

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1810596

Date Reported:

CLIENT: John Shomaker & Assoc.

Client Sample ID: First Swab Run

Project: Enduring Resources

Collection Date: 10/9/2018 8:37:00 AM

Lab ID: 1810596-001

Matrix: AQUEOUS

Received Date: 10/10/2018 12:40:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: MRA
Fluoride	ND	0.50		mg/L	5	10/10/2018 7:01:11 PM	R54788
Chloride	27	2.5		mg/L	5	10/10/2018 7:01:11 PM	R54788
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	10/10/2018 7:01:11 PM	R54788
Bromide	ND	0.50		mg/L	5	10/10/2018 7:01:11 PM	R54788
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	10/10/2018 7:01:11 PM	R54788
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	10/10/2018 7:01:11 PM	R54788
Sulfate	460	10	*	mg/L	20	10/10/2018 7:13:35 PM	R54788
SM2510B: SPECIFIC CONDUCTANCE							Analyst: MRA
Conductivity	1300	5.0		µmhos/c	1	10/11/2018 2:57:17 PM	R54833
SM2540C MOD: TOTAL DISSOLVED SOLIDS							Analyst: KS
Total Dissolved Solids	820	100	*D	mg/L	1	10/15/2018 4:39:00 PM	40981
SM4500-H+B / 9040C: PH							Analyst: MRA
pH	8.22		H	pH units	1	10/11/2018 2:57:17 PM	R54833
EPA METHOD 200.7: METALS							Analyst: JLF
Calcium	15	1.0		mg/L	1	10/16/2018 6:57:32 PM	40970
Magnesium	4.5	1.0		mg/L	1	10/16/2018 6:57:32 PM	40970
Potassium	9.3	1.0		mg/L	1	10/16/2018 6:57:32 PM	40970
Sodium	270	10		mg/L	10	10/16/2018 6:59:21 PM	40970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

## Analytical Report

Lab Order 1810596

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: John Shomaker &amp; Assoc.

Client Sample ID: First Formation

Project: Enduring Resources

Collection Date: 10/9/2018 11:52:00 AM

Lab ID: 1810596-002

Matrix: AQUEOUS

Received Date: 10/10/2018 12:40:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Fluoride	5.8	0.50	*	mg/L	5	10/10/2018 7:26:00 PM	R54788
Chloride	1400	100	*	mg/L	200	10/12/2018 3:31:22 AM	R54823
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Bromide	1.5	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	10/10/2018 7:26:00 PM	R54788
Phosphorus, Orthophosphate (As P)	ND	10		mg/L	20	10/10/2018 7:38:25 PM	R54788
Sulfate	6100	100	*	mg/L	200	10/12/2018 3:31:22 AM	R54823
<b>SM2510B: SPECIFIC CONDUCTANCE</b>							Analyst: <b>MRA</b>
Conductivity	13000	10		µmhos/c	2	10/15/2018 3:53:19 PM	R54896
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	10200	200	*D	mg/L	1	10/15/2018 4:39:00 PM	40981
<b>SM4500-H+B / 9040C: PH</b>							Analyst: <b>MRA</b>
pH	7.93		H	pH units	1	10/11/2018 3:01:50 PM	R54833
<b>EPA METHOD 200.7: METALS</b>							Analyst: <b>JLF</b>
Calcium	1100	100		mg/L	100	10/16/2018 7:07:08 PM	40970
Magnesium	72	10		mg/L	10	10/16/2018 7:03:08 PM	40970
Potassium	320	10		mg/L	10	10/16/2018 7:03:08 PM	40970
Sodium	3300	100		mg/L	100	10/16/2018 7:07:08 PM	40970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 2 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

## Analytical Report

Lab Order 1810596

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: John Shomaker &amp; Assoc.

Client Sample ID: Final Swab Run

Project: Enduring Resources

Collection Date: 10/9/2018 3:15:00 PM

Lab ID: 1810596-003

Matrix: AQUEOUS

Received Date: 10/10/2018 12:40:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>MRA</b>
Fluoride	6.1	0.50	*	mg/L	5	10/10/2018 7:50:49 PM	R54788
Chloride	950	100	*	mg/L	200	10/12/2018 3:43:47 AM	R54823
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	10/10/2018 7:50:49 PM	R54788
Bromide	0.72	0.50		mg/L	5	10/10/2018 7:50:49 PM	R54788
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	10/10/2018 7:50:49 PM	R54788
Phosphorus, Orthophosphate (As P)	ND	10		mg/L	20	10/10/2018 8:03:14 PM	R54788
Sulfate	6500	100	*	mg/L	200	10/12/2018 3:43:47 AM	R54823
<b>SM2510B: SPECIFIC CONDUCTANCE</b>							Analyst: <b>MRA</b>
Conductivity	13000	10		µmhos/c	2	10/15/2018 3:57:20 PM	R54896
<b>SM2540C MOD: TOTAL DISSOLVED SOLIDS</b>							Analyst: <b>KS</b>
Total Dissolved Solids	9980	200	*D	mg/L	1	10/15/2018 4:39:00 PM	40981
<b>SM4500-H+B / 9040C: PH</b>							Analyst: <b>MRA</b>
pH	7.66		H	pH units	1	10/11/2018 3:05:50 PM	R54833
<b>EPA METHOD 200.7: METALS</b>							Analyst: <b>JLF</b>
Calcium	260	100		mg/L	100	10/16/2018 7:10:47 PM	40970
Magnesium	16	10		mg/L	10	10/16/2018 7:08:55 PM	40970
Potassium	84	10		mg/L	10	10/16/2018 7:08:55 PM	40970
Sodium	3300	100		mg/L	100	10/16/2018 7:10:47 PM	40970

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 3 of 0
	D	Sample Diluted Due to Matrix	E	Value above quantitation range	
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range	
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit	
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified	

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

CONDITIONS

Action 300687

CONDITIONS

Operator: NEW MEXICO ENERGY MINERALS & NATURAL RESOURCE 1220 S St Francis Dr Santa Fe , NM 87504	OGRID: 264235
	Action Number: 300687
	Action Type: [IM-SD] Well File Support Doc (ENG) (IM-AWF)

CONDITIONS

Created By	Condition	Condition Date
pgoetze	None	1/7/2024