

Additional Information

Water Analysis
Received
11/27/2019



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

November 26, 2019

NATE ALLEMAN

ALL CONSULTING, LLC

1718 S. CHEYENNE AVE.

TULSA, OK 74119

RE: GW-1 WATER SAMPLES

Enclosed are the results of analyses for samples received by the laboratory on 11/12/19 13:40.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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, appearing to read "Mike Snyder".

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

Analytical Results For:

ALL CONSULTING, LLC
NATE ALLEMAN
1718 S. CHEYENNE AVE.
TULSA OK, 74119
Fax To: NA

Received: 11/12/2019
Reported: 11/26/2019
Project Name: GW-1 WATER SAMPLES
Project Number: NONE GIVEN
Project Location: NOT GIVEN

Sampling Date: 11/12/2019
Sampling Type: Water
Sampling Condition: Cool & Intact
Sample Received By: Tamara Oldaker

Sample ID: C-02959 - GW-1 (H903838-02)

Bicarbonate 310.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Alkalinity, Bicarbonate	156	5.00	11/13/2019	5.00	318			4.02	
BTEX 8021B		mg/L		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	11/13/2019	ND	0.020	99.3	0.0200	1.96	
Toluene*	<0.001	0.001	11/13/2019	ND	0.020	99.5	0.0200	3.37	
Ethylbenzene*	<0.001	0.001	11/13/2019	ND	0.021	103	0.0200	3.11	
Total Xylenes*	<0.003	0.003	11/13/2019	ND	0.060	101	0.0600	3.25	
Total BTEX	<0.006	0.006	11/13/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 74-98

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Calcium 200.2 by ICP		mg/L		Analyzed By: AES					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Calcium*	545	1.00	11/22/2019	ND	3.70	92.5	4.00	3.86	

Cardinal Laboratories

*=Accredited Analyte

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Carbonate 310.1		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Alkalinity, Carbonate	<1.00	1.00	11/13/2019	ND	ND				
Chloride, SM4500Cl-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	96.0	4.00	11/13/2019	ND	104	104	100	0.00	
Conductivity 120.1		uS/cm		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Conductivity*	3800	1.00	11/13/2019		52100	104	50000		

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Hardness, 200.2 Metals		mg/L		Analyzed By: AES					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Hardness as CaCO3	2000	6.62	11/22/2019						
Iron 200.2 by ICP		mg/L		Analyzed By: AES					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Iron*	0.198	0.500	11/22/2019	ND	3.78	94.6	4.00	2.21	J
Magnesium 200.2 by ICP		mg/L		Analyzed By: AES					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Magnesium*	155	1.00	11/22/2019	ND	19.4	96.9	20.0	3.17	

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pH		pH Units		Analyzed By: AC						
	Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
pH*		8.75	0.100	11/13/2019		7.06	101	7.00		

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Potassium 200.2 by ICP		mg/L	Analyzed By: AES						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Potassium*	7.58	10.0	11/22/2019	ND	7.94	99.3	8.00	1.18	J

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Resistivity 120.1		Ohms/m	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Resistivity	2.63		11/13/2019						

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Sodium 200.2 by ICP		mg/L		Analyzed By: AES						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sodium*	253	10.0	11/22/2019	ND	3.15	97.3	3.24	1.62		
Strontium 200.2 by ICP		mg/L		Analyzed By: AES						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Strontium*	7.93	1.00	11/22/2019	ND	3.90	97.4	4.00	0.764		

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Sulfate 375.4		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Sulfate*	2160	500	11/13/2019	ND	19.5	97.4	20.0	1.60		
TDS 160.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TDS*	3480	5.00	11/19/2019	ND	564	107	527			
Total Alkalinity 310.1		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Alkalinity, Total*	128	4.00	11/13/2019	4.00	260	104	250	3.92		
TSS, 160.2		mg/L		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
TSS*	9.00	2.00	11/18/2019	ND						

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Notes and Definitions

QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
J	Estimated concentration. Analyte concentration between MDL and RL.
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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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

Company Name: ALL Consulting

ANALYSIS REQUEST

Am'ons

[illegible]

Relinquished By:

Relinquished By:	Date:	Received By:	Verbal Result:
Scott Mory	11-12-19	Juanara Alaraz	<input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
Relinquished By:	Time:	Received By:	All Results are emailed. Please provide Email address:
	1:340		na11emara@a1-11c1om, 05ekins@a1-11c1
Date:			REMARKS:
Time:			

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

maleman@a1-c.com, o5ekins@a1-c.com

REMARKS:

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