



30-045-34609

Element Analysis

Attention: **Randall Anderson**

Customer: **ConocoPhillips Company (1500363)**

Location Code: **14293**

Region: **San Juan Basin Field**

Batch ID: **130709121158-21-SDEA**

Location: **Allison Lease**

Sample ID: **AA33923**

System: **Production System**

Collection Date: **06/25/2013**

Equipment: **Well Allison Unit 41M**

Receive Date: **07/09/2013**

Lab ID: **ABU-0021**

Report Date: **07/12/2013**

Sample Point: **Wellhead**

Analysis	Result (mg/L)
Sulfate	30.30
Chloride	433.7
Magnesium	1.554
Calcium	74.19
Strontium	1.428
Barium	7.978
Phosphorus	<
Manganese	0.487
Iron	19.02

RCVD JUL 18 '13
OIL CONS. DIV.
DIST. 3

Comments:

third party, or use the contents of it for any purpose other than the purpose for which it was intended by Champion

07/15/2013

Pag

NALCO Champion

An Ecolab Company

ConocoPhillips

Water Analysis Report

ALLISON UNIT 41M

Formation: DK,MV
Field: San Juan Basin

Sample Location: Wellhead

Sample Date: 5/14/2013
Analysis Date: 6/17/2013

Cations

Calcium	39.2	mg/L
Magnesium	5.0	mg/L
Sodium	1834.5	mg/L
Barium	0.0	mg/L
Manganese	0.8	mg/L
Strontium	2.6	mg/L
Iron	72.8	mg/L

Dissolved Gases

Hydrogen Sulfide	2.00	mg/L
Carbon Dioxide	168.00	mg/L

Gas Analysis

Hydrogen Sulfide	2.50	ppm
Partial Pressure	0.00	psi
Carbon Dioxide	9.00	%
Partial Pressure	15.66	psi

Anions

Carbonate	0.0	mg/L
Bicarbonate	610.0	mg/L
Sulfate	1560.0	mg/L
Chloride	1409.0	mg/L

Other Properties

pH	7.30
Specific Gravity	1.006
Conductivity	7694 μ mho/cm
TDS	4924 mg/L

System Parameters

Temperature	64.0 °F
Pressure	174 psi

Organic Acid Analysis

Malonic Acid	Propionic Acid
Succinic Acid	Butyric Acid
Glycolic Acid	Isobutyric Acid
Formic Acid	
Acetic Acid	

Temperature (°F)	Saturation Index					PTB Value				
	CaCO ₃	BaSO ₄	CaSO ₄	SrSO ₄	FeS	CaCO ₃	BaSO ₄	CaSO ₄	SrSO ₄	FeS
70.00	-0.37	0.42	-1.17	-0.70	2.86	0.00	0.03	0.00	0.00	7.50
80.00	-0.30	0.32	-1.17	-0.70	2.86	0.00	0.02	0.00	0.00	7.50
90.00	-0.23	0.24	-1.17	-0.70	2.87	0.00	0.02	0.00	0.00	7.50
100.00	-0.16	0.16	-1.17	-0.69	2.88	0.00	0.01	0.00	0.00	7.50
110.00	-0.08	0.09	-1.16	-0.69	2.90	0.00	0.01	0.00	0.00	7.50
120.00	-0.01	0.03	-1.15	-0.67	2.92	0.00	0.00	0.00	0.00	7.50
130.00	0.07	-0.03	-1.14	-0.66	2.95	8.95	0.00	0.00	0.00	7.50
140.00	0.15	-0.08	-1.13	-0.64	2.98	18.26	0.00	0.00	0.00	7.50
150.00	0.22	-0.12	-1.12	-0.62	3.01	27.02	0.00	0.00	0.00	7.50
160.00	0.30	-0.16	-1.11	-0.59	3.05	35.20	0.00	0.00	0.00	7.50
170.00	0.38	-0.19	-1.09	-0.56	3.09	42.78	0.00	0.00	0.00	7.50
180.00	0.46	-0.22	-1.07	-0.53	3.14	49.72	0.00	0.00	0.00	7.50
190.00	0.54	-0.24	-1.06	-0.50	3.18	56.04	0.00	0.00	0.00	7.50
200.00	0.62	-0.26	-1.04	-0.46	3.24	61.73	0.00	0.00	0.00	7.50

ALLISON UNIT 41M

Sample Date: 5/14/2013

Sample Location: Wellhead

Analysis Date: 6/17/2013

