

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co.: BK Exploration
 Lease: Pardue '34' # 3
 Well No.: Middle Drilling Pit
 Location: 30-015-33513
 Attention:

Date Sampled: 01-September-2004
 Date Analyzed: 02-September-2004
 Lab ID Number: Sep0204.002- 2
 Salesperson:

File Name: F:\ANALYSES\SEP0204.002

ANALYSIS

1. pH 5.300
2. Specific Gravity 60/60 F. 1.178
3. CACO3 Saturation Index @ 80F 1.153
 @140F 2.253

Dissolved Gasses

4. Hydrogen Sulfide Not Present
5. Carbon Dioxide Not Determined
6. Dissolved Oxygen Not Determined

Cations

			MG/L	EQ. WT.	*MEQ/L
7.	Calcium (Ca++)		24,850	/ 20.1 =	1,236.32
8.	Magnesium (Mg++)		4,559	/ 12.2 =	373.69
9.	Sodium (Na+) (Calculated)		73,223	/ 23.0 =	3,183.61
10.	Barium (Ba++)		1	/ 68.7 =	0.01

Anions

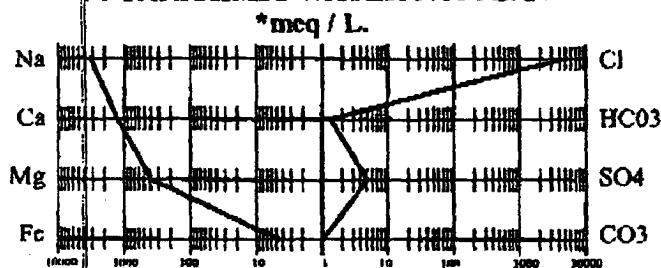
11.	Hydroxyl (OH+)		0	/ 17.0 =	0.00
12.	Carbonate (CO3=)		0	/ 30.0 =	0.00
13.	Bicarbonate (HCO3-)		78	/ 61.1 =	1.28
14.	Sulfate (SO4=)		230	/ 48.8 =	4.71
15.	Chloride (Cl-)		169,962	/ 35.5 =	4,787.66
16.	Total Dissolved Solids		272,903		
17.	Total Iron (Fe)		81	/ 18.2 =	4.42
18.	Total Hardness as CaCO3		80,822		
19.	Resistivity @ 75 F. (Calculated)		0.001	Ohm · meters	

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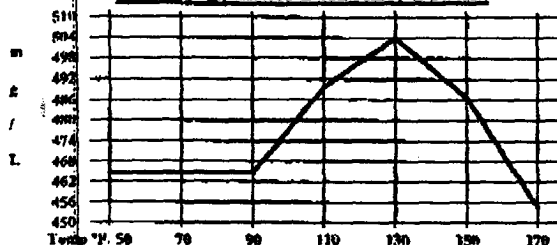
LOGARITHMIC WATER PATTERN



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L =	mg/L.
Ca(HCO3)2	81.04	1.28		103
CaSO4	68.07	4.70		320
CaCl2	55.50	1,230.34		68,284
Mg(HCO3)2	73.17	0.00		0
MgSO4	60.19	0.00		0
MgCl2	47.62	373.69		17,795
NaHCO3	84.00	0.00		0
NaSO4	71.03	0.00		0
NaCl	58.46	3,183.63		186,115

Calcium Sulfate Solubility Profile



Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : BK Exploration
 Lease : Pardue '34' # 3
 Well No.: East Drilling Pit
 Location:
 Attention:

Date Sampled : 01-September-2004
 Date Analyzed: 02-September-2004
 Lab ID Number: Sep0204.002- 3
 Salesperson :

File Name : F:\ANALYSES\SEP0204.002

ANALYSIS

1. Ph 5.900
2. Specific Gravity 60/60 F. 1.208
3. CaCO3 Saturation Index @ 80F 2.742
 @140F 2.842

Dissolved Gases

4. Hydrogen Sulfide Not Present
5. Carbon Dioxide Not Determined
6. Dissolved Oxygen Not Determined

Cations

		MG/L.	EQ. WT.	*MEQ/L
7.	Calcium (Ca++)	25,852	/ 20.1 =	1,286.17
8.	Magnesium (Mg++)	4,255	/ 12.2 =	348.77
9.	Sodium (Na+) (Calculated)	83,022	/ 23.0 =	3,609.65
10.	Barium (Ba++)	2	/ 68.7 =	0.03

Anions

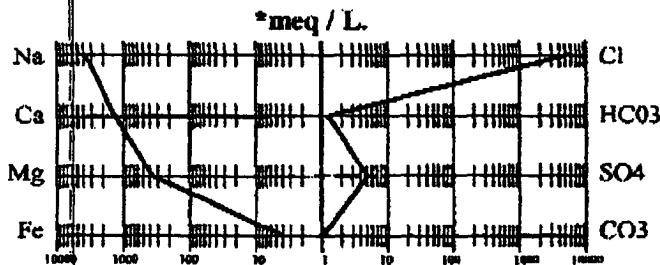
11.	Hydroxyl (OH+)	0	/ 17.0 =	0.00
12.	Carbonate (CO3=)	0	/ 30.0 =	0.00
13.	Bicarbonate (HCO3-)	73	/ 61.1 =	1.19
14.	Sulfate (SO4=)	235	/ 48.8 =	4.82
15.	Chloride (Cl-)	185,958	/ 35.5 =	5,238.25
16.	Total Dissolved Solids	299,397		
17.	Total Iron (Fe)	68	/ 18.2 =	3.71
18.	Total Hardness as CaCO3	82,073		
19.	Resistivity @ 75 F. (Calculated)	0.001 Ohm · meters		

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Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L =	mg/L
Ca(HCO3)2	81.04	1.19		97
CaSO4	68.07	4.79		326
CaCl2	55.50	1,280.19		71,050
Mg(HCO3)2	73.17	0.00		0
MgSO4	60.19	0.00		0
MgCl2	47.62	348.77		16,608
NaHCO3	84.00	0.00		0
NaSO4	71.03	0.00		0
NaCl	58.46	3,609.30		210,999

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : BK Exploration
 Lease : Pardue '34' # 3
 Well No.: West Drilling Pit
 Location:
 Attention:

Date Sampled : 01-September-2004
 Date Analyzed: 02-September-2004
 Lab ID Number: Sep0204.002- 1
 Salesperson :

File Name : F:\ANALYSES\SEP0204.002

ANALYSIS

- | | |
|------------------------------|--------------|
| 1. PH | 8.400 |
| 2. Specific Gravity 60/60 F. | 1.173 |
| 3. CaCO3 Saturation Index | @ 80F 4.822 |
| | @ 140F 6.202 |

Dissolved Gasses

- | | |
|---------------------|----------------|
| 4. Hydrogen Sulfide | Not Present |
| 5. Carbon Dioxide | Not Determined |
| 6. Dissolved Oxygen | Not Determined |

Cations

- | | | | | |
|--------------|--------------------|--------|----------|----------|
| 7. Calcium | (Ca++) | 25,751 | / 20.1 = | 1,281.14 |
| 8. Magnesium | (Mg++) | 3,890 | / 12.2 = | 318.85 |
| 9. Sodium | (Na+) (Calculated) | 70,352 | / 23.0 = | 3,058.78 |
| 10. Barium | (Ba++) | 4 | / 68.7 = | 0.06 |

Anions

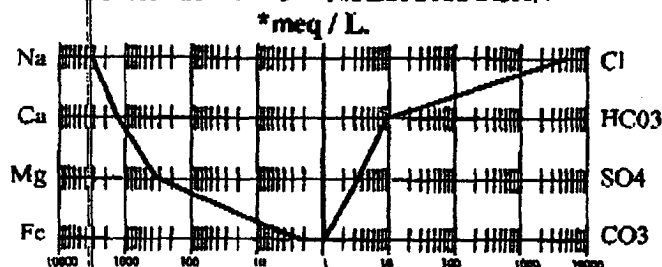
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|--------------------------------------|---------|--------------------|----------|----------|
| 11. Hydroxyl | (OH+) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate | (CO3=) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate | (HCO3-) | 537 | / 61.1 = | 8.79 |
| 14. Sulfate | (SO4=) | 160 | / 48.8 = | 3.28 |
| 15. Chloride | (Cl-) | 164,963 | / 35.5 = | 4,646.85 |
| 16. Total Dissolved Solids | | 265,657 | | |
| 17. Total Iron | (Fe) | 39 | / 18.2 = | 2.14 |
| 18. Total Hardness as CaCO3 | | 80,322 | | |
| 19. Resistivity @ 75 F. (Calculated) | | 0.001 Ohm · meters | | |

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LOGARITHMIC WATER PATTERN



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L =	mg/L.
Ca(HCO3)2	81.04		8.79	712
CaSO4	68.07		3.22	219
CaCl2	55.50		1,269.13	70,437
Mg(HCO3)2	73.17		0.00	0
MgSO4	60.19		0.00	0
MgCl2	47.62		318.85	15,184
NaHCO3	84.00		0.00	0
NaSO4	71.03		0.00	0
NaCl	58.46		3,058.86	178,821

Calcium Sulfate Solubility Profile

