

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



Central Area Laboratory
12701 N. Santa Fe Ave, Suite 151
Oklahoma City, Oklahoma 73114

REPORT DATE: 1/7/2025

COMPLETE WATER ANALYSIS REPORT SSP v.2010

CUSTOMER: US OIL
DISTRICT: KANSAS
AREA/LEASE: POWERS
SAMPLE POINT NAME: POWERS 1-2 SWD
SITE TYPE: WELL SITES
SAMPLE POINT DESCRIPTION: NOT PROVIDED
CUSTOMER SAMPLE POINT ID:

ACCOUNT REP: BRETT J SUTER
SAMPLE ID: 202410007929
SAMPLE DATE: 12/18/2024
ANALYSIS DATE: 1/2/2025
ANALYST: BS/RH

US OIL, POWERS, POWERS 1-2 SWD

FIELD DATA			ANALYSIS OF SAMPLE							
			ANIONS:		mg/L	meq/L	CATIONS:		mg/L	meq/L
Initial Temperature (°F):	80	Chloride (Cl ⁻):			16214.0	457.4	Sodium (Na ⁺):		9788.7	426.0
Final Temperature (°F):	65	Sulfate (SO ₄ ²⁻):			1917.0	39.9	Potassium (K ⁺):		208.8	5.3
Initial Pressure (psi):	100	Borate (H ₃ BO ₃):			94.7	1.5	Magnesium (Mg ²⁺):		379.2	31.2
Final Pressure (psi):	15	Fluoride (F ⁻):			ND		Calcium (Ca ²⁺):		1476.7	73.7
		Bromide (Br ⁻):			ND		Strontium (Sr ²⁺):		45.3	1.0
pH:		Nitrite (NO ₂ ⁻):			ND		Barium (Ba ²⁺):		0.2	0.0
pH at time of sampling:	6.9	Nitrate (NO ₃ ⁻):			ND		Iron (Fe ²⁺):		3.9	0.1
		Phosphate (PO ₄ ³⁻):			0.2	0.0	Manganese (Mn ²⁺):		0.1	0.0
		Silica (SiO ₂):			ND		Lead (Pb ²⁺):		ND	
							Zinc (Zn ²⁺):		0.9	0.0
ALKALINITY BY TITRATION:		mg/L	meq/L							
Bicarbonate (HCO ₃ ⁻):	1080.0	17.7								
Carbonate (CO ₃ ²⁻):	ND									
Hydroxide (OH ⁻):	ND									
			ORGANIC ACIDS:		mg/L	meq/L				
aqueous CO ₂ (ppm):	90.0	Formic Acid:			ND		Molybdenum (Mo ²⁺):		ND	
aqueous H ₂ S (ppm):	15.0	Acetic Acid:			ND		Nickel (Ni ²⁺):		ND	
aqueous O ₂ (ppb):	ND	Propionic Acid:			ND		Tin (Sn ²⁺):		ND	
		Butyric Acid:			ND		Titanium (Ti ²⁺):		ND	
Calculated TDS (mg/L):	31115	Valeric Acid:			ND		Vanadium (V ²⁺):		ND	
Density/Specific Gravity (g/cm ³):	1.0195						Zirconium (Zr ²⁺):		ND	
Measured Specific Gravity	ND						Lithium (Li):		ND	
Conductivity (mmhos):	ND									
Resistivity:	ND						Total Hardness:		5306	N/A
MCF/D:	No Data									
BOPD:	No Data									
BWPD:	No Data									
		Anion/Cation Ratio:			0.96		ND = Not Determined			

SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.

Conditions		Barite (BaSO ₄)		Calcite (CaCO ₃)		Gypsum (CaSO ₄ ·2H ₂ O)		Anhydrite (CaSO ₄)	
Temp	Press.	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)
65°F	15 psi	0.71	0.076	1.00	180.023	-0.12	0.000	-0.41	0.000
67°F	24 psi	0.69	0.075	0.93	170.849	-0.12	0.000	-0.41	0.000
68°F	34 psi	0.67	0.074	0.90	166.843	-0.12	0.000	-0.40	0.000
70°F	43 psi	0.66	0.073	0.89	164.993	-0.12	0.000	-0.40	0.000
72°F	53 psi	0.64	0.073	0.89	165.420	-0.12	0.000	-0.39	0.000
73°F	62 psi	0.63	0.072	0.91	166.976	-0.12	0.000	-0.39	0.000
75°F	72 psi	0.61	0.071	0.92	168.521	-0.13	0.000	-0.38	0.000
77°F	81 psi	0.59	0.070	0.93	170.054	-0.13	0.000	-0.38	0.000
78°F	91 psi	0.58	0.069	0.94	171.575	-0.13	0.000	-0.37	0.000
80°F	100 psi	0.56	0.068	0.95	173.084	-0.13	0.000	-0.36	0.000

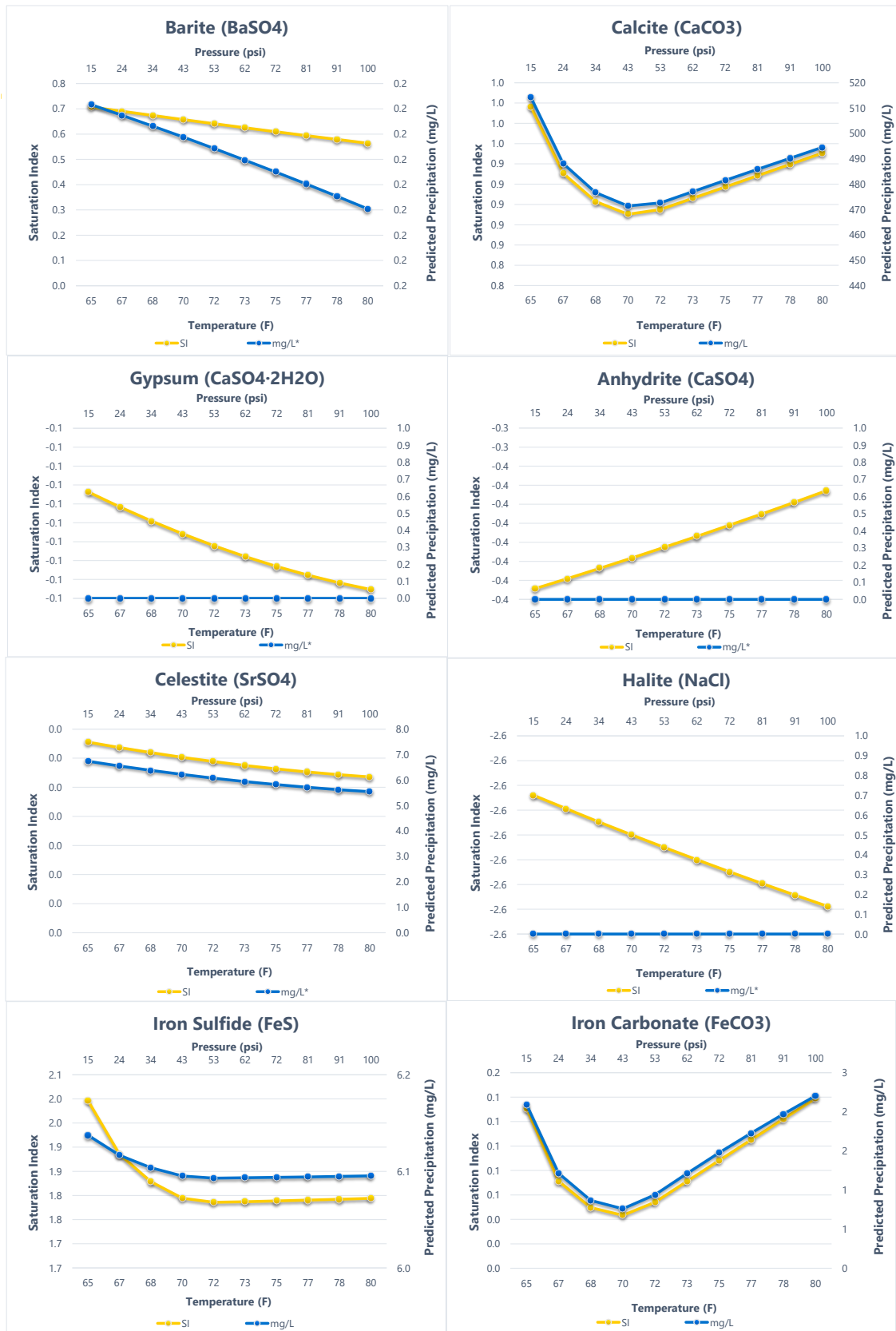
Conditions		Celestite (SrSO ₄)		Halite (NaCl)		Iron Sulfide (FeS)		Iron Carbonate (FeCO ₃)	
Temp	Press.	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)	Index	Amt (ptb)
65°F	15 psi	0.03	2.358	-2.61	0.000	2.00	2.148	0.13	0.733
67°F	24 psi	0.03	2.293	-2.61	0.000	1.89	2.141	0.07	0.425
68°F	34 psi	0.03	2.233	-2.62	0.000	1.83	2.136	0.05	0.304
70°F	43 psi	0.03	2.177	-2.62	0.000	1.79	2.133	0.04	0.266
72°F	53 psi	0.03	2.126	-2.62	0.000	1.79	2.133	0.05	0.328
73°F	62 psi	0.03	2.079	-2.63	0.000	1.79	2.133	0.07	0.425
75°F	72 psi	0.03	2.037	-2.63	0.000	1.79	2.133	0.09	0.517
77°F	81 psi	0.03	2.000	-2.63	0.000	1.79	2.133	0.11	0.605
78°F	91 psi	0.03	1.968	-2.63	0.000	1.79	2.133	0.12	0.690
80°F	100 psi	0.03	1.940	-2.63	0.000	1.79	2.133	0.14	0.772

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

Note 3: Saturation Index predictions on this sheet use pH and alkalinity; %CO₂ is not included in the calculations.

Comments:



SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.