

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	_____	_____	_____	_____	_____

Submitted Electronically

Complete Water Analysis

Customer: **GREAT PLAINS ENERGY INC**
 Geographic Region: **Kansas**
 Geographic Location: **Decatur County**
 System Description: **Production System**

Equipment Description: **Swede Hollow Injection**
 Sample Point: **Injection**
 Sample ID: **AT02253**
 Account Rep: **Steve.Eckhardt@championx.com**

Collection Date: **02/11/2022**
 Receive Date: **02/22/2022**
 Report Date: **02/25/2022**
 Location Code: **470211**

Field Analysis			Sample Analysis		
<u>Analysis</u>	<u>Result</u>	<u>Analysis Method</u>	<u>Analysis</u>	<u>Result</u>	<u>Analysis Method</u>
Bicarbonate	459 mg/L	Titration	Specific Gravity	1.052	Densitometer
Dissolved CO2	220 mg/L	Titration	Ionic Strength	1.63 mol/L	Calculation
Dissolved H2S	132.6 mg/L	Titration	Total Dissolved Solids	91603.46 mg/L	Calculation
Pressure Surface	10 psi				
Temperature	76 ° F				
pH of Water	6.9	Meter			

Cations - Analyzed By ICP					
Iron	0.320 mg/L	Measured Sodium	33410 mg/L		
Manganese	0.171 mg/L				
Barium	11.97 mg/L				
Strontium	402.4 mg/L				
Calcium	1254 mg/L				
Magnesium	540.6 mg/L				
Sodium	33410.00 mg/L				

Anions - Analyzed By IC		
Chloride	55207 mg/L	
Sulfate	318 mg/L	

Scale Type					
Anhydrite CaSO4 PTB		N/A	Anhydrite CaSO4 SI		-1.63
Barite BaSO4 PTB		6.5	Barite BaSO4 SI		1.08
Calcite CaCO3 PTB		N/A	Calcite CaCO3 SI		-0.48
Celestite SrSO4 PTB		N/A	Celestite SrSO4 SI		-0.05
Gypsum CaSO4 PTB		N/A	Gypsum CaSO4 SI		-1.42
Hemihydrate CaSO4 PTB		N/A	Hemihydrate CaSO4 SI		-1.43

Comments

Scaling predictions calculated using Oddo-Tomson model

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