

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>	_____	_____	_____	_____	_____



Baker Hughes  
1625 W Road  
Plainville Kansas, 67663

Report Date: 2/7/2020

### Complete Water Analysis Report SSP v.8

Customer:	Fossil Energy	Sample Date:	2/7/2020
District:	Kansas	Log Out Date:	2/7/2020
Area:	Barton county	Sample ID:	Seifers #2 SWD
Lease:	Seifers #2 Water tank	Analyst:	Bill Foster
Sample Point Name	Bleeder	Chemical Used:	
Sales Rep:	Bill Foster	Comments:	

#### Fossil Energy, Seifers #2 Water tank, Bleeder

Field Data			Analysis of Sample					
			Anions:			Cations:		
			mg/L	meq/L	mg/L	meq/L	mg/L	meq/L
Initial Temperature (°F):	140		Chloride (Cl <sup>-</sup> ):	22000	619.7	Sodium (Na <sup>+</sup> ):	12041	525.8
Final Temperature (°F):	70		Sulfate (SO <sub>4</sub> <sup>2-</sup> ):	50	1.0	Potassium (K <sup>+</sup> ):	0	0.0
Initial Pressure (psi):	15		Borate (H <sub>3</sub> BO <sub>3</sub> ):	0.0	0.0	Magnesium (Mg <sup>2+</sup> ):	454	37.4
Final Pressure (psi):	15		Fluoride (F <sup>-</sup> ):	0.0	0.0	Calcium (Ca <sup>2+</sup> ):	1200	59.9
			Bromide (Br <sup>-</sup> ):	0.0	0.0	Strontium (Sr <sup>2+</sup> ):	0	0.0
pH:			Nitrite (NO <sub>2</sub> <sup>-</sup> ):	0.0	0.0	Barium (Ba <sup>2+</sup> ):	0.0	0.0
pH at time of sampling:	7.1		Nitrate (NO <sub>3</sub> <sup>-</sup> ):	0.0	0.0	Iron (Fe <sup>2+</sup> ):	0.0	0.0
pH at time of analysis:	NA		Phosphate (PO <sub>4</sub> <sup>3-</sup> ):	0.0	0.0	Manganese (Mn <sup>2+</sup> ):	0.00	0.0
pH used in Calcs:	7.1		Silica (SiO <sub>2</sub> ):	0.0	0.0	Lead (Pb <sup>2+</sup> ):	0.00	0.0
						Zinc (Zn <sup>2+</sup> ):	0.0	0.0
Alkalinity by Titration:								
	mg/L	meq/L						
Bicarbonate (HCO <sub>3</sub> <sup>-</sup> ):	545	8.9				Aluminum (Al <sup>3+</sup> ):	0.0	0.0
Carbonate (CO <sub>3</sub> <sup>2-</sup> ):	0	0.0				Chromium (Cr <sup>3+</sup> ):	0.0	0.0
Hydroxide (OH <sup>-</sup> ):	0	0.0				Cobalt (Co <sup>2+</sup> ):	0.0	0.0
			Organic Acids:	mg/L	meq/L			
aqueous CO <sub>2</sub> (ppm):	0.0		Formate:	0.0	0.0	Copper (Cu <sup>2+</sup> ):	0.0	0.0
aqueous H <sub>2</sub> S (ppm):	0.0		Acetate:	0.0	0.0	Molybdenum (Mo <sup>2+</sup> ):	0.0	0.0
aqueous O <sub>2</sub> (ppb):	0.0		Propionate:	0.0	0.0	Nickel (Ni <sup>2+</sup> ):	0.0	0.0
			Butyrate:	0.0	0.0	Tin (Sn <sup>2+</sup> ):	0.0	0.0
Calculated TDS (mg/L):	36290		Valerate:	0.0	0.0	Titanium (Ti <sup>2+</sup> ):	0.0	0.0
Density/Specific Gravity (g/cm <sup>3</sup> ):	1.0250					Vanadium (V <sup>2+</sup> ):	0.0	0.0
Measured Density/Specific Gravity	1					Zirconium (Zr <sup>2+</sup> ):	0.0	0.0
Conductivity (µmhos):	0					Total Hardness:	5200	N/A
MCF/D:	0		Anion/Cation Ratio:		1.01			
BOPD:	0							
BWPD:	0							

Conditions		Barite (BaSO <sub>4</sub> )		Calcite (CaCO <sub>3</sub> )		Gypsum (CaSO <sub>4</sub> ·2H <sub>2</sub> O)		Anhydrite (CaSO <sub>4</sub> )	
Temp	Press.	Index	Amt (PTB)	Index	Amt (PTB)	Index	Amount	Index	Amt (PTB)
70°F	15 psi		0.000	0.87	77.926	-1.82	0.000	-2.09	0.000
78°F	15 psi		0.000	0.94	82.676	-1.82	0.000	-2.06	0.000
86°F	15 psi		0.000	1.00	87.211	-1.82	0.000	-2.03	0.000
93°F	15 psi		0.000	1.07	91.531	-1.82	0.000	-2.00	0.000
101°F	15 psi		0.000	1.13	95.634	-1.82	0.000	-1.96	0.000
109°F	15 psi		0.000	1.20	99.524	-1.82	0.000	-1.92	0.000
117°F	15 psi		0.000	1.26	103.202	-1.81	0.000	-1.89	0.000
124°F	15 psi		0.000	1.33	106.675	-1.81	0.000	-1.85	0.000
132°F	15 psi		0.000	1.39	109.949	-1.80	0.000	-1.80	0.000
140°F	15 psi		0.000	1.45	113.032	-1.79	0.000	-1.76	0.000

Conditions		Celestite (SrSO <sub>4</sub> )		Halite (NaCl)		Iron Sulfide (FeS)		Iron Carbonate (FeCO <sub>3</sub> )	
Temp	Press.	Index	Amt (PTB)	Index	Amt (PTB)	Index	Amt (PTB)	Index	Amt (PTB)
70°F	15 psi		0.000	-2.40	0.000	0	0.000		0.000
78°F	15 psi		0.000	-2.41	0.000	0	0.000		0.000
86°F	15 psi		0.000	-2.42	0.000	0	0.000		0.000
93°F	15 psi		0.000	-2.42	0.000	0	0.000		0.000
101°F	15 psi		0.000	-2.43	0.000	0	0.000		0.000
109°F	15 psi		0.000	-2.44	0.000	0	0.000		0.000
117°F	15 psi		0.000	-2.44	0.000	0	0.000		0.000
124°F	15 psi		0.000	-2.45	0.000	0	0.000		0.000
132°F	15 psi		0.000	-2.45	0.000	0	0.000		0.000
140°F	15 psi		0.000	-2.45	0.000	0	0.000		0.000

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

Note 3: Saturation Index predictions on this sheet use pH and alkalinity; %CO<sub>2</sub> is not included in the calculations.



ScaleSoftPitzer™  
SSP2010

Sample ID: Seifers #2 SWD Fossil Energy, Seifers #2 Water tank, Bleeder

