

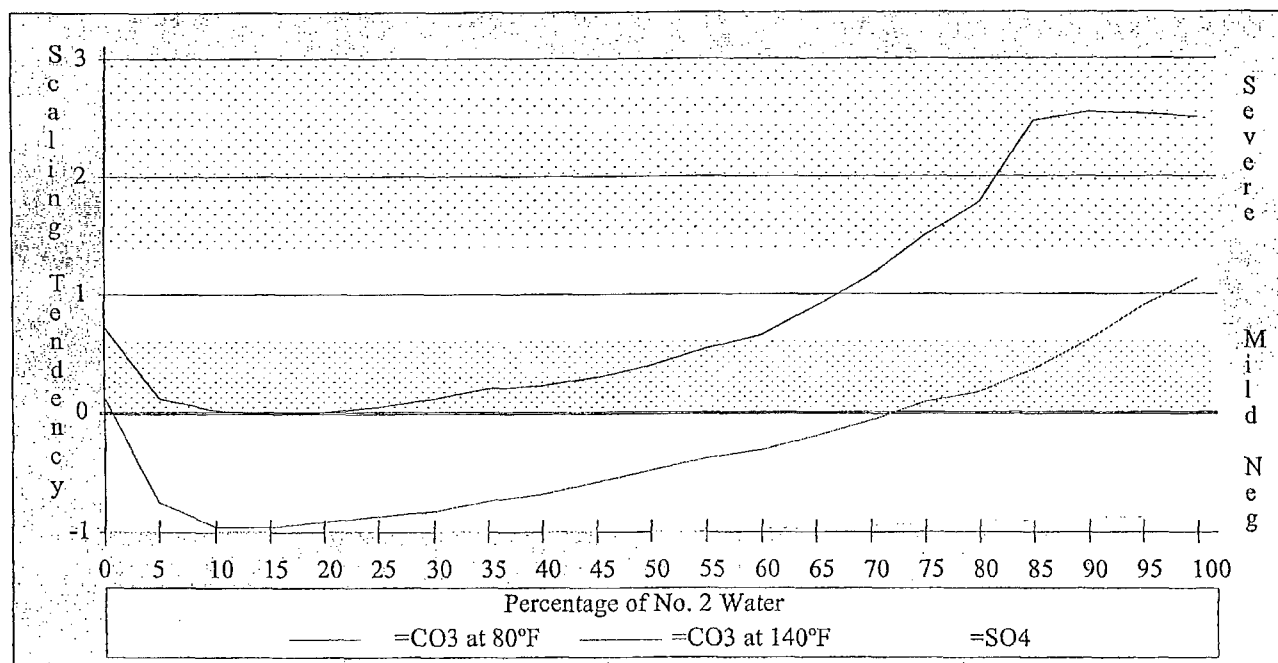
Comparison Between Two Waters

Requested by: Pro-Kem, Inc.

Sample No. 1
Celero Energy
Recovery Water

Sample No. 2
Celero Energy
Produced Water

Percent of #1 & #2	pH	TDS	SpGr	CaCO ₃ Saturation @80°F. @140°F.		Calcium Sulfate Scaling Potential
100 - 00	7.100	468	1.009	0.133	0.733	Nil
95 - 05	7.070	15,378	1.019	-0.751	0.109	Nil
90 - 10	7.040	30,289	1.029	-0.960	0.010	Nil
85 - 15	7.010	45,199	1.038	-0.952	-0.012	Nil
80 - 20	6.980	60,109	1.048	-0.908	0.002	Nil
75 - 25	6.950	75,020	1.058	-0.873	0.047	Nil
70 - 30	6.920	89,930	1.068	-0.823	0.107	Nil
65 - 35	6.890	104,840	1.077	-0.742	0.193	Nil
60 - 40	6.860	119,751	1.087	-0.679	0.226	Nil
55 - 45	6.830	134,661	1.097	-0.592	0.298	Nil
50 - 50	6.800	149,572	1.107	-0.480	0.400	Nil
45 - 55	6.770	164,482	1.116	-0.382	0.538	Nil
40 - 60	6.740	179,392	1.126	-0.307	0.653	Nil
35 - 65	6.710	194,303	1.136	-0.196	0.904	Nil
30 - 70	6.680	209,213	1.146	-0.067	1.153	Nil
25 - 75	6.650	224,123	1.155	0.080	1.500	Nil
20 - 80	6.620	239,034	1.165	0.175	1.785	Nil
15 - 85	6.590	253,944	1.175	0.367	2.467	Nil
10 - 90	6.560	268,854	1.185	0.608	2.548	Nil
05 - 95	6.530	283,765	1.194	0.898	2.528	Nil
00 - 100	6.500	298,675	1.204	1.125	2.505	Nil



Oil Conservation Division

Case No.

Exhibit No. 34

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : **Celero Energy**
 Lease :
 Well No.: **Fresh Water**
 Location:
 Attention:

Date Sampled : **17-August-2007**
 Date Analyzed: **23-August-2007**
 Lab ID Number: **Aug2307.003- 2**
 Salesperson :
 File Name : **aug2307.003**

ANALYSIS

1. Ph 7.100
2. Specific Gravity 60/60 F. 1.009
3. CACO3 Saturation Index

@ 80F
 @140F

0.133 Mild
 0.733 Moderate

Dissolved Gasses

4. Hydrogen Sulfide
5. Carbon Dioxide
6. Dissolved Oxygen

Not Present
 Not Determined
 Not Determined

MG/L. EQ. WT. *MEQ/L

Cations

7. Calcium (Ca++)
8. Magnesium (Mg++)
9. Sodium (Na+) (Calculated)
10. Barium (Ba++)

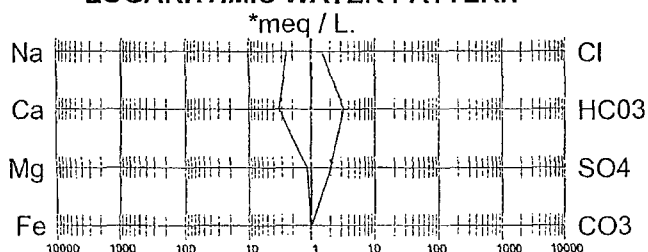
63 / 20.1 = 3.13
 13 / 12.2 = 1.07
 54 / 23.0 = 2.35
 Not Determined

Anions

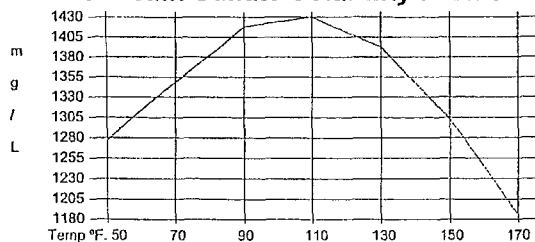
11. Hydroxyl (OH-)
12. Carbonate (CO3=)
13. Bicarbonate (HCO3-)
14. Sulfate (SO4=)
15. Chloride (Cl-)
16. Total Dissolved Solids
17. Total Iron (Fe)
18. Manganese (Mn++)
19. Total Hardness as CaCO3
20. Resistivity @ 75 F. (Calculated)

0 / 17.0 = 0.00
 0 / 30.0 = 0.00
 193 / 61.1 = 3.16
 95 / 48.8 = 1.95
 50 / 35.5 = 1.41
 468
 2.00 / 18.2 = 0.11
 Not Determined
 208
 2.462 Ohm · meters

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	*meq/L	X	EQ. WT. =	mg/L.
Ca(HCO3)2	3.13		81.04	254
CaSO4	0.00		68.07	0
CaCl2	0.00		55.50	0
Mg(HCO3)2	0.02		73.17	2
MgSO4	1.04		60.19	63
MgCl2	0.00		47.62	0
NaHCO3	0.00		84.00	0
NaSO4	0.91		71.03	64
NaCl	1.41		58.46	82

* milliequivalents per Liter

Kevin Byrne, Analyst

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : **Celero**
 Lease : **Rock Queen**
 Well No.: **84**
 Location:
 Attention:

Date Sampled : **17-July-2007**
 Date Analyzed: **20-July-2007**
 Lab ID Number: **Jul2307.004- 1**
 Salesperson :
 File Name : **jul2307.004**

ANALYSIS

1. Ph 6.500
2. Specific Gravity 60/60 F. 1.204
3. CACO3 Saturation Index @ 80F
- @140F

1.125 Moderate
 2.505 Severe

Dissolved Gasses

4. Hydrogen Sulfide
5. Carbon Dioxide
6. Dissolved Oxygen

	MG/L.	EQ. WT.	*MEQ/L
4. Hydrogen Sulfide	Not Present		
5. Carbon Dioxide	300		
6. Dissolved Oxygen	Not Determined		

Cations

7. Calcium (Ca++)
8. Magnesium (Mg++)
9. Sodium (Na+) (Calculated)
10. Barium (Ba++)

	1,876	/ 20.1 =	93.33
	5,310	/ 12.2 =	435.25
	107,113	/ 23.0 =	4,657.09
	Not Determined		

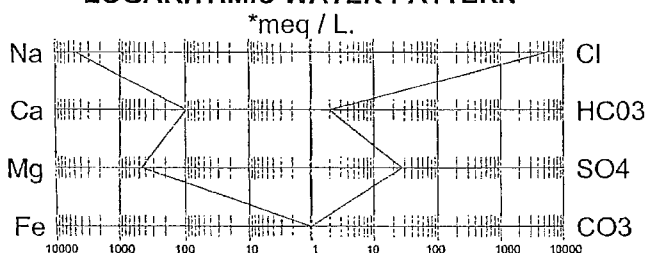
Anions

11. Hydroxyl (OH-)
12. Carbonate (CO3=)
13. Bicarbonate (HCO3-)
14. Sulfate (SO4=)
15. Chloride (Cl-)
16. Total Dissolved Solids
17. Total Iron (Fe)
18. Manganese (Mn++)
19. Total Hardness as CaCO3
20. Resistivity @ 75 F. (Calculated)

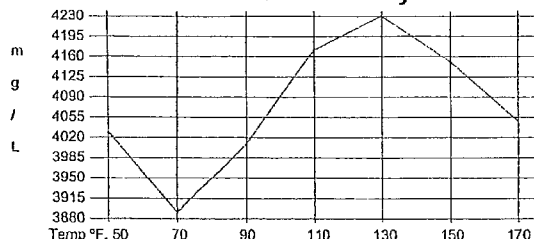
	0	/ 17.0 =	0.00
	0	/ 30.0 =	0.00
	117	/ 61.1 =	1.91
	1,300	/ 48.8 =	26.64
	182,959	/ 35.5 =	5,153.77
	298,675		
	11.50	/ 18.2 =	0.63
	Not Determined		
	26,544		

0.001 Ohm · meters

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	*meq/L	X	EQ. WT. =	mg/L.
Ca(HCO3)2	1.91		81.04	155
CaSO4	26.64		68.07	1,813
CaCl2	64.78		55.50	3,595
Mg(HCO3)2	0.00		73.17	0
MgSO4	0.00		60.19	0
MgCl2	435.25		47.62	20,726
NaHCO3	0.00		84.00	0
NaSO4	0.00		71.03	0
NaCl	4,653.75		58.46	272,058

* milliequivalents per Liter

Kevin Byrne, Analyst

Report Date: June 14, 2007
2972Work Order: 7052432
Celero Energy-Rock Queen ESAPage Number: 1 of 1
Chaves Co. NM

Summary Report

Ike Tavarez
Highlander Environmental Services
1910 N. Big Spring Street
Midland, TX, 79705

Report Date: June 14, 2007

Work Order: 7052432

Project Location: Chaves Co. NM
Project Name: Celero Energy-Rock Queen ESA
Project Number: 2972

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
125351	Water Well 31-13-31	water	2007-05-22	00:00	2007-05-23

Location: Sec. 35(F), T13S, R31E CM

Sample: 125351 - Water Well 31-13-31

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCo3	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCo3	1.00
Bicarbonate Alkalinity		152	mg/L as CaCo3	4.00
Total Alkalinity		152	mg/L as CaCo3	4.00
Dissolved Calcium		63.5	mg/L	0.500
Chloride		32.1	mg/L	0.500
Specific Conductance		546	uMHOS/cm	0.00
Fluoride		<1.00	mg/L	0.200
Dissolved Potassium		1.98	mg/L	0.500
Dissolved Magnesium		8.79	mg/L	0.500
Dissolved Sodium		28.5	mg/L	0.500
Nitrate-N		4.10	mg/L	0.200
pH		7.83	s.u.	0.00
Sulfate		43.6	mg/L	0.500
Total Dissolved Solids		327.0	mg/L	10.00

