

APACHE CORPORATION

P.O.Box 1849 Eunice, NM 88231 Phone 575,394,3159

White Owl Battery

Closure Report

API 30-025-36689

Release Date: February 15th, 2012

Unit Letter D, Section 2, Township 20S, Range 38E

Rice Environmental Consulting & Safety

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

June 27th, 2013

Geoffrey Leking

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau – District 1 1625 N. French Dr. Hobbs, NM 88240-9273

> RE: TERMINATION REQUEST Apache – White Owl Battery AD UL/D sec. 2 T20S R38E API No. 30-025-36689

Mr. Leking:

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 crude oil associated with the White Owl Battery when a swedge on a circulating line ruptured. Fluids were released within the battery containment and also outside the containment onto the caliche pad for the unit well #001. An initial form C-141 was submitted by Apache Corporation on February 17th, 2012 (Appendix A). The site is located south of Hobbs, in unit letter 'D' of section 2, T20S, R38E in Lea County, New Mexico. According to the NM OSE and USGS records, depth to groundwater in the area is approximately 48 ft bgs.

On February 16th, 2012, RECS personnel initiated work on the White Owl Battery (Figure 1). Surface soil samples were collected and field tested for chloride. Headspace measurements were also taken in the field using a Photo Ionization Detector (PID). The samples were submitted to a commercial laboratory for chloride and TPH (GRO/DRO) analyses (Appendix B). Chloride ranged from 48.0 mg/kg to 496 mg/kg. TPH ranged from 39,700 mg/kg to 73,500 mg/kg.

The leak was divided into several excavated areas. On February 29th, 2012, RECS personnel collected and field tested a representative composite sample from the floor of the caliche pad scraped area (Figure 2). The sample was submitted to a laboratory for chloride and TPH analyses and contained <16.0 ppm chloride and <10.0 ppm TPH (Appendix C).

On March 1, 2012, RECS personnel collected and field tested samples from the remaining areas which included the floor of the bermed area surrounding the tanks, the floor of the middle scraped area, and the walls of both the middle scraped area and the caliche pad scraped area (Figure 3). The samples were submitted to a laboratory for chloride and TPH analyses

(Appendix C). In all samples chloride did not exceed 224 ppm and TPH did not exceed 15.3 ppm.

Impacted soils were removed from the excavation and transported to a NMOCD approved disposal facility. The excavations were backfilled with clean caliche and leveled. See Appendix B for photographs of field activities.

Conclusion

Due to the removal of impacted soils relative to necessary groundwater depth, Apache submits the final C-141 (Appendix D) 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,

Lara Weinheimer

Project Scientist

RECS

(575) 441-0431

Attachments:

Figure 1: Site Plat with Initial Sampling Lab Data
Figure 2: Site Plat with Caliche Pad Scrape Lab Data

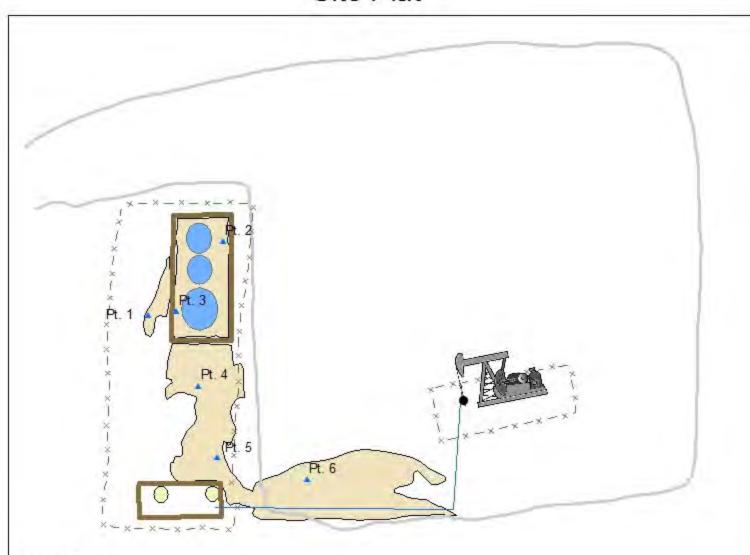
Figure 3: Site Plat with Bermed Area, Middle Scraped Area, and Caliche Pad

Scraped Area Lab Data

Appendix A: Initial Form C-141 Appendix B: Site Photographs Appendix C: Laboratory Results Appendix D: Final Form C-141

Figures

Site Plat



Legend

- WELL HEAD
- ▲ SAMPLE POINTS
- WELL HEAD





FLOW LINE

- PAD

SEPARATOR

STAIN (3,791 sq ft)

TANK

INITIAL SAMPLING LAB DATA

Sample Description	CI-	GRO	DRO
Pt.1 surface	48	27,800	44,400
Pt.2 surface	48	33,000	40,500
Pt.3 surface	64	16,900	22,800
Pt.4 surface	112	28,400	43,300
Pt.5 surface	192	23,400	34,200
Pt.6 surface	496	29,600	42,700



APACHE WHITE OWL BATTERY AD

UL/D SECTION 2 T-20-S R-38-E LEA COUNTY, NM

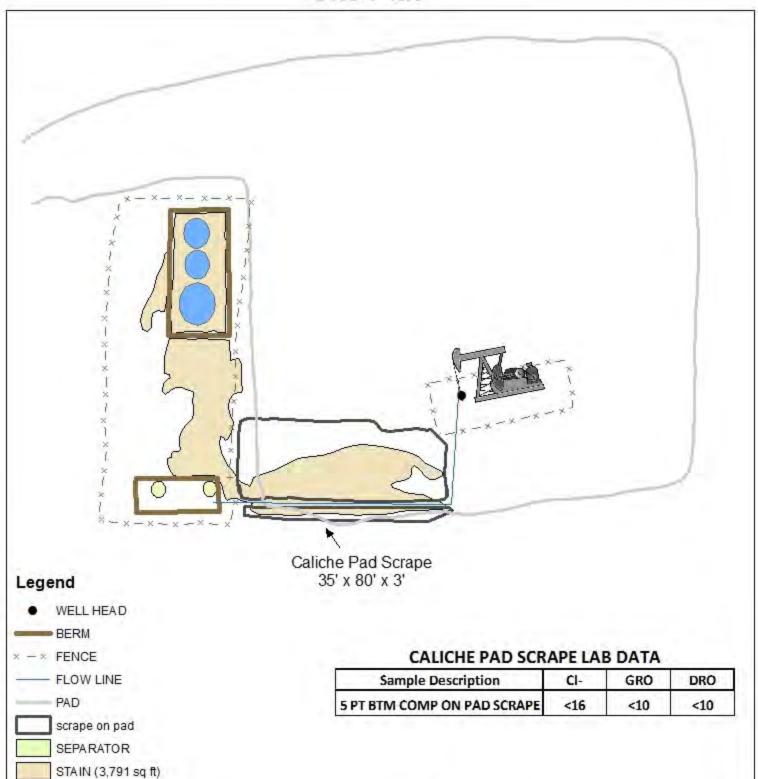
DGW = 48	ft
Figure	1



0 15 30 60

GPS date: 2/16/12 Drawing date: 3/15/12 Drafted by: L. W einheimer

Site Plat





TANK

APACHE WHITE OWL BATTERY AD

UL/D SECTION 2 T-20-S R-38-E LEA COUNTY, NM

DG	- W	48 ft	Ň
Fi	gur	e 2	w S
0	15	30	60
			Feet

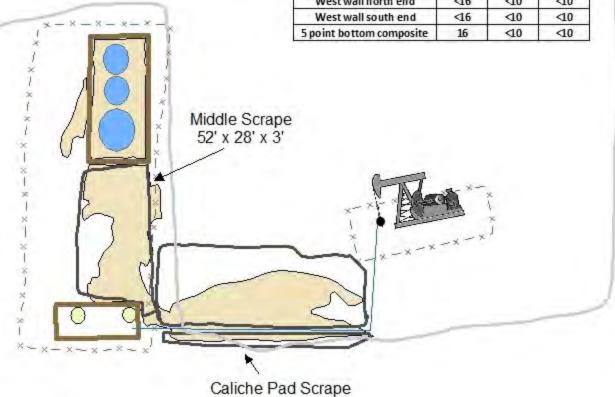
Drafted by: L. Weinheimer

BERMED AREA LAB DATA

Sample Description	CI-	GRO	DRO
NW corner bottom@ 1.6'	<16	<10	<10
SE corner bottom@ 2'	128	<10	15

MIDDLE SCRAPE LAB DATA

CI-	GRO	DRO
<16	<10	<10
80	<10	<10
224	<10	<10
<16	<10	<10
<16	<10	<10
<16	<10	<10
16	<10	<10
	<16 80 224 <16 <16 <16	46 40 80 40 224 40 46 40 46 40 46 40 46 40



35' x 80' x 3'

Legend

WELL HEAD

BERM

-× FENCE

FLOW LINE

PAD

SCRAPES

SEPARATOR

STAIN (3,791 sq ft)

TANK

CALICHE PAD SCRAPE LAB DATA

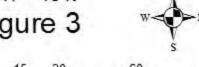
Sample Description	Cl-	GRO	DRO
North wall west end	32	<10	<10
North wall east end	144	<10	<10
South wall east end	64	<10	<10
South wall west end	16	<10	<10
West wall center	224	<10	<10
East wall center	128	<10	<10



APACHE WHITE OWL BATTERY AD

UL/D SECTION 2 T-20-S R-38-E LEA COUNTY, NM

DGW = 48	ft
Figure	3



30 60 15 Feet

GPS date: 2/16/12 Drawing date: 3/15/12 Drafted by: L. Weinheimer

Appendix A Initial Form C-141

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District III

1301 W. Grand Avenue, 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

Revised October 10, 2003

Form C-141

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

						OPERA	ΓOR	D	Initia	al Report		Final Report
		pache Corpo				Contact Na	talie Gladden			***		
Address PC							No. 575-390-41					
Facility Nar	ne White	Owl Bty (ne	arest wel	1 #001)		Facility Typ	e Production Fa	acility				
Surface Ow	ner Unkn	own		Mineral O	wner s	State of NM			Lease N	To. 30-025-	-36689	9
				LOCA	TIOI	N OF REI	LEASE					
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/We	st Line	County	-	
D	2	20S	38E	582'	FNL		330'	FWL		Lea		
			Lat	ritude		_ Longitud	e					
				NAT	URE	OF RELI	EASE					
Type of Relea							Release 150bbls	7	/olume R	Recovered 7:	5bbls	
Source of Rel	lease Swed	ge Failure					our of Occurrenc	е Г	Date and	Hour of Disc		
Was Immedia	te Notice C	Given?	-			2/15/12 If YES, To	Whom?	2	/15/12			
			Yes 🗌	No 🗌 Not Re	quired	Geoffrey L						
By Whom?							our 2/15/12 449 ₁					
Was a Watero	ourse Reac		Yes 🛚	No		If YES, Vo	lume Impacting the	he Waterc	ourse.			
If a Watercou	rse was Im	pacted, Descri	be Fully.*									
	· · · · · · · · · · · · · · · · · · ·											
Describe Cau	se of Proble	em and Remed	dial Action	Taken.*			1					
Swedge on th	iculating in	ie cracked due	e to corros	ion and caused flu	na to re	iease inside a	nd outside of conf	tainment v	valls.			
Describe Area	Affected a	and Cleanup A	ction Tak	an *								
				and NMOCD Stan	ıdards w	rill be followe	ed to closure.					
			Ü									
I hereby certif	y that the in	nformation give	ven above	is true and compl	ete to th	e best of my	knowledge and ur	nderstand t	that purs	uant to NMC)CD ri	iles and
regulations all	l operators a	are required to	report an	d/or tile certain re	lease no	otifications an	d perform correct	ive action	s for rele	ases which r	nav en	danger
should their or	or the envir perations ha	onment. The	acceptanc dequately	e of a C-141 report investigate and re	rt by the	NMOCD ma	rked as "Final Re	eport" does	s not relie	eve the opera	itor of	liability
or the environ	ment. In ac	idition, NMO	CD accept	ance of a C-141 r	eport do	es not relieve	the operator of r	esponsibil	itv for co	, surface wat ompliance wi	er, nur th anv	nan neaith
federal, state,	or local law	s and/or regu	lations.									omer
	$\bigcap_{i=1}^{n}$	/	λ .		,		OIL CONS	SERVA'	TION	<u>DIVISIO</u>	N	
Signature:	Det	alue (Silc	dden								
Printed Name	Natalie G	ladden			A	Approved by 1	District Superviso	or:				
Title: EHS E	vironmenta	al Tech			A	Approval Date	· ·	Exp	oiration I	Date:		
E-mail Addres	ss: <u>natalie.g</u>	ladden@apac	hecorp.com	n		Conditions of	Approval:					
Date: 2/17/1	2	Phone: 575-	300_4196							Attached	Ц	
Attach Additi												

$\underset{\text{Site Photographs}}{Appendix} \ B$

White Owl Battery Unit Letter D, Section 2, T21S R37E



Initial release, facing northwest

2/16/2012



Initial release, facing northeast

2/16/2012



Initial release, facing west





Excavating, facing southwest

2/24/2012



Exporting soil, facing north

2/24/2012



Excavating, facing south

2/28/2012



Final excavation, facing west

2/29/2012



Backfilling, facing north





Final excavation, facing southeast

2/29/2012



Importing caliche, facing south

3/9/2012



Rebuilding berms, facing south

3/12/2012



Site backfilled, facing south





Site backfilled, facing west

3/13/2012



Site backfilled, facing north

6/5/2012

Appendix C Laboratory Results



February 21, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: WHITE OWL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 02/16/12 16:10.

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/qa/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.

Celey D. Keeno

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



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

Received: 02/16/2012 Sampling Date: 02/16/2012

Reported: 02/21/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SS @ PT 1 (H200426-01)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/20/2012	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	27800	200	02/17/2012	ND	179	89.4	200	5.95	
DRO >C10-C28	44400	200	02/17/2012	ND	176	88.2	200	7.64	

Surrogate: 1-Chlorooctane 367 % 55.5-154
Surrogate: 1-Chlorooctadecane 167 % 57.6-158

Sample ID: SS @ PT 2 (H200426-02)

Chloride, SM4500CI-B	mg,	'kg	Analyze	d By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/20/2012	ND	416	104	400	3.92		
TPH 8015M	mg,	/kg	Analyzed By: MS						S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	33000	200	02/17/2012	ND	179	89.4	200	5.95		
DRO >C10-C28	40500	200	02/17/2012	ND	176	88.2	200	7.64		

Surrogate: 1-Chlorooctane 405 % 55.5-154
Surrogate: 1-Chlorooctadecane 124 % 57.6-158

Cardinal Laboratories *=Accredited Analyte

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02/16/2012

Soil

Sampling Date:



Analytical Results For:

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

Received: 02/16/2012 Reported: 02/21/2012

Sampling Type: Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SS @ PT 3 (H200426-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/20/2012	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	Analyzed By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	16900	200	02/17/2012	ND	179	89.4	200	5.95	
DRO >C10-C28	22800	200	02/17/2012	ND	176	88.2	200	7.64	

Surrogate: 1-Chlorooctane 271 % 55.5-154 Surrogate: 1-Chlorooctadecane 100 % 57.6-158

Sample ID: SS @ PT 4 (H200426-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	02/20/2012	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	28400	200	02/17/2012	ND	179	89.4	200	5.95	
		200	02/17/2012	ND	176	88.2	200	7.64	

375 % 55.5-154 Surrogate: 1-Chlorooctane 149 % Surrogate: 1-Chlorooctadecane 57.6-158

Cardinal Laboratories *=Accredited Analyte

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02/16/2012



Analytical Results For:

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

Received: 02/16/2012 Sampling Date:

Reported: 02/21/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: SS @ PT 5 (H200426-05)

oloride, SM4500Cl-B mg		/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	02/20/2012	ND	416	104	400	3.92	
TPH 8015M	mg,	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	23400	200	02/17/2012	ND	179	89.4	200	5.95	

Surrogate: 1-Chlorooctane 342 % 55.5-154
Surrogate: 1-Chlorooctadecane 186 % 57.6-158

Sample ID: SS @ PT 6 (H200426-06)

hloride, SM4500Cl-B mg/kg		/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	02/20/2012	ND	416	104	400	3.92	
TPH 8015M	mg	/kg	Analyze	d By: MS					S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	29600	200	02/17/2012	ND	179	89.4	200	5.95	
DRO >C10-C28	42700	200	02/17/2012	ND	176	88.2	200	7.64	
Surrogate: 1-Chlorooctane	276	% 55.5-15							

Surrogate: 1-Chlorooctane 276 % 55.5-154
Surrogate: 1-Chlorooctadecane 115 % 57.6-158

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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 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

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ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Nam	e: Apache Corp.										ILL TO	9	Too for					ANAI	YSIS	REC	QUES	Т		
Project Manage	er: Natalie Gladden							P.O). #:															
Address:								Cor	mpa	ny:								S						
City:	State:	Zij	o:					Attı	n:									Cations/Anions		- 1				
Phone #:	Fax #:							Add	dres	s:								Ani						
Project #:	Project Own	er:						City	y:					10	Σ		I	1/8		- 1				
Project Name:								Sta	te:		Zip:			Chlorides	15	×	Texas TPH	on						
Project Locatio	in: White Our Bottery	AD						Pho	one i	#:				oric	801	BTEX	S	ati	TDS					
Sampler Name:								Fax						h		В	×		-		1			
FOR LAB USE ONLY	1	0.		-	MA	TRI	X		PRE	SER	V. SAM	PLING	3	C	TPH		Te	te						
Lab I.D. H200426	Sample I.D.	(G)RAB OR (C)OMP.	AINER	GROUNDWATER	WASTEWATER	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	DAT	E	TIME					Complete						
1	55 @P+/	9	1		1	1				/	2-16-1	29	115	V	/									
2	65 @ P42	9	1		1					1	2-16-1	29	1,20	/	-									
3	55 @ Pr-3	9	1		1				- 1	/	2-16-1	29	1:25	-										
4	SS @ PHY	9	1	\vdash	/	-		-	1		2-16-	29	130	V						-	-		_	-
5	SS @PFS	9	1	\vdash	-	/		-	-	1	216-1	29	35	-		/				-		-	-	
6	55 @FF6	2	1	\vdash	-	+		-	-	-	2-16	09	1,40	V	-					-			-	-
		+	\vdash	+	+	+		\dashv		+	1	+								-		_	_	1
		+	-	\forall				1	+			+												
PLEASE NOTE: Liability a	and Damages, Cardinal's liability and client's exclusive remedy fo	r any cla	im arisi	ng whet	her base	ed in co	ontract	or tort,	shall b	e limite	d to the amoun	t paid by	the client for	the										

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 consequental 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:	Date:	Received By:	Phone Result:
Relinquished By:	Date:	Redeived By:	email results natalie.gladden@apachecorp.com
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	1	Sample Condition Cool Intact Pres Pres	Annifolis Aconder@rice-ecs.com; Bbaker@rice-ecs.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com

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



March 05, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: WHITE OWL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 03/01/12 8:15.

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/qa/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.

Celey D. Keeno

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



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

Received: 03/01/2012 Sampling Date: 02/29/2012

Reported: 03/05/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: 5 PT BTM COMP ON PAD SCRAPE (H200543-01)

Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/02/2012	ND	416	104	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	03/03/2012	ND	192	96.2	200	3.12	
DRO >C10-C28	<10.0	10.0	03/03/2012	ND	157	78.5	200	2.75	
Surrogate: 1-Chlorooctane	88.3	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	95.8	% 57.6-15	8						

Cardinal Laboratories *=Accredited Analyte

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Notes and Definitions

S-HI High surrogate recovery was confirmed as a matrix effect by a second analysis.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (505) 393-2326 FAX (505) 393-2476

Company Name:	roject Manager: 1)/c fe //c 6/6 ddg					1	3	B	ILI	L TO							ANA	LYS	IS I	REC	QUES	ST						
Project Manager	· N/c felie 6/4ddon						F	2.0.	#:								T		1									
Address:								om	par	ıy:																	1	
City:	State:	Zip	:				1	ttn	:																	1		
Phone #:	Fax #:						A	dd	ress	:						- 1											1	
Project #:	Project Owne	r:					0	ity								1									1			
Project Name:	white one bottery						5	tat	e:		Zi	ip:																
Project Location	1: 2						F	ho	ne #	:													8			1		
Sampler Name:	A)all Harris						F	ax	#:						1											1		
FOR LAB USE ONLY		1.		_	MA	TRI	X	P	RES	ERV	۷	SAMPL	NG		,	3												
Lab I.D. H2205431	Sample I.D. Spt bitm curp on pad Scrape	(G)RAB OR (C)OMP	- # CONTAINERS	GROUNDWATER	WASIEWAIER SOIL	OIF	SLUDGE	OTHEK:	ACID/BASE:	OTHER		DATE	TIME	70	- 1 - W	77118												
analyses. All claims Includin service. Igno event shall Co	7.100	g without Cardinal	d waive	d unless	s made i siness in whether By:	in writi iterrup r such	ng and re tions, los	s of us	d by C se, or I upon a	erdinal oss of any of	d within profits the ab	n 30 days after s incurred by a nove stated re-	er completion of t dient, its subsidi	the applica aries, ise,		Yes Yes	Les income	000000000000000000000000000000000000000	Add'' Add''	Phon Fax #	ie #:	ac p	lecr	inp	.00	M		
	Time: Sample Cool Impler - UPS - Bus - Other: Sample Cool Implement Implem				-Inta	ict/	n	C /	HEC	KEL	D BY:	11.000	Her	e	pice													



March 06, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: WHITE OWL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 03/02/12 8:35.

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/qa/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.

Celey D. Keeno

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



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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: NW CORNER BTTM @ 1.6' (H200555-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/05/2012	ND	416	104	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	03/05/2012	ND	206	103	200	15.5	
0110 00 010									

Surrogate: 1-Chlorooctane 105 % 55.5-154
Surrogate: 1-Chlorooctadecane 111 % 57.6-158

Sample ID: SE CORNER BTTM @ 2' (H200555-02)

Chloride, SM4500CI-B	4500Cl-B mg/kg		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/05/2012	ND	416	104	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	03/05/2012	ND	206	103	200	15.5	
			03/05/2012	ND	195	97.3	200	8.29	

Surrogate: 1-Chlorooctane 98.4 % 55.5-154
Surrogate: 1-Chlorooctadecane 107 % 57.6-158

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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: ON PAD SCRAPE N WALL W END (H200555-03)

Chloride, SM4500CI-B	mg/	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/05/2012	ND	416	104	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	03/05/2012	ND	206	103	200	15.5	
DRO >C10-C28	<10.0	10.0	03/05/2012	ND	195	97.3	200	8.29	
Surrogate: 1-Chlorooctane	98.9	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	109 9	% 57.6-15	8						

Sample ID: ON PAD SCRAPE N WALL E END (H200555-04)

Chloride, SM4500Cl-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	03/05/2012	ND	416	104	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	03/05/2012	ND	206	103	200	15.5	
DRO >C10-C28	<10.0	10.0	03/05/2012	ND	195	97.3	200	8.29	
Surrogate: 1-Chlorooctane	87.8	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	98.6	% 57.6-15	8						

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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: **NOT GIVEN**

Sample ID: ON PAD SCRAPE S WALL E END (H200555-05)

Chloride, SM4500Cl-B	mg	/kg	Analyze	ed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/05/2012	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	ed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2012	ND	206	103	200	15.5	
DRO >C10-C28	<10.0	10.0	03/05/2012	ND	195	97.3	200	8.29	
Surrogate: 1-Chlorooctane	95.4	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	102	% 57.6-15	8						

Sample ID: ON PAD SCRAPE S WALL W END (H200555-06)

108 %

57.6-158

Chloride, SM4500CI-B	oride, SM4500Cl-B mg/kg		Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/05/2012	ND	416	104	400	0.00	
TPH 8015M	8015M mg/kg			d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	03/05/2012	ND	206	103	200	15.5	
DRO >C10-C28	<10.0	10.0	03/05/2012	ND	195	97.3	200	8.29	
Surrogate: 1-Chlorooctane	98.0	% 55.5-15	4						

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Celey D. Keine

Surrogate: 1-Chlorooctadecane



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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact Sample Received By: Project Number: NONE GIVEN Jodi Henson

Project Location: **NOT GIVEN**

Sample ID: ON PAD SCRAPE W WALL CENTER (H200555-07)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/05/2012	ND	416	104	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	03/05/2012	ND	206	103	200	15.5	
DRO >C10-C28	<10.0	10.0	03/05/2012	ND	195	97.3	200	8.29	
Surrogate: 1-Chlorooctane	94.5	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	105	% 57.6-15	8						

Sample ID: ON PAD SCRAPE E WALL CENTER (H200555-08)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	81.3	% 55.5-15	i.4						
Surrogate: 1-Chlorooctadecane	89.4	% 57.6-15	18						

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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: MIDDLE SCRAPE N WALL CENTER (H200555-09)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	92.1	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	102	% 57.6-15	8						

Sample ID: MIDDLE SCRAPE E WALL N END (H200555-10)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	101	% 55.5-15	74						
Surrogate: 1-Chlorooctadecane	107	% 57.6-15	8						

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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: MIDDLE SCRAPE E WALL S END (H200555-11)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	100	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	96.6	% 57.6-15	8						

Sample ID: MIDDLE SCRAPE S WALL CENTER (H200555-12)

Chloride, SM4500Cl-B	mg,	'kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	106	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	114	% 57.6-15	8						

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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: MIDDLE SCRAPE W WALL N END (H200555-13)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	106	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	113	% 57.6-15	8						

Sample ID: MIDDLE SCRAPE W WALL S END (H200555-14)

•		•	•						
Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	87.0	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	74.3	% 57.6-15	8						

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

Received: 03/02/2012 Sampling Date: 03/01/2012

Reported: 03/06/2012 Sampling Type: Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Jodi Henson

Project Location: NOT GIVEN

Sample ID: MIDDLE SCRAPE 5 PT BTTM COMP @ 3' (H200555-15)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	03/05/2012	ND	416	104	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	03/06/2012	ND	195	97.4	200	24.4	
DRO >C10-C28	<10.0	10.0	03/06/2012	ND	196	98.2	200	16.7	
Surrogate: 1-Chlorooctane	85.8	% 55.5-15	4						
Surrogate: 1-Chlorooctadecane	83.3	% 57.6-15	8						

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Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

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_ .ARDINAL LABORATORIES

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name	ct Manager: Natalie Gladden								В	3/L	L TO						ANA	YSIS	REQUE	ST		
Project Manage	er: Natalie Gladden						P.	0. #.	, =													
Address:							Co	mpa	any:				1				S					
City:	State: NM	Zip	:				At	tn:					1	2			o					
Phone #:	Fax#:						Ac	dre	ss:								7			1 1		
Project #:	Project Owner	r:					Ci	ty:					10	Σ		I	s//				-11	
Project Name:	White ON Battery						St	ate:		7	Zip:		Chlorides	TPH 8015 M	×	Texas TPH	on				1	
Project Location	n:						Ph	one	#:				ΪΞ	30	Щ	S	ati	TDS				
Sampler Name:	Dakston Harris						Fa	x #:] 을	Ŧ	BTEX	Xa	O	F				
FOR LAB USE ONLY			19	_	MATI	XIX	_	PRE	SER	٧.	SAMPLI	NG	O	立	30.00	e	te					
Lab I.D.	Lab I.D. Sample I.D. H2D0555 Fnside Tank Battery N. W. Corner BHH 61'6" Sol. Corner BHH 88'					OTHER	ACID/BASE:	V VICE/COOL	OTHER	date 3-1-10- 3-1-10-	TIME 1:05 1:30	\ \ 	V			Complete Cations/Anions						
analyses. All claims include service. In no event shall	fing those for negligence and any other cause whatkoever shall be apardinal be liable for goldental or consequental damages, including the performance of services herefunder by part of the performance of services hereful by part of the performance of the p	deeme ng withou Cardina Re	d waived of the tritation regardle ceive	d By	made in v ness inter hether su	writing a	and rece s, loss o	eived by	Cardin or loss o	al wil	thin 30 days after fits incurred by	Phone Re Fax Resu REMARK	laries ise. esult: ilt:	□ Ye	s 🛭	No No	Add'I			chocou	TO CON	
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[†] Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

Company Name	any Name: Apache ct Manager: Natalie Gladden								BI	LL TO						ANAI	YSIS	REQUEST		
Project Manage	r: Natalie Gladden						P.C). # <i>:</i>					51 11							
Address:							Co	mpan	y:							S				
City:	State: NM	Zip					Att	n:								0			- 1	- 1
Phone #:	Fax#:						Ad	dress	:							7				- 1
Project #:	Project Owner	r:					Cit	y:				.,	Σ		I	1/S				
Project Name:	White ONL battery						Sta	te:		Zip:		Chlorides	PH 8015	×	٥	- Ho				
Project Location							Ph	one #] <u>E</u>	ò	BTEX	S	aţi	TDS			
Sampler Name:	Dakston Harris						Fax	k #:]은	1 2	B	x	Ö	F			
EASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising when the content of			GROUNDWATER	TIOS V	SLUBGE		ACID/BASE: Additional Statement of the Acid/Base and Acid/	OTHER:		TIME 2:00 2:05 2:10 2:15 2:30	0 00000	TO SOCO TEN		Texas TPH	Complete Cations/Anions					
analyses, All claims includi service. In no event shall C	nd Damages. Cardinal's liability and client's exclusive remedy for ng those for negligence and any other cause whatsoever shall be rardinal be liable j&lincidental or consequental damages, including ng out of or relafted to the performance of services harawinder by	deeme	d waived at limitat	unless on busi	made in s ness inter	writing an muptions,	d recei	ved by C luse, or l	ardinal oss of p	within 30 days aft profits incurred by	er completion of client, its subsid	the applica laties	ble							
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	- Bus - Other:	2	0	Co	Yes	ntact	s	((Ini	KED BY: tials)	A Committee of the Comm							eimer@rice-	om	

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

Company Name	Apache		-						ILL TO							ANAL	YSIS	RE	QUE	ST			
Project Manage	*: Natalie Gladden						P.O.	#:				1	-			-					- 1		7
Address:							Com	pany:								S							
City:	State: NM	Zip:					Attn						1 8			o							
Phone #:	Fax #:						Add	ress:								'n							
Project #:	Project Owner	r:					City:					,,	Σ		I	1/8					. 1		
Project Name:	White OWL Buttery						State	:	Zip:			Chlorides	TPH 8015 M	×	Texas TPH	Cations/Anions				1 1	1		
Project Location	1:						Pho	ne #:	7 00			ric	30,	Ή	S	atic	TDS						
Sampler Name:	Jakston Harris						Fax	#:				임	ω ₊	BTEX	xa	Ö	F						
FOR LAB USE ONLY					MATR	IX	P	RESE	V. SAMP	LIN	G	S	ā		e e	te				1 1			
Lab I.D.	200555 Middle Scrape & By & G. Wall Center & G. Wall nend G.			WASTEWATER	SOIL	SLUDGE	OTHER	ICE / COOL	DATE		TIME					Complete							
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analyses. All claims including	nd Demages. Cardinal's liability and client's exclusive remedy for ng those for negligence and any other cause whatsoever shall be	deemed	waived	unless m	nade in w	riting and	receive	d by Cardi	nal within 30 days a	iter c	ompletion of th	e applicat	ble										
	to This Ting: 35	Red	eive		ether suc	th claim is	based		of the above stated	P F		e. sult: t:	□ Ye □ Ye	s Z	No No e Gla	Add'l			apa	chec	orp.co	om _	
	: (Circle One) - Bus - Other:	-2	0	Coc	Yes [ondition tact Yes No			CKED BY:		Zcond hcond	_						_				om	

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



March 13, 2012

NATALIE GLADDEN

APACHE - EUNICE

P. O. BOX 1849

EUNICE, NM 88231

RE: WHITE OWL BATTERY AD

Enclosed are the results of analyses for samples received by the laboratory on 03/09/12 15:35.

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/qa/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.

Lope S. Moreno

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,

Hope Moreno

Inorganic Technical Director



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

 Received:
 03/09/2012
 Sampling Date:
 03/09/2012

 Reported:
 03/13/2012
 Sampling Type:
 Soil

Project Name: WHITE OWL BATTERY AD Sampling Condition: ** (See Notes)
Project Number: NONE GIVEN Sample Received By: Amanda Ponce

Project Location: NADINE

Sample ID: BACKFILL (H200620-01)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	d Blank BS % R		True Value QC	RPD	Qualifier
Chloride	160	16.0	03/13/2012	ND	400	400	100	3.92	

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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

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*** 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

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Hope S. Moreno



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Apache Corp.	S S S S S S S S S S S S S S S S S S S	BILL TO	ANALYSIS REQUEST
Project Manager: Natalie Gladden		P.O. #:	
Address: Apache Corp.		Company:] <u> </u>
City: State:	M Zip:	Attn:	
Phone #: Fax #:		Address:	
Project #: Project	Owner:	City:	[E I S
Project Name: White OUI WALKS	1	State: Zip:	[
Project Location: Nobine		Phone #:	Chlorides PH 8015 N BTEX Fexas TPH TDS TDS
Sampler Name: (MOND) JUNIO		Fax #:	
Lab I.D. Sample I.D. Hausologo Dark(all)	(G)RAB OR (C)OMP.	PRESERV SAMPLING CATHER: DATE TIME 7 3.9.12 1:30	Chlorides TPH 8015 M BTEX Texas TPH Complete Cations/Anions TDS
PLEASE NOTE: Liability and Damages. Cardinal's stability and client's exclusive ranalyses. All claims including those for negligence and any other cause whatsoes service. In no event shall Cardinal be liable for incidental or consequental damage affiliales or successors arising out of or related to the performance of services here. Relinquished By: Date: Time: Delivered By: (Circle One) Sampler - UPS - Bus - Other:	shall be deemed waved unless made in writin including without himshallon, business interrupt ander by Cardinal, reparalless of whether such a Received By:	gland received by Cardinal within 30 days after completion of installing the state of use, or loss of profits incurred by dient, its subsidiant is based upon any of the above stated reasons or otherwise many of the above stated reasons or otherwise many of the above stated reasons or otherwise REMARK email ZCONG (Mittals)	the applicable aries esuit: □ Yes ☑ No Add'l Phone #: elt: □ Yes ☑ No Add'l Fax #:

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

Appendix D Final C-141

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II
1301 W. Grand Avenue, 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 October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

						OPERATOR Initial Report Final I					Final Report		
Name of Company Apache Corp.						Contact Bruce Baker							
Address PO BOX 1849, Eunice, NM 88231						Telephone No. (432) 631-6982							
Facility Name White Owl Battery (nearest well #1)						Facility Type Production Facility							
Surface Owner Unknown Mineral Owner						State of NM	[L	Lease No. 30-025-36689				
LOCATION OF RELEASE													
Unit Letter	Section	Township	Range	Feet from the	North/	South Line	Feet from the	East/West	East/West Line				
D	2	20S	38E	582	FNL		330	FWL	FWL		Lea		
						Longitus	- · · · · · · · · · · · · · · · · · · ·		J				
LatitudeLongitude													
NATURE OF RELEASE													
Type of Release		dan failum								lume Recovered 75 bbl			
Source of Re	lease Swe	edge failure				2/15/12	our of Occurrenc		te and . .5/12	Hour of Dis	Hour of Discovery		
Was Immedia	ate Notice C	Given?				If YES, To	Whom?	2/1	.5/12				
		\boxtimes	Yes	No 🗌 Not Re	equired	Geoffrey L	eking						
By Whom?	Natalie					Date and H							
Was a Water	course Reac	ched?	Yes 🗵	l No		If YES, Volume Impacting the Watercourse.							
If a Watercou	irse was Im	pacted, Descr	ibe Fully.	•									
Describe Cau					uid to mo	Janga ingida g	and outside of som	tainmaant	.11.			·	
Swedge on ci	reulating ii.	ne cracked du	e to corros	sion and caused fl	uia to re	riease inside a	ind outside of con	itainment wa	ilis.				
Describe Are	a Affected	and Cleanup A	Action Tak	en.*									
The leak affe	cted area w	ithin the earth	en berm a	nd also outside th	e berm	onto the calic	ne pad for the uni	t well #001.	Impac	cted soils we	re reme	oved to a	
NMOCD approved disposal facility. Representative soil samples were collected from the excavations and sent to a commercial laboratory for chloride and TPH confirmation. The excavations were backfilled with clean caliche and leveled.													
				is true and comp			knowledge and u	nderstand th	at purs	suant to NM	OCD rı	ules and	
				nd/or file certain r									
				ce of a C-141 repo									
				investigate and retance of a C-141									
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: Power booker													
						Approved by District Supervisor:							
Printed Name: Bruce Baker													
Title: Env	ironmental	Tech				Approval Date: Expira			iration	on Date:			
E-mail Addre	ess: larry	.baker@apac	iker@apachecorp.com			Conditions of Approval:			—				
0 2- 12						Attached							
Date: 8-30-13 Phone: (432) 631-6982													

^{*} Attach Additional Sheets If Necessary