



EXPLORING WHAT'S POSSIBLE

APACHE CORPORATION

P.O.Box 1849
Eunice, NM 88231
Phone 575.394.3159

Tony Federal #28
(2RP-2443)

Termination Request

API No. 30-015-33000

Release Date: July 29th, 2014

Unit Letter G, Section 19, Township 17S, Range 31E

January 5th, 2015

Mike Bratcher

New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau – District 2
811 S. First St.
Artesia, NM 88210

**RE: Termination Request
Apache Corporation Tony Federal #28 (2RP-2443)
UL/G sec. 19 T17S R31E
API No. 30-015-33000**

Mr. Bratcher:

Apache Corporation (Apache) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 4.2 miles east of Loco Hills, New Mexico at UL/G sec. 19 T17S R31E. This site is located in an area of no known groundwater.

On July 29th, 2014, while a flow line was being hot oiled, the line was pressured up and ruptured. The line released a total of 2 barrels of oil and 3 barrels of produced water over 886 square feet of pasture land as standing fluid and over 31,183 square feet of pasture land and lease pad as overspray. None of this fluid was recovered. BLM was notified of the release on July 29th, 2014, and an initial C-141 was submitted to NMOCD and BLM for their approval. NMOCD approved the initial C-141 on August 15th, 2014 (Appendix A).

RECS personnel were on site beginning on July 31st, 2014. Two points within the release area and one point within the overspray were sampled at the surface of the release (Figure 1). The samples were field tested for chlorides and organic vapors and taken to a commercial laboratory for analysis (Appendix B). Point 1 and Point 2 returned elevated laboratory chloride readings. Point 3 returned laboratory chloride readings below regulatory standards. All three points returned slightly elevated Gasoline Range Organics (GRO), Diesel Range Organics (DRO) and BTEX readings.

On August 13th, 2014, a path forward for the site was sent to NMOCD and BLM. The path forward requested permission to wash the overspray area with Dawn dish soap and to conduct further delineation activities in the release area. NMOCD approved the path forward on August 14th, 2014, and BLM approved the path forward on August 18th, 2014. BLM approved the path forward with the stipulation that if the attempt to clean the overspray with Dawn dish soap was not effective, further work would be required.

The overspray area was washed with Dawn dish soap on August 15th, 2014, and site excavation began on August 20th, 2014. A hydro-vac began the initial excavation and spotted lines around the release area. The site was then excavated in two parts (Figure 2). The east side of the release was excavated to a depth of 4 ft bgs, and final wall samples and a bottom grab sample were field tested for chlorides and organics vapors. The samples were then taken to a commercial laboratory for analysis. The west side of the release was scraped down 6 inches. A bottom sample from the 6 inch scrape was also field tested for chlorides and organic vapors and taken to a commercial laboratory for analysis. All wall samples from the 4 ft bgs excavation returned laboratory chloride readings below 250 mg/kg, except for West Wall 1, which returned a laboratory chloride reading of 448 mg/kg. GRO, DRO and BTEX readings for all wall samples returned values of non-detect. Bottom 1, from the 4 ft excavation, returned a chloride value of 2,240 mg/kg, and Bottom 2, from the 6 inch scrape, returned a chloride value of 32 mg/kg. GRO, DRO and BTEX readings from both bottom samples returned values of non-detect, except for the DRO reading in Bottom 1, which returned a value of 11.7 mg/kg.

Given the elevated chloride reading at the base of the 4 ft excavation, a vertical was installed to determine the depth of chloride contamination. The vertical was installed to a depth of 12 ft bgs, with soil samples taken every foot from 5 ft bgs to 12 ft bgs. The samples were field tested for chlorides and organic vapors, and the 11 ft bgs and 12 ft bgs samples were taken to a commercial laboratory for analysis. The 11 ft bgs sample returned a laboratory chloride reading of 128 mg/kg, and the 12 ft bgs sample returned a laboratory chloride reading of 16 mg/kg.

A request to backfill the site was sent to NMOCD and BLM on September 16th, 2014. NMOCD approved the site to be backfilled on September 18th, 2014. All excavated soil was taken to a NMOCD approved facility for disposal. Clean top soil was imported to the site to serve as backfill. The site was backfilled with the imported top soil and contoured to the surrounding location. On November 3rd, 2013, the disturbed area was seeded with LPC mix.

Photo documentation of the field activities can be found in Appendix C.

Given that Apache has washed the overspray area and excavated the contaminated soil passed the nutritive layer of the vadose zone, Apache respectfully requests 'remediation termination' and site closure. A final C-141 can be found in Appendix D.

RECS appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 393-2967 or me if you have any questions or wish to discuss the site.

Sincerely,



Lara Weinheimer
Project Scientist
RECS
(575) 441-0431

Attachments:

Figure 1 – Initial Sampling Data

Figure 2 – Excavation Data

Appendix A – Initial C-141

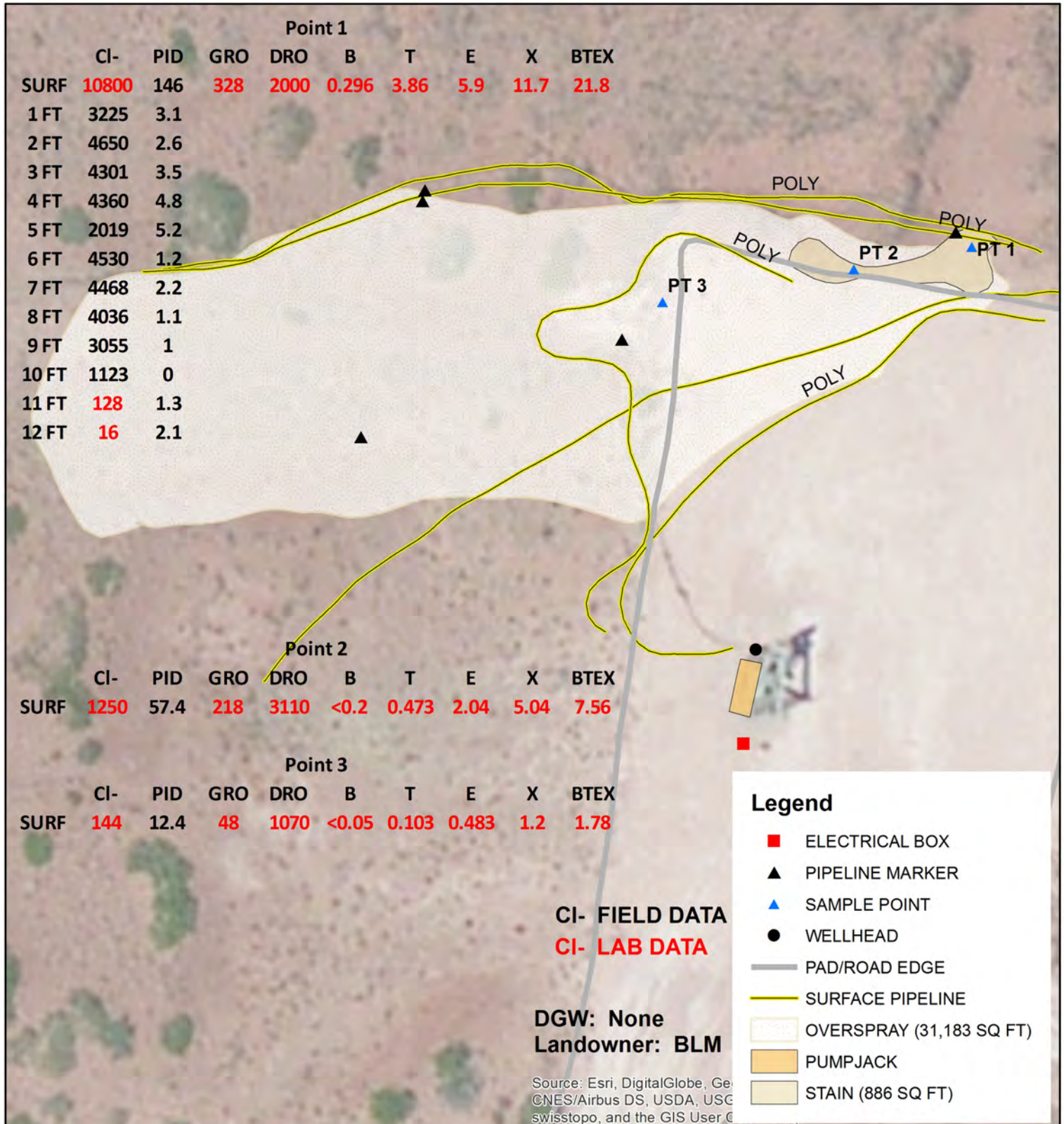
Appendix B – Sampling Labs

Appendix C – Photo Documentation

Appendix D – Final C-141

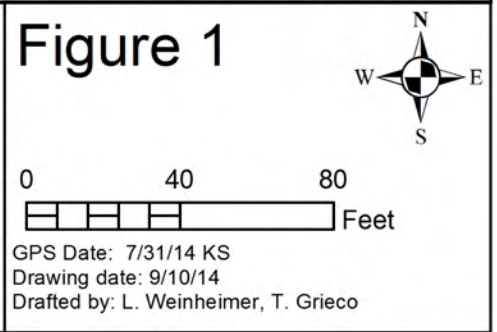
Figures

Initial Sampling Data

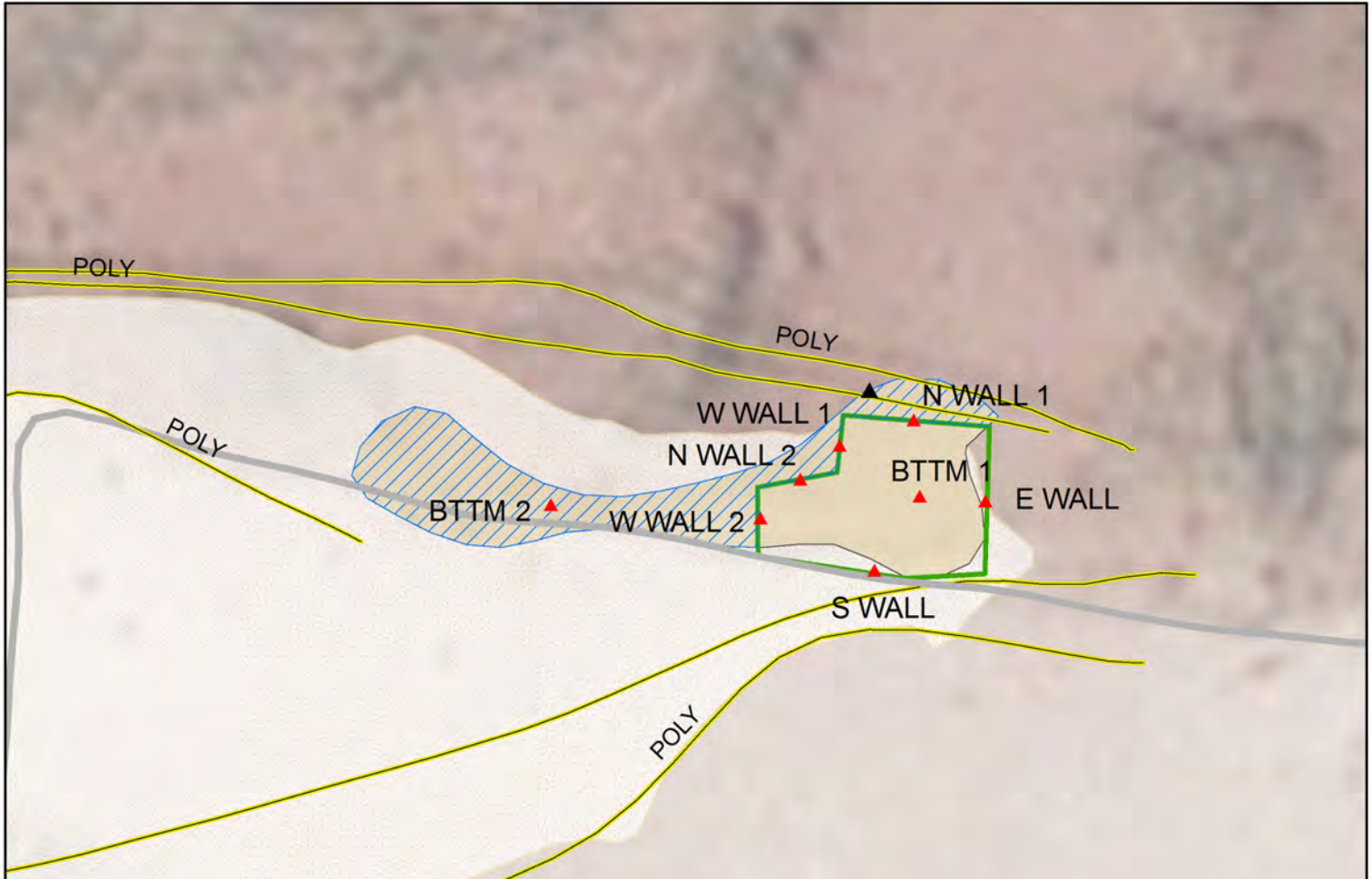


**APACHE
TONY FEDERAL
#28**
Legals: UL/G sec. 19
T-17-S R-31-E
EDDY COUNTY, NM

Figure 1



Excavation Data



Final Sampling Data

	CI-	PID	GRO	DRO	B	T	E	X	BTEX
South Wall	48	12.4	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
North Wall 1	96	2.2	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
North Wall 2	144	1	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
West Wall 1	448	34.3	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
West Wall 2	32	10.3	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
East Wall	96	7.1	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3
Bottom 1	2240	5.7	<10	11.7	<0.05	<0.05	<0.05	<0.15	<0.3
Bottom 2	32	0	<10	<10	<0.05	<0.05	<0.05	<0.15	<0.3

Legend

- ▲ FINAL SAMPLE POINTS
- ELECTRICAL BOX
- ▲ PIPELINE MARKER
- WELLHEAD
- PAD/ROAD EDGE
- SURFACE PIPELINE
- EXCAVATION @ 4 ft
- ▨ SCRAPE TO 6 IN
- OVERSPRAY (31,183 SQ FT)
- PUMPJACK
- STAIN (886 SQ FT)

CI- LAB DATA
CI- FIELD DATA

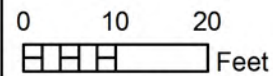
DGW: None
Landowner: BLM

Source: Esri, DigitalGlobe, GeoE
CNES/Airbus DS, USDA, USGS,
swisstopo, and the GIS User Cor



**APACHE
TONY FEDERAL
#28**
Legals: UL/G sec. 19
T-17-S R-31-E
EDDY COUNTY, NM

Figure 2



GPS Date: 7/31/14 KS
Drawing date: 9/8/14
Drafted by: L. Weinheimer/ B. Cooper

Appendix A

Initial C-141

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

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

OPERATOR

Initial Report Final Report

Name of Company Apache Corporation	Contact Bruce Baker
Address 2350 W Marland Blvd. Hobbs NM 88240	Telephone No. 432-631-6982
Facility Name Tony Federal # 28	Facility Type Oil Well
Surface Owner Federal	Mineral Owner
API No. 30-015-33000	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	19	17S	31E	1750'	FNL	2310'	FEL	Eddy

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release Oil and Produced Water	Volume of Release 2 barrels of oil 3 barrels of water	Volume Recovered 0 barrels
Source of Release Flow Line	Date and Hour of Occurrence 7/29/2014	Date and Hour of Discovery 7/29/2014
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Jeffery Robertson (BLM)	
By Whom? Bruce Baker	Date 7/29/2014	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

The flow line was being hot oiled and pressured up resulting in a rupture in flow line. The well was shut in and the flow line was repaired.

Describe Area Affected and Cleanup Action Taken.

The release affected 886 square feet of pasture, and an area of overspray of 31,183 square feet of pasture and lease pad. The area was mapped and surface samples collected and sent to a commercial laboratory for analysis.

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

OIL CONSERVATION DIVISION

Signature: <i>Bruce Baker</i>	Approved by Environmental Specialist: <i>[Signature]</i>	
Printed Name: Bruce Baker	Approval Date: 8/15/2014	Expiration Date: N/A
Title: Environmental Technician	Conditions of Approval:	
E-mail Address: larry.baker@apachecorp.com	Remediation per OCD Rules and Guidelines. Submit remediation proposal no later than: 9/15/2014	Attached <input type="checkbox"/> 2RP-2443
Date: 8/14/2014 Phone: (432) 631-6982		

* Attach Additional Sheets If Necessary

Appendix B

Sampling Labs

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

August 05, 2014

BRUCE BAKER
APACHE - EUNICE
P. O. BOX 1849
EUNICE, NM 88231

RE: TONY FEDERAL #28

Enclosed are the results of analyses for samples received by the laboratory on 07/29/14 14:45.

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: 07/29/2014
 Reported: 08/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 07/28/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: PT. 1 @ SURFACE (H402321-01)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.296	0.200	08/01/2014	ND	1.89	94.7	2.00	6.63	
Toluene*	3.86	0.200	08/01/2014	ND	1.89	94.5	2.00	5.95	
Ethylbenzene*	5.90	0.200	08/01/2014	ND	1.83	91.7	2.00	6.35	
Total Xylenes*	11.7	0.600	08/01/2014	ND	5.63	93.8	6.00	6.25	
Total BTEX	21.8	1.20	08/01/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 139 % 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	10800	16.0	08/01/2014	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	328	50.0	07/30/2014	ND	189	94.6	200	10.2	
DRO >C10-C28	2000	50.0	07/30/2014	ND	211	106	200	16.6	

Surrogate: 1-Chlorooctane 101 % 65.2-140
Surrogate: 1-Chlorooctadecane 126 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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: 07/29/2014
 Reported: 08/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 07/28/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: PT. 2 @ SURFACE (H402321-02)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	08/01/2014	ND	1.89	94.7	2.00	6.63	
Toluene*	0.473	0.200	08/01/2014	ND	1.89	94.5	2.00	5.95	
Ethylbenzene*	2.04	0.200	08/01/2014	ND	1.83	91.7	2.00	6.35	
Total Xylenes*	5.04	0.600	08/01/2014	ND	5.63	93.8	6.00	6.25	
Total BTEX	7.56	1.20	08/01/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 132 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	08/01/2014	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	218	50.0	07/30/2014	ND	189	94.6	200	10.2	
DRO >C10-C28	3110	50.0	07/30/2014	ND	211	106	200	16.6	

Surrogate: 1-Chlorooctane 100 % 65.2-140

Surrogate: 1-Chlorooctadecane 143 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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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: 07/29/2014
 Reported: 08/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 07/28/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: PT. 3 @ SURFACE (H402321-03)

BTEX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/01/2014	ND	1.89	94.7	2.00	6.63	
Toluene*	0.103	0.050	08/01/2014	ND	1.89	94.5	2.00	5.95	
Ethylbenzene*	0.483	0.050	08/01/2014	ND	1.83	91.7	2.00	6.35	
Total Xylenes*	1.20	0.150	08/01/2014	ND	5.63	93.8	6.00	6.25	
Total BTEX	1.78	0.300	08/01/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 135 % 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	144	16.0	08/01/2014	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	48.0	10.0	07/30/2014	ND	177	88.6	200	4.94	
DRO >C10-C28	1070	10.0	07/30/2014	ND	186	93.2	200	4.87	

Surrogate: 1-Chlorooctane 82.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 97.9 % 63.6-154

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
- 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 SM450Cl-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



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

Company Name: Apache		BILL TO		ANALYSIS REQUEST																		
Project Manager: BRUCE BAKER		P.O. #:		Chlorides	TPH 8015 M	BTEX	Texas TPH	Complete Cations/Anions	TDS													
Address:		Company:																				
City: Hobbs State: NM Zip: 88240		Attn:																				
Phone #: Fax #:		Address:																				
Project #: Project Owner:		City:																				
Project Name:		State: Zip:																				
Project Location: Tony Fed. #28		Phone #:																				
Sampler Name: Kyle Humphrey		Fax #:																				
FOR LAB USE ONLY																						
Lab I.D.	Sample I.D.	(GRAB OR (COMP. # CONTAINERS	MATRIX							PRESERV.	SAMPLING											
			GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:	ACID/BASE: ICE/COOL OTHER:	DATE	TIME																
H402301																						
1	pt. 1 @ surface	6			7-28-14	4:50	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
2	pt. 2 @ surface	6			7-28-14	4:05	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
3	pt. 3 @ surface	6			7-28-14	4:10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													

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: Kyle Humphrey	Date: 8/9/14	Received By: [Signature]	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By: [Signature]	Time: 2:45	Received By: [Signature]	Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 4,2°c	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: [Signature]	REMARKS: Larry, Baker @ apachecorp.com	
			email results Knorman@rice-ecs.com Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com; Lweinheimer@rice-ecs.com Khumphrey@rice-ecs.com sedwards@rice-ecs.com, lflores@rice-ecs.com	

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

September 05, 2014

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: TONY FEDERAL #28

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,



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:	08/22/2014
Reported:	09/05/2014	Sampling Type:	Soil
Project Name:	TONY FEDERAL #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: N. WALL 1 (H402747-01)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 94.2 % 65.2-140
Surrogate: 1-Chlorooctadecane 101 % 63.6-154

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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
 Reported: 09/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: W. WALL 1 (H402747-02)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 94.9 % 65.2-140

Surrogate: 1-Chlorooctadecane 100 % 63.6-154

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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
 Reported: 09/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: W. WALL 2 (H402747-03)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 95.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 102 % 63.6-154

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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
 Reported: 09/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: E. WALL (H402747-04)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 96.3 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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Analytical Results For:

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

 Received: 09/04/2014
 Reported: 09/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: S. WALL (H402747-05)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 94.8 % 65.2-140

Surrogate: 1-Chlorooctadecane 103 % 63.6-154

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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:	08/22/2014
Reported:	09/05/2014	Sampling Type:	Soil
Project Name:	TONY FEDERAL #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Kathy Perez
Project Location:	NOT GIVEN		

Sample ID: N. WALL 2 (H402747-06)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 93.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 63.6-154

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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
 Reported: 09/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: BOTTOM 1 (H402747-07)

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	09/05/2014	ND	1.91	95.6	2.00	6.31	
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70	
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15	
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42	
Total BTEX	<0.300	0.300	09/05/2014	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 89.4-126

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CK					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2240	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28	
DRO >C10-C28	11.7	10.0	09/05/2014	ND	211	106	200	5.25	

Surrogate: 1-Chlorooctane 98.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 107 % 63.6-154

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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
 Reported: 09/05/2014
 Project Name: TONY FEDERAL #28
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

 Sampling Date: 08/22/2014
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Kathy Perez

Sample ID: BOTTOM 2 (H402747-08)

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	09/05/2014	ND	1.91	95.6	2.00	6.31		
Toluene*	<0.050	0.050	09/05/2014	ND	1.79	89.3	2.00	5.70		
Ethylbenzene*	<0.050	0.050	09/05/2014	ND	1.70	84.8	2.00	5.15		
Total Xylenes*	<0.150	0.150	09/05/2014	ND	5.20	86.7	6.00	4.42		
Total BTEX	<0.300	0.300	09/05/2014	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: CK						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/05/2014	ND	416	104	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	09/05/2014	ND	212	106	200	4.28		
DRO >C10-C28	<10.0	10.0	09/05/2014	ND	211	106	200	5.25		

Surrogate: 1-Chlorooctane 94.4 % 65.2-140

Surrogate: 1-Chlorooctadecane 101 % 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



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

Company Name: Apache		BILL TO		ANALYSIS REQUEST																
Project Manager: Bruce Baker		P.O. #:		Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS																
Address:		Company:																		
City:		Attn:																		
Phone #:		Address:																		
Project #:		City:																		
Project Name:		State: Zip:																		
Project Location: Tony Ped #28		Phone #:																		
Sampler Name: Kyle H		Fax #:																		

Lab I.D.	Sample I.D.	(GRAB OR C)OMP. # CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME									
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:											
#402747 1-5	N. well 1	9	/	/	/	/	/	/	/	/	8-22-14	9:00	/	/	/							
	W. well 1	9	/	/	/	/	/	/	/	/		9:10	/	/	/							
	W. well 2	9	/	/	/	/	/	/	/	/		9:15	/	/	/							
	E. well	9	/	/	/	/	/	/	/	/		9:25	/	/	/							
	S. Well	9	/	/	/	/	/	/	/	/		9:20	/	/	/							
	N. well 2	9	/	/	/	/	/	/	/	/		9:05	/	/	/							
	Bottom 1	9	/	/	/	/	/	/	/	/		9:30	/	/	/							
	Bottom 2	9	/	/	/	/	/	/	/	/		9:35	/	/	/							

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Relinquished By: Kyle H		Date: 9-4-14	Received By: Cathy	Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
		Time: 2:43		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:	
		Time:		email results: hconder@rice-ecs.com; knorman@rice-ecs.com; jkamplain@rice-ecs.com; regans@rice-ecs.com; lflores@rice-ecs.com; lweinheimer@rice-ecs.com; kjones@riceswd.com; cursanic@rice-ecs.com environmental tech: Bruce Baker @rice-ecs.com company:	
Delivered By: (Circle One)			Sample Condition	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:			Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	KP	

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

#54

Rush

September 09, 2014

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: TONY FEDERAL #28

Enclosed are the results of analyses for samples received by the laboratory on 09/09/14 8:30.

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:	09/09/2014	Sampling Date:	09/08/2014
Reported:	09/09/2014	Sampling Type:	Soil
Project Name:	TONY FEDERAL #28	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: VERTICAL 1 @ 11' (H402789-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	09/09/2014	ND	416	104	400	0.00	

Sample ID: VERTICAL 1 @ 12' (H402789-02)

Chloride, SM4500Cl-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	09/09/2014	ND	416	104	400	0.00	

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



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

Company Name: **AP-UNP**
 Project Manager: **Bruce Baker**
 Address: _____
 City: Hobbs State: NM Zip: 88240
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: _____
 Project Location: **TODY Fed. # 28**
 Sampler Name: Kyle Humphrey

BILL TO		ANALYSIS REQUEST												
P.O. #:	Company:													
Attn:	Address:													
City:	State:	Zip:									Chlorides			
Phone #:	Fax #:											TPH 8015 M		
												BTEX		
												Texas TPH		
												Complete Cations/Anions		
												TDS		
													R/S	

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING			
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME
H402189														
1	VERT. 2 @ 11 FT.	6	1			✓				✓		9-8-14	12:00	✓
2	VERT. 2 @ 12 FT	6	1			✓				✓		9-8-14	12:05	✓

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: *[Signature]* Date: **9/9/14** Time: **8:30**
 Received By: *Jodi Henson*
 Relinquished By: _____ Date: _____ Time: _____
 Received By: _____
 Delivered By: (Circle One) Sampler - UPS - Bus - Other:
 Sample Condition: Cool Intact
 Yes No Yes No
 CHECKED BY: *[Signature]*
 Phone Result: Yes No Add'l Phone #: _____
 Fax Result: Yes No Add'l Fax #: _____
 REMARKS: email results **Larry.BAKER@AP-UNP.COM**
 Knorman@rice-ecs.com
 KJones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com;
 Lweinheimer@rice-ecs.com
 Khumphrey@rice-ecs.com
 sedwards@rice-ecs.com, lflores@rice-ecs.com

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

#54

Appendix C

Photo Documentation

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

Apache Tony Federal #28

Unit Letter G, Section 19, T17S, R31E



Initial release area, facing west

7/31/14



Initial release area, facing west

7/31/14



Initial release area, facing south

8/15/14



Washing plants in overspray area, facing west 8/15/14



Excavating with hydro-vac, facing southwest 8/20/14



Installing vertical, facing south 8/21/14



Excavating release area, facing west 8/22/14



Exporting soil, facing west 8/22/14



Excavation completed, facing southwest 8/22/14



Installing vertical in base of excavation, facing east 9/8/14



Importing soil, facing west 9/26/14



Backfilling site, facing south 9/26/14



Site backfilled, facing north

9/26/14



Site backfilled, facing west

9/26/14



Raking site prior to seeding, facing northeast

11/3/14



Seeding site, facing west

11/3/14



Raking seed into soil, facing north

11/3/14



Site completed, facing east

11/3/14

Appendix D

Final C-141

RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

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

Form C-141
Revised August 8, 2011

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

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

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

Name of Company	Apache Corporation	Contact	Bruce Baker
Address	2350 W. Marland Blvd. Hobbs NM 88240	Telephone No.	432-631-6982
Facility Name	Tony Federal #28	Facility Type	Oil Well
Surface Owner	Federal	Mineral Owner	
		API No.	30-015-33000

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	19	17S	31E	1750'	FNL	2310'	FEL	Eddy

Latitude _____ Longitude _____

NATURE OF RELEASE

Type of Release	Oil and Produced Water	Volume of Release	2 barrels of oil 3 barrels of water	Volume Recovered	0 barrels
Source of Release	Flow Line	Date and Hour of Occurrence	7/29/2014	Date and Hour of Discovery	7/29/2014
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Jeffery Robertson (BLM)		
By Whom?	Bruce Baker	Date and Hour	7/29/2014		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully.*
Describe Cause of Problem and Remedial Action Taken.* The flow line was being hot oiled and pressured up resulting in a rupture in flow line. The well was shut in and the flow line was repaired.

Describe Area Affected and Cleanup Action Taken.* The release affected a total of 886 square feet of pasture land as standing fluid and 31,183 square feet of pasture land and lease pad as overspray. RECS personnel were on site beginning on July 31st, 2014. Two points within the release area and one point within the overspray were sampled at the surface of the release. Point 1 and Point 2 returned elevated laboratory chloride readings. Point 3 returned laboratory chloride readings below regulatory standards. All three points returned slightly elevated GRO, DRO and BTEX readings. On August 13th, 2014, a path forward for the site was sent to NMOCD and BLM. NMOCD approved the path forward on August 14th, 2014, and BLM approved the path forward on August 18th, 2014. BLM approved the path forward with the stipulation that if the attempt to clean the overspray with Dawn dish soap was not effective, further work would be required. The overspray area was washed with Dawn dish soap on August 15th, 2014, and site excavation began on August 20th, 2014. The site was excavated in two parts. The east side of the release was excavated to a depth of 4 ft bgs, and final wall samples and a bottom grab sample were taken. The west side of the release was scraped down 6 inches. A bottom sample from the 6 inch scrape was taken to a commercial laboratory for analysis. All wall samples from the 4 ft bgs excavation returned laboratory chloride readings below 250 mg/kg, except for West Wall 1, which returned a chloride reading of 448 mg/kg. GRO, DRO and BTEX readings for all wall samples returned values of non-detect. Bottom 1, from the 4 ft excavation, returned a chloride value of 2,240 mg/kg, and Bottom 2, from the 6 inch scrape, returned a chloride value of 32 mg/kg. GRO, DRO and BTEX readings from both bottom samples returned values of non-detect, except for the DRO reading in Bottom 1, which returned a value of 11.7 mg/kg. A vertical to a depth of 12 ft bgs was installed at the base of the 4 ft excavation to determine the depth of chloride contamination. The 11 ft bgs and 12 ft bgs samples were taken to a commercial laboratory for analysis. The 11 ft bgs sample returned a laboratory chloride reading of 128 mg/kg, and the 12 ft bgs sample returned a laboratory chloride reading of 16 mg/kg. A request to backfill the site was sent to NMOCD and BLM on September 16th, 2014. NMOCD approved the site to be backfilled on September 18th, 2014. All excavated soil was taken to a NMOCD approved facility for disposal. Clean top soil was imported to the site to serve as backfill. The site was backfilled with the imported top soil and contoured to the surrounding location. On November 3rd, 2013, the disturbed area was seeded with LPC mix.

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: <i>Bruce Baker</i>	OIL CONSERVATION DIVISION		
Printed Name: Bruce Baker	Approved by Environmental Specialist:		
Title: Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: larry.baker@apachecorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 1-2-2015	Phone: 432-631-6982		