



NMOCD Case #: 1RP-3572

LEGALS: UL/Q SEC. 3 T-21-S R-37-E LEA COUNTY, NM

GPS: 32.506035 -103.145793 20 GPS date: 7/30/15 KH Drawing date: 7/31/15 Drafted by: T. Grieco



August 05, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: HAWK B -3 #9

Enclosed are the results of analyses for samples received by the laboratory on 07/30/15 13:55.

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 <a href="https://www.tceq.texas.gov/field/ga/lab">www.tceq.texas.gov/field/ga/lab</a> 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. Keine

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

Received: 07/30/2015 Reported: 08/05/2015

Project Name: HAWK B -3 #9
Project Number: NONE GIVEN
Project Location: HAWK B-3 #9

Sampling Date: 07/30/2015

Sampling Type: Soil

Sampling Condition: Cool & Intact
Sample Received By: Judy Garcia

### Sample ID: NORTH WALL (H501982-01)

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2015	ND	1.92	96.2	2.00	0.311	
Toluene*	<0.050	0.050	08/04/2015	ND	1.95	97.4	2.00	0.357	
Ethylbenzene*	<0.050	0.050	08/04/2015	ND	2.10	105	2.00	0.478	
Total Xylenes*	<0.150	0.150	08/04/2015	ND	5.55	92.4	6.00	0.104	
Total BTEX	<0.300	0.300	08/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 85.6-13	7						
Chloride, SM4500CI-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/03/2015	ND	400	100	400	3.92	
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	07/31/2015	ND	202	101	200	3.18	
DRO >C10-C28	<10.0	10.0	07/31/2015	ND	182	91.0	200	4.59	
Surrogate: 1-Chlorooctane	101 9	% 47.2-15	7						
Surrogate: 1-Chlorooctadecane	109 9	% 52.1-17	6						

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 whistoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.



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

(0.0) 000 = 10

HAWK B-3 #9

110 %

52.1-176

Received: 07/30/2015 Sampling Date: 07/30/2015

Reported: 08/05/2015 Sampling Type: Soil

Project Name: HAWK B -3 #9 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Judy Garcia

Sample ID: WEST WALL (H501982-02)

Project Location:

Surrogate: 1-Chlorooctadecane

BTEX 8021B	mg/	kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2015	ND	1.92	96.2	2.00	0.311	
Toluene*	<0.050	0.050	08/04/2015	ND	1.95	97.4	2.00	0.357	
Ethylbenzene*	<0.050	0.050	08/04/2015	ND	2.10	105	2.00	0.478	
Total Xylenes*	<0.150	0.150	08/04/2015	ND	5.55	92.4	6.00	0.104	
Total BTEX	<0.300	0.300	08/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	109 9	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	08/03/2015	ND	400	100	400	3.92	
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	07/31/2015	ND	202	101	200	3.18	
DRO >C10-C28	64.9	10.0	07/31/2015	ND	182	91.0	200	4.59	
Surrogate: 1-Chlorooctane	103 9								

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Received: 07/30/2015 Sampling Date: 07/30/2015

Reported: 08/05/2015 Sampling Type: Soil

Project Name: HAWK B -3 #9 Sampling Condition: Cool & Intact
Project Number: NONE GIVEN Sample Received By: Judy Garcia

Project Location: HAWK B-3 #9

### Sample ID: SOUTH WALL (H501982-03)

BTEX 8021B	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2015	ND	1.92	96.2	2.00	0.311	
Toluene*	<0.050	0.050	08/04/2015	ND	1.95	97.4	2.00	0.357	
Ethylbenzene*	<0.050	0.050	08/04/2015	ND	2.10	105	2.00	0.478	
Total Xylenes*	<0.150	0.150	08/04/2015	ND	5.55	92.4	6.00	0.104	
Total BTEX	<0.300	0.300	08/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 9	% 85.6-13	7						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	08/03/2015	ND	400	100	400	3.92	
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	07/31/2015	ND	202	101	200	3.18	
DRO >C10-C28	35.9	10.0	07/31/2015	ND	182	91.0	200	4.59	

Surrogate: 1-Chlorooctane 111 % 47.2-157
Surrogate: 1-Chlorooctadecane 120 % 52.1-176

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Celeg D. Freene



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

Received: 07/30/2015 Sampling Date: 07/30/2015

Reported: 08/05/2015 Sampling Type: Soil

Project Name: HAWK B-3 #9 Sampling Condition: Cool & Intact Project Number: Sample Received By: NONE GIVEN Judy Garcia

Project Location: HAWK B-3 #9

### Sample ID: EAST SURFACE (H501982-04)

BTEX 8021B	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/04/2015	ND	1.92	96.2	2.00	0.311	
Toluene*	<0.050	0.050	08/04/2015	ND	1.95	97.4	2.00	0.357	
Ethylbenzene*	<0.050	0.050	08/04/2015	ND	2.10	105	2.00	0.478	
Total Xylenes*	<0.150	0.150	08/04/2015	ND	5.55	92.4	6.00	0.104	
Total BTEX	<0.300	0.300	08/04/2015	ND					
Surrogate: 4-Bromofluorobenzene (PID	113 %	% 85.6-13	7						
Chloride, SM4500Cl-B	mg/	'kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/03/2015	ND	400	100	400	3.92	
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	<50.0	50.0	07/31/2015	ND	202	101	200	3.18	
DRO >C10-C28	<50.0	50.0	07/31/2015	ND	182	91.0	200	4.59	
Surrogate: 1-Chlorooctane	101 9	% 47.2-15	7						
G . 1 CH . 1	110.0	52.1.17							

119 % 52.1-176 Surrogate: 1-Chlorooctadecane

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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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# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

### ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 21

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

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Project Manager: Bruce Baker / Kyle Norman							P.O.	0. #:	"								_					
Address: 419 W Cain							Co	mp	Company:								IS					
City: Hobbs State: NM	Zip: 88240	824	40				Attn:	ä						, -			lor		_			
Phone #: 575-393-2967 Fax #: 575-393-0293	93-029	3					Ad	Address:	SS					_		_	41					
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PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any daim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All daims including those for negligence and any other cause whatsoever shall be deemed walved unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be labels for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries service. In no event shall Cardinal be labels for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries services, because a vision and 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.	any claim a deemed w ng without li Cardinal, re	rising valved unitation	wheth	r base made ness in	id in c in writ in writ	ontrac ing an itions, claim	t or to d rece loss o	rt, sha ived t if use, ed up	or lo	imited dinal v dinal v s of p	to the amount paid within 30 days after or offts incurred by clice above stated reas	by the client for the completion of the apent, its subsidiaries ons or otherwise.	plicable									
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Now Hungy Time:			1	3	0	-	7	7	7	2	The same	REMARKS:										

Sample Condition
Coel Intact
Yes Yes
No No

CHECKED BY:

company: larry.baker@apachecorp.com

#54

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Relinquished By:

Received By

email results:

Knorman @ basinenu. com

Lucinheimer @ basinent .com

<sup>†</sup> Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



August 26, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: HAWK B-3 #9

Enclosed are the results of analyses for samples received by the laboratory on 08/20/15 10:20.

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Method EPA 524.4 Regulated VOCs (V1, V2, V3)

Celey D. Keine

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Sincerely,

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:
 08/20/2015
 Sampling Date:
 08/20/2015

 Reported:
 08/26/2015
 Sampling Type:
 Soil

Project Name: HAWK B -3 #9 Sampling Condition: \*\* (See Notes)
Project Number: NONE GIVEN Sample Received By: Judy Garcia

Project Location: HAWK B-3 #9

### Sample ID: SOUTH WALL (H502191-01)

Chi---id- CM4E00CL D

Chioride, SM4500CI-B	mg/	кg	Anaiyze	и ву: АР					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	08/21/2015	ND	432	108	400	7.69	

A ..... I ..... A D. ... A D

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

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Celeg D. Freene



# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

### 101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

company name:	40000		07-11/8	ANALYSIS REQUEST
Project Manager:	Bruch Boxor		P.O. #:	
Address:			Company:	
City:	State:	Zip:	Attn:	
Phone #:	Fax #:		Address:	
Project #:	Project Owner:	a	City:	
Project Name:			State: Zip:	
Project Location:	HAUK BU HO		Phone #:	
Sampler Name:	Kule Humph-PG	8	Fax #:	
FOR LAB USE ONLY			PRESERV. SAMPLING	
Lab I.D. 1507/9/	Sample I.D.	(G)RAB OR (C)OM # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE	OTHER: ACID/BASE: ICE / COOL OTHER:  DATE  TIME	
	South Well	611	x 56.8 8-02.8	
		7		
	*			
PLEASE NOTE: Liability and [	lamages. Cardinal's liability and client's exclusive remedy for	any claim arising whether based in contract	PLEASE NOTE: Liability and Damages. Cardinate liability and client's exclusive remody for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the	

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

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(Initials)

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Fax Result: REMARKS:

Phone Result:

☐ Yes ☐ No Add'I Phone #:

affiliates or successors arising of Relinquished By:

service. In no event shall Cardinal be liable for incide