



303 Veterans Airpark Lane Midland, TX 79705

Deferment Request

October 16, 2020

Re: Chesterfield Battery
Case # NRM2019758820

On 06/30/2020 a release occurred due to a failure on a circulating line in a lined facility. The majority of the fluid was contained inside the lined secondary containment. The integrity of the liner was compromised due to small holes in the liner near the entrance of the secondary containment. An initial C-141 was submitted on 07/08/20 and approved by NMOCD. The release (GPS Coordinates: 32.57422 -103.11254) is located east of Eunice, New Mexico in unit letter H section 14 township 20S range 38E. A groundwater survey was conducted utilizing NMOSE wells of record with the shallowest well at 42 feet below ground surface.

Apache Corporation delineated the release area on 09/21/2020. We did place small holes in the liner allowing us to utilize a hand auger to complete the delineation process with one sample point being taken to a depth of 3' and horizontals being taken to show the extent of contamination underneath the containment. After completing this process, we did repair the areas we cut to complete delineation as well as the initial area of concern. These samples were taken to a commercial laboratory for analysis of chloride, TPH, and BTEX. Laboratory results showed chloride, TPH, and BTEX to be below table one standards at SP1 at a depth of 3' and horizontals being below table one standards at surface for releases at or below groundwater depth of 50'.

On 10/6/20 the area of contamination found outside the liner was taken a depth of 1' with 5-point composites not exceeding 200 square feet taken to a commercial laboratory for analysis of chloride, TPH, and BTEX. During excavation we did get as close as possible to the liner without compromising the integrity of the liner which is labeled as W2 on the sample map. Laboratory results showed chloride, TPH, and BTEX levels below table one standards on Wall 1 (W1) and Bottom 1 (B1). Approximately 12 yards of excavated material was taken to an approved OCD disposal facility. The excavation was backfilled with clean imported caliche.

Apache Corporation has determined the area of contamination found underneath the liner is protected and poses no threat to groundwater. Apache Corporation respectfully request the remaining contamination be deferred until system abandonment.

Enclosed: C-141, Maps, Sample Data, Laboratory Results, and Photos

Submitted by;

Bruce Baker

Environmental Technician

larry.baker@apachecorp.com

Cell# 432-631-6982

Incident ID	NRM2019758820
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>42'</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NRM2019758820
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Jeffrey Broom Title: Environmental Technician
Signature: *Jeff Broom* Date: 10/16/2020
email: Jeffrey.Broom@apachecorp.com Telephone: 432.664.4677

OCD Only

Received by: Cristina Eads Date: 10/19/2020

Incident ID	NRM2019758820
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Jeffrey Broom Title: Environmental Technician
Signature: Jeff Broom Date: 10/16/2020
email: Jeffrey.Broom@apachecorp.com Telephone: 432.664.4677

OCD Only

Received by: Cristina Eads Date: 10/19/2020

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☒ Deferral Approved

Signature: Cristina Eads Date: 12/04/2020



Chesterfield

NMOSE POD #08310

1049 ft

© 2020 Google

Google earth



New Mexico Office of the State Engineer

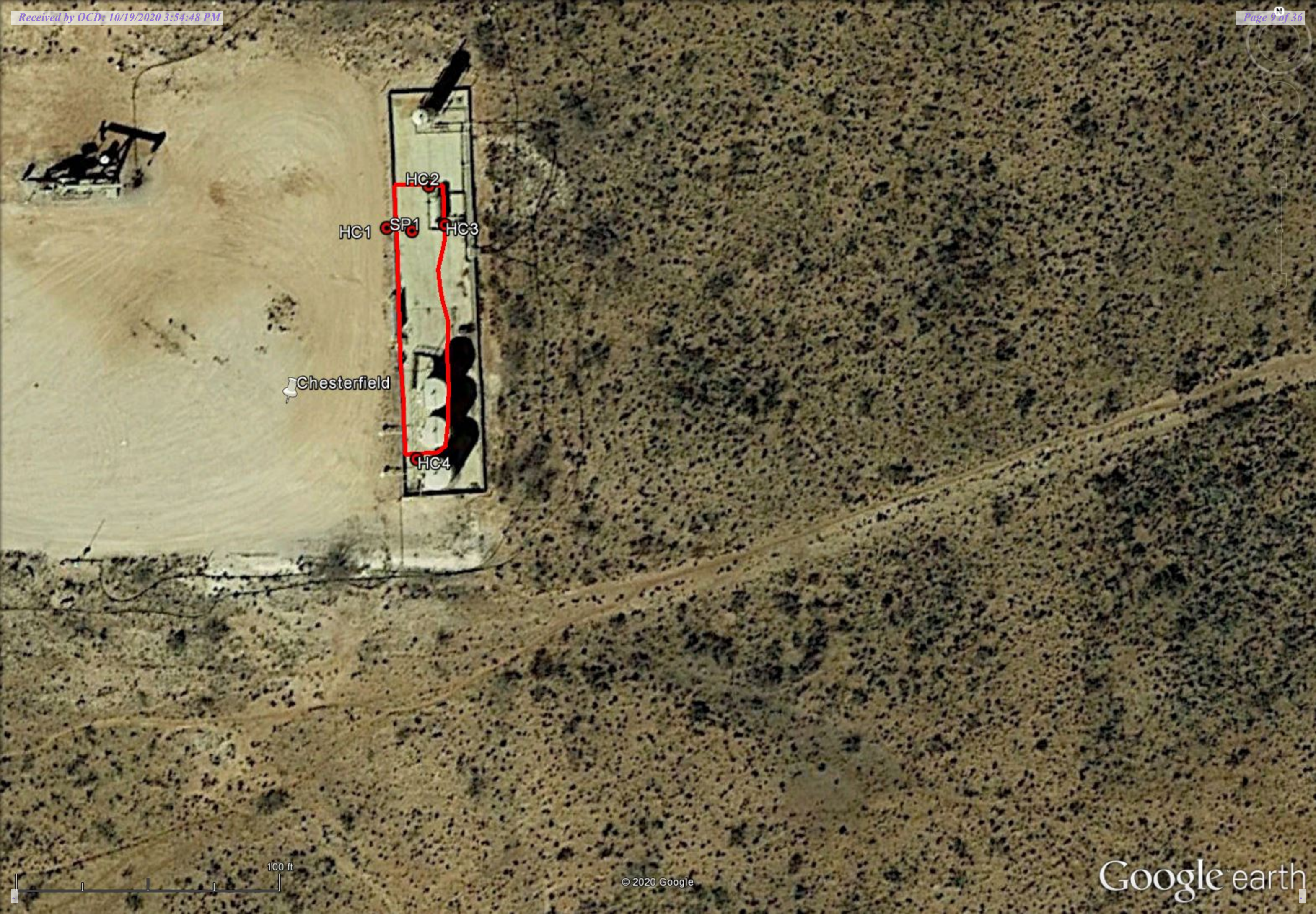
Point of Diversion Summary


		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	L 08310		1	1	13	20S	38E	677536	3606140*🌐
Driller License:	657	Driller Company:				OLDAKER & SONS			
Driller Name:	OLDAKER, GEORGE D.								
Drill Start Date:	07/09/1980	Drill Finish Date:				07/10/1980		Plug Date:	
Log File Date:	08/21/1980	PCW Rcv Date:						Source:	Shallow
Pump Type:		Pipe Discharge Size:						Estimated Yield:	15 GPM
Casing Size:	6.63	Depth Well:				65 feet		Depth Water:	42 feet
Water Bearing Stratifications:					Top	Bottom	Description		
					42	65	Other/Unknown		
Casing Perforations:					Top	Bottom			
					45	65			

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.





 Chesterfield

HC1 SP1 HC2 HC3 HC4






W1

B1

W2

 Chesterfield

100 ft

Delineation Samples

Sample Date	Sample ID	Depth	Field Chloride	Chloride Lab	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
9/21/2020	SP 1	S	300	304	<0.500	3.51	7.74	17.6	28.8	738	10300	1630	32.57432 -103.11253
9/21/2020		1'	148	112	<0.050	0.169	0.531	1.69	2.39	<10.0	<10.0	<10.0	
9/21/2020		2'	149	48	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	83.7	19	
9/24/2020		3'	141	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	
9/21/2020	H1	S	88	<16.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.27434 -103.11253
9/24/2020	H2	S	138	48.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	2950	511	32.57410 -103.11251
9/21/2020	H3	S	145	32.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	32.57434 -103.11251
9/24/2020	H4	S	84	80.0	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	24	<10.0	32.57437 -103.11250

Excavation Samples

10/6/2020	W1	1'	116	32	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	32.574244 -103.112560
10/6/2020	W2	1'	117	80	0.25	14.1	29.2	66.6	110	1880	8930	1450	32.574217 -103.112548
10/6/2020	B1	1'	115	32	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	32.574196 -103.112550



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 23, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CHESTERFIELD

Enclosed are the results of analyses for samples received by the laboratory on 09/21/20 15:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

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

Received:	09/21/2020	Sampling Date:	09/21/2020
Reported:	09/23/2020	Sampling Type:	Soil
Project Name:	CHESTERFIELD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ SURFACE (H002503-01)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	3.51	0.500	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	7.74	0.500	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	17.6	1.50	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTX	28.8	3.00	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 133 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	09/22/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	738	100	09/22/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	10300	100	09/22/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	1630	100	09/22/2020	ND					

Surrogate: 1-Chlorooctane 313 % 44.3-144

Surrogate: 1-Chlorooctadecane 364 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/21/2020
 Reported: 09/23/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/21/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 1' (H002503-02)

BTX 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	0.169	0.050	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	0.531	0.050	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	1.69	0.150	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTX	2.39	0.300	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 144 % 73.3-129

Chloride, SM4500CI-B			mg/kg					Analyzed By: GM	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	09/22/2020	ND	400	100	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*	53.8	10.0	09/21/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	1020	10.0	09/21/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	160	10.0	09/21/2020	ND					

Surrogate: 1-Chlorooctane 121 % 44.3-144

Surrogate: 1-Chlorooctadecane 141 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/21/2020
 Reported: 09/23/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/21/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: SP 1 @ 2' (H002503-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	0.051	0.050	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	0.120	0.050	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	0.436	0.150	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTEX	0.607	0.300	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	09/22/2020	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/21/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	263	10.0	09/21/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	51.8	10.0	09/21/2020	ND					

Surrogate: 1-Chlorooctane 109 % 44.3-144

Surrogate: 1-Chlorooctadecane 124 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/21/2020
 Reported: 09/23/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/21/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 1 (H002503-04)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	<0.050	0.050	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	<0.050	0.050	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	<0.150	0.150	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTX	<0.300	0.300	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/22/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/21/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	<10.0	10.0	09/21/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	<10.0	10.0	09/21/2020	ND					

Surrogate: 1-Chlorooctane 97.6 % 44.3-144

Surrogate: 1-Chlorooctadecane 102 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/21/2020
 Reported: 09/23/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/21/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 2 (H002503-05)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	<0.050	0.050	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	<0.050	0.050	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	<0.150	0.150	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTX	<0.300	0.300	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/22/2020	ND	400	100	400	0.00	

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*	<10.0	10.0	09/22/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	2950	10.0	09/22/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	511	10.0	09/22/2020	ND					

Surrogate: 1-Chlorooctane 104 % 44.3-144

Surrogate: 1-Chlorooctadecane 186 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/21/2020
 Reported: 09/23/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/21/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 3 (H002503-06)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	<0.050	0.050	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	<0.050	0.050	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	<0.150	0.150	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTX	<0.300	0.300	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/22/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/22/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	58.6	10.0	09/22/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	37.0	10.0	09/22/2020	ND					

Surrogate: 1-Chlorooctane 103 % 44.3-144

Surrogate: 1-Chlorooctadecane 109 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/21/2020
 Reported: 09/23/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/21/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: H 4 (H002503-07)

BTEx 8021B		mg/kg	Analyzed By: MS					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.200	0.200	09/22/2020	ND	2.11	105	2.00	1.18	
Toluene*	1.94	0.200	09/22/2020	ND	2.12	106	2.00	1.82	
Ethylbenzene*	<0.200	0.200	09/22/2020	ND	2.09	105	2.00	1.44	
Total Xylenes*	23.2	0.600	09/22/2020	ND	6.02	100	6.00	1.26	
Total BTEX	25.1	1.20	09/22/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 177 % 73.3-129

Chloride, SM4500Cl-B		mg/kg	Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/22/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg	Analyzed By: MS					S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	460	50.0	09/22/2020	ND	174	87.1	200	3.00	
DRO >C10-C28*	3060	50.0	09/22/2020	ND	180	89.9	200	1.59	
EXT DRO >C28-C36	514	50.0	09/22/2020	ND					

Surrogate: 1-Chlorooctane 153 % 44.3-144

Surrogate: 1-Chlorooctadecane 197 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

01 jo 01 ege



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Apache Corporation</u>		P.O. #:		BILL TO				ANALYSIS REQUEST			
Project Manager: <u>Grace Baker</u>		Company:									
Address:		Attn:									
City:		State:		Zip:							
Phone #:		Fax #:		Address:							
Project #:		Project Owner:		City:		State:		Zip:			
Project Name: <u>Cheterville</u>		State:		Phone #:							
Project Location: <u>Cheterville</u>		Fax #:									
Sampler Name: <u>Jeff Brown</u>											
FOR LAB USE ONLY											
Lab I.D.		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX		PRESERV.		SAMPLING	
Sample I.D.						GROUNDWATER					
						WASTEWATER					
						SOIL					
						OIL					
						SLUDGE					
						OTHER :					
						ACID/BASE:					
						ICE / COOL					
						OTHER :					
H002503		SP1 @ Surface		9/21/20		1248		✓		CL	
2 SP1 @ 1'		9/21/20		1250		✓		✓		BTEX	
3 SP1 @ 2'		9/21/20		1252		✓		✓		Ext. TPH	
4 H1		9/21/20		1254		✓		✓			
5 H2		9/21/20		1256		✓		✓			
6 H3		9/21/20		1258		✓		✓			
7 H4		9/21/20		1309		✓		✓			

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <u>Jeff Brown</u>	Date: <u>9/21/20</u>	Received By: <u>Jeff Brown</u>	Date: <u>9/21/20</u>	Time: <u>3:05</u>	Time: <u>1515</u>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:
All Results are emailed. Please provide Email address:						
REMARKS:						
Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition	Cool Intact	Checked By: (Initials)	Turnaround Time:
Sampler - UPS - Bus - Other:			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<u>TE</u>	Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>
						Bacteria (only) Sample Condition
						Cool Intact <input type="checkbox"/> Observed Temp. °C
						Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

September 28, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CHESTERFIELD

Enclosed are the results of analyses for samples received by the laboratory on 09/24/20 15:19.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received:	09/24/2020	Sampling Date:	09/24/2020
Reported:	09/28/2020	Sampling Type:	Soil
Project Name:	CHESTERFIELD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: SP 1 @ 3' (H002535-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2020	ND	2.15	107	2.00	6.33	
Toluene*	<0.050	0.050	09/25/2020	ND	2.17	109	2.00	6.76	
Ethylbenzene*	<0.050	0.050	09/25/2020	ND	2.11	106	2.00	7.31	
Total Xylenes*	<0.150	0.150	09/25/2020	ND	6.07	101	6.00	7.30	
Total BTX	<0.300	0.300	09/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	09/25/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2020	ND	194	97.0	200	2.56	
DRO >C10-C28*	<10.0	10.0	09/24/2020	ND	177	88.5	200	11.1	
EXT DRO >C28-C36	<10.0	10.0	09/24/2020	ND					

Surrogate: 1-Chlorooctane 120 % 44.3-144

Surrogate: 1-Chlorooctadecane 137 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/24/2020
 Reported: 09/28/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/24/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: HC 2 (H002535-02)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2020	ND	2.15	107	2.00	6.33	
Toluene*	<0.050	0.050	09/25/2020	ND	2.17	109	2.00	6.76	
Ethylbenzene*	<0.050	0.050	09/25/2020	ND	2.11	106	2.00	7.31	
Total Xylenes*	<0.150	0.150	09/25/2020	ND	6.07	101	6.00	7.30	
Total BTX	<0.300	0.300	09/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/25/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2020	ND	194	97.0	200	2.56	
DRO >C10-C28*	<10.0	10.0	09/24/2020	ND	177	88.5	200	11.1	
EXT DRO >C28-C36	<10.0	10.0	09/24/2020	ND					

Surrogate: 1-Chlorooctane 98.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 112 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 09/24/2020
 Reported: 09/28/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 09/24/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: HC 4 (H002535-03)

BTEx 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/25/2020	ND	2.15	107	2.00	6.33	
Toluene*	<0.050	0.050	09/25/2020	ND	2.17	109	2.00	6.76	
Ethylbenzene*	<0.050	0.050	09/25/2020	ND	2.11	106	2.00	7.31	
Total Xylenes*	<0.150	0.150	09/25/2020	ND	6.07	101	6.00	7.30	
Total BTEx	<0.300	0.300	09/25/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/25/2020	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/24/2020	ND	194	97.0	200	2.56	
DRO >C10-C28*	10.8	10.0	09/24/2020	ND	177	88.5	200	11.1	
EXT DRO >C28-C36	<10.0	10.0	09/24/2020	ND					

Surrogate: 1-Chlorooctane 110 % 44.3-144

Surrogate: 1-Chlorooctadecane 123 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 6 of 6



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 07, 2020

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: CHESTERFIELD

Enclosed are the results of analyses for samples received by the laboratory on 10/06/20 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received:	10/06/2020	Sampling Date:	10/06/2020
Reported:	10/07/2020	Sampling Type:	Soil
Project Name:	CHESTERFIELD	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

Sample ID: B1 (H002635-01)

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/06/2020	ND	2.08	104	2.00	3.03	
Toluene*	<0.050	0.050	10/06/2020	ND	2.05	102	2.00	3.72	
Ethylbenzene*	<0.050	0.050	10/06/2020	ND	2.00	99.8	2.00	3.91	
Total Xylenes*	<0.150	0.150	10/06/2020	ND	5.73	95.5	6.00	3.96	
Total BTEX	<0.300	0.300	10/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.0 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/06/2020	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/06/2020	ND	208	104	200	4.94	
DRO >C10-C28*	<10.0	10.0	10/06/2020	ND	195	97.6	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	10/06/2020	ND					

Surrogate: 1-Chlorooctane 90.4 % 44.3-144

Surrogate: 1-Chlorooctadecane 100 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 10/06/2020
 Reported: 10/07/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 10/06/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: W1 (H002635-02)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/06/2020	ND	2.08	104	2.00	3.03	
Toluene*	<0.050	0.050	10/06/2020	ND	2.05	102	2.00	3.72	
Ethylbenzene*	<0.050	0.050	10/06/2020	ND	2.00	99.8	2.00	3.91	
Total Xylenes*	<0.150	0.150	10/06/2020	ND	5.73	95.5	6.00	3.96	
Total BTX	<0.300	0.300	10/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/06/2020	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/06/2020	ND	208	104	200	4.94	
DRO >C10-C28*	<10.0	10.0	10/06/2020	ND	195	97.6	200	1.96	
EXT DRO >C28-C36	<10.0	10.0	10/06/2020	ND					

Surrogate: 1-Chlorooctane 102 % 44.3-144

Surrogate: 1-Chlorooctadecane 114 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

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

Received: 10/06/2020
 Reported: 10/07/2020
 Project Name: CHESTERFIELD
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 10/06/2020
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Jodi Henson

Sample ID: W2 (H002635-03)

BTEx 8021B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.250	0.200	10/06/2020	ND	2.08	104	2.00	3.03	
Toluene*	14.1	0.200	10/06/2020	ND	2.05	102	2.00	3.72	
Ethylbenzene*	29.2	0.200	10/06/2020	ND	2.00	99.8	2.00	3.91	
Total Xylenes*	66.6	0.600	10/06/2020	ND	5.73	95.5	6.00	3.96	
Total BTEX	110	1.20	10/06/2020	ND					

Surrogate: 4-Bromofluorobenzene (PID) 253 % 73.3-129

Chloride, SM4500Cl-B			mg/kg					Analyzed By: AC	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/06/2020	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1880	50.0	10/06/2020	ND	208	104	200	4.94	
DRO >C10-C28*	8930	50.0	10/06/2020	ND	195	97.6	200	1.96	
EXT DRO >C28-C36	1450	50.0	10/06/2020	ND					

Surrogate: 1-Chlorooctane 536 % 44.3-144

Surrogate: 1-Chlorooctadecane 313 % 42.2-156

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]





