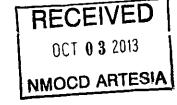
loache

EXPLORING WHAT'S POSSIBLE

## **APACHE CORPORATION**

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



# Tony Federal Tank Battery

## Closure Report 2RP-1605

API 30-015-30244

Release Date: May 23<sup>rd</sup>, 2012

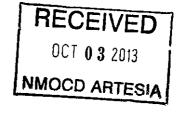
Unit Letter K, Section 18, Township 17S, Range 31E

## Rice Environmental Consulting & Safety

P.O. Box 2948 Hobbs, NM 88241 Phone 575.393.2967

June 3<sup>rd</sup>, 2013

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 Tony Federal Tank Battery AD (2RP-1605) UL/K sec. 18 T17S R31E API No. 30-015-30244

Mr. Bratcher:

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

## **Background and Previous Work**

The site is an accidental discharge of produced water associated with the Tony Federal Tank Battery. A pin hole size leak was discovered in the body of the 4 in check valve on the water transfer liner on May 23<sup>rd</sup>, 2012. A total of 15 barrels of fluid was released and a total of 5 barrels of fluid was recovered from the site. The line was repaired and NMOCD was informed of the release on the May 23<sup>rd</sup>, 2012. An initial form C-141 was submitted to NMOCD on May 26<sup>th</sup>, 2012. (Appendix A). The site is located approximately 4 miles east of Loco Hills in unit letter 'K' of section 18, T17S, R31E in Eddy County, New Mexico. This site is located in an area of no known groundwater.

Beginning on May 23<sup>rd</sup>, 2012, RECS personnel initiated work on the Tony Federal Tank Battery (Figure 1). Soil samples were collected from the surface of the site and at depth. The samples were field tested for chlorides and hydrocarbons. The surface samples were submitted to a commercial laboratory for chloride and TPH analysis (Appendix B). Laboratory results showed high chloride values and low TPH values across the release area.

The entire leak area was excavated to 2 ft below ground surface (Figure 2). On July 3<sup>rd</sup>, 2012, a representative 5 point composite soil sample was collected from the excavation floor. The sample was field tested for chlorides and hydrocarbons and then the sample was taken to a commercial laboratory for analysis (Appendix C). The sample returned a chloride result of 352 mg/kg, a GRO result of non-detect and a DRO result of 357 mg/kg.

The excavated soil was taken to a NMOCD approved facility for disposal and clean soil was imported to the site to use as backfill. A sample of the imported soil was taken to a commercial laboratory for analysis and returned a chloride result of 144 mg/kg (Appendix D).

## Conclusion

According to data obtained from the installation of several temporary monitor wells at surrounding locations, no groundwater exists beneath the site (Appendix D). Due to the non-existence of groundwater in the area, Apache submits the final C-141 (Appendix E) and respectfully requests the closure of the regulatory file for this site.

Apache Corporation appreciates the opportunity to work with you on this project. Please call Hack Conder at (575) 631-6432 if you have any questions or comments.

Sincerely,

JC.W.

Lara Weinheimer Project Scientist RECS (575) 441-0431

Attachments:

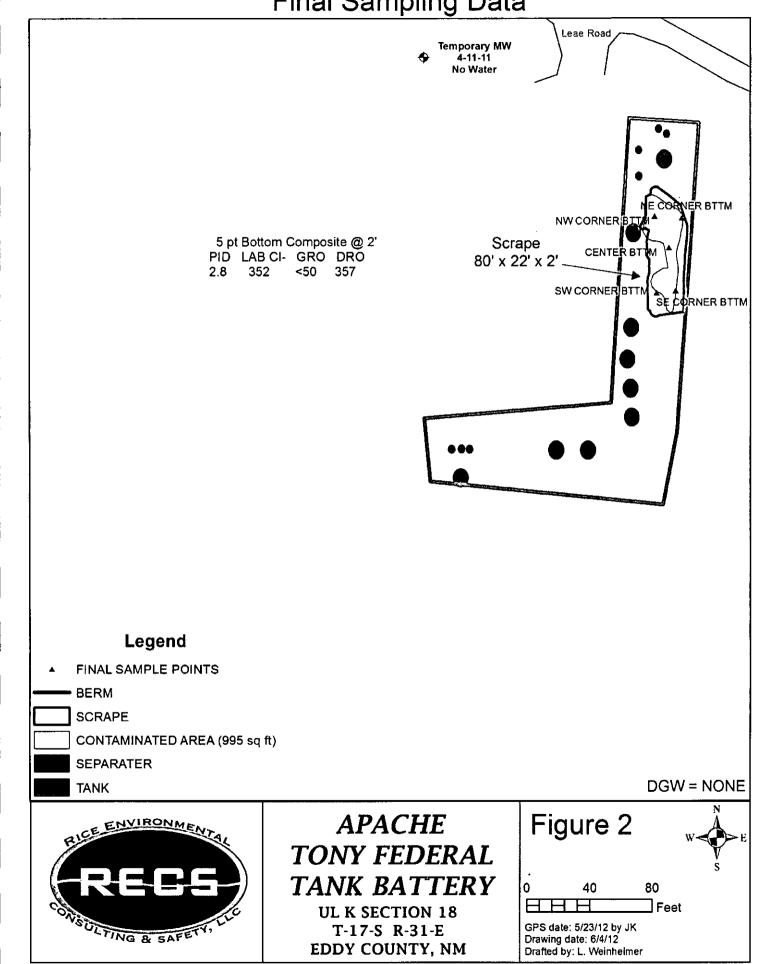
Figure 1: Site Plat with Initial Sampling Data
Figure 2: Site Plat with Final Excavation Lab Data
Appendix A: Initial Form C-141
Appendix B: Site Photographs
Appendix C: Laboratory Results
Appendix D: Groundwater Study
Appendix E: Final Form C-141

# Figures

## Initial Sampling Data

					Can	ipinig		
		1 SAMP				Те	mporary I	Leae Road
Sample Description	d-	PID	LAB CI-	GRO	DRO	• "	4-11-11	
Pt.1@SURFACE	17,523	30	17,000	14.6	28.2	+	No Water	
Pt.1 @0.5'	7,682	10.1						
Pt.1@1'	1,355	7.6						
Pt.1@1.5'	743	2.4						
Pt.1 @2'	593	1.9						••
Pt.1 @2.5'	960	2.3						
Pt.1 @3'	1,133	2.7						
Pt.1@3.5'	1,311	2.8						
Pt.1@4	1,071	1						2
Pt.1@4.5'	1,182	<u>Z.1</u>						
Pt.1 @5'	1,260	1.9						<b>^</b> 3
Pt.1@5.5'	1,057	1.9						
Pt.1@6'	2,148	1.7						
Pt.1@6.5'	1,290	2.3						البر
Pt.1@7	1,530	2.1						
Pt.1 @7.5'	1,424	2.7						
Pt.1 @8'	888	1.1						V I
Pt.1 @8.5'	1,698	0.9						
	PT.	2 SAMP	LES					
Sample Description	d-	PID	LAB CI-	GRO	DRO			
Pt.2 @ SURFACE	22,488	3	27,600	<10	<10			
Pt.2 @0.5'	4,424	1.5			<b></b>			
Pt.2@1'	488	1					the second second second second	
Pt.2@1.5'	314	1.2	1					•
Pt.2 @2'	302	1.3	1			1		
Pt.2 @2.5'	669	1.6	1					
Pt.2 @3'	360	1.9						
Pt.2 @3.5'	421	2.1	1			Participant of the second s		
Pt.2 @4'	602	1.1	1			PT.	3 SAMP	PLES
Pt.2 @4.5'	471	1.1		Sa	mple Descript		PID	LAB CI- GRO DRO
Pt.2 @5'	647	1	]	j	3 @ SURFACE	17,355	9	19,600 <10 59.2
Pt.2 @5.5'	1,180	0.9			3 @0.5'	2,073	6	
Pt.2 @6'	922	0.7	]		3@1'	1,881	3.1	
Pt.2 @6.5'	750	1.5			3 @1.5'	521	2.7	-
Pt.2 @7'	619	2.5	j	Pt.	3 @2'	570	1.1	
Pt.2 @7.5'	420	2.1		Pt.	3 @2.5'	513	1	
Pt.2 @8'	562	1.9		Pt.	3 @3'	473	0.9	
Pt.2 @8.5'	606	1.5	]	Pt.	3 @3.5'	644	0.7	ا د ا
		L		Pt.	.3 @4'	547	Q.8	
Ľ	.egeno	1		Pt.	3 @4.5'	440	1	
▲ SAMPLE				Pt.	3 @5'	611	Z	
	FOINTS			Pt.	.3 @5.5'	656	2.5	
BERM				Pt.	3 @6'	495	2.6	
			05 41	. —	3 @6.5'	469	1.4	-
	INALED	AREA (9	es sq π)	<u> </u>	3 @7'	583	1.7	
SEPARAT	ER				3 @7.5'	651	2.5	4
<b>TANK</b>					3 @8'	529	0.9	DGW = NONE
TANK				Pt.	3 @8.5	558	1.5	
RICE EN	IRONA	AENTAL		ТС		ACHE FEDEI		Figure 1
						BATT		S S
ON THE			C		UL K SEC	CTION 1	8	
"ULTIN		ETT, V			T-17-S	R-31-E		GPS date: 5/23/12 by JK
	3 0K 5 AT	-	1	Ε	DDY CO	UNTY, N	IM	Drawing date: 6/4/12 Drafted by: L. Weinheimer
CONSULTING & SAFETY, LLC						<b>-, -</b>		1 = = = = = = = = = = = = = = = = = = =

## **Final Sampling Data**



# Appendix A Initial C-141

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

2

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## State of New Mexico Energy Minerals and Natural Resources

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

RE	<b>ICE</b>	IV	Ε	D
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MAR 2.6 2013 Revised August 8, 2011

Submit I Copy to appropriate District Office in NMOCD APPress 199.15.29 NMAC.

Release Notification and Corrective Action												
nJMW12099300190						OPERATOR 🛛 Initial Report 🗌 Final Report						inal Report
							talic Gladden					
Address PC				st well #1)			to, 575-390-41 e Production F					
			y (neare					acting .				
Surface Ow	ner BLM			Mineral O			 ·		API No	. 30-015-3	0244	J
<u></u>						OF REI						
Unit Letter	Section	Township	Range	Feet from the	North/	orth/South Line Feet from the			Vest Line	County		ļ
К	18	17S	31E	1385'	FSL		1410*	FWL		Eddy		J
			La	titude		_ Longitud	le					
				NAT	URE	OF REL	EASE					
Type of Rele						Volume of	Release 15			Recovered 5		
Source of Re	lease Hole	in 4" check va	ulve			Date and 1 05/23/12	lour of Occurrenc	e	Date and Same	Hour of Dis	covery	
Was Immedi	ate Notice (		Yes 🛛	] Na 🔲 Noi Re	quired	If YES, To Amos/Brat			Oune	<u></u>		
By Whom? N	Natalie Glad	den					lour 05/23/12					
Was a Water	course Reac		Yes 🛛	No		If YES, Vo	hume Impacting t	the Wate	ercourse.			
If a Watercou	urse was lin	pacted, Descr	be Fully.	•		I	,					
Describe Cau		in and Dama	Finh Antin	. Teles +					RF	CEIN		
				ive on the water tr	ansfer li	nc.						
						OCT <b>0 3</b> 2013						
Describe Are						NMOCD ARTESIA						
Site will he re	emediated b	у миосоль	LM Guide	clines to closure.								
regulations at public health should their o or the enviror	t 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 bealth 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: addu ( nladal					<u>~_</u> ]	A 1						
Printed Name: Natalie Gladden						Approved by Environmental Specialist: Signed By Mile Bennun						m_
						Approval Dat	NR 08 20	13	Expiration 1	Date:		
E-mail Addre	ss: natalie o	ladden/ii)anar	hecom.co	m		Conditions of	Approval:				-	
			•				ation per OC	D Rule	. &	Attached	Ľ	
Date: 5/26/1 Attach Addit		Phone: 575		<u>,                                     </u>	(		SUBMIT REF			1	<u> </u>	<u> </u>
Auton Modil	ional Shee	ia IL INCUUSSE	аy			PROPO	ŞAL N <u>O</u> LATE		N:	2KF	-16(	Ь
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# Appendix B Initial Laboratory Analyses



May 30, 2012

NATALIE GLADDEN APACHE - EUNICE P. O. BOX 1849 EUNICE, NM 88231

RE: TONY FEDERAL TANK BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 05/25/12 8:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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/ga/lab\_accred\_certif.html.

Cardinal Laboratories is accreditated 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.Kune

Celey D. Keene Lab Director/Quality Manager



## Analytical Results For:

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

Received:	05/25/2012	Sampling Date:	05/23/2012
Reported:	05/30/2012	Sampling Type:	Soil
Project Name:	TONY FEDERAL TANK BATTERY AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

## Sample ID: PT. 1 @ SURFACE (H201193-01)

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	17000	16.0	05/29/2012	NĎ	432	108	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	14.6	10.0	05/29/2012	ND	191	95.4	200	1.35	
DRO >C10-C28	28.2	10.0	05/29/2012	ND	193	96.6	200	1.68	
Surrogate: 1-Chlorooctane	84.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	95.7% 63.6		4						

## Sample ID: PT. 2 @ SURFACE (H201193-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	27600	16.0	05/29/2012	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/29/2012	ND	191	95.4	200	1.35	
DRO >C10-C28	<10.0	10.0	05/29/2012	ND	193	96.6	200	1.68	
Surrogate: 1-Chlorooctane	87.6	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	99.8 % 63.6-1		4						

### Cardinal Laboratories

## \*=Accredited Analyte

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Celey D. Kune

Celey D. Keene, Lab Director/Quality Manager



## Analytical Results For:

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

· · ·	Sampling Date:	05/23/2012
Reported: 05/30/2012	Sampling Type:	Soil
Project Name: TONY FEDERAL TANK BA	ATTERY AD Sampling Condition:	Cool & Intact
Project Number: NONE GIVEN	Sample Received By:	Jodi Henson
Project Location: NOT GIVEN		

## Sample ID: PT. 3 @ SURFACE (H201193-03)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19600	16.0	05/29/2012	ND	432	108	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/29/2012	ND	191	95.4	200	1.35	
DRO >C10-C28	59.2	10.0	05/29/2012	ND	193	96.6	200	1.68	
Surrogate: 1-Chlorooctane	84.0	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane 99.2 % 63.		% 63.6-15	4						

### **Cardinal Laboratories**

### \*=Accredited Analyte

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Celeg D. Kune

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 SM4500CI-B does not require samples be received at or below $6^{\circ}\text{C}$
	Samples reported on an as received basis (wet) unless otherwise noted on report

**Cardinal Laboratories** 

\*=Accredited Analyte

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Celey D. Kune

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Celey D. Keene, Lab Director/Quality Manager

ARDINAL LABORATORIES

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORAI ORIES 101 East Mariand, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

hconder@rice-ecs.com; Lweinheimer@rice-ecs.com Zconder@rice-ecs.com; Bbaker@rice-ecs.com; ANALYSIS REQUES Add'l Phone #: Add'l Fax #: Sat Complete Cations/Anoina H9T sexeT on 12 X<sub>3</sub>T8 0 Yes M SIOS HOL email results NATALIE Chlorides Phone Result: Fax Result: REMARKS: 7 to the amount peed by the cleant for the photos of the TIME 9:40 9:45 9:50 d by clean, the su aver there BILL TO .... .... SAMPLING 21-52-2 5-23-2 (~73~12 DATE ED BY 505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020 Zip: (n R : язнто PRESERV Company: 1000 / 301 Address: Phone #: 이 별다 간다 ㅋ 같이 # 0 d State: Fax #: ACID/BASE Attn: City: : язнто SLUDGE € ٦IO MATRI į TIOS 800 PH-21 RETAWETEAW Received By AB Po 3 ROUNDWATER after a Table # CONTAINERS ы П (G)RAB OR (C)OMP 500 0 ja te Project Owner: Tark ר |-) 102te: 55/255/1 Time: 50 State: Period and and and a Ð Fax #: Sample I.D. Falera Sampler - UPS - Bus - Other: Delivered By: (Circle One) Project Manager: NATALIE Apache 202L the state of the second se A shall During Company Name: Project Location: Relinquished B 3 Sampler Name: 8201193H EASE NOTE: Lebén (behinguished) Project Name: FOR LAB USE ONLY Lab I.D. Project #: Address: Phone #: ł ; či či

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

# Appendix C Final Sampling Laboratory Analysis



July 13, 2012

NATALIE GLADDEN APACHE - EUNICE P. O. BOX 1849 EUNICE, NM 88231

RE: TONY FEDERAL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 07/05/12 11:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated 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,

Lope S. Moreno-

Hope Moreno Inorganic Technical Director

## **CARDINAL** Laboratories

## Analytical Results For:

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

Received:	07/05/2012	
Reported:	07/13/2012	
Project Name:	TONY FEDERAL BATTERY AD	
Project Number:	NONE GIVEN	
Project Location:	NONE GIVEN	

Sampling Date:	07/03/2012
Sampling Type:	Soil
Sampling Condition:	Cool & Intact
Sample Received By:	Jodi Henson

## Sample ID: 5 PT BTM COMP @ 2' (H201521-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	07/06/2012	ND	416	104	400	0.00	
TPH 8015M	mg,	/kg	Analyze	d By: AM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<50.0	50.0	07/11/2012	ND	193	96.5	200	0.00207	
DRO >C10-C28	357	50.0	07/11/2012	ND	202	101	200	0.0431	
Surrogate: 1-Chlorooctane	69.2	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	130	% 63.6-15	4						

**Cardinal Laboratories** 

\*=Accredited Analyte

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Lope S. Moreno-

Hope Moreno, Inorganic Technical Director

## **CARDINAL** Laboratories

## **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 SM4500CI-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: Labitly and Damages. Cardinal's liability and clent'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 Laboratones.

Lope S. Moreno-

Hope Moreno, Inorganic Technical Director

Page 3 of 4

Page 4 of 4

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		ARDINAL
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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

Company Name:	Apache	BILL TO					ANA	ANALYSIS	REQUEST		
Project Manager.	Project Manager: Natalie Gladden	P.O.#:			-						
Address:		Company:					S				
city:	State: NM Zip:	Attn:					uo	•		<u></u>	
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# Appendix D Imported Soil Laboratory Analysis



July 12, 2012

NATALIE GLADDEN APACHE - EUNICE P. O. BOX 1849 EUNICE, NM 88231

RE: TONY FEDERAL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 07/09/12 10:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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 <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accredited certif.html.

Cardinal Laboratories is accreditated 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,

Lope S. Moreno-

Hope Moreno Inorganic Technical Director



## Analytical Results For:

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

Received:	07/09/2012	Sampling Date:	07/06/2012
Reported:	07/12/2012	Sampling Type:	Soil
Project Name:	TONY FEDERAL BATTERY AD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NONE GIVEN		
-			

## Sample ID: IMPORTED SOIL (H201553-01)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/10/2012	ND	416	104	400	3.92	

**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 walved 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 incidential or consequential damages, including, writiout limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsciance, affabates or successors arising out of or related to the performance of the services hereinder by Cardinal, regardless of whither such claim is based upon any of the above stated reasons or otherwse. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Lope S. Moreno-

Hope Moreno, Inorganic Technical Director



## **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 SM4500CI-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 lability and clent's exclusive remedy for any claim ansing, whether based in contract or tort, shall be limited to the amount paid by clent for analyses. All claims, including those for neglegence and any other cause whistoever shall be deemed valved 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 inordential or consequential damages, including, writhout limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidianes, 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.

Lope S. Moreno-

Hope Moreno, Inorganic Technical Director

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Page 4 of 4

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# **CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

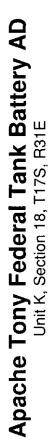
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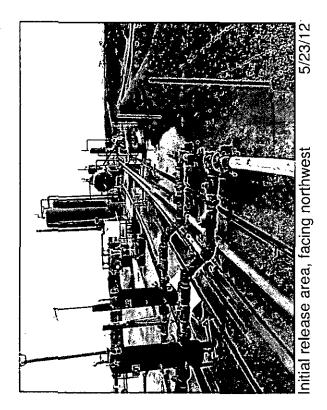
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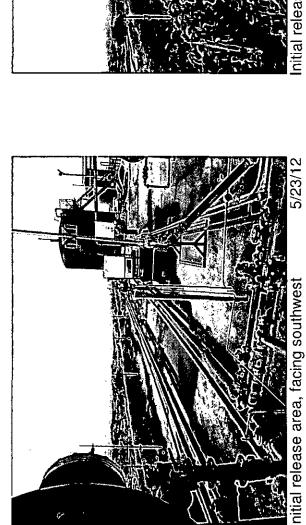
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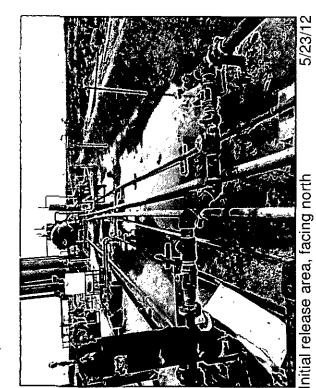
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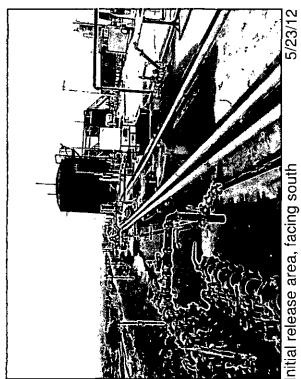
# Appendix E Photo Documentation

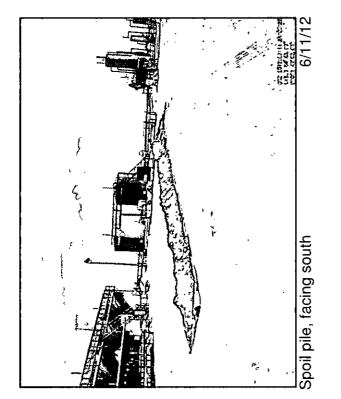




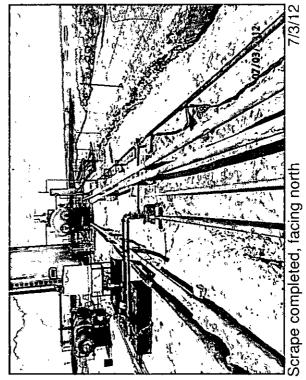


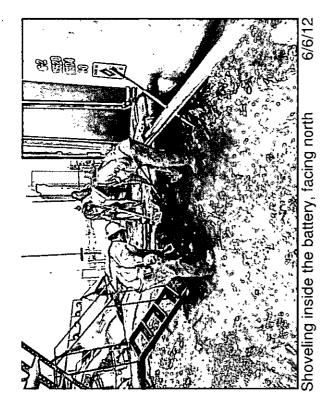


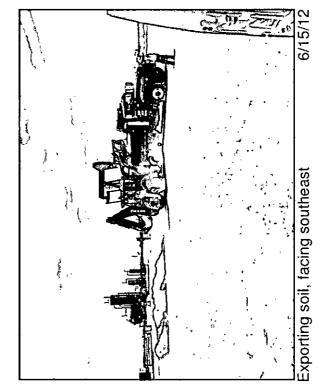


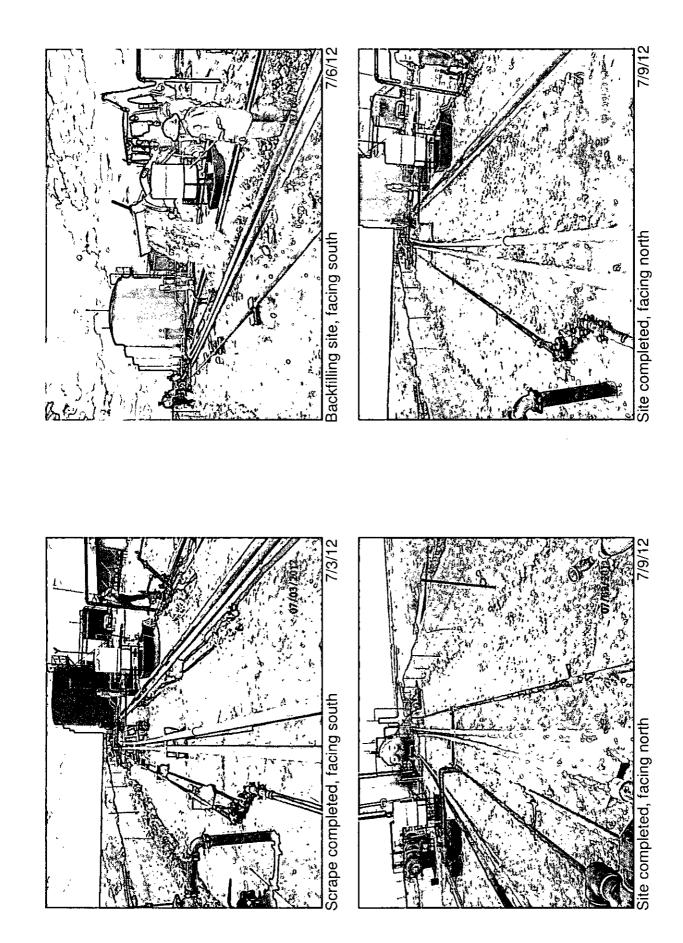


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# Appendix F

## 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.

1220 S. St. Fran	cis Dr., Sanla	Fe, NM 87505	5			e, NM 875							
			Rele				orrective A	ction	**		· · ·		
1								al Report	$\boxtimes$	Final Report			
Name of Co	mpany A	Apache Corp	1	Contact Bruce Baker									
Address PO				Telephone No. (575) 394-1503									
Facility Nan	ne Tony F	ederal Batte		Facility Type Production Facility									
Surface Ow	ner E	BLM	)wner	r BLM API No. 30-015-30244									
		<u> </u>		LOCA	TIO	N OF REI	LEASE						
Unit Letter	Section	Township	th/South Line Feet from the East/West Line County										
ĸ	18	175	31E	1385		FSL 1410 FWL Ed							
LatitudeLongitude													
NATURE OF RELEASE													
Type of Relea	se Produ	ced Water				Volume of Release 15 bbls Volume Recovered 5 bbls							
Source of Rel				Date and Hour of Occurrence     Date and Hour of Discovery       5/23/12     5/23/12									
Was Immediate Notice Given?						If YES, To Whom?							
By Whom? Natalie Gladden						Date and Hour 5/23/12							
Was a Watero		hed?		If YES, Volume Impacting the Watercourse.									
		L											
If a Watercou	rse was Imj	pacted, Descri	be Fully.*					-	R	ECEI		D	
Describe Cau Pin hole size					ansfer	line caused the release of 15 bbls.							
Describe Area Affected and Cleanup Action Taken.* A total of 995 sq ft in the bermed facility was affected by the release. Beginning on May 23 <sup>rd</sup> , 2012, RECS personnel initiated work on the Tony Federal Tank Battery. Soil samples were collected from the surface of the site and at depth. The samples were field tested for chlorides and hydrocarbons. The surface samples were submitted to a commercial laboratory for chloride and TPH analysis. The entire leak area was excavated to 2 ft below ground surface. On July 3 <sup>rd</sup> , 2012, a representative 5 point composite soil sample was collected from the excavation floor. The sample was field tested for chlorides and hydrocarbons and then the sample was taken to a commercial laboratory for analysis. The sample returned a chloride result of 352 mg/kg, a GRO result of non-detect and a DRO result of 357 mg/kg. The excavated soil was taken to a NMOCD approved facility for disposal and clean soil was imported to the site to use as backfill. A sample of the imported soil was taken to a commercial laboratory for analysis and returned a chloride result of 144 mg/kg. 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 of federal, state, or local laws and/or regulations.											omer		
	л	<u></u>		OIL CONSERVATION DIVISION									
Signature:	mure	Bahy		Approved by Environmental Specialist:									
Printed Name	Bruce Ba	iker											
Title: Environmental Technician						Approval Date: Expirat			iration 1	ion Date:			
E-mail Addres	s: lar	-y. Bake	<u>m</u>	Conditions of Approval:			Attached						
Date: 10 -	R-13		Phone:	(575) 394-1503	3				_	<u> </u>			

Attach Additional Sheets If Necessary