

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	_____	_____	_____	_____	_____
	TOTAL	_____	_____	_____	_____	_____



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 ₄)	450.00
Dissolved CO ₂ (as CO ₂)	30.00
Bicarbonate (as HCO ₃)	12.20
Carbonate (as CO ₃)	0.00
H ₂ S (as H ₂ 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 ₂ (atm)	0.00341
pH ₂ 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
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Supply Well

Report Date: 02-20-2017 Sampled: 01-24-2017
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SATURATION LEVEL

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

MOMENTARY EXCESS (Lbs/1000 Barrels)

Calcite (CaCO ₃)	-0.831
Aragonite (CaCO ₃)	-0.949
Witherite (BaCO ₃)	-27.06
Strontianite (SrCO ₃)	-6.84
Magnesite (MgCO ₃)	-2.90
Anhydrite (CaSO ₄)	-1424
Gypsum (CaSO ₄ *2H ₂ O)	-1386
Barite (BaSO ₄)	-0.272
Celestite (SrSO ₄)	-210.51
Siderite (FeCO ₃)	-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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