

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form U3C  
June 2015  
Form must be Typed  
Form must be completed  
on a per well basis

**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>	_____	_____	_____	_____	_____

**STAABCO CHEMICAL, INC.**P.O. Box D  
Plainville, KS 67663Phone: (785) 737-6141  
Fax: (785) 434-2529**WATER ANALYSIS REPORT**Company: Abundant Oil  
Source: Marcotte #3Date Sampled: September 7, 2018  
Date Analyzed: September 9, 2018

pH:	7.00	Total Dissolved Solids (mg/L):	71,247
Dissolved H <sub>2</sub> S:	1		
Dissolved CO <sub>2</sub> :	0	Total Ionic Strength:	1.334
Specific Gravity:	1.040		
Density, (lbs/gal):	8.67		

		mg/L	Meq/L
<b>Anions</b>			
	Sulfide	44.8	44.8
	Bicarbonate:	305	5
	Chloride:	42,000	1,183
	Sulfate:	1,600	33
<b>Cations</b>			
	Calcium:	3,200	160
	Magnesium:	317	26
	Sodium:	23,815	1,035
	Barium:	9	
	Strontium:	0	
	Total Hardness:	3,720	
	Total Dissolved Iron:	0	
	Ferrous Iron:	Not Determined	

**PROBABLE MINERAL COMPOSITION**

		Meq/L	mg/L
160 Ca	5 HCO <sub>3</sub>		
26 Mg	33 SO <sub>4</sub>		
1,035 Na	1,183 Cl		
<b>Saturation Values</b>			
In Distilled Water @ 20°C			
CaCO <sub>3</sub>	13 mg/L	Calcium Bicarbonate:	5 405
CaSO <sub>4</sub> * 2H <sub>2</sub> O	2,090 mg/L	Calcium Sulfate:	33 2,269
MgCO <sub>3</sub>	103 mg/L	Calcium Chloride:	122 6,753
		Magnesium Bicarbonate:	0 0
		Magnesium Sulfate:	0 0
		Magnesium Chloride:	26 1,238
		Sodium Bicarbonate:	0 0
		Sodium Sulfate:	0 0
		Sodium Chloride:	1,035 60,532

**COMMENTS:**

# STAABCO CHEMICAL, INC.

P.O. Box D  
Plainville, KS 67663

Phone: (785) 737-6141  
Fax: (785) 434-2529

## Scale Deposition Potential Analysis

Company: Abundant Oil  
Source: Marcotte #3

Date Sampled: September 7, 2018  
Date Analyzed: September 9, 2018

### Brine Composition

pH:	7.00	Ca, mg/L:	3,200	Total Hardness, mg/L:	3,720
Specific Gravity:	1.040	Mg, mg/L:	317	Total Dissolved Solids, mg/L:	71,247
HCO <sub>3</sub> , mg/L:	305	Na, mg/L:	23,815	Total Ionic Strength:	1.334
Cl, mg/L:	42,000	Ba, mg/L:	9	Total Dissolved Iron, mg/L:	0.0
SO <sub>4</sub> , mg/L:	1,600	Sr, mg/L:	0		

### Calcium Carbonate Scale Indices

					Specified Temperatures	
Temperature, °F:	75	100	125	150	110	130
Stiff-Davis Index:	0.13	0.40	0.78	1.27	0.54	0.88
Deposition, lbs/1,000 Bbls:	41.6	103.7	144.4	165.0	122.3	150.6

### Calcium Sulfate Scale Indices

					Specified Temperatures	
Temperature, °F:	75	100	125	150	110	130
Supersaturation Ratio:	0.64	0.64	0.65	0.66	0.64	0.65
Deposition, lbs/1,000 Bbls:	-451.3	-449.1	-432.1	-408.9	-443.9	-428.1

### Barium Sulfate Scale Indices

					Specified Temperatures	
Temperature, °F:	75	100	125	150	110	130
Supersaturation Ratio:	93.39	85.08	57.59	38.55	71.44	52.29
Deposition, lbs/1,000 Bbls:	5.3	5.3	5.3	5.2	5.3	5.3

⊙ Return To Main Menu

