

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	_____	_____	_____	_____	_____

Customer: **GREAT PLAINS ENERGY INC**
 Region: **Swede Hollow Unit**
 Location: **Decatur, KS**
 System: **Injection**

Equipment: **Injection Plant**
 Sample Point: **Bleeder**
 Sample ID: **AN86589**
 Acct Rep Email: **Steve.Eckhardt@ecolab.com**

Collection Date: **10/08/2019**
 Receive Date: **10/18/2019**
 Report Date: **10/25/2019**
 Location Code: **420714**

Field Analysis

Bicarbonate	468 mg/L	Dissolved CO2	238 mg/L	Dissolved H2S	200.6 mg/L
Pressure Surface	120 psi	Temperature	81 ° F	pH of Water	7.0

Sample Analysis

Conductivity (Calculated)	138770 µS - cm3	Ionic Strength	1.57	Resistivity	0.072 ohms - m
Specific Gravity	1.055	Total Dissolved Solids	88813.48 mg/L		

Cations

Iron	0.695 mg/L	Manganese	0.075 mg/L	Barium	8.079 mg/L
Strontium	32.45 mg/L	Calcium	1144 mg/L	Magnesium	417.5 mg/L
Sodium	32896.68 mg/L				

Anions

Chloride	53592 mg/L	Sulfate	254 mg/L
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Scale Type

Anhydrite CaSO4 PTB	N/A	Anhydrite CaSO4 SI	-1.74
Barite BaSO4 PTB	4.0	Barite BaSO4 SI	0.79
Calcite CaCO3 PTB	N/A	Calcite CaCO3 SI	-0.35
Celestite SrSO4 PTB	N/A	Celestite SrSO4 SI	-1.23
Gypsum CaSO4 PTB	N/A	Gypsum CaSO4 SI	-1.56
Hemihydrate CaSO4 PTB	N/A	Hemihydrate CaSO4 SI	-1.57

Comments

Scaling predictions calculated using Odco-Tomson model

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