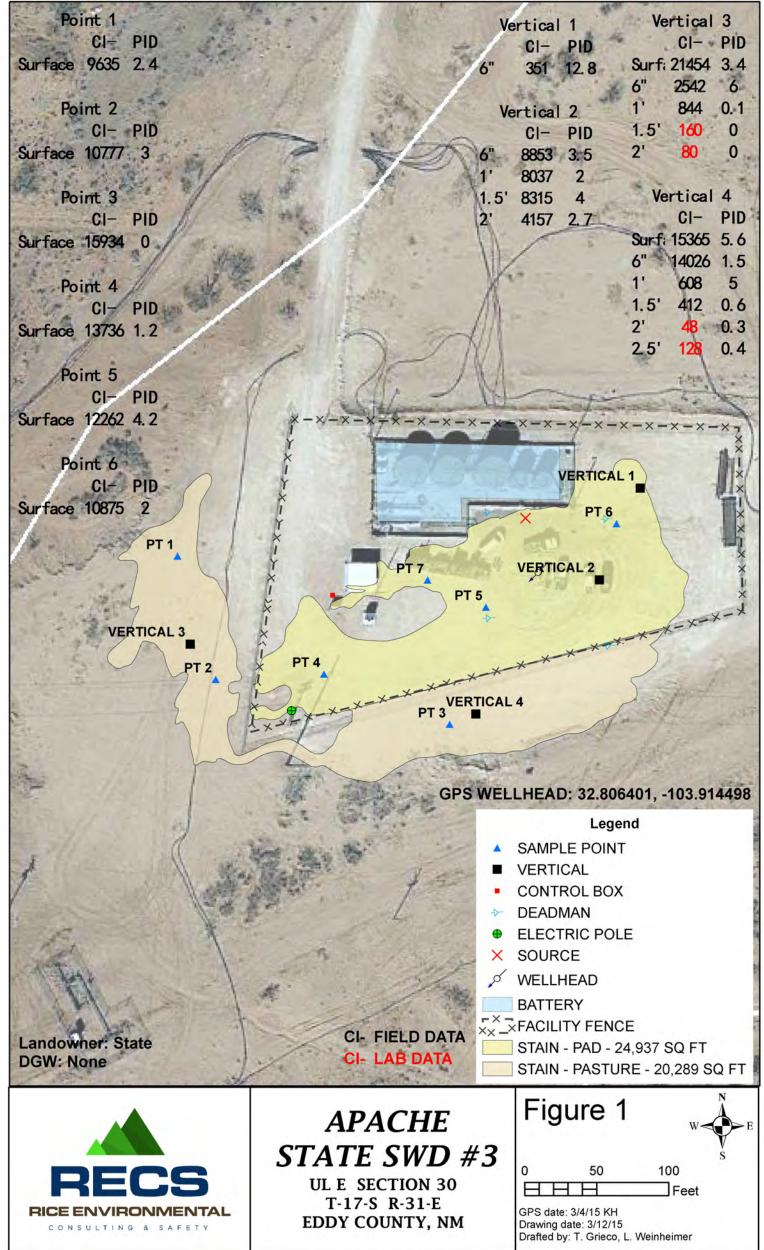
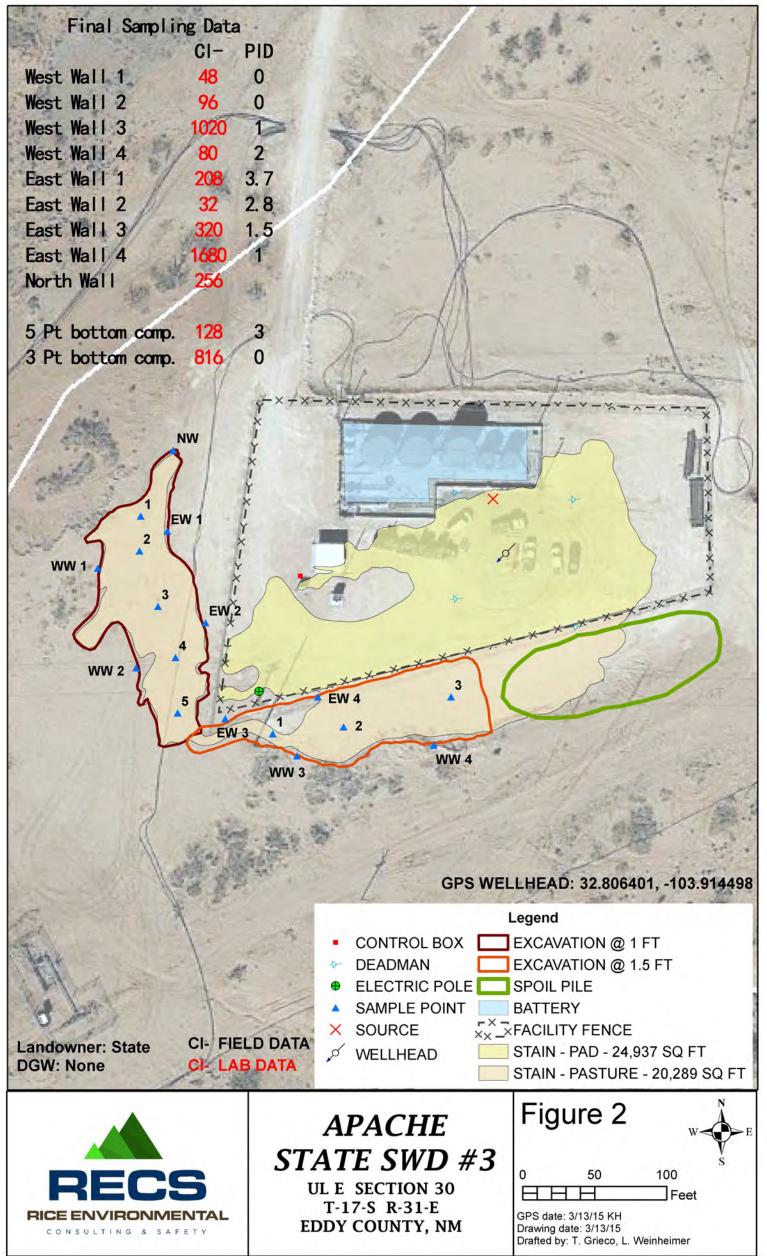
Figures

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

Initial Sampling Data



Excavation Data



Appendix A Laboratory Analyses

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



March 23, 2015

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD. HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 03/20/15 16:30.

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/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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/20/2015	Sampling Date:	03/05/2015
Reported:	03/23/2015	Sampling Type:	Soil
Project Name:	STATE SWD #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Celey D. Keene
Project Location:	NOT GIVEN		

Sample ID: VERT 3 @ 1.5 FT (H500765-01)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/23/2015	ND	416	104	400	3.77	

Sample ID: VERT 3 @ 2 FT (H500765-02)

Chloride, SM4500CI-B	mg,	/kg	Analyze	Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/23/2015	ND	416	104	400	3.77	

Sample ID: VERT 4 @ 2 FT (H500765-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/23/2015	ND	416	104	400	3.77	

Sample ID: VERT 4 @ 2.5 FT (H500765-04)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/23/2015	ND	416	104	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	(505) 393-2326 FAX (505) 393-24	16 (325)	6/3-/001 F	4X (323	1013-	1020	100151	-			-		VSIS	REQUEST	61	
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City: Hobbs	State: NM	Zip: 8824	10	Attn:			1.					0				
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Project #:	Project Owner:		City:				S	Σ		I	Cations/Anions					
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FOR LAB USE ONLY	(C11)		MATRIX	PRE	SERV.	SAMPLI	NG	0	Ē		Te	ete				
Lab I.D. HS00765- 01 02 03 04	Sample I.D. $VP \rightarrow + . J @ 1.5 F + VP \rightarrow + . J @ 2 F + VP \rightarrow + . 4 @ 2 F + VP \rightarrow + . 4 @ 2 F + VP \rightarrow + . 4 @ 2.5 F + VP \rightarrow + . 4 @ 2.5 F + VP \rightarrow + . 4 @ 2.5 F + VP \rightarrow + . 4 @ 2.5 F + VP \rightarrow + . 4 @ 2.5 F + VP \rightarrow + . 4 @ 2.5 F + . 4 @ 2$	COMPICE CONTAINERS	WASTEWATER Soll	OTHER : ACID/BASE:	V V CE / COOL	DATE 3-5-15 3-5-15 3-5-15 3-5-15	2:10	111				Complete				
							-									

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

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service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profils incurred by client, its subsidiaries,

Relinquished By:	Date: Time:	Received By:	Phone Result: Fax Result: REMARKS:	□ Yes □ Yes	No No	Add'I Phone #: Add'I Fax #:	
Relinquished By:	Data: 2015	Received By:	lweinheim ikamplain(er@rice	-ecs.d	vd.com; lflores@ com; knorman@ m; sedwards@r	@rice-ecs.com; @rice-ecs.com; ice-ecs.com;
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Cool Intact	(Initials) (Initials) Cursanic@ Environme	price-ecs	s.com		@rice-ecs.com
† Cardinal cannot accept verb	al changes. Pleas	e fax written changes to 505-393-	Rus	5.1	4	11	



March 20, 2015

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD. HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 03/18/15 10:12.

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/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. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/18/2015	Sampling Date:	03/13/2015
Reported:	03/20/2015	Sampling Type:	Soil
Project Name:	STATE SWD #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: WEST WALL 1 (H500733-01)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: WEST WALL 2 (H500733-02)

Chloride, SM4500CI-B	mg/kg		Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: WEST WALL 3 (H500733-03)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: WEST WALL 4 (H500733-04)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	03/19/2015	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/18/2015	Sampling Date:	03/13/2015
Reported:	03/20/2015	Sampling Type:	Soil
Project Name:	STATE SWD #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: EAST WALL 1 (H500733-05)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: EAST WALL 2 (H500733-06)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: EAST WALL 3 (H500733-07)

Chloride, SM4500Cl-B mg/kg		Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	320	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: EAST WALL 4 (H500733-08)

Chloride, SM4500Cl-B	CI-B mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1680	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: 5 PT. BOTTOM COMP (H500733-09)

Chloride, SM4500Cl-B	500Cl-B mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	03/19/2015	ND	416	104	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	03/18/2015	Sampling Date:	03/13/2015
Reported:	03/20/2015	Sampling Type:	Soil
Project Name:	STATE SWD #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: 3 PT. BOTTOM COMP (H500733-10)

Chloride, SM4500Cl-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	816	16.0	03/19/2015	ND	416	104	400	0.00	

Sample ID: NORTH WALL (H500733-11)

Chloride, SM4500Cl-B	mg/kg			d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	03/19/2015	ND	416	104	400	0.00	

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



Notes and Definitions

- ND
 Analyte NOT DETECTED at or above the reporting limit

 RPD
 Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 5 of 7

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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RDINAL LABORATORI	IES .				
101 East Marland, Hobbs, NM	88240	2111 Beechwood,	Abilene,	ТΧ	79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Company Name: APech	BILL TO	ANALYSIS REQUEST
Project Manager: BIVCT BCKEF	P.O. #:	
Address:	Company:	N N
City: Hobbs State: NM Zip: 88240	Attn:	Chlorides Chlorides TPH 8015 M BTEX Texas TPH Texas TPH TDS TDS
Phone #: Fax #:	Address:	Internet
Project #: Project Owner:	City:	
Project Name:	State: Zip:	
Project Location: State SWDH3	Phone #:	Chlorides Chlorides BTEX BTEX Texas TPH TDS TDS
Sampler Name: Kyle Humphrey	Fax #:	TD allori
FOR LAB USE ONLY MATT	X PRESERV SAMPLI	
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service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business Inte		fioni, its subsidiaries,
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`		Knorman@rice-ecs.com
Time:		Kjones@riceswd.com; jkamplain@rice-ecs.com hconder@rice-ecs.com;
Delivered By: (Circle One) Sample		Lweinheimer@rice-ecs.com Khumphrey@rice-ecs.com
Sampler - UPS - Bus - Other: -6.82 Yes	Yes No	sedwards@rice-ecs.com,lflores@rice-ecs.com

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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(505) 393-2326 FAX (505) 393-2476	(325) 673-7001 FAX (325) 673-7020

Company Name:	APacht								E	314	470			-		A	NAL	YSIS R	EQUEST	 	_
Project Manager:	ect Manager: Bruch_BcKP/			Ρ.	P.O. #: Company:									1							
Address:													Co	1	S						
City: Hobbs	State: NM	Zip	: 88	240			At	Attn:									jo				
Phone #:	10000				A	Address: City:						TPH 8015 M	BTEX		Cations/Anions						
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FOR LAB USE ONLY		T		_	MAT	RIX	-	PR	ESER	RV.	SAMPLI	NG	Ū	ā		Le	te			-	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	SOIL	OIL	SLUDGE	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME					Complete				_
4	North Lell	6	1		\ 						2-17-15	1,50									
										10											

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Relinquished By: Mare HUUM Relinquished By:	31313 Time: 0.12	Received By: Received By:	Phone Result: Yes No Add'I Phone #: Fax Result: Yes No Add'I Fax #: REMARKS: email: hconder@riceswd.com; lflord lweinheimer@rice-ecs.com; knormation jkamplain@rice-ecs.com; sedwards	an@rice-ecs.com;
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	-4	Sample Condition CHECKED B Cool Intact Ves Yes No No	Y: cursanic@rice-ecs.com Environmental Tech:	@rice-ecs.com

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

Appendix B

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

Apache State SWD #3 Unit Letter E, Section 30, T17S, R31E



Initial release area, facing west

3/4/15



Initial release area, facing west



Initial release area, facing northwest

3/4/15



Initial release area, facing east

3/4/15



Initial release area, facing northwest

3/4/15



Moving contaminated soil to spoil pile, facing southeast 3/5/15



Scraping wet material, facing southeast

3/5/15





Scraping west of battery, facing east

3/9/15