

303 Veterans Airpark Lane Midland, TX 79705

# **Closure Report**

February 12, 2021

*Re: WBDU # 12 Case # NRM2015737274* 

### Background:

On 5/26/2020 a release occurred due to valve failure. The release (GPS: 32.50080, -103.16790) is located north of Eunice, NM in unit letter O section 4 township 21S range 37E. A groundwater survey was conducted utilizing the NMOSE and USGS wells of record. The nearest well suggest that groundwater beneath the release is 24 feet. A remediation plan was submitted and approved by OCD on 10/22/2020.

The release area was hand excavated to a depths 1 to 1.6 feet. All excavated materials (108 yards) was hauled to an OCD approved disposal facility. Final 5 point wall and bottom composite samples were collected and submitted to a commercial laboratory for analysis of chloride, TPH, and BTEX. Once laboratory results were below table one standards for releases less than 50 feet to groundwater the excavation was backfilled with clean imported caliche and the pad was restored.

Apache Corporation has remediated the release to below table one standards and respectfully request closure of event NRM2015737274.

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

Submitted by;

Bruce Baker

Environmental Technician larry.baker@apachecorp.com Cell# 432-631-6982 Off# 432-818-1000 **Oil Conservation Division** 

	Page 2 of	33
Incident ID	NRM2015737274	
District RP		
Facility ID		

Application ID

# Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

A scaled site and sampling diagram as described in 19.15.29.11 NMAC

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Larry Baker

 Signature:
 Larry Baker
 Date:
 2/12/2021

 email:
 Iarry.baker@apachecorp.com
 Telephone:
 432-637

Title: Environmental Tech SR.

Telephone: 432-631-6982

**OCD Only** 

Received by: Cristina Eads

Date: 02/12/2021

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

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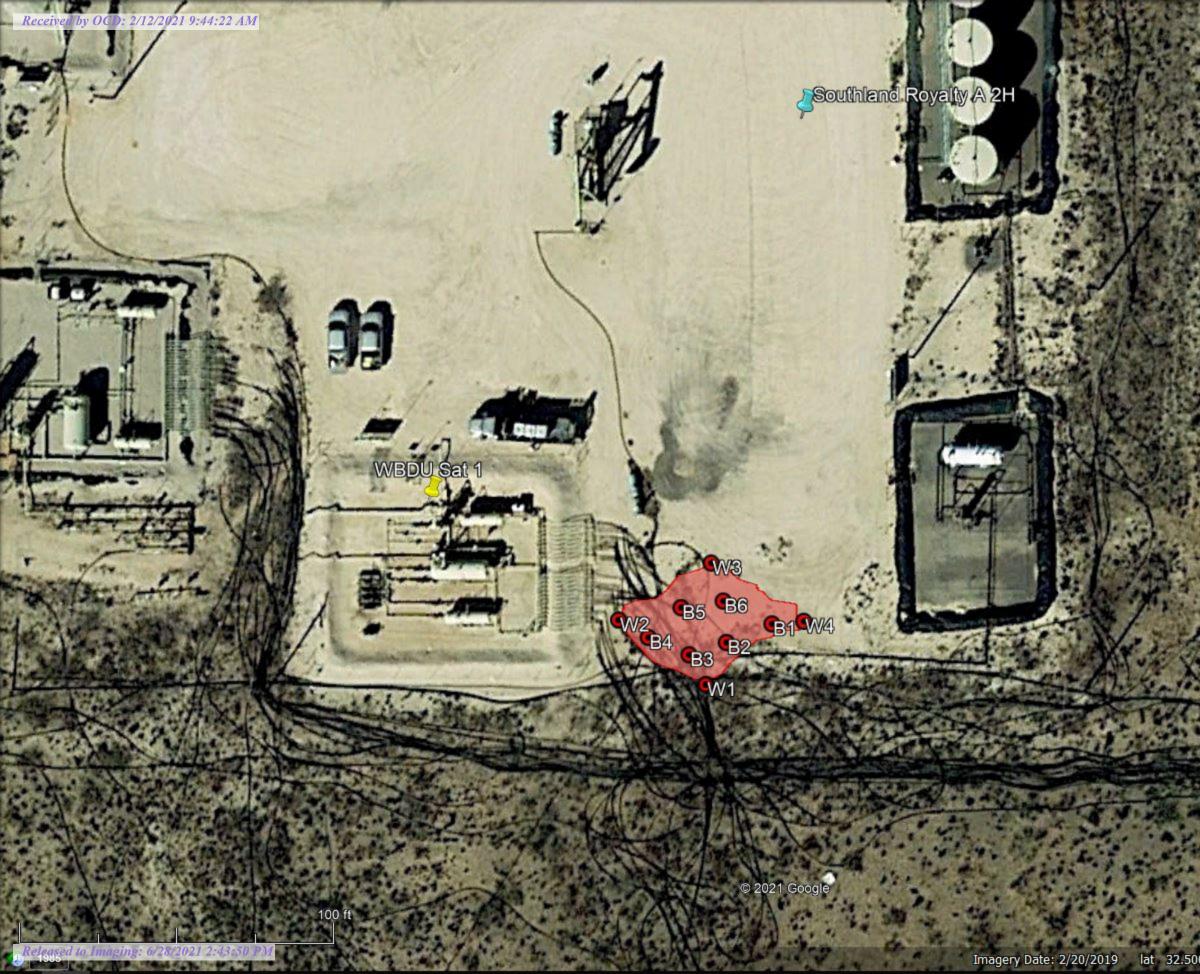
undan e Closure Approved by:

Date: 06/28/2021

Printed Name: Cristina Eads

Title: Environmental Specialist

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Google Earth

lat 32.500510° lon -103.167348° elev 3478 ft eye alt 3916 ft 🥏

	WBDU 12 Delineation Samples												
Map ID	Sample Date	Sample ID	Depth	Chloride	Benzene	Toulene	Ethybenzene	Total Xylenes	Total BTEX	GRO	DRO	EXT DRO	GPS Coordinates
													32.500696
W1	1/14/2021	W1		160	<.050	<.050	<.050	<.150	<.300	<10.0	549.0	133.0	-103.167875
	1/22/2021	W1			<.050	<.050	<.050	<.150	<.300	<10.0	29.6	<10.0	
													32.500753
W2	1/14/2021	W2		64	<.050	<.050	<.050	<.150	<.300	<10.0	144.0	35.5	-103.167965
	1/22/2021	W2			<.050	<.050	<.050	<.150	<.300	<10.0	<10.0	<10.0	
													32.500803
W3	1/22/2021	W3		48	<.050	<.050	<.050	<.150	<.300	<10.0	104.0	18.4	-103.167869
	2/4/2021	W3			<.050	<.050	<.050	<.150	<.300	<10.0	<10.0	<10.0	
													32.500752
W4	1/14/2021	W4		<16.0	<.050	<.050	<.050	<.150	<.300	<10.0	32.4	<10.0	-103.167773
													32.500749
B1	1/14/2021	B1	1'	80	<.050	<.050	<.050	<.150	<.300	<10.0	15.8	<10.0	-103.167806
													32.500733
B2	1/14/2021	B2	1'	80	<.050	<.050	<.050	<.150	<.300	<10.0	234.0	59.4	-103.167853
	1/22/2021	B2	1'		<.050	<.050	<.050	<.150	<.300	<10.0	<10.0	<10.0	
													32.500722
B3	1/14/2021	B3	1'	112	<.050	<.050	<.050	<.150	<.300	<10.0	834.0	147.0	-103.167892
	1/22/2021	B3	1'		<.050	<.050	<.050	<.150	<.300	<10.0	67.0	<10.0	
													32.500738
B4	1/14/2021	B4	1'	48	<.050	<.050	<.050	<.150	<.300	<10.0	253.0	44.1	-103.167935
	1/22/2021	B4	1.3'		<.050	<.050	<.050	<.150	<.300	<10.0	94.9	31.2	
	2/4/2021	B4	1.6'		<.050	<.050	<.050	<.150	<.300	<10.0	<10.0	<10.0	
5-		8-									00.0		32.500764
B5	1/22/2021	B5	1'	48	<.050	<.050	<.050	<.150	<.300	<10.0	89.3	14.6	-103.167901
	2/4/2021	B5	1.3'		<.050	<.050	<.050	<.150	<.300	<10.0	<10.0	<10.0	22 500770
DC	1/22/2024	DC.	41	22	1050				. 200	.10.0	120.0	20.2	32.500770
B6	1/22/2021	B6	1'	32	<.050	<.050	<.050	<.150	<.300	<10.0	120.0	38.3	-103.167857
	2/4/2021	B6	1.3'		<.050	<.050	<.050	<.150	<.300	<10.0	10.8	<10.0	



January 18, 2021

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #12

Enclosed are the results of analyses for samples received by the laboratory on 01/14/21 16:15.

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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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



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

#### Analytical Results For:

		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432	2	
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: W 1 (H210091-01)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	549	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	133	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	80.0	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	131	% 42.2-15	6						

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland BLVD.		
		Fax To:	(575) 393-2432		
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: W 2 (H210091-02)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.0	% 73.3-12	9						
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	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	144	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	35.5	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	84.5	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	101	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland BLVD.		
		Fax To:	(575) 393-2432		
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: W 4 (H210091-03)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 \$	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	32.4	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	<10.0	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	83.2	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	90.0	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BAI	ARLAND BLVD.		
		Fax To:	(575) 393-2432		
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 1 (H210091-04)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	97.4	% 73.3-12	9						
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	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	15.8	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	<10.0	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	83.1	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	88.4	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432	2	
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 2 (H210091-05)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	98.7	% 73.3-12	9						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	234	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	59.4	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	78.4	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	101	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432	2	
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 3 (H210091-06)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	106 9	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	834	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	147	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	85.2	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	142 9	% 42.2-15	6						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432		
Received:	01/14/2021			Sampling Date:	01/14/2021
Reported:	01/18/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 4 (H210091-07)

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	01/16/2021	ND	2.14	107	2.00	0.624	
Toluene*	<0.050	0.050	01/16/2021	ND	2.08	104	2.00	2.86	
Ethylbenzene*	<0.050	0.050	01/16/2021	ND	2.02	101	2.00	2.82	
Total Xylenes*	<0.150	0.150	01/16/2021	ND	5.91	98.4	6.00	2.61	
Total BTEX	<0.300	0.300	01/16/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	106	% 73.3-12	9						
Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/15/2021	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	01/14/2021	ND	191	95.6	200	1.99	
DRO >C10-C28*	253	10.0	01/14/2021	ND	199	99.7	200	2.69	
EXT DRO >C28-C36	44.1	10.0	01/14/2021	ND					
Surrogate: 1-Chlorooctane	78.1	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	101	% 42.2-15	6						

#### 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 SM4500CI-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

Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

REM	Verb All R	to the amount paid by the client for the within 30 days after completion of the applicable profits incurred by client, its subsidiaries, the above stated reasons or otherwise.				1-14			TIME	SAMPLING	
REMARKS: Zmail to Bruch	Verbal Result:  Ves No Add'l Phone #: All Results are emailed. Please provide Email address:	lient for the ion of the ubsidiaries otherwise.	1		~			Ē			
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Sompany Name:     Corperation     BILL TO       Project Manager:     BAUL:     Company:       Address:     State:     Zip:       Project Manager:     Fax #:     Project Commer:       Project Name:     WCDU     #Li       Project Name:     Sample Rate     Project Name:       Project Name:     Sample Rate     Project Name:       Project Name:     Sample Rate     Project Name:       Project Name:     Sample Control Nation Rate     Project Name:       Project Name:     Sample Rate     Project Nation Rate       Project Name:     Sample Rate     Project Nation Rate       Project Nate	Are     Corperation     PILL TO       Are     Company:     Company:       Fax #:     Fige:     Address:       Project Owner:     State:     City:       Project Owner:     Gity:     Project Owner:       Sample I.D.     Gity:     Project Owner:       City:     Project Owner:     Sample Owner:       Sample I.D.     Gity:     Project Owner:       City:     Project Owner:     Fig.:       City:     Project Owner:     Project Owner:       City:     City:     Project Owner:     Project Owner:       City:     City:     Project Owner:     Project Owner:       City:     City:     Project Owner:     Project Owner:       City:<	BILL TO     BILL TO       State:     Zip:       Fax #:     Zip:       Project Owner:     City:       City:     City: <tr< th=""></tr<>
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BILL TO       BILL TO       BILL TO       ESERV.       Zip:       Zip:       DATE       TIME       I-IU       I-IU<	BILL TO     ANN       Imp:     Zip:       #:     Zip:       #:     Zip:       #:     DATE       TIME     TIME       I-I-IU     I-IU       I-IU     I-IU	AMALT ANALT ANALTO
	AND	AMALT actor None

Page 14 of 35



January 26, 2021

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #12

Enclosed are the results of analyses for samples received by the laboratory on 01/22/21 13:30.

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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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



		BRUCE BA	1arland BLVD.		
		Fax To:	(575) 393-2432		
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: W 1 (H210163-01)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	73.3-12	9						
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	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	29.6	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	<10.0	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	81.7	% 44.3-14	4						
0	01.7	70 44.5-14	7						

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432	2	
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: W 2 (H210163-02)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 %	6 73.3-12	9						
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	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	<10.0	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	<10.0	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	82.6 9	% 44.3-14	4						

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland BLVD.		
		Fax To:	(575) 393-2432	2	
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: W 3 (H210163-03)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	73.3-12	9						
Chloride, SM4500Cl-B	mg,	kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/25/2021	ND	400	100	400	0.00	
TPH 8015M	mg/	'kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	104	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	18.4	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	85.5	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	106	42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432		
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 2 @ 1' (H210163-04)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	73.3-12	9						
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	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	<10.0	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	<10.0	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	85.7	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	97.0	% 42.2-15	6						

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432	2	
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 3 @ 1' (H210163-05)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.0 \$	% 73.3-12	9						
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	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	67.0	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	<10.0	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	88.2 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	104 9	42.2-15							

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland Blvd.		
		Fax To:	(575) 393-2432	2	
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 4 @ 1' (H210163-06)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	101 9	73.3-12	9						
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	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	94.9	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	31.2	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	88.1	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	107 9	42.2-15							

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland BLVD.		
		Fax To:	(575) 393-2432		
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 5 @ 1' (H210163-07)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	101	% 73.3-12	9						
Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	01/25/2021	ND	400	100	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/23/2021	ND	190	95.2	200	15.6	
DRO >C10-C28*	89.3	10.0	01/23/2021	ND	214	107	200	0.222	
EXT DRO >C28-C36	14.6	10.0	01/23/2021	ND					
Surrogate: 1-Chlorooctane	78.2	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	91.6	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BA	1arland BLVD.		
		Fax To:	(575) 393-2432		
Received:	01/22/2021			Sampling Date:	01/22/2021
Reported:	01/26/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Jodi Henson
Project Location:	LEA COUNTY, NM				

#### Sample ID: B 6 @ 1' (H210163-08)

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	01/23/2021	ND	2.13	106	2.00	1.95	
Toluene*	<0.050	0.050	01/23/2021	ND	2.06	103	2.00	2.08	
Ethylbenzene*	<0.050	0.050	01/23/2021	ND	2.02	101	2.00	3.08	
Total Xylenes*	<0.150	0.150	01/23/2021	ND	5.89	98.2	6.00	2.88	
Total BTEX	<0.300	0.300	01/23/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	99.1	% 73.3-12	9						
Chloride, SM4500Cl-B	mg/	/kg	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	01/25/2021	ND	400	100	400	0.00	
TPH 8015M	mg/	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/25/2021	ND	218	109	200	3.94	
DRO >C10-C28*	120	10.0	01/25/2021	ND	214	107	200	0.789	
EXT DRO >C28-C36	38.3	10.0	01/25/2021	ND					
Surrogate: 1-Chlorooctane	84.9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	104	% 42.2-15	6						

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

QR-03The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch<br/>accepted based on LCS and/or LCSD recovery and/or RPD values.QR-02The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC<br/>batch were accepted based on percent recoveries and completeness of QC data.NDAnalyte NOT DETECTED at or above the reporting limitRPDRelative 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

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

## Received by OCD: 2/12/2021 9:44:22 AM

1		CONTRACTOR NOT THE REPORT OF T	STOLEN OF THE OWNER AND ADDRESS OF THE OWNER ADDRES			
Company Name:	anache Coro	11.04.02	BILL TO			ANALYSIS REQUEST
Project Manager:	Pruce Baker		P.O. #:			
Address:		0	Company:			
City:	State:	Zip:	Attn:			
Phone #:	Fax #:		Address:			
Project #:	Project Owner:	0	City:			
ame:	WIRDU 12		State: Zip:			
on:	6		Phone #:			
			Eav #·			
Sampler Name:	IEFF Grean	L	1	5	-	
FOR LAB USE ONLY	×	MATRIX	PRESERV. SAMPLING	G	1	
Lab I.D.	Sample I.D.	G)RAB OR (C)OMP CONTAINERS BROUNDWATER VASTEWATER BOIL BLUDGE	DTHER : ACID/BASE: CE / COOL DTHER :	TIME CL -	BTEX EXT. TPH	
	11		18/26/1	0930	VV	
-	112	V	2	0933	VV	
142	N 2	<	16/20/1	1 8460	1	
	B2 @ 1	×	16/00/1	0935	44	
-		<	1/22/1	0942	N	
8	402	5	14/26/1	0937	< <	
-	502.	5	1/20/2.	0945 V	7	
8	60	5	1erceft	0946 V	1	
	the second se	a daim arision whathar based in nontract o	or fort shall be limited to the amount paid	by the client for the		
alyses. All claims including the prvice, In no event shall Cardin	analyses. All claims incurring the registerion and any other cause whatsoever shall be deened waived unless made in writing and received by Cardinal within 30 days after completion of the applic analyses. All claims including those for negligence and any other cause whatsoever shall be deened waived unless made in writing and received by Cardinal within 30 days after completion of the applic service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profile incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profile incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profile incidental or consequential damages.	leemed waived unless made in writing and without limitation, business interruptions, ic	received by Cardinal within 30 days after oss of use, or loss of profits incurred by cl	ient, its subsidiaries,	cable	
affiliates or successors arising out of or related to the perform Relinquished By:	at of or related to the performance of services hereunder by C	heeunder of Cardinal regurees of written source during on a written source during on a written source of the sourc	and the second s	Phone Result: Fax Result:	Yes No	Add'l Phone #: Add'l Fax #:
THE S	Time: 1.3 v	and A	Len Br	REMARKS:	1	
Relinquished By:	Date:	Received By:			Tendero	(100100)
	Time:					
	Circle One) 4,90 /#113	Sample Condition	on CHEOKED BX-			
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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**CARDINAL** Laboratories

Released to Imaging: 6/28/2021 2:43:50 PM



February 05, 2021

BRUCE BAKER APACHE CORP - HOBBS 2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: WBDU #12

Enclosed are the results of analyses for samples received by the laboratory on 02/04/21 16:35.

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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

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:	02/04/2021	Sampling Date:	02/04/2021
Reported:	02/05/2021	Sampling Type:	Soil
Project Name:	WBDU #12	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

#### Sample ID: W3 (H210290-01)

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	02/05/2021	ND	1.99	99.5	2.00	6.51	
Toluene*	<0.050	0.050	02/05/2021	ND	1.94	96.8	2.00	6.66	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	1.89	94.6	2.00	6.69	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.54	92.3	6.00	6.40	
Total BTEX	<0.300	0.300	02/05/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 9	73.3-12	9						
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	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	<10.0	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					
Surrogate: 1-Chlorooctane	82.5	% 44.3-14	4						

#### **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:	02/04/2021	Sampling Date:	02/04/2021
Reported:	02/05/2021	Sampling Type:	Soil
Project Name:	WBDU #12	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

#### Sample ID: B4 (H210290-02)

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	02/05/2021	ND	1.99	99.5	2.00	6.51	
Toluene*	<0.050	0.050	02/05/2021	ND	1.94	96.8	2.00	6.66	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	1.89	94.6	2.00	6.69	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.54	92.3	6.00	6.40	
Total BTEX	<0.300	0.300	02/05/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	6 73.3-12	9						
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	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	<10.0	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					
Surrogate: 1-Chlorooctane	82.8 9	% 44.3-14	4						
Surrogate: 1-Chlorooctadecane	87.8 9	% 42.2-15							

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celez 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:	02/04/2021	Sampling Date:	02/04/2021
Reported:	02/05/2021	Sampling Type:	Soil
Project Name:	WBDU #12	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM		

#### Sample ID: B5 (H210290-03)

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	02/05/2021	ND	1.99	99.5	2.00	6.51	
Toluene*	<0.050	0.050	02/05/2021	ND	1.94	96.8	2.00	6.66	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	1.89	94.6	2.00	6.69	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.54	92.3	6.00	6.40	
Total BTEX	<0.300	0.300	02/05/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	100 %	6 73.3-12	9						
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	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	<10.0	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					
Surrogate: 1-Chlorooctane	86.4 9	% 44.3-14	4						

#### **Cardinal Laboratories**

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



		BRUCE BAK	ARLAND BLVD.		
		Fax To:	(575) 393-2432		
Received:	02/04/2021			Sampling Date:	02/04/2021
Reported:	02/05/2021			Sampling Type:	Soil
Project Name:	WBDU #12			Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN			Sample Received By:	Tamara Oldaker
Project Location:	LEA COUNTY, NM				

#### Sample ID: B6 (H210290-04)

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	02/05/2021	ND	1.99	99.5	2.00	6.51	
Toluene*	<0.050	0.050	02/05/2021	ND	1.94	96.8	2.00	6.66	
Ethylbenzene*	<0.050	0.050	02/05/2021	ND	1.89	94.6	2.00	6.69	
Total Xylenes*	<0.150	0.150	02/05/2021	ND	5.54	92.3	6.00	6.40	
Total BTEX	<0.300	0.300	02/05/2021	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 9	% 73.3-12	9						
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	02/05/2021	ND	215	108	200	7.12	
DRO >C10-C28*	10.8	10.0	02/05/2021	ND	214	107	200	3.53	
EXT DRO >C28-C36	<10.0	10.0	02/05/2021	ND					
Surrogate: 1-Chlorooctane	85.4	% 44.3-14	4						

#### **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 SM4500CI-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

# **CARDINAL** Laboratories

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

	Thenk you.		Cool Intact HIG Pres Pres No No	Bus - Other: A. 7c	Sampler - UPS - Bus - Other
Bruce and Jeff	Send to Bruce .			Time:	
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o Addi Frione +. Addi Fax #:	Phone Result: U Tes U No Fax Result: U Yes U No REMARKS:	MILL	Received By:	Date: 2/4/21	Relinguished By:
		is based upon any of the above stated re-	3 without limitation, business interruptions, ardinal, regardless of whether such claim	service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	service. In no event shall Cardinal b affiliates or successors arising out of
	d by the client for the r completion of the applicable	t or tort, shall be limited to the amount pair of received by Cardinal within 30 days after	my claim arising whether based in contract deemed waived unless made in writing an	PLEASE NOTE: Liability and Danages. Cardina's liability and client's exclusive ramedy for any claim arising whether based in contract or fort, shall be limited to the amount paid by the client for the analyses. All claims induction those for neclinence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applica	PLEASE NOTE: Liability and Dama analyses. All claims including those
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		Attn:	Zip:	State:	City:
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ANALYSIS REQUEST	Andread Anna Anna Anna Anna Anna Anna Anna An	BILL TO		Abache Corporation	Company Name:

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST







District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

	OGRID:
APACHE CORPORATION	873
303 Veterans Airpark Ln	Action Number:
Midland, TX 79705	17915
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By	Condition	Condition Date
ceads	None	6/28/2021

CONDITIONS

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Action 17915