KOLAR Document ID: 1912675

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 # 7311
Name: Shakespeare Oil Co., Inc.
Address 1: 202 W MAIN ST
Address 2:
City: SALEM State: IL Zip: 62881 + 1519
Contact Person: Joseph McDanel
Phone: (618) 548-1585
Lease Name: OTTLEY
Well Number: 4-10

API No.: 15-109-21667-00-00
Permit No: D34399.0
Reporting Year: 2025
(January 1 to December 31)

NE - SE - SW - SE (Q/Q/Q/Q) Sec. 10 Twp. 14 S. R. 32 ☐ E ☑ W
513 feet from ☐ N / ☑ S Line of Section
1612 feet from ☑ E / ☐ W Line of Section
County: Logan

I. Injection Fluid:

Type *(Pick one)*: ☐ Fresh Water ☐ Treated Brine ☐ Untreated Brine ☑ Water/Brine
Source: ☑ Produced Water ☐ Other *(Attach list)*
Quality: Total Dissolved Solids: 74408 mg/l Specific Gravity: 1.0602 Additives:
(Attach water analysis, if available)

II. Well Data:

Maximum Authorized Injection Pressure: 0 psi Injection Zone: CEDAR HILLS
Maximum Authorized Injection Rate: 2000 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	9125	0	0	0	31
February	9265	0	0	0	28
March	8937	0	0	0	31
April	8767	0	0	0	30
May	9283	0	0	0	31
June	9364	0	0	0	30
July	9177	0	0	0	31
August	8981	0	0	0	31
September	8861	0	0	0	30
October	9631	0	0	0	31
November	8938	0	0	0	30
December	9411	0	0	0	31
TOTAL	109740		0		

Submitted Electronically

Baker Hughes

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

Upstream Chemicals

REPORT DATE: 2/23/2026

COMPLETE WATER ANALYSIS REPORT SSP v.2010

CUSTOMER:	SHAKESPEARE OIL	**ACCOUNT REP:**	TREVOR PFANNENSTIEL
DISTRICT:	KANSAS	**SAMPLE ID:**	202610001362
AREA/LEASE:	OTTLEY	**SAMPLE DATE:**	1/29/2026
SAMPLE POINT NAME	OTTLEY 4-10	**ANALYSIS DATE:**	2/19/2026
SITE TYPE:	WELL SITES	**ANALYST:**	BS/RH
SAMPLE POINT DESCRIPTION:	NOT PROVIDED		
CUSTOMER SAMPLE POINT ID:			

SHAKESPEARE OIL, OTTLEY, OTTLEY 4-10

FIELD DATA

Initial Temperature (°F):	150
Final Temperature (°F):	50
Initial Pressure (psi):	100
Final Pressure (psi):	15
pH:	
pH at time of sampling:	6.3

ALKALINITY BY TITRATION:	**mg/L**	**meq/L**
Bicarbonate (HCO_3^-):	549.0	9.0
Carbonate (CO_3^{2-}):	ND	
Hydroxide (OH^-):	ND	

aqueous CO_2 (ppm):	148.5
aqueous H_2S (ppm):	75.0
aqueous O2 (ppb):	ND
Calculated TDS (mg/L):	74408
Density/Specific Gravity (g/cm^3):	1.0475
Measured Specific Gravity	ND
Conductivity (mmhos):	ND
Resistivity:	ND
MCF/D:	No Data
BOPD:	No Data
BWPD:	No Data

ANALYSIS OF SAMPLE

ANIONS:	**mg/L**	**meq/L**
Chloride (Cl^-):	41866.0	1181.0
Sulfate (SO_4^{2-}):	3751.0	78.1
Borate (H_3BO_3):	162.2	2.6
Fluoride (F^-):	ND	
Bromide (Br^-):	ND	
Nitrite (NO_2^-):	ND	
Nitrate (NO_3^-):	ND	
Phosphate (PO_4^{3-}):	0.6	0.0
Silica (SiO_2):	ND	

ORGANIC ACIDS:	**mg/L**	**meq/L**
Formic Acid:	ND	
Acetic Acid:	ND	
Propionic Acid:	ND	
Butyric Acid:	ND	
Valeric Acid:	ND	

Anion/Cation Ratio:	1.02

CATIONS:	**mg/L**	**meq/L**
Sodium (Na^+):	26320.5	1145.4
Potassium (K^+):	337.3	8.6
Magnesium (Mg^{2+}):	433.7	35.7
Calcium (Ca^{2+}):	1105.3	55.2
Strontium (Sr^{2+}):	44.8	1.0
Barium (Ba^{2+}):	0.0	0.0
Iron (Fe^{2+}):	0.2	0.0
Manganese (Mn^{2+}):	0.0	0.0
Lead (Pb^{2+}):	ND	
Zinc (Zn^{2+}):	0.0	0.0
Aluminum (Al^{3+}):	ND	
Chromium (Cr^{3+}):	ND	
Cobalt (Co^{2+}):	ND	
Copper (Cu^{2+}):	ND	
Molybdenum (Mo^{2+}):	ND	
Nickel (Ni^{2+}):	ND	
Tin (Sn^{2+}):	ND	
Titanium (Ti^{2+}):	ND	
Vanadium (V^{2+}):	ND	
Zirconium (Zr^{2+}):	ND	
Lithium (Li):	ND	
Total Hardness:	4601	N/A

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 ($CaSO_4{\cdot}2H_2O$)**		**Anhydrite ($CaSO_4$)**	
Temp	**Press.**	**Index**	**Amt (ptb)**	**Index**	**Amt (ptb)**	**Index**	**Amt (ptb)**	**Index**	**Amt (ptb)**
50°F	15 psi		0.000	-0.15	0.000	-0.26	0.000	-0.59	0.000
61°F	24 psi		0.000	-0.13	0.000	-0.26	0.000	-0.54	0.000
72°F	34 psi		0.000	-0.09	0.000	-0.25	0.000	-0.49	0.000
83°F	43 psi		0.000	-0.04	0.000	-0.25	0.000	-0.45	0.000
94°F	53 psi		0.000	0.01	1.845	-0.24	0.000	-0.40	0.000
106°F	62 psi		0.000	0.08	10.966	-0.24	0.000	-0.34	0.000
117°F	72 psi		0.000	0.14	19.421	-0.23	0.000	-0.29	0.000
128°F	81 psi		0.000	0.20	27.290	-0.23	0.000	-0.23	0.000
139°F	91 psi		0.000	0.26	34.642	-0.22	0.000	-0.17	0.000
150°F	100 psi		0.000	0.32	41.539	-0.21	0.000	-0.11	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)**
50°F	15 psi	0.05	3.246	-1.77	0.000	0.41	0.054	-2.41	0.000
61°F	24 psi	0.05	3.346	-1.79	0.000	0.32	0.046	-2.35	0.000
72°F	34 psi	0.05	3.443	-1.80	0.000	0.27	0.041	-2.27	0.000
83°F	43 psi	0.05	3.566	-1.81	0.000	0.25	0.039	-2.19	0.000
94°F	53 psi	0.05	3.739	-1.82	0.000	0.25	0.039	-2.11	0.000
106°F	62 psi	0.06	3.986	-1.83	0.000	0.27	0.041	-2.02	0.000
117°F	72 psi	0.06	4.322	-1.83	0.000	0.29	0.043	-1.93	0.000
128°F	81 psi	0.07	4.759	-1.84	0.000	0.31	0.046	-1.85	0.000
139°F	91 psi	0.08	5.305	-1.84	0.000	0.34	0.048	-1.78	0.000
150°F	100 psi	0.09	5.962	-1.85	0.000	0.37	0.050	-1.71	0.000

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

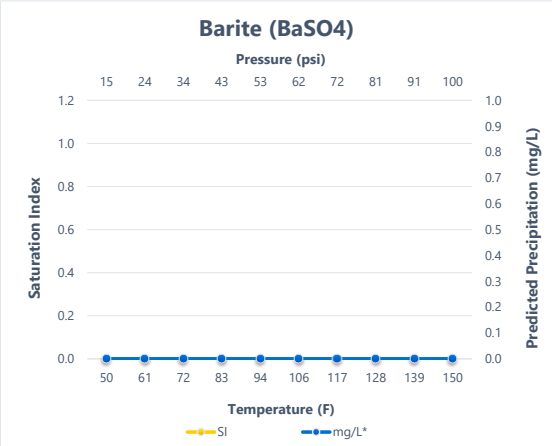
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

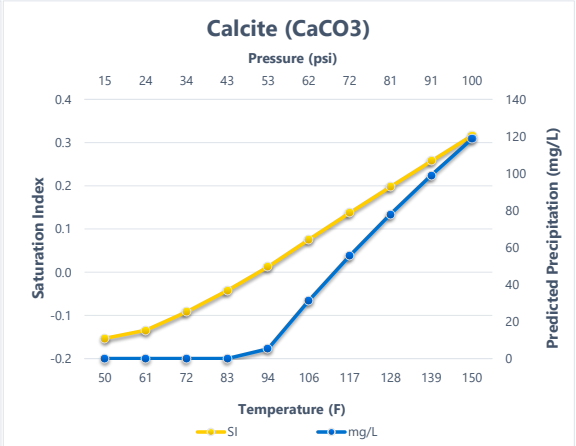
Note 3: Saturation Index predictions on this sheet use pH and alkalinity; $\%CO_2$ is not included in the calculations.

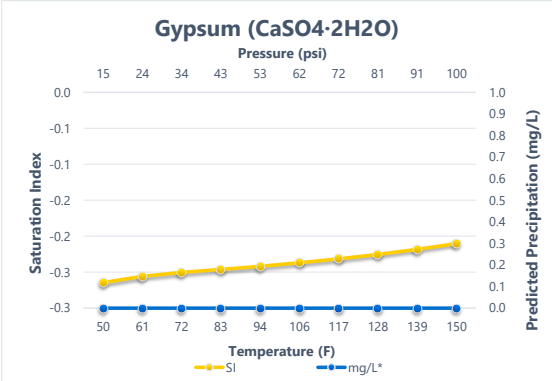
EESI ScaleSoftPitzer™ SSP2010

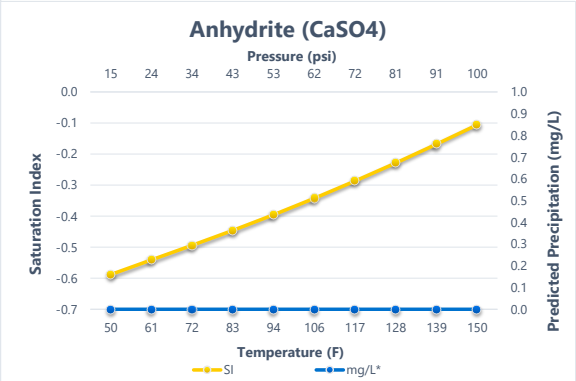
Comments:

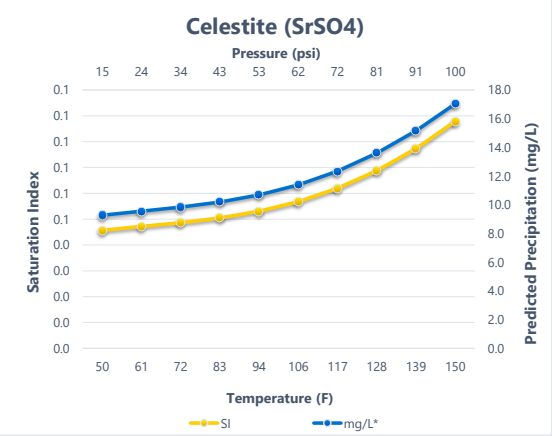
SAMPLE ID: 202610001362 SHAKESPEARE OIL, OTTLEY, OTTLEY 4-10

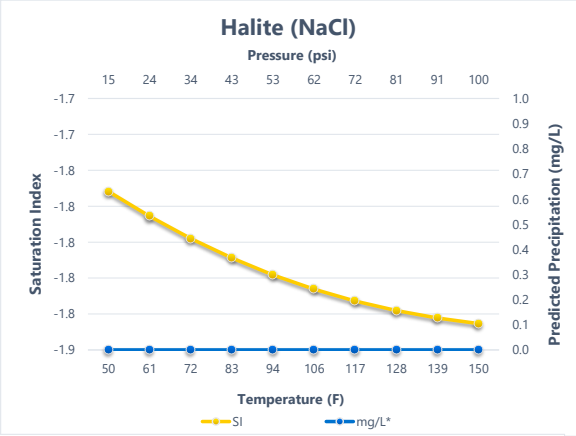


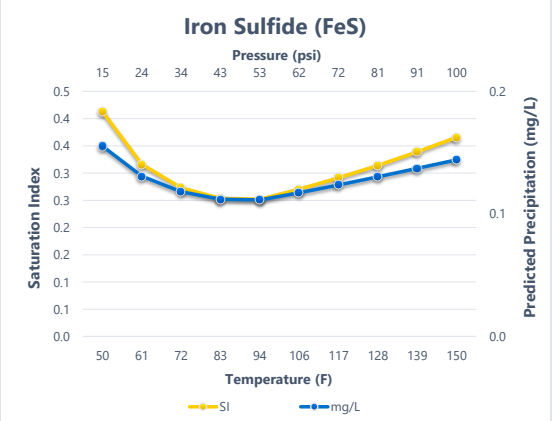


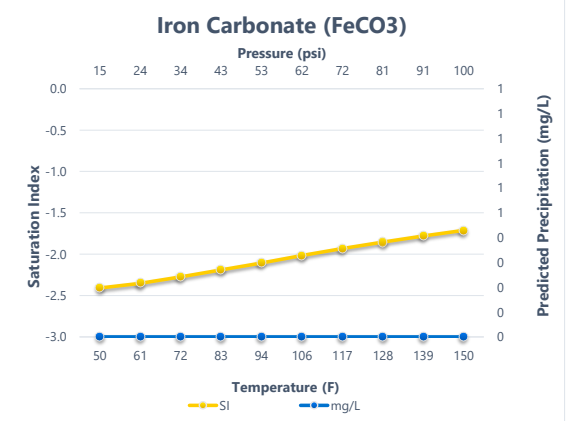












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