

Additional Information

Fresh Water Samples
From AOR

Engineer, OCD, EMNRD

From: ben sosconsulting.us <ben@sosconsulting.us>
Sent: Friday, January 17, 2020 12:42 PM
To: Engineer, OCD, EMNRD
Subject: [EXT] Water Analysis for Trove's Ghost Rider and Snowman C-108s...
Attachments: H000036 SOS.pdf

The attached water analysis was obtained from a domestic well that is within BOTH 1-mile radius areas of the subject SWD applications. Please include this with both applications and let me know if additional information is needed.

Thank you,
Ben



Visit us on the web at [www.sosconsulting.us!](http://www.sosconsulting.us)

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

January 16, 2020

BEN STONE
SOS CONSULTING
P.O. BOX 300
COMO, TX 75431

RE: FRESH WATER SAMPLES

Enclosed are the results of analyses for samples received by the laboratory on 01/07/20 8:10.

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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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 style with a large, stylized initial 'C'.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:SOS CONSULTING
P.O. BOX 300
COMO TX, 75431Project: FRESH WATER SAMPLES
Project Number: NOT GIVEN
Project Manager: BEN STONE
Fax To:Reported:
16-Jan-20 17:27

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WATER - WWLWD - 01209	H000036-01	Water	06-Jan-20 15:00	07-Jan-20 08:10

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 SOS CONSULTING
 P.O. BOX 300
 COMO TX, 75431

 Project: FRESH WATER SAMPLES
 Project Number: NOT GIVEN
 Project Manager: BEN STONE
 Fax To:

 Reported:
 16-Jan-20 17:27

WATER - WWLWD - 01209
H000036-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories
Inorganic Compounds

Chloride*	12.0		4.00	mg/L	1	0010606	AC	09-Jan-20	4500-Cl-B	
pH*	8.62		0.100	pH Units	1	0010707	AC	07-Jan-20	150.1	
TDS*	208		5.00	mg/L	1	0010307	AC	08-Jan-20	160.1	

Green Analytical Laboratories
Total Recoverable Metals by ICP (E200.7)

Calcium*	58.6		0.500	mg/L	5	B001090	AES	14-Jan-20	EPA200.7	
Hardness as CaCO3	198		3.31	mg/L	5	[CALC]	AES	14-Jan-20	2340 B	
Magnesium*	12.5		0.500	mg/L	5	B001090	AES	14-Jan-20	EPA200.7	

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Celey D. Keene, Lab Director/Quality Manager

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 P.O. BOX 300
 COMO TX, 75431

 Project: FRESH WATER SAMPLES
 Project Number: NOT GIVEN
 Project Manager: BEN STONE
 Fax To:

 Reported:
 16-Jan-20 17:27

Inorganic Compounds - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0010307 - Filtration										
Blank (0010307-BLK1)										
					Prepared: 03-Jan-20 Analyzed: 07-Jan-20					
TDS	ND	5.00	mg/L							
LCS (0010307-BS1)										
					Prepared: 03-Jan-20 Analyzed: 07-Jan-20					
TDS	536		mg/L	527		102	80-120			
Duplicate (0010307-DUP1)										
					Source: H000016-01 Prepared: 03-Jan-20 Analyzed: 07-Jan-20					
TDS	2650	5.00	mg/L		2480			6.72	20	
Batch 0010606 - General Prep - Wet Chem										
Blank (0010606-BLK1)										
					Prepared & Analyzed: 06-Jan-20					
Chloride	ND	4.00	mg/L							
LCS (0010606-BS1)										
					Prepared & Analyzed: 06-Jan-20					
Chloride	100	4.00	mg/L	100		100	80-120			
Matrix Spike (0010606-MS1)										
					Source: H000005-03 Prepared & Analyzed: 06-Jan-20					
Chloride	236	4.00	mg/L	100	140	96.0	80-120			
Batch 0010707 - General Prep - Wet Chem										
LCS (0010707-BS1)										
					Prepared & Analyzed: 07-Jan-20					
pH	7.08		pH Units	7.00		101	90-110			
Duplicate (0010707-DUP1)										
					Source: H000030-01 Prepared & Analyzed: 07-Jan-20					
pH	6.85	0.100	pH Units		6.86			0.146	20	

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 P.O. BOX 300
 COMO TX, 75431

 Project: FRESH WATER SAMPLES
 Project Number: NOT GIVEN
 Project Manager: BEN STONE
 Fax To:

 Reported:
 16-Jan-20 17:27

Total Recoverable Metals by ICP (E200.7) - Quality Control
Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B001090 - Total Rec. 200.7/200.8/200.2
Blank (B001090-BLK1)

Prepared: 13-Jan-20 Analyzed: 14-Jan-20

Magnesium	ND	0.100	mg/L							
Calcium	ND	0.100	mg/L							

LCS (B001090-BS1)

Prepared: 13-Jan-20 Analyzed: 14-Jan-20

Magnesium	19.6	0.100	mg/L	20.0		98.1	85-115			
Calcium	3.83	0.100	mg/L	4.00		95.9	85-115			

LCS Dup (B001090-BSD1)

Prepared: 13-Jan-20 Analyzed: 14-Jan-20

Magnesium	19.5	0.100	mg/L	20.0		97.7	85-115	0.433	20	
Calcium	3.81	0.100	mg/L	4.00		95.3	85-115	0.605	20	

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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

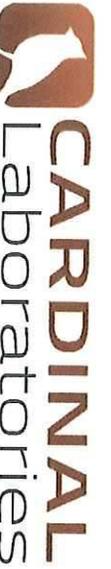
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*=Accredited Analyte

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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

Company Name: <u>SOS Consulting</u> Project Manager: <u>Ben</u>		BILL TO		ANALYSIS REQUEST	
Address: <u>PO Box 362</u> City: <u>Camo</u> State: <u>NM</u> Zip: <u>85431</u>		P.O. #: Company:			
Phone #: <u>505-488-</u> Fax #: Project Owner:		Attn: Address:			
Project #: Project Location:		City: State: Zip:			
Sampler Name:		Phone #: Fax #:			
FOR LAB USE ONLY					
Lab I.D. <u>H000036</u>	Sample I.D. <u>WATER-WW2000-01209</u>	(G)RAB OR (C)OMP.	# CONTAINERS <u>1</u>	MATRIX <input type="checkbox"/> GROUNDWATER <input checked="" type="checkbox"/> WASTEWATER <input type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE OTHER :	PRESERV. ACID/BASE: ICE / COOL OTHER :
				DATE <u>1-6-20</u> TIME <u>15:00</u>	
				<u>CL</u>	
				<u>PH</u>	
				<u>Hardness</u>	
				<u>TDS</u>	
Relinquished By: <u>[Signature]</u>		Received By: <u>[Signature]</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Date: <u>1-7-20</u> Time: <u>0810</u>		Date: <u>1-6-20</u> Time: <u>15:00</u>		All Results are emailed. Please provide Email address:	
Relinquished By: <u>[Signature]</u>		Received By: <u>[Signature]</u>		REMARKS: <u>ben SOS consulting. 45</u>	
Delivered By: (Circle One) <u>UPS</u>		Observed Temp. °C <u>10.5</u>		Sample Condition <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Cool <input type="checkbox"/> Yes <input type="checkbox"/> No	
Corrected Temp. °C		CHECKED BY: (Initials) <u>[Signature]</u>		Turaround Time: <input type="checkbox"/> Standard <input checked="" type="checkbox"/> Rush	
Corrected Temp. °C		Bacteria (only) <input type="checkbox"/> Intact <input type="checkbox"/> Cool <input type="checkbox"/> Yes <input type="checkbox"/> No		Sample Condition <input type="checkbox"/> Observed Temp. °C <input type="checkbox"/> Corrected Temp. °C	

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