



# ANNUAL REPORT OF PRESSURE MONITORING, FLUID INJECTION AND ENHANCED RECOVERY

Complete all blanks - add pages if needed. Copy to be retained for five (5) years after filing date.

OPERATOR: License # \_\_\_\_\_  
Name: \_\_\_\_\_  
Address 1: \_\_\_\_\_  
Address 2: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Phone: ( \_\_\_\_\_ ) \_\_\_\_\_  
Lease Name: \_\_\_\_\_  
Well Number: \_\_\_\_\_

API No.: \_\_\_\_\_  
Permit No.: \_\_\_\_\_  
Reporting Year: \_\_\_\_\_  
(January 1 to December 31)  
\_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_ Sec. \_\_\_\_ Twp. \_\_\_\_ S. R. \_\_\_\_  E  W  
(a/a/a/a)  
\_\_\_\_\_ feet from  N /  S Line of Section  
\_\_\_\_\_ feet from  E /  W Line of Section  
County: \_\_\_\_\_

### I. Injection Fluid:

Type (Pick one):  Fresh Water  Treated Brine  Untreated Brine  Water/Brine  
Source:  Produced Water  Other (Attach list)  
Quality: Total Dissolved Solids: \_\_\_\_\_ mg/l Specific Gravity: \_\_\_\_\_ Additives: \_\_\_\_\_  
(Attach water analysis, if available)

### II. Well Data:

Maximum Authorized Injection Pressure: \_\_\_\_\_ psi Injection Zone: \_\_\_\_\_  
Maximum Authorized Injection Rate: \_\_\_\_\_ barrels per day  
Total Number of Enhanced Recovery Injection Wells Covered by this Permit: \_\_\_\_\_ (Include TA's)

III.	Month:	Total Fluid Injected BBL	Maximum Fluid Pressure	Total Gas Injected MCF	Maximum Gas Pressure	# Days of Injection
	January	_____	_____	_____	_____	_____
	February	_____	_____	_____	_____	_____
	March	_____	_____	_____	_____	_____
	April	_____	_____	_____	_____	_____
	May	_____	_____	_____	_____	_____
	June	_____	_____	_____	_____	_____
	July	_____	_____	_____	_____	_____
	August	_____	_____	_____	_____	_____
	September	_____	_____	_____	_____	_____
	October	_____	_____	_____	_____	_____
	November	_____	_____	_____	_____	_____
	December	_____	_____	_____	_____	_____
	<b>TOTAL</b>	_____	_____	_____	_____	_____

**Bachman Production Specialties, Inc.**

307 C Street, Airport Addition  
Great Bend, Kansas 67530

Phone: (620-792-2549)  
Fax: (620-792-1412)

**WATER ANALYSIS REPORT**

Company: Zetetic  
Source: Gupton

Date Sampled: 4-2-09  
Date Analyzed: 4-7-09

pH:	7.00	Total Dissolved Solids (mg/L):	37,658
Dissolved H <sub>2</sub> S:	0		
Dissolved CO <sub>2</sub> :	15	Total Ionic Strength:	0.724
Specific Gravity:	1.020	Resistivity @ 75°F(Ohm-Meters):	0.18
Density, (lbs/gal):	8.51		

	mg/L	Meq/L
<b>Anions</b>		
Bicarbonate:	366	6
Chloride:	22,126	623
Sulfate:	800	17
<b>Cations</b>		
Calcium:	2,509	125
Magnesium:	128	11
Sodium:	11,729	510
Barium:	0	
Strontium:	0	
Total Hardness:	6,800	
Total Dissolved Iron:	0.0	
Ferrous Iron:	Not Determined	

**PROBABLE MINERAL COMPOSITION**

125 Ca	6 HCO <sub>3</sub>		
11 Mg	17 SO <sub>4</sub>	Meq/L	mg/L
510 Na	623 Cl		
<b>Saturation Values</b>			
In Distilled Water @ 20°C			
CaCO <sub>3</sub>	13 mg/L	Calcium Bicarbonate:	6 486
CaSO <sub>4</sub> * 2H <sub>2</sub> O	2,090 mg/L	Calcium Sulfate:	17 1,135
MgCO <sub>3</sub>	103 mg/L	Calcium Chloride:	103 5,703
		Magnesium Bicarbonate:	0 0
		Magnesium Sulfate:	0 0
		Magnesium Chloride:	11 502
		Sodium Bicarbonate:	0 0
		Sodium Sulfate:	0 0
		Sodium Chloride:	510 29,813

Remarks  
0



P. 2

Bachman Production Specialties, Inc.

Phone: (620) 792-2549

### Scale Deposition Potential Analysis

Company: Zetetic  
Source: Gupton

Date Sampled: 4-2-09  
Date Analyzed: 4-7-09

#### Brine Composition

pH:	7.00	Ca, mg/L:	2,509	Total Hardness, mg/L:	6,800
Specific Gravity:	1.020	Mg, mg/L:	128	Total Dissolved Solids, mg/L:	37,658
HCO <sub>3</sub> , mg/L:	366	Na, mg/L:	11,729	Total Ionic Strength:	0.724
Cl, mg/L:	22,126	Ba, mg/L:	0	Total Dissolved Iron, mg/L:	0.0
SO <sub>4</sub> , mg/L:	800	Sr, mg/L:	0		

#### Calcium Carbonate Scale Indices

					Specified Temperatures	
Temperature, °F:	75	100	125	150	80	140
Stiff-Davis Index:	0.19	0.48	0.85	1.32	0.24	1.15
Deposition, lbs/1,000 Bbls:	80.0	145.9	181.6	199.4	96.7	194.5

#### Calcium Sulfate Scale Indices

					Specified Temperatures	
Temperature, °F:	75	100	125	150	80	140
Supersaturation Ratio:	0.407	0.406	0.409	0.419	0.407	0.415
Deposition, lbs/1,000 Bbls:	-577.9	-581.4	-573.6	-549.9	-579.1	-560.5

#### Barium Sulfate Scale Indices

					Specified Temperatures	
Temperature, °F:	75	100	125	150	80	140
Supersaturation Ratio:	0.000	0.000	0.000	0.000	0.000	0.000
Deposition, lbs/1,000 Bbls:	-0.1	-0.1	-0.1	-0.2	-0.1	-0.2



Brine Water Analysis Software