

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>	_____	_____	_____	_____	_____



**DownHole SAT®**  
**SURFACE WATER CHEMISTRY INPUT**

Falcon Exploration  
GRC  
Tim Schiffelbein

Supply Well

Report Date: 02-20-2017    Sampled: 01-24-2017  
Sample #: 1621                      at 1616

**CATIONS**

Calcium (as Ca)                      118.40  
Magnesium (as Mg)                    23.80  
Barium (as Ba)                        0.00  
Strontium (as Sr)                      7.43  
Sodium (as Na)                        76745  
Iron (as Fe)                            3.10  
Manganese (as Mn)                    0.100

**ANIONS**

Chloride (as Cl)                      120000  
Sulfate (as SO<sub>4</sub>)                      450.00  
Dissolved CO<sub>2</sub> (as CO<sub>2</sub>)            30.00  
Bicarbonate (as HCO<sub>3</sub>)            12.20  
Carbonate (as CO<sub>3</sub>)                   0.00  
H<sub>2</sub>S (as H<sub>2</sub>S)                        0.00

**PARAMETERS**

Calculated T.D.S.                      188624  
Molar Conductivity                    311459  
Resistivity                              3.21  
Sp.Gr.(g/mL)                            1.13  
Pressure(psia)                          30.00  
pCO<sub>2</sub>(atm)                              0.00341  
pH<sub>2</sub>S(atm)                              0.00  
Temperature (°F)                        72.00  
pH    6.00

**COMMENTS**

Analyst: Davida Lowery

**ROCKWATER ENERGY SOLUTIONS**  
**7906 West Highway 80, Midland, TX 79706**



**DownHole SAT®**  
**SURFACE WATER**  
**DEPOSITION POTENTIAL INDICATORS**

Falcon Exploration  
GRC  
Tim Schiffelbein

Supply Well

Report Date: 02-20-2017    Sampled: 01-24-2017  
Sample #: 1621                      at 1616

**SATURATION LEVEL**

Calcite (CaCO <sub>3</sub> )	< 0.001
Aragonite (CaCO <sub>3</sub> )	< 0.001
Witherite (BaCO <sub>3</sub> )	0.00
Strontianite (SrCO <sub>3</sub> )	< 0.001
Magnesite (MgCO <sub>3</sub> )	< 0.001
Anhydrite (CaSO <sub>4</sub> )	0.00691
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	0.00911
Barite (BaSO <sub>4</sub> )	0.00
Celestite (SrSO <sub>4</sub> )	0.0110
Siderite (FeCO <sub>3</sub> )	0.0106
Halite (NaCl)	0.169
Iron sulfide (FeS)	0.00

**MOMENTARY EXCESS (Lbs/1000 Barrels)**

Calcite (CaCO <sub>3</sub> )	-0.831
Aragonite (CaCO <sub>3</sub> )	-0.949
Witherite (BaCO <sub>3</sub> )	-27.06
Strontianite (SrCO <sub>3</sub> )	-6.84
Magnesite (MgCO <sub>3</sub> )	-2.90
Anhydrite (CaSO <sub>4</sub> )	-1424
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	-1386
Barite (BaSO <sub>4</sub> )	-0.272
Celestite (SrSO <sub>4</sub> )	-210.51
Siderite (FeCO <sub>3</sub> )	-0.0603
Halite (NaCl)	-93518
Iron sulfide (FeS)	-1.02

**SIMPLE INDICES**

Langelier	-3.06
Ryznar	12.12
Puckorius	12.27
Larson-Skold Index	18942
Stiff Davis Index	-3.15
Oddo-Tomson	-3.96

**BOUND IONS**

Calcium	118.40
Barium	0.00
Carbonate	0.210
Sulfate	450.00

**TOTAL**

**FREE**

116.03
0.00
< 0.001
245.93

**OPERATING CONDITIONS**

Temperature (°F)	72.00
Time(mins)	3.00

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