



Water Analysis Report

10/20/2009

Address:

Customer: Conoco Phillips

Attention: Kenny Kidd

CC: M. Baker, Corey Hodnett

Lease: EVGSAU

Formation:

Salesman: Mike Baker

Target Name: EVGSAU 3202-S07

Sample Point: EVGSAU 3202-S07

Sample Date: 10/09/2009

Test Date: 10/20/2009

Water Analysis(mg/L)

Calcium	88
Magnesium	29
Barium	
Strontium	
Sodium(calc.)	111
Bicarbonate Alkalinity	281
Sulfate	25
Chloride	230
Resistivity	8.3770

Appended Data(mg/L)

CO2	40
H2S	17
Iron	0
Oxygen	

Physical Properties

Ionic Strength(calc.)	0.02
pH(calc.)	5.67
Temperature(°F)	90
Pressure(psia)	50
Density	8.33

Additional Data

Specific Gravity	1.00
Total Dissolved Solids(Mg/L)	764
Total Hardness(CaCO3 Eq Mg/)	339

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

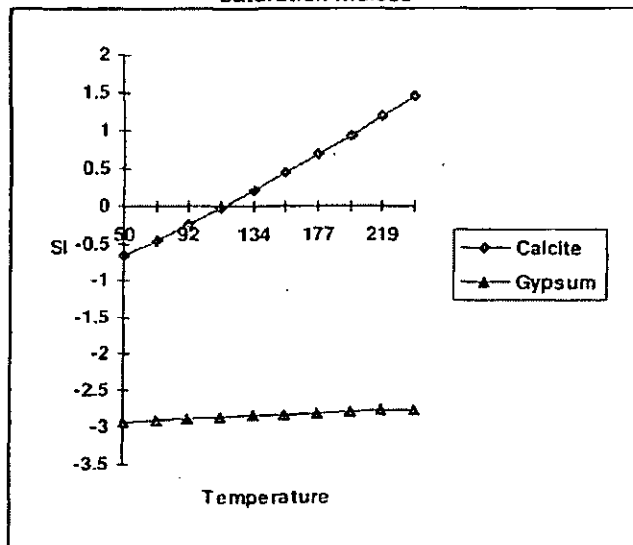
Calculation Method	Value
CO2 in Brine(mg/L)	40

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	-0.27	
Gypsum (Calcium Sulfate)	-2.88	
Hemihydrate (Calcium Sulfate)	-2.63	
Anhydrite (Calcium Sulfate)	-3.13	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.66	-0.46	-0.25	-0.03	0.20	0.44	0.68	0.93	1.19	1.46
Gypsum	-2.93	-2.90	-2.88	-2.86	-2.84	-2.82	-2.80	-2.78	-2.77	-2.75

Lab Tech.: *[Signature]*

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Exhibit No. 22

Submitted by:

CONOCOPHILLIPS COMPANY

Hearing Date: March 7, 2013



Water Analysis Report

10/20/2009

Address:

Customer: Conoco Phillips

Attention: Kenny Kidd

CC: M. Baker, Corey Hodnett

Lease: EVGSAU

Formation:

Salesman: Mike Baker

Target Name: EVGSAU 2864-S02

Sample Point: EVGSAU 2864-S02

Sample Date: 10/09/2009

Test Date: 10/20/2009

Water Analysis(mg/L)

Calcium	40
Magnesium	413
Barium	
Strontium	
Sodium(calc.)	
Bicarbonate Alkalinity	281
Sulfate	68
Chloride	121
Resistivity	

Appended Data(mg/L)

CO2	20
H2S	0
Iron	0
Oxygen	

Additional Data

Specific Gravity	
Total Dissolved Solids(Mg/L)	
Total Hardness(CaCO3 Eq Mg/)	1793

Physical Properties

Ionic Strength(calc.)	0.04
pH(calc.)	7.16
Temperature(°F)	90
Pressure(psia)	50
Density	

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

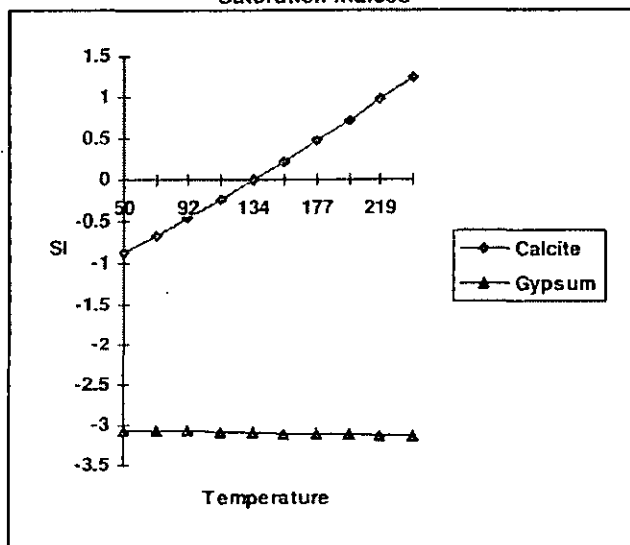
Calculation Method	Value
CO2 in Brine(mg/L)	20

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	-0.48	
Gypsum (Calcium Sulfate)	-3.07	
Hemihydrate (Calcium Sulfate)	-2.84	
Anhydrite (Calcium Sulfate)	-3.32	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.88	-0.67	-0.46	-0.24	-0.01	0.22	0.47	0.72	0.98	1.24
Gypsum	-3.07	-3.07	-3.07	-3.08	-3.09	-3.10	-3.10	-3.11	-3.12	-3.13

Lab Tech.: *[Signature]*



Water Analysis Report

10/20/2009

Address:

Customer: Conoco Phillips

Attention: Kenny Kidd

CC: M. Baker, Corey Hodnett

Lease: EVGSAU

Formation:

Salesman: Mike Baker

Target Name: EVGSAU 2060-S01

Sample Point: EVGSAU 2060-S01

Sample Date: 10/09/2009

Test Date: 10/20/2009

Water Analysis(mg/L)

Calcium	64
Magnesium	29
Barium	
Strontium	
Sodium(calc.)	78
Bicarbonate Alkalinity	220
Sulfate	62
Chloride	145
Resistivity	10.7023

Appended Data(mg/L)

CO2	10
H2S	0
Iron	0
Oxygen	

Physical Properties

Ionic Strength(calc.)	0.01
pH(calc.)	7.44
Temperature(°F)	90
Pressure(psi)	50
Density	8.33

Additional Data

Specific Gravity	1.00
Total Dissolved Solids(Mg/L)	598
Total Hardness(CaCO3 Eq Mg/	279

Dew Point	
Lead	
Zinc	

Calcite Calculation Information

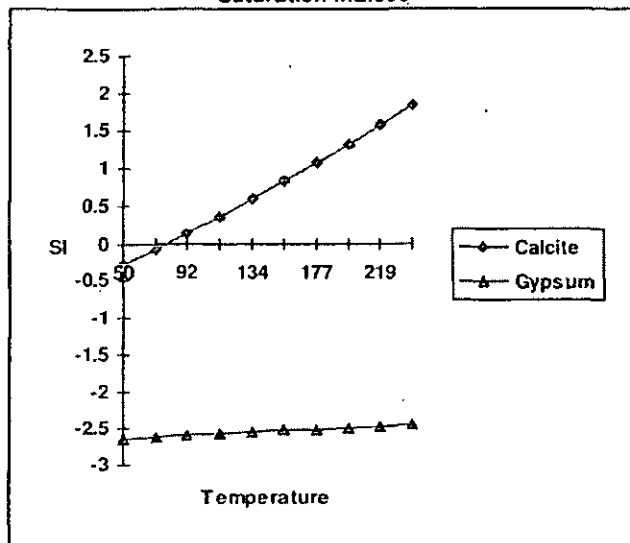
Calculation Method	Value
CO2 in Brine(mg/L)	10

Remarks:

SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	0.11	7.00
Gypsum (Calcium Sulfate)	-2.59	
Hemihydrate (Calcium Sulfate)	-2.32	
Anhydrite (Calcium Sulfate)	-2.84	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)		

Saturation Indices



Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.28	-0.08	0.13	0.35	0.58	0.82	1.06	1.31	1.57	1.84
Gypsum	-2.63	-2.61	-2.59	-2.57	-2.55	-2.53	-2.51	-2.49	-2.47	-2.46

Lab Tech.: *[Signature]*