

Bachman Production Specialties, Inc.

307 C Street, Airport Addition
Great Bend, Kansas 67530

Phone: (620-792-2549

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WATER ANALYSIS REPORT

Company: Lebsack Oil Production
Source: Foster D #1

Date Sampled: 9-26-02

Date Analyzed: 10-1-02

pH:	7.00	Total Dissolved Solids (mg/L):	112,254
Dissolved H ₂ S:	0		
Dissolved CO ₂ :	0	Total Ionic Strength:	2.069
Specific Gravity:	1.060	Resistivity @ 75°F(Ohm-Meters):	0.0706
Density, (lbs/gal):	8.84		

	mg/L	Meq/L
Anions		
Bicarbonate:	165	3
Chloride:	66,804	1,882
Sulfate:	2,048	43
Cations		
Calcium:	3,633	182
Magnesium:	612	50
Sodium:	38,993	1,695
Barium:	0	
Strontium:	0	
Total Hardness:	11,600	
Total Dissolved Iron:	0.0	
Ferrous Iron:	Not Determined	

PROBABLE MINERAL COMPOSITION

182 Ca	3 HCO ₃
50 Mg	43 SO ₄
1,695 Na	1,882 Cl

Saturation Values
In Distilled Water @ 20°C

CaCO ₃	13 mg/L
CaSO ₄ * 2H ₂ O	2,090 mg/L
MgCO ₃	103 mg/L

	Meq/L	mg/L
Calcium Bicarbonate:	3	219
Calcium Sulfate:	43	2,904
Calcium Chloride:	136	7,564
Magnesium Bicarbonate:	0	0
Magnesium Sulfate:	0	0
Magnesium Chloride:	50	2,388
Sodium Bicarbonate:	0	0
Sodium Sulfate:	0	0
Sodium Chloride:	1,695	99,111

Remarks

0

Hydro  *Par*

BACHMAN PRODUCTION SPECIALTIES, Inc.

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Phone 620-792-2540
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WATER ANALYSIS REPORT

Company: Lebsack Oil Production
Source: Foster D #1

Date Sampled: 1-2-02
Date Analyzed: 1-4-02

pH: 6.50 Total Dissolved Solids (mg/L): 125,669
Dissolved H₂S:
Dissolved CO₂:
Specific Gravity: 1.08 Total Ionic Strength: 2.353261
Density (lbs/gal): 9.0072

	mg/L	Meq/L
Anions		
Bicarbonate:	0	0
Chloride:	75,739	2,133
Sulfate:	1,568	33
Cations		
Calcium:	5,443	272
Magnesium:	727	60
Sodium:	42,191	1,834
Barium:	0	
Strontium:	0	
Total Hardness:	16,600	
Total Iron:	6.0	
Ferrous Iron:	0.0	

PROBABLE MINERAL COMPOSITION

		Meq/L	mg/L
272 Ca	0 HCO ₃		
60 Mg	33 SO ₄		
1,834 Na	2,133 Cl		
	Calcium Bicarbonate:	0	0
	Calcium Sulfate:	33	2,246
	Calcium Chloride:	239	13,265
	Magnesium Bicarbonate:	0	0
	Magnesium Sulfate:	0	0
	Magnesium Chloride:	60	2,857
	Sodium Bicarbonate:	0	0
	Sodium Sulfate:	0	0
	Sodium Chloride:	1,834	107,216

Saturation Values
In Distilled Water @ 20 C

CaCO ₃	13 mg/L
CaSO ₄ * 2H ₂ O	2,090 mg/L
MgCO ₃	103 mg/L

Remarks: