

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: Shakespeare Oil Company
 Region: Kansas
 Location: Lane County, KS
 System: Production System

Equipment: Mumma 1 OWWO
 Sample Point: Bleeder
 Sample ID: AO44657
 Acct Rep Email: Michael.Walters@ecolab.com

Collection Date: 02/03/2020
 Receive Date: 02/06/2020
 Report Date: 02/07/2020
 Location Code: 430669

Field Analysis					
Bicarbonate	366 mg/L	Dissolved CO2	211 mg/L	Dissolved H2S	136 mg/L
Pressure Surface	25 psi	Temperature	100 °F	pH of Water	7.5

Sample Analysis					
Conductivity (Calculated)	89048 µS - cm3	Ionic Strength	1.04	Resistivity	0.112 ohms - m
Specific Gravity	1.037	Total Dissolved Solids	56990.56 mg/L		

Cations					
Iron	<0.1 mg/L	Manganese	0.020 mg/L	Barium	0.027 mg/L
Strontium	30.31 mg/L	Calcium	1110 mg/L	Magnesium	400.2 mg/L
Sodium	19720.00 mg/L				

Anions			
Chloride	32118 mg/L	Sulfate	3246 mg/L

Scale Type			
Anhydrite CaSO4 PTB	N/A	Anhydrite CaSO4 SI	-0.52
Barite BaSO4 PTB	N/A	Barite BaSO4 SI	-0.54
Calcite CaCO3 PTB	64.0	Calcite CaCO3 SI	0.35
Celestite SrSO4 PTB	N/A	Celestite SrSO4 SI	-0.06
Gypsum CaSO4 PTB	N/A	Gypsum CaSO4 SI	-0.40
Hemihydrate CaSO4 PTB	N/A	Hemihydrate CaSO4 SI	-0.38

Comments	

Scaling predictions calculated using Oddo-Tomson model

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