

November 05, 2015

MICHAEL BRANDON
OILFIELD WATER LOGISTICS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS, TX 75225

RE: MCLOY RANCH HOUSE

Enclosed are the results of analyses for samples received by the laboratory on 10/23/15 13:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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	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,



Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:OILFIELD WATER LOGISTICS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225Project: MCLOY RANCH HOUSE
Project Number: NONE GIVEN
Project Manager: MICHAEL BRANDON
Fax To:Reported:
05-Nov-15 15:45

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WELL WATER	H502768-01	Wastewater	22-Oct-15 13:30	23-Oct-15 13:45

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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OILFIELD WATER LOGISTICS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225

Project: MCLOY RANCH HOUSE
Project Number: NONE GIVEN
Project Manager: MICHAEL BRANDON
Fax To:

Reported:
05-Nov-15 15:45

WELL WATER
H502768-01 (Wastewater)

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

Alkalinity, Bicarbonate	312		5.00	mg/L	1	5102603	AP	26-Oct-15	310.1	
Alkalinity, Carbonate	<0.00		0.00	mg/L	1	5102603	AP	26-Oct-15	310.1	
Chloride*	20.0		4.00	mg/L	1	5102805	AP	29-Oct-15	4500-Cl-B	
Conductivity*	712		1.00	uS/cm	1	5110411	AP	04-Nov-15	120.1	
pH*	7.91		0.100	pH Units	1	5110412	AP	04-Nov-15	150.1	
Sulfate*	70.0		25.0	mg/L	2.5	5102803	AP	28-Oct-15	375.4	
TDS*	448		5.00	mg/L	1	5102606	AP	30-Oct-15	160.1	
Alkalinity, Total*	256		4.00	mg/L	1	5102603	AP	26-Oct-15	310.1	

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

Calcium*	22.5		0.020	mg/L	1	B511019	JGS	03-Nov-15	EPA200.7	
Magnesium*	28.5		0.100	mg/L	1	B511019	JGS	03-Nov-15	EPA200.7	
Potassium*	3.22		1.00	mg/L	1	B511019	JGS	03-Nov-15	EPA200.7	
Sodium*	90.3		1.00	mg/L	1	B511019	JGS	03-Nov-15	EPA200.7	

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*=Accredited Analyte

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OILFIELD WATER LOGISTICS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225

Project: MCLOY RANCH HOUSE
Project Number: NONE GIVEN
Project Manager: MICHAEL BRANDON
Fax To:

Reported:
05-Nov-15 15:45

Inorganic Compounds - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 5102603 - General Prep - Wet Chem
Blank (5102603-BLK1)

Prepared & Analyzed: 26-Oct-15

Alkalinity, Carbonate	ND	0.00	mg/L							
Alkalinity, Bicarbonate	ND	5.00	mg/L							
Alkalinity, Total	ND	4.00	mg/L							

LCS (5102603-BS1)

Prepared & Analyzed: 26-Oct-15

Alkalinity, Carbonate	ND	0.00	mg/L				80-120			
Alkalinity, Bicarbonate	126	5.00	mg/L				80-120			
Alkalinity, Total	104	4.00	mg/L	100		104	80-120			

LCS Dup (5102603-BSD1)

Prepared & Analyzed: 26-Oct-15

Alkalinity, Carbonate	ND	0.00	mg/L				80-120		20	
Alkalinity, Bicarbonate	122	5.00	mg/L				80-120	3.23	20	
Alkalinity, Total	100	4.00	mg/L	100		100	80-120	3.92	20	

Batch 5102606 - Filtration
Blank (5102606-BLK1)

Prepared: 26-Oct-15 Analyzed: 30-Oct-15

TDS	ND	5.00	mg/L							
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LCS (5102606-BS1)

Prepared: 26-Oct-15 Analyzed: 30-Oct-15

TDS	516	5.00	mg/L	527		97.9	80-120			
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Duplicate (5102606-DUP1)

Source: H502763-13

Prepared: 26-Oct-15 Analyzed: 30-Oct-15

TDS	363000	5.00	mg/L		350000			3.68	20	
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Batch 5102803 - General Prep - Wet Chem
Blank (5102803-BLK1)

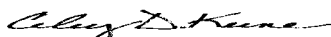
Prepared & Analyzed: 28-Oct-15

Sulfate	ND	10.0	mg/L							
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*=Accredited Analyte

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OILFIELD WATER LOGISTICS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225

Project: MCLOY RANCH HOUSE
Project Number: NONE GIVEN
Project Manager: MICHAEL BRANDON
Fax To:

Reported:
05-Nov-15 15:45

Inorganic Compounds - Quality Control
Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 5102803 - General Prep - Wet Chem
LCS (5102803-BS1)

Prepared & Analyzed: 28-Oct-15

Sulfate	19.5	10.0	mg/L	20.0	97.3	80-120
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LCS Dup (5102803-BSD1)

Prepared & Analyzed: 28-Oct-15

Sulfate	20.4	10.0	mg/L	20.0	102	80-120	4.77	20
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Batch 5102805 - General Prep - Wet Chem
Blank (5102805-BLK1)

Prepared & Analyzed: 28-Oct-15

Chloride	ND	4.00	mg/L
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LCS (5102805-BS1)

Prepared & Analyzed: 28-Oct-15

Chloride	104	4.00	mg/L	100	104	80-120
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LCS Dup (5102805-BSD1)

Prepared & Analyzed: 28-Oct-15

Chloride	104	4.00	mg/L	100	104	80-120	0.00	20
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Batch 5110411 - NO PREP
LCS (5110411-BS1)

Prepared & Analyzed: 04-Nov-15

Conductivity	524		uS/cm	500	105	80-120
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Duplicate (5110411-DUP1)

Source: H502768-01

Prepared & Analyzed: 04-Nov-15

Conductivity	717	1.00	uS/cm	712	0.700	20
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Batch 5110412 - General Prep - Wet Chem
LCS (5110412-BS1)

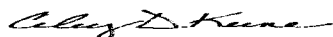
Prepared & Analyzed: 04-Nov-15

pH	7.12		pH Units	7.00	102	90-110
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Cardinal Laboratories

*=Accredited Analyte

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8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225Project: MCLOY RANCH HOUSE
Project Number: NONE GIVEN
Project Manager: MICHAEL BRANDON
Fax To:Reported:
05-Nov-15 15:45**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 5110412 - General Prep - Wet Chem

Duplicate (5110412-DUP1)

Source: H502768-01

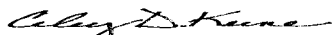
Prepared & Analyzed: 04-Nov-15

pH	7.95	0.100	pH Units	7.91	0.504	20
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OILFIELD WATER LOGISTICS
8214 WESTCHESTER DRIVE, SUITE 850
DALLAS TX, 75225

Project: MCLOY RANCH HOUSE
Project Number: NONE GIVEN
Project Manager: MICHAEL BRANDON
Fax To:

Reported:
05-Nov-15 15:45

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 B511019 - EPA 200.2
Blank (B511019-BLK1)

Prepared & Analyzed: 03-Nov-15

Magnesium	ND	0.100	mg/L							
Calcium	ND	0.020	mg/L							
Sodium	ND	1.00	mg/L							
Potassium	ND	1.00	mg/L							

LCS (B511019-BS1)

Prepared & Analyzed: 03-Nov-15

Magnesium	20.2	0.100	mg/L	20.0		101	85-115			
Calcium	4.12	0.020	mg/L	4.00		103	85-115			
Potassium	8.19	1.00	mg/L	8.00		102	85-115			
Sodium	6.72	1.00	mg/L	6.48		104	85-115			

LCS Dup (B511019-BSD1)

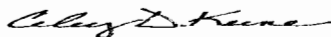
Prepared & Analyzed: 03-Nov-15

Magnesium	20.0	0.100	mg/L	20.0		100	85-115	1.06	20	
Potassium	8.14	1.00	mg/L	8.00		102	85-115	0.550	20	
Calcium	4.08	0.020	mg/L	4.00		102	85-115	0.821	20	
Sodium	6.78	1.00	mg/L	6.48		105	85-115	1.00	20	

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

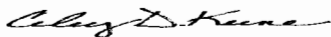
Notes and Definitions

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: DWL				BILL TO				ANALYSIS REQUEST																	
Project Manager:				P.O. #:				Cation / Anion																	
Address:				Company:																					
City:		State:		Zip:		Attn:																			
Phone #:		Fax #:		Address:																					
Project #:		Project Owner:		City:																					
Project Name: McLoy Ranch House				State:																Zip:					
Project Location: Lea County, NM				Phone #:																					
Sampler Name: Luis Aguirre				Fax #:																					
FOR LAB USE ONLY																									
Lab I.D.		Sample I.D.		(GIRAB OR (C)OMP. # CONTAINERS		MATRIX		PRESERV.		SAMPLING															
						GROUNDWATER																			
						WASTEWATER																			
						SOIL																			
						OIL																			
						SLUDGE																			
						OTHER																			
						ACID/BASE																			
						ICE / COOL																			
						OTHER																			
										DATE		TIME													
H502768		well water		G								10/23/15		1:30											

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Relinquished By: 		Date: 10/23/15		Received By: 		Phone Result: ☐ Yes ☐ No		Add'l Phone #:	
Time: 1:45		Date:		Time:		Fax Result: ☐ Yes ☐ No		Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS: mbrandon2oilfieldwater logistics.com			
Delivered By: (Circle One)		Sample Condition		CHECKED BY:					
Sampler - UPS - Bus - Other:		20.60		Cool ☐ Intact ☒		Yes ☐ No ☒			