

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](http://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

**Analytical Results For:**

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
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**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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**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**

<b>Blank (5102603-BLK1)</b>			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							

<b>LCS (5102603-BS1)</b>			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			

<b>LCS Dup (5102603-BSD1)</b>			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**

<b>Blank (5102606-BLK1)</b>			Prepared: 26-Oct-15 Analyzed: 30-Oct-15							
TDS	ND	5.00	mg/L							

<b>LCS (5102606-BS1)</b>			Prepared: 26-Oct-15 Analyzed: 30-Oct-15							
TDS	516	5.00	mg/L	527		97.9	80-120			

<b>Duplicate (5102606-DUP1)</b>			Source: H502763-13 Prepared: 26-Oct-15 Analyzed: 30-Oct-15							
TDS	363000	5.00	mg/L		350000			3.68	20	

**Batch 5102803 - General Prep - Wet Chem**

<b>Blank (5102803-BLK1)</b>			Prepared & Analyzed: 28-Oct-15							
Sulfate	ND	10.0	mg/L							

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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
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**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**

<b>LCS (5102803-BS1)</b>				Prepared & Analyzed: 28-Oct-15						
Sulfate	19.5	10.0	mg/L	20.0		97.3	80-120			
<b>LCS Dup (5102803-BSD1)</b>				Prepared & Analyzed: 28-Oct-15						
Sulfate	20.4	10.0	mg/L	20.0		102	80-120	4.77	20	

**Batch 5102805 - General Prep - Wet Chem**

<b>Blank (5102805-BLK1)</b>				Prepared & Analyzed: 28-Oct-15						
Chloride	ND	4.00	mg/L							
<b>LCS (5102805-BS1)</b>				Prepared & Analyzed: 28-Oct-15						
Chloride	104	4.00	mg/L	100		104	80-120			
<b>LCS Dup (5102805-BSD1)</b>				Prepared & Analyzed: 28-Oct-15						
Chloride	104	4.00	mg/L	100		104	80-120	0.00	20	

**Batch 5110411 - NO PREP**

<b>LCS (5110411-BS1)</b>				Prepared & Analyzed: 04-Nov-15						
Conductivity	524		uS/cm	500		105	80-120			
<b>Duplicate (5110411-DUP1)</b>				Source: H502768-01		Prepared & Analyzed: 04-Nov-15				
Conductivity	717	1.00	uS/cm		712			0.700	20	

**Batch 5110412 - General Prep - Wet Chem**

<b>LCS (5110412-BS1)</b>				Prepared & Analyzed: 04-Nov-15						
pH	7.12		pH Units	7.00		102	90-110			

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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
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**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**

<b>Duplicate (5110412-DUP1)</b>		<b>Source: H502768-01</b>			<b>Prepared &amp; Analyzed: 04-Nov-15</b>					
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
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**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 &amp; 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 &amp; 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 &amp; 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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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

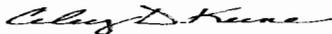
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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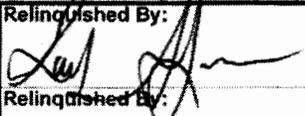
Celey D. Keene, Lab Director/Quality Manager

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

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

Company Name: <b>DWL</b>		<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																				
Project Manager:		P.O. #:				<div style="writing-mode: vertical-rl; transform: rotate(180deg);">Cation / Anion</div>																				
Address:		Company:																								
City: State: Zip:		Attn:																								
Phone #: Fax #:		Address:																								
Project #: Project Owner:		City:																								
Project Name: <b>McLoy Ranch House</b>		State: Zip:																								
Project Location: <b>Lea County, NM</b>		Phone #:																								
Sampler Name: <b>Luis Aguirre</b>		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												
<b>H502768</b>		<b>well water</b>		<b>G</b>	<b>1</b>							<b>10/23/15</b>		<b>1:30</b>												

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Relinquished By: 		Date: <b>10/23/15</b>		Received By: <b>Jodi Stenson</b>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Time: <b>7:45</b>		Date:		Received By:		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Fax #:	
Relinquished By:		Date:		Received By:		REMARKS: <b>mbrandon @ oilfield water logistics. com</b>			
Time:		Date:		Received By:					
Delivered By: (Circle One)				Sample Condition		CHECKED BY:			
Sampler - UPS - Bus - Other:				Cool Intact		Initials			
				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

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