

Pro-Kem, Inc.

WATER ANALYSIS REPORT

COPY

SAMPLE

Oil Co.: DKD
Lease: Snyder
Well No.: # 1
Location:
Attention:

Date Sampled: 17-September-2004
Date Analyzed: 21-September-2004
Lab ID Number: Sep2104.001- 2
Salesperson:

File Name: F:\ANALYSES\SEP2104.001

ANALYSIS

- | | |
|------------------------------|--------------|
| 1. Ph | 6.020 |
| 2. Specific Gravity 60/60 F. | 1.138 |
| 3. CACO3 Saturation Index | @ 80F 0.267 |
| | @ 140F 1.487 |

Dissolved Gasses

- | | MG/L. | EQ. WT. | *MEQ/L |
|---------------------|----------------|---------|--------|
| 4. Hydrogen Sulfide | 30 | | |
| 5. Carbon Dioxide | 135 | | |
| 6. Dissolved Oxygen | Not Determined | | |

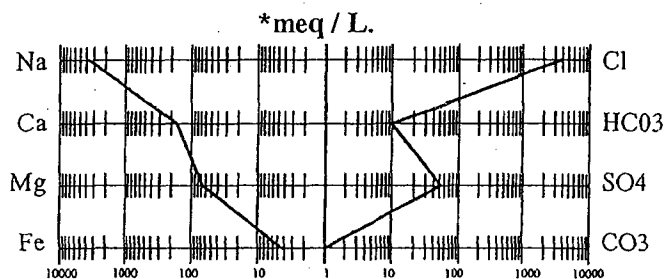
Cations

- | | | | | |
|--------------|--------------------|----------------|----------|----------|
| 7. Calcium | (Ca++) | 3,206 | / 20.1 = | 159.50 |
| 8. Magnesium | (Mg++) | 790 | / 12.2 = | 64.75 |
| 9. Sodium | (Na+) (Calculated) | 80,475 | / 23.0 = | 3,498.91 |
| 10. Barium | (Ba++) | Not Determined | | |

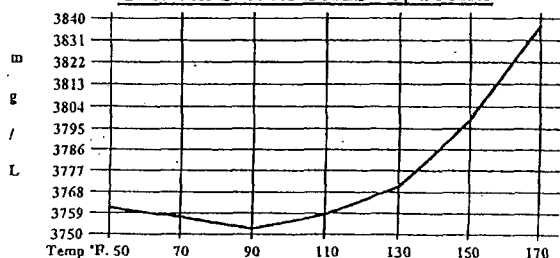
Anions

- | | | | | |
|--------------------------------------|---------|--------------------|----------|----------|
| 11. Hydroxyl | (OH+) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate | (CO3=) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate | (HCO3-) | 576 | / 61.1 = | 9.43 |
| 14. Sulfate | (SO4=) | 2,400 | / 48.8 = | 49.18 |
| 15. Chloride | (Cl-) | 129,971 | / 35.5 = | 3,661.15 |
| 16. Total Dissolved Solids | | 217,418 | | |
| 17. Total Iron | (Fe) | 74 | / 18.2 = | 4.07 |
| 18. Total Hardness as CaCO3 | | 11,260 | | |
| 19. Resistivity @ 75 F. (Calculated) | | 0.001 Ohm · meters | | |

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L =	mg/L.
Ca(HCO3)2	81.04		9.43	764
CaSO4	68.07		49.18	3,348
CaCl2	55.50		100.89	5,600
Mg(HCO3)2	73.17		0.00	0
MgSO4	60.19		0.00	0
MgCl2	47.62		64.75	3,084
NaHCO3	84.00		0.00	0
NaSO4	71.03		0.00	0
NaCl	58.46		3,495.51	204,347



Pro-Kem, Inc.

WATER ANALYSIS REPORT

COPY

SAMPLE

Oil Co.: DKD
Lease: Snyder "A"
Well No.: # 1
Location:
Attention:

Date Sampled: 20-January-2005
Date Analyzed: 24-January-2005
Lab ID Number: Jan2405.002- 1
Salesperson:

File Name: F:\ANALYSES\Jan2405.002

ANALYSIS

1.	Ph	6.050
2.	Specific Gravity 60/60 F.	1.123
3.	CACO3 Saturation Index	@ 80F 0.005
		@ 140F 0.945

Dissolved Gases

	MG/L.	EQ. WT.	*MEQ/L
4. Hydrogen Sulfide	0		
5. Carbon Dioxide	280		
6. Dissolved Oxygen	Not Determined		

Cations

7.	Calcium	(Ca++)	3,206	/ 20.1 =	159.50
8.	Magnesium	(Mg++)	1,641	/ 12.2 =	134.51
9.	Sodium	(Na+) (Calculated)	62,421	/ 23.0 =	2,713.96
10.	Barium	(Ba++)	Not Determined		

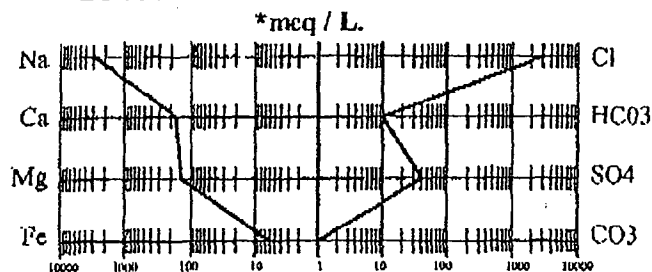
Anions

11.	Hydroxyl	(OH+)	0	/ 17.0 =	0.00
12.	Carbonate	(CO3=)	0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO3-)	586	/ 61.1 =	9.59
14.	Sulfate	(SO4=)	1,900	/ 48.8 =	38.93
15.	Chloride	(Cl-)	104,976	/ 35.5 =	2,957.07
16.	Total Dissolved Solids		174,730		
17.	Total Iron	(Fe)	102	/ 18.2 =	5.58
18.	Total Hardness as CaCO3		14,763		
19.	Resistivity @ 75 F. (Calculated)		0.018 Ohm · meters		

PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L	=	mg/L.
Ca(HCO3)2	81.04		9.59		777
CaSO4	68.07		38.93		2,650
CaCl2	55.50		110.98		6,159
Mg(HCO3)2	73.17		0.00		0
MgSO4	60.19		0.00		0
MgCl2	47.62		134.51		6,405
NaHCO3	84.00		0.00		0
NaSO4	71.03		0.00		0
NaCl	58.46		2,711.58		158,519

LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile

