

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	_____	_____	_____	_____	_____

Complete Water Analysis

Customer: **SHAKESPEARE OIL COMPANY**
 Geographic Region: **Kansas**
 Geographic Location: **Lane County**
 System Description: **Production System**

Equipment Description: **Mcliesh 3-19**
 Sample Point: **Bleeder**
 Sample ID: **AT00602**
 Account Rep: **Michael.Walters@championx.com**

Collection Date: **02/22/2022**
 Receive Date: **02/23/2022**
 Report Date: **02/24/2022**
 Location Code: **430650**

Field Analysis			Sample Analysis		
Analysis	Result	Analysis Method	Analysis	Result	Analysis Method
Bicarbonate	122.00 mg/L	Titration	Specific Gravity	1.042	Densitometer
Dissolved CO2	246.00 mg/L	Titration	Ionic Strength	1.17 mol/L	Calculation
Dissolved H2S	68.00 mg/L	Titration	Total Dissolved Solids	63266.44 mg/L	Calculation
Pressure Surface	25 psi				
Temperature	100 °F				
pH of Water	7.50	Meter			

Cations - Analyzed By ICP

Iron	0.209 mg/L	Measured Sodium	21670 mg/L
Manganese	0.043 mg/L		
Barium	2.389 mg/L		
Strontium	385.9 mg/L		
Calcium	1611 mg/L		
Magnesium	676.9 mg/L		
Sodium	21670.00 mg/L		

Anions - Analyzed By IC

Chloride	37875 mg/L
Sulfate	923 mg/L

Scale Type

Anhydrite CaSO4 PTB	N/A	Anhydrite CaSO4 SI	-0.92
Barite BaSO4 PTB	1.2	Barite BaSO4 SI	0.82
Calcite CaCO3 PTB	N/A	Calcite CaCO3 SI	0.00
Celestite SrSO4 PTB	148.3	Celestite SrSO4 SI	0.47
Gypsum CaSO4 PTB	N/A	Gypsum CaSO4 SI	-0.81
Hemihydrate CaSO4 PTB	N/A	Hemihydrate CaSO4 SI	-0.80

Comments

Scaling predictions calculated using Oddo-Tomson model

This document contains the confidential and/or proprietary information of ChampionX. The recipient agrees to maintain the confidentiality of the terms of this document, and shall not reproduce it by any means, disclose the contents of it to any third party, or use the contents of it for any purpose other than the purpose for which it was intended by ChampionX.