



WBDU WSW 43 Field Titration test result for Chloride

Sampling Location and Depth	Depth	Chlorides mg/kg	Sampling date	Lat.-Long
BH-1	0"-3"	300	1/12/2017	32.48771-103.18784
BH-1	.5'	300	1/12/2017	
BH-2	0-3"	200	1/12/2017	32.48772-103.18765
BH-2	.5'	300	1/12/2017	
BH-3	0-3"	300	1/12/2017	32.48789-103.18733
BH-3	.5'	100	1/12/2017	
BH-4	0-3"	100	1/12/2017	32.48768-103.18748
BH-4	.5'	100	1/12/2017	
BH-5	0-3"	300		32.48753-103.18763
BH-5	.5'	100	1/12/2017	
BH-6	0-3'"	300	1/12/2017	32.48747-103.18768
BH-6	.5'	100	1/12/2017	
BH-7	0-3'	300	1/12/2017	32.48735-103.18771
BH-7	.5'	100	1/12/2017	
BH-8	0-3'"	300	1/12/2017	32.48750-103.18793
BH-8	.5'	100	1/12/2018	

February 07, 2017

MIKE STUBBLEFIELD

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: W B D U WSW 43

Enclosed are the results of analyses for samples received by the laboratory on 01/27/17 14:41.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-16-8. 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,



Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

R T HICKS CONSULTANTS
MIKE STUBBLEFIELD
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received: 01/27/2017
Reported: 02/07/2017
Project Name: W B D U WSW 43
Project Number: NONE GIVEN
Project Location: UTN SEC.8 - T215 - R37E

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Celey D. Keene

Sample ID: S-3 0-3" (H700208-01)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	02/02/2017	ND	432	108	400	3.64		

Sample ID: S-3 0.5' (H700208-02)

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	02/02/2017	ND	432	108	400	3.64		

Sample ID: S-4 0-3" (H700208-03)

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	02/02/2017	ND	432	108	400	3.64		

Sample ID: S-4 0.5 (H700208-04)

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	02/02/2017	ND	432	108	400	3.64		

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

R T HICKS CONSULTANTS
MIKE STUBBLEFIELD
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received: 01/27/2017
Reported: 02/07/2017
Project Name: W B D U WSW 43
Project Number: NONE GIVEN
Project Location: UTN SEC.8 - T215 - R37E

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Celey D. Keene

Sample ID: S-6 0-3" (H700208-05)

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	02/02/2017	ND	432	108	400	3.64		

Sample ID: S-6 0.5' (H700208-06)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/02/2017	ND	432	108	400	3.64	

Sample ID: S-7 0-3" (H700208-07)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	02/02/2017	ND	432	108	400	3.64		

Sample ID: S-7 0.5 (H700208-08)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/02/2017	ND	432	108	400	3.64		

Sample ID: S-8 0-3" (H700208-09)

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/02/2017	ND	432	108	400	3.64	

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

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MIKE STUBBLEFIELD
901 RIO GRANDE BLVD SUITE F-142
ALBUQUERQUE NM, 87104
Fax To: NONE

Received: 01/27/2017
Reported: 02/07/2017
Project Name: W B D U WSW 43
Project Number: NONE GIVEN
Project Location: UTN SEC.8 - T215 - R37E

Sampling Date: 01/12/2017
Sampling Type: Soil
Sampling Condition: ** (See Notes)
Sample Received By: Celey D. Keene

Sample ID: S-8 0.5' (H700208-10)**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	02/02/2017	ND	432	108	400	3.64	

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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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Celey D. Keene, Lab Director/Quality Manager



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Relinquished By:	Date:	12/21/17	Received By:	C. Johnson	Phone Result:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Add'l Phone #:
	Time:	2:41	Date:			Fax Result:	<input type="checkbox"/> Yes	
Relinquished By:	Date:		Received By:		REMARKS:			
	Time:							
Delivered By: (Circle One)			Sample Condition	CHECKED BY:				
Sampler - UPS - Bus - Other:			Cool <input type="checkbox"/> Intact <input type="checkbox"/>	(Initials)				
			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CAH #15				

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company Apache Corporation	Contact Bruce Baker	
Address 2350 W Marland Street, Hobbs, NM 88240	Telephone No. (432) 631-6982	
Facility Name WBDU WSW # 43	Facility Type Water	
Surface Owner BLM	Mineral Owner BLM	API No. 30-025-26601

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
N	8	21S	37E	660	FSL	1980	FWL	Lea

Latitude 32.4879913 Longitude -103.1872253

NATURE OF RELEASE

Type of Release water	Volume of Release 9 barrels of water	Volume Recovered 7 barrels of water
Source of Release Check Valve	Date and Hour of Occurrence 1/7/2017	Date and Hour of Discovery 1/7/2017
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Shelly Tucker (BLM) – email Tomas Oberding (NMOCD)-email	
By Whom? Bruce Baker	Date and Hour 1/9/2017 at 10:51 a.m.	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

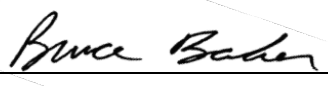
Describe Cause of Problem and Remedial Action Taken.*

The line was frozen and when the well started and split the check valve. The well was shut in to isolate the release and a vacuum truck was dispatched to pick-up standing fluid. The check valve was replace and the line was insulated to help prevent freezing.

Describe Area Affected and Cleanup Action Taken.*

The majority of the release was contained on the lease pad and lease road except for approximately 1,000 square feet of pasture south of the lease road. The site was mapped and samples were collected and submitted to a commercial laboratory for analysis. The well is used for make-up water and the laboratory results demonstrate that chloride values were all under 250 chlorides.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Bruce Baker	Approved by Environmental Specialist:		
Title: Environmental Technician	Approval Date:	Expiration Date:	
E-mail Address: larry.baker@apachecorp.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 4/25/2017	Phone: (432) 631-6982		

* Attach Additional Sheets If Necessary