

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<sup>®</sup>**  
**SURFACE WATER CHEMISTRY INPUT**

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Falcon Exploration  
 Jossierand                              Supply Well  
 Tim Schiffelbein

Report Date:    02-20-2017    Sampled:    01-24-2017  
 Sample #:        1622                              at    1616

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**CATIONS**

Calcium (as Ca)	64.90
Magnesium (as Mg)	17.30
Barium (as Ba)	0.00
Strontium (as Sr)	3.68
Sodium (as Na)	69810
Iron (as Fe)	3.10
Manganese (as Mn)	0.100

**ANIONS**

Chloride (as Cl)	108000
Sulfate (as SO <sub>4</sub> )	1212
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.	172139
Molar Conductivity	279279
Resistivity	3.58
Sp.Gr.(g/mL)	1.11
Pressure(psia)	30.00
pCO <sub>2</sub> (atm)	0.00133
pH <sub>2</sub> S(atm)	0.00
Temperature (°F)	72.00
pH	6.70

**COMMENTS**

Analyst: Davida Lowery

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

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

Falcon Exploration  
Josserand  
Tim Schiffelbein

Supply Well

Report Date: 02-20-2017    Sampled: 01-24-2017  
Sample #: 1622                      at 1616

**SATURATION LEVEL**

Calcite (CaCO <sub>3</sub> )	0.00177
Aragonite (CaCO <sub>3</sub> )	0.00154
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> )	0.0101
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	0.0136
Barite (BaSO <sub>4</sub> )	0.00
Celestite (SrSO <sub>4</sub> )	0.0167
Siderite (FeCO <sub>3</sub> )	0.0565
Halite (NaCl)	0.136
Iron sulfide (FeS)	0.00

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

Calcite (CaCO <sub>3</sub> )	-1.61
Aragonite (CaCO <sub>3</sub> )	-1.83
Witherite (BaCO <sub>3</sub> )	-26.29
Strontianite (SrCO <sub>3</sub> )	-7.49
Magnesite (MgCO <sub>3</sub> )	-4.08
Anhydrite (CaSO <sub>4</sub> )	-1368
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	-1303
Barite (BaSO <sub>4</sub> )	-0.0888
Celestite (SrSO <sub>4</sub> )	-124.11
Siderite (FeCO <sub>3</sub> )	-0.0552
Halite (NaCl)	-101556
Iron sulfide (FeS)	-0.387

**SIMPLE INDICES**

Langelier	-14.00
Ryznar	14.00
Puckorius	-5.92
Larson-Skold Index	15853
Stiff Davis Index	-2.76
Oddo-Tomson	-3.51

**BOUND IONS**

Calcium	64.90
Barium	0.00
Carbonate	0.793
Sulfate	1212

**TOTAL**

**FREE**

61.51
0.00
0.00504
692.92

**OPERATING CONDITIONS**

Temperature (°F)	72.00
Time(mins)	3.00

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