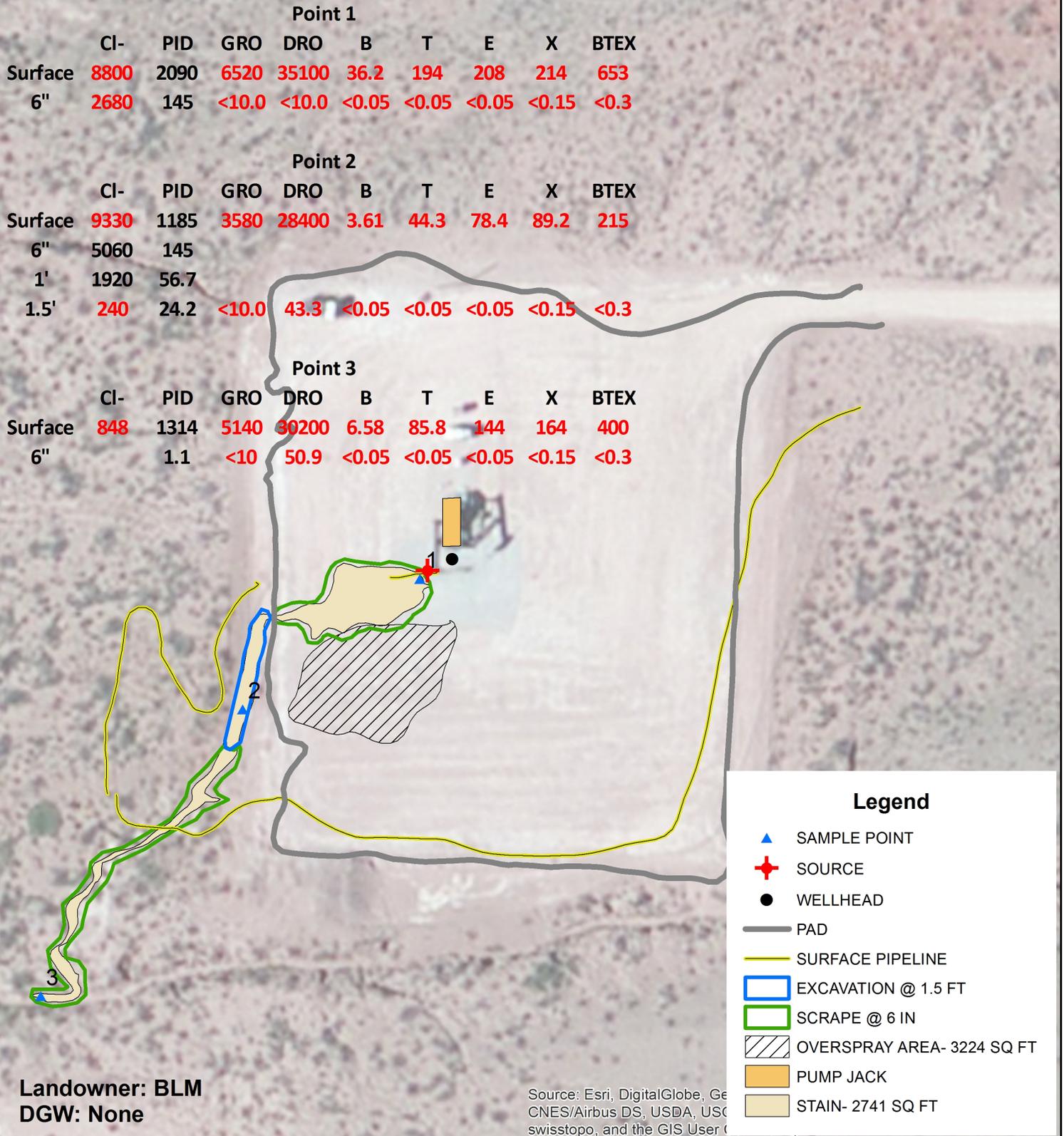


Excavation Map



Landowner: BLM
DGW: None

Source: Esri, DigitalGlobe, GeoEye, IGN, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, swisstopo, and the GIS User Community

Legend

- ▲ SAMPLE POINT
- + SOURCE
- WELLHEAD
- PAD
- SURFACE PIPELINE
- ▭ EXCAVATION @ 1.5 FT
- ▭ SCRAPE @ 6 IN
- ▨ OVERSPRAY AREA- 3224 SQ FT
- ▭ PUMP JACK
- ▭ STAIN- 2741 SQ FT



**APACHE NFE
FEDERAL #11**

UL G SECTION 8
T-17-S R-31-E
EDDY COUNTY, NM

GPS date: 8/17/14 KL, 9/16/14 KS
 Drawing date: 9/18/14
 Drafted by: T. Grieco, L. Weinheimer

August 22, 2014

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NFE FEDERAL #11

Enclosed are the results of analyses for samples received by the laboratory on 08/19/14 9:10.

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.

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

Received:	08/19/2014	Sampling Date:	08/17/2014
Reported:	08/22/2014	Sampling Type:	Soil
Project Name:	NFE FEDERAL #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 1 (H402528-01)

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	36.2	5.00	08/20/2014	ND	1.80	89.8	2.00	5.15	
Toluene*	194	5.00	08/20/2014	ND	1.65	82.6	2.00	4.46	
Ethylbenzene*	208	5.00	08/20/2014	ND	1.84	91.8	2.00	4.49	
Total Xylenes*	214	15.0	08/20/2014	ND	5.47	91.1	6.00	5.21	
Total BTEX	653	30.0	08/20/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	08/19/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	6520	500	08/19/2014	ND	191	95.7	200	0.146		
DRO >C10-C28	35100	500	08/19/2014	ND	207	103	200	0.978		

Surrogate: 1-Chlorooctane 380 % 65.2-140
Surrogate: 1-Chlorooctadecane 855 % 63.6-154

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:	08/19/2014	Sampling Date:	08/17/2014
Reported:	08/22/2014	Sampling Type:	Soil
Project Name:	NFE FEDERAL #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 2 (H402528-02)

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	3.61	2.00	08/20/2014	ND	1.80	89.8	2.00	5.15	
Toluene*	44.3	2.00	08/20/2014	ND	1.65	82.6	2.00	4.46	
Ethylbenzene*	78.4	2.00	08/20/2014	ND	1.84	91.8	2.00	4.49	
Total Xylenes*	89.2	6.00	08/20/2014	ND	5.47	91.1	6.00	5.21	
Total BTEX	215	12.0	08/20/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9330	16.0	08/19/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	3580	500	08/19/2014	ND	191	95.7	200	0.146		
DRO >C10-C28	28400	500	08/19/2014	ND	207	103	200	0.978		

Surrogate: 1-Chlorooctane 275 % 65.2-140

Surrogate: 1-Chlorooctadecane 691 % 63.6-154

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:	08/19/2014	Sampling Date:	08/17/2014
Reported:	08/22/2014	Sampling Type:	Soil
Project Name:	NFE FEDERAL #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 (H402528-03)

BTEX 8021B		mg/kg		Analyzed By: ck					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	6.58	5.00	08/20/2014	ND	1.80	89.8	2.00	5.15	
Toluene*	85.8	5.00	08/20/2014	ND	1.65	82.6	2.00	4.46	
Ethylbenzene*	144	5.00	08/20/2014	ND	1.84	91.8	2.00	4.49	
Total Xylenes*	164	15.0	08/20/2014	ND	5.47	91.1	6.00	5.21	
Total BTEX	400	30.0	08/20/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	848	16.0	08/19/2014	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: CK						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	5140	500	08/19/2014	ND	191	95.7	200	0.146		
DRO >C10-C28	30200	500	08/19/2014	ND	207	103	200	0.978		

Surrogate: 1-Chlorooctane 354 % 65.2-140

Surrogate: 1-Chlorooctadecane 700 % 63.6-154

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



Celey D. Keene, Lab Director/Quality Manager



ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Apache
 Project Manager: Laura Flores
 Address: _____
 City: Hobbs State: NM Zip: 88240
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Location: NFE Federal # 11
 Sampler Name: Karania Lewis
 FOR LAB USE ONLY

P.O. #: _____ Company: _____
 Attn: _____ Address: _____
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS REQUEST				
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			ICE / COOL	OTHER :	Chlorides	TPH 8015 M	
<u>H4D2578</u>	<u>Point 1</u>	<u>g</u>	<u>g</u>							<u>8-17-14</u>							
	<u>Point 2</u>	<u>g</u>	<u>g</u>							<u>8-17-14</u>							
	<u>Point 3</u>	<u>g</u>	<u>g</u>							<u>8-17-14</u>							

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 analysis. 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. This agreement shall be deemed to have been accepted by the client upon receipt of the invoice and/or successors arising out of or related to the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Karania Lewis Date: 8-18-14 Time: 9:10
 Received By: Scotti Stender

Delivered By: (Circle One)
 Sampler - UPS - Bus - Other: _____
 Sample Condition: Cool Intact Yes No
 CHECKED BY: [Signature]

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476
#54

Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____
 REMARKS: _____
 email: hconder@riceswd.com; lflores@rice-ecs.com; lweinheimer@rice-ecs.com; knorman@rice-ecs.com; jkampaign@rice-ecs.com; sedwards@rice-ecs.com; cursanic@rice-ecs.com; Environmental Tech: K Lewis @rice-ecs.com



September 11, 2014

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NFE FED #11

Enclosed are the results of analyses for samples received by the laboratory on 09/04/14 14:43.

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,

A handwritten signature in black ink that reads "Celey D. Keene".

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:	09/04/2014	Sampling Date:	08/26/2014
Reported:	09/11/2014	Sampling Type:	Soil
Project Name:	NFE FED #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: PT. 1 @ 6" (H402748-01)

BTEX 8021B		mg/kg		Analyzed By: MS				O-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.050	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	<0.050	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	<0.150	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	<0.300	0.300	09/10/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2680	16.0	09/10/2014	ND	400	100	400	7.69	

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	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	<10.0	10.0	09/06/2014	ND	213	107	200	0.664	

Surrogate: 1-Chlorooctane 72.9 % 65.2-140
Surrogate: 1-Chlorooctadecane 84.0 % 63.6-154

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:	09/04/2014	Sampling Date:	08/26/2014
Reported:	09/11/2014	Sampling Type:	Soil
Project Name:	NFE FED #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: PT. 2 @ 1.5' (H402748-02)

BTEX 8021B		mg/kg		Analyzed By: MS				O-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/10/2014	ND	2.04	102	2.00	3.90	
Toluene*	<0.050	0.050	09/10/2014	ND	1.83	91.4	2.00	3.90	
Ethylbenzene*	<0.050	0.050	09/10/2014	ND	1.70	84.8	2.00	3.77	
Total Xylenes*	<0.150	0.150	09/10/2014	ND	5.15	85.8	6.00	3.51	
Total BTEX	<0.300	0.300	09/10/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	09/10/2014	ND	400	100	400	7.69	

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	09/06/2014	ND	180	90.1	200	0.353	
DRO >C10-C28	43.3	10.0	09/06/2014	ND	213	107	200	0.664	

Surrogate: 1-Chlorooctane 90.1 % 65.2-140

Surrogate: 1-Chlorooctadecane 96.6 % 63.6-154

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

- O-04 This sample was analyzed outside the EPA recommended holding time.
- 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



CARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Apache
 Project Manager: Bruce Baker
 Address: _____ State: _____ Zip: _____
 City: _____
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: _____
 Project Location: NFE Fed #11
 Sampler Name: Kyle H.
 FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :								
H402148	PL1 B64	9	1							8-26-14	11:00	-	-	-			
2	PL2 L.S.	9	1							8-26-14	10:50	-	-	-			

Relinquished By: _____ Date: 8-14-14 Received By: _____ Date: 8-14-14
 Relinquished By: _____ Date: 8-14-14 Received By: _____ Date: 8-14-14

Delivered By: (Circle One) UPS Bus Other: 546
 Sampler - UPS - Bus - Other: Yes No Yes No

CHECKED BY: _____ (Initials)

REMARKS: email results: hconder@rice-ecs.com; knorman@rice-ecs.com; jkamlain@rice-ecs.com; regans@rice-ecs.com; flores@rice-ecs.com; lweilheimer@rice-ecs.com; kJones@riceswd.com; cursantic@rice-ecs.com @rice-ecs.com environmental tech: _____

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 analysis. 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 applied to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

September 25, 2014

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: NFE FED #11

Enclosed are the results of analyses for samples received by the laboratory on 09/24/14 9:15.

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

Received:	09/24/2014	Sampling Date:	09/23/2014
Reported:	09/25/2014	Sampling Type:	Soil
Project Name:	NFE FED #11	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: PT. 3 @ 6" (H402923-01)

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	09/24/2014	ND	1.75	87.6	2.00	3.42		
Toluene*	<0.050	0.050	09/24/2014	ND	1.64	81.8	2.00	3.34		
Ethylbenzene*	<0.050	0.050	09/24/2014	ND	1.52	75.9	2.00	4.67		
Total Xylenes*	<0.150	0.150	09/24/2014	ND	4.50	75.0	6.00	4.67		
Total BTEX	<0.300	0.300	09/24/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 89.4-126

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	09/24/2014	ND	183	91.6	200	1.51		
DRO >C10-C28	50.9	10.0	09/24/2014	ND	190	95.1	200	7.86		

Surrogate: 1-Chlorooctane 91.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 99.2 % 63.6-154

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



ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Apache</u>		P.O. #:		BILL TO		ANALYSIS REQUEST	
Project Manager: <u>1 Bruce Becker</u>		Company:				Chlorides	
Address:		Attn:				TPH 8015 M	
City:		Address:				BTEX	
State:		City:				Texas TPH	
Zip:		State:				Complete Cations/Anions	
Phone #:		Zip:				TDS	
Project #:		Project Owner:					
Project Name:		City:					
Project Location: <u>NFE # 11</u>		State:					
Sampler Name:		Phone #:					
FOR LAB USE ONLY		Fax #:					
Lab I.D. <u>H402923</u>	Sample I.D.	(G)RAB OR (C)OMP.	MATRIX	PRESERV.	SAMPLING	DATE	TIME
<u>1</u>	<u>PT. 3 @ 617</u>	<u>61</u>	GROUNDWATER			<u>9-23-14</u>	<u>10:30</u>
			WASTEWATER				
			SOIL				
			OIL				
			SLUDGE				
			OTHER:				
			ACID/BASE:				
			ICE / COOL				
			OTHER:				

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients 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>Mike Kumpury</u>	Date: <u>9/24/14</u>	Received By: <u>John Henderson</u>	Date: <u>9-23-14</u>
Time: <u>1:15</u>	Time:	Time:	Time:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <u>-7.42</u>	Sample Condition Cool <input type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>	CHECKED BY: <u>[Signature]</u>	

REMARKS:

Phone Result: Yes No Add'l Phone #:

Fax Result: Yes No Add'l Fax #:

email results: Bruce Baker
 hconder@rice-ecs.com; knorman@rice-ecs.com;
 jkampain@rice-ecs.com; regans@rice-ecs.com; flores@rice-ecs.com;
 lweihemer@rice-ecs.com; cursanlic@rice-ecs.com
 environmental tech: Kumpury @rice-ecs.com

* Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

#54

RUSH!!