

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	_____	_____	_____	_____	_____



Cochran Chemical Company, Inc.
 1976 250th Ave.
 Hays, KS 67601

WATER ANALYSIS

COMPANY: Ruda Exploration **LEASE & WELL:** Ruda Estate 2
FIELD: **COUNTY:** Rawlins **STATE:** KS
WATER: 40 **Oil:** 3 **SAMPLE POINT:** Wellhead
 (Bbls/Day) (Bbls/Day)
FORMATION: **DATE SAMPLED:** 6/16/2015

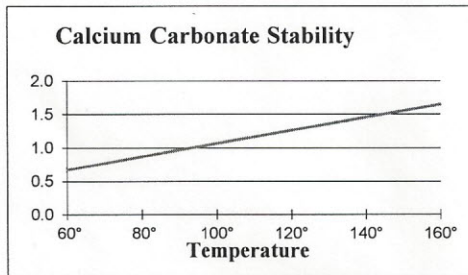
SOLIDS	<i>Cations</i>	me/l	mg/l	<i>Anions</i>	me/l	mg/l
Calcium (Ca)		160.0	3,200	Chloride (Cl)	1,323.9	47,000
Magnesium (Mg)		66.0	800	Bicarbonate (HCO ³)	3.6	220
Sodium (Na)		1,145.5	26,348	Sulfate (SO ₄)	44.0	2,110
Barium (Ba)		0.0	0			
Iron, Total:		0.3	5	Total Dissolved Solids (mg/l):		79,677
Iron, Ferrous:		0.3	5			
Iron, Ferric:		0.0	0			

GASES:	
Oxygen, O ² :	N/A
Carbon Dioxide, CO ² :	25
Hydrogen Sulfide, H ² S:	10.0

Specific Gravity: 1.0398
pH: 7.0

Calcium Carbonate

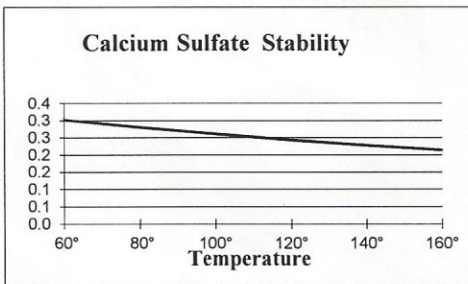
Temp	S.I.
60°	0.67
80°	0.87
100°	1.06
120°	1.26
140°	1.45
160°	1.65



Positive values indicate precipitation.

Calcium Sulfate

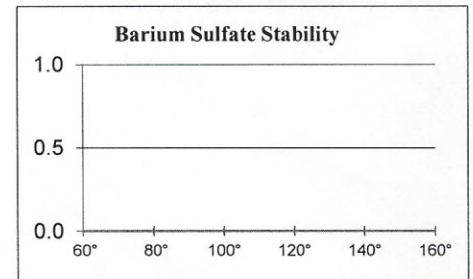
Temp	S.I.
60°	0.30
80°	0.28
100°	0.26
120°	0.24
140°	0.23
160°	0.21



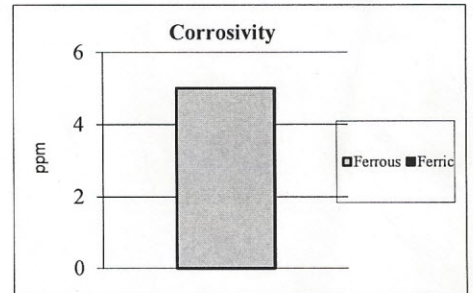
Positive values indicate precipitation.

Barium Sulfate

Temp	S.I.
60°	0.0
80°	0.0
100°	0.0
120°	0.0
140°	0.0
160°	0.0



Positive values indicate precipitation.



Ferric iron is loss due to corrosion.
 Ferrous iron is natural formation iron.

NOTES:

Tested by: Dru Miller