



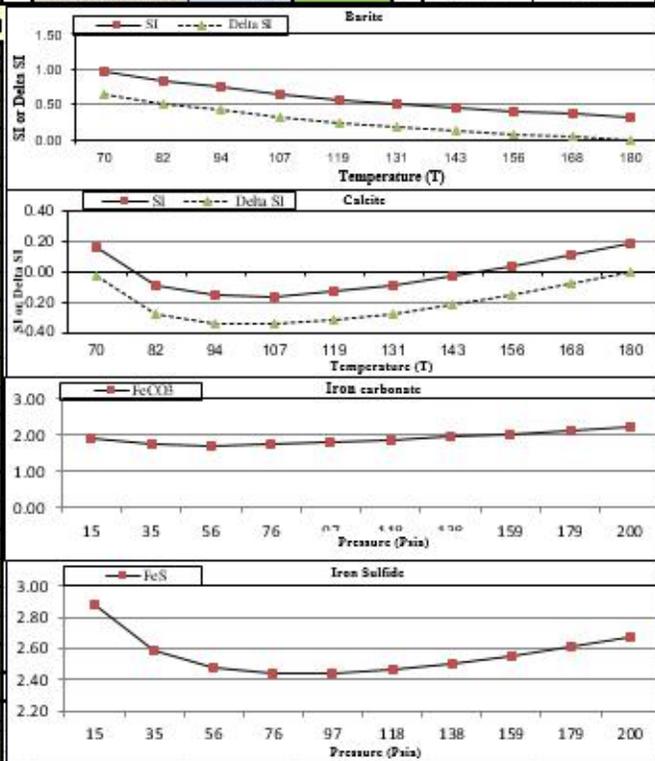
1465 East 1650 south Vernal UT 84078 (435) 789-2069 www.nalco.com

### Water Analysis Report

<b>Field :</b> San Juan Basin	<b>Sample Date :</b> 12/7/2010
<b>County :</b> Atlatnic D Com 206	<b>Formation :</b>
<b>Lab ID :</b>	<b>Depth :</b>
<b>Comments :</b> Mn= 0.74 ppm	<b>Analysed Date:</b> 7/20/2020

CATIONS	mg/l	Measured	Calculated	ANIONS	mg/l	
Potassium	42.7	Total Dissolve Solid	301.90	0.00	Sulfate	60.0
Sodium	1,672.9	Total Hardness	301.90	0.00	Chloride	4,500.0
Calcium	96.4	PH	7.00	0.00	Carbonate	0.0
Magnesium	14.8	Total H2S aq	2.00	0.00	Bicarbonate	910.0
Iron	94.1	Manganese	0.12		Bromide	0.0
Barium	2.0	PO4 Residual	0.00		Organic Acids	0.0
Strontium	8.0	SRB Vials Turned	0.00		Hydroxide	0.0
<b>SUM +</b>	<b>1,931.0</b>	APB Vials Turned	0.00		<b>SUM -</b>	<b>5,470.0</b>

Initial(BH)	Final(VH)
<b>saturation Index value</b>	
<b>Calcite (CaCO<sub>3</sub>)</b>	
0.19	0.16
<b>Barite (BaSO<sub>4</sub>)</b>	
0.32	0.96
<b>Halite (NaCl)</b>	
-3.89	-3.83
<b>Gypsum</b>	
-2.08	-2.16
<b>Hemihydrate</b>	
-2.45	-2.94
<b>Anhydrite</b>	
-1.85	-2.45
<b>Celestite</b>	
-1.42	-1.58
<b>Iron Sulfide</b>	
2.68	2.88
<b>Zinc Sulfide</b>	
9.11	10.53
<b>Calcium fluoride</b>	
0.00	0.00
<b>Iron Carbonate</b>	
2.22	1.93
<b>Inhibitor needed (mg/l)</b>	
<b>Calcite</b>	<b>NTMP</b>
0.00	0.00
<b>Barite</b>	<b>BHPMP</b>
0.00	0.00



Lab Manager: Andrea Craig  
Analysis by: