

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

Water Analysis Report

Attention: **Michael.Walters@ecolab.com**

Location Code: **375713**

Sample ID: **AK30937**

Login Batch: **2018-02-22-001-LP1**

Collection Date: **02/18/2018**

Receive Date: **02/22/2018**

Report Date: **02/26/2018**

Customer: **Great Plains Energy Inc (1505558)**

Region: **Kansas(KS)**

Location: **Trego County, KS**

System: **Disposal System**

Equipment: **Flax SWD**

Lab ID: **ABU-0055**

Sample Point: **Water Tank**

Analyses	Result	Unit
Dissolved CO2	273	mg/L
Dissolved H2S	35	mg/L
pH	6.8	
Pressure	<.25	psi
Temperature	50	° F

Analyses	Result	Unit
Bicarbonate	503	mg/L
Conductivity (Calculated)	53799	µS - cm3
Ionic Strength	0.66	
Resistivity	0.186	ohms - m
Specific Gravity	1.019	
Total Dissolved Solids	34432.06	mg/L

Cations	Result	Unit
Iron	0.509	mg/L
Manganese	0.038	mg/L
Barium	0.097	mg/L
Strontium	43.40	mg/L
Calcium	1329	mg/L
Magnesium	368.8	mg/L
Sodium	11197.22	mg/L

Anions	Result	Unit
Chloride	18947	mg/L
Sulfate	2043	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.90
Barite BaSO4 PTB	0.0
Barite BaSO4 SI	0.29
Calcite CaCO3 SI	-0.43
Celestite SrSO4 SI	0.00
Gypsum CaSO4 SI	-0.42
Hemihydrate CaSO4 SI	-0.31

Saturation Index Calculation (Tomson-Oddo Model)

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Water Analysis Report

Attention: **Michael.Walters@ecolab.com**

Location Code: **294906**

Sample ID: **AK30938**

Login Batch: **2018-02-22-001-LP1**

Collection Date: **02/18/2018**

Receive Date: **02/22/2018**

Report Date: **02/26/2018**

Customer: **H&M Petroleum Corporation (1508375)**

Region: **Not Available**

Location: **Scott County, KS**

System: **Production System**

Equipment: **Well French #1 SWD**

Lab ID: **ABU-0055**

Sample Point: **Water Tank**

Analyses	Result	Unit
Dissolved CO2	228	mg/L
Dissolved H2S	35	mg/L
pH	7.0	
Pressure	<.25	psi
Temperature	50	° F

Analyses	Result	Unit
Bicarbonate	320	mg/L
Conductivity (Calculated)	89221	µS - cm3
Ionic Strength	1.04	
Resistivity	0.112	ohms - m
Specific Gravity	1.034	
Total Dissolved Solids	57102.02	mg/L

Cations	Result	Unit
Iron	0.211	mg/L
Manganese	0.055	mg/L
Barium	0.050	mg/L
Strontium	26.85	mg/L
Calcium	844.0	mg/L
Magnesium	320.0	mg/L
Sodium	20475.85	mg/L

Anions	Result	Unit
Chloride	30331	mg/L
Sulfate	4784	mg/L

Scale Type	Result
Anhydrite CaSO4 SI	-0.77
Barite BaSO4 PTB	0.0
Barite BaSO4 SI	0.18
Calcite CaCO3 SI	-0.81
Celestite SrSO4 PTB	1.1
Celestite SrSO4 SI	0.03
Gypsum CaSO4 SI	-0.33
Hemihydrate CaSO4 SI	-0.27

Saturation Index Calculation (Tomson-Oddo Model)

Comments

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