KOLAR Document ID: 1777590

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 # 35233
Name: US Oil Resources LLC
Address 1: 6727 W. PRENTICE AVE
Address 2:
City: LAKEWOOD State: CO Zip: 80123 + 2691
Contact Person: Rick Parks
Phone: (303) 229-7689
Lease Name: POWERS
Well Number: 1-2 SWD

API No.: 15-063-21978-00-03
Permit No: D32771.0
Reporting Year: 2023
(January 1 to December 31)

__ - __ - SE - SE Sec. 2 Twp. 14 S. R. 29 ☐ E ☑ W
(Q/Q/Q/Q)
660 feet from ☐ N / ☑ S Line of Section
660 feet from ☑ E / ☐ W Line of Section
County: Gove

I. Injection Fluid:

Type *(Pick one)*: ☐ Fresh Water ☐ Treated Brine ☑ Untreated Brine ☐ Water/Brine
Source: ☑ Produced Water ☐ Other *(Attach list)*
Quality: Total Dissolved Solids: 31653 mg/l Specific Gravity: 1.0195 Additives:
(Attach water analysis, if available)

II. Well Data:

Maximum Authorized Injection Pressure: 0 psi Injection Zone: CEDAR HILLS
Maximum Authorized Injection Rate: 500 barrels per day
Total Number of Enhanced Recovery Injection Wells Covered by this Permit: 1 *(Include TA's)*

III.

Month:	Total Fluid Injected BBL	Maximum Fluid Pressure	Total Gas Injected MCF	Maximum Gas Pressure	# Days of Injection
January	8497	0	0		31
February	7876	0	0		28
March	7756	0	0		31
April	9482	0	0		30
May	7244	0	0		21
June	7652	0	0		17
July	11896	0	0		31
August	10292	0	0		31
September	10968	0	0		30
October	9432	0	0		31
November	9337	0	0		30
December	9226	0	0		31
TOTAL	109658		0		

Submitted Electronically

Baker Hughes

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

Upstream Chemicals

REPORT DATE: 12/27/2023

COMPLETE WATER ANALYSIS REPORT SSP v.2010

CUSTOMER:	US OIL	**ACCOUNT REP:**	BRETT J SUTER
DISTRICT:	KANSAS	**SAMPLE ID:**	202310008100
AREA/LEASE:	POWERS	**SAMPLE DATE:**	12/4/2023
SAMPLE POINT NAME	POWERS 1-2 SWD	**ANALYSIS DATE:**	12/21/2023
SITE TYPE:	WELL SITES	**ANALYST:**	BS
SAMPLE POINT DESCRIPTION:	WELL HEAD		
CUSTOMER SAMPLE POINT ID:			

US OIL, POWERS, POWERS 1-2 SWD

FIELD DATA

Initial Temperature (°F):	85
Final Temperature (°F):	55
Initial Pressure (psi):	100
Final Pressure (psi):	15
pH:	
pH at time of sampling:	6.9

ALKALINITY BY TITRATION:	**mg/L**	**meq/L**
Bicarbonate (HCO_3^-):	1020.0	16.7
Carbonate (CO_3^{2-}):	ND	
Hydroxide (OH^-):	ND	

aqueous CO_2 (ppm):	40.0
aqueous H_2S (ppm):	5.0
aqueous O2 (ppb):	ND
Calculated TDS (mg/L):	31653
Density/Specific Gravity (g/cm³):	1.0195
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^-):	17000.0	479.5
Sulfate (SO_4^{2-}):	2171.0	45.2
Borate (H_3BO_3):	93.0	1.5
Fluoride (F^-):	ND	
Bromide (Br^-):	ND	
Nitrite (NO_2^-):	ND	
Nitrate (NO_3^-):	ND	
Phosphate (PO_4^{3-}):	0.0	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:		1.05

CATIONS:	**mg/L**	**meq/L**
Sodium (Na^+):	9405.2	409.3
Potassium (K^+):	206.9	5.3
Magnesium (Mg^{2+}):	378.4	31.1
Calcium (Ca^{2+}):	1417.7	70.7
Strontium (Sr^{2+}):	43.4	1.0
Barium (Ba^{2+}):	0.0	0.0
Iron (Fe^{2+}):	10.3	0.4
Manganese (Mn^{2+}):	0.1	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:	5153	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)**
55°F	15 psi		0.000	0.83	149.990	-0.08	0.000	-0.41	0.000
58°F	24 psi		0.000	0.78	142.922	-0.08	0.000	-0.40	0.000
62°F	34 psi		0.000	0.77	140.963	-0.08	0.000	-0.39	0.000
65°F	43 psi		0.000	0.77	141.060	-0.08	0.000	-0.38	0.000
68°F	53 psi		0.000	0.79	143.621	-0.08	0.000	-0.36	0.000
72°F	62 psi		0.000	0.81	146.898	-0.08	0.000	-0.35	0.000
75°F	72 psi		0.000	0.83	150.125	-0.09	0.000	-0.34	0.000
78°F	81 psi		0.000	0.86	153.302	-0.09	0.000	-0.33	0.000
82°F	91 psi		0.000	0.88	156.429	-0.09	0.000	-0.32	0.000
85°F	100 psi		0.000	0.90	159.505	-0.09	0.000	-0.30	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)**
55°F	15 psi	0.08	5.182	-2.59	0.000	1.83	5.389	0.35	4.025
58°F	24 psi	0.08	5.042	-2.60	0.000	1.73	5.322	0.32	3.747
62°F	34 psi	0.07	4.918	-2.60	0.000	1.67	5.283	0.32	3.749
65°F	43 psi	0.07	4.809	-2.61	0.000	1.64	5.259	0.33	3.862
68°F	53 psi	0.07	4.717	-2.62	0.000	1.64	5.256	0.36	4.107
72°F	62 psi	0.07	4.640	-2.62	0.000	1.64	5.259	0.40	4.362
75°F	72 psi	0.07	4.580	-2.63	0.000	1.65	5.263	0.43	4.597
78°F	81 psi	0.07	4.538	-2.63	0.000	1.65	5.267	0.47	4.813
82°F	91 psi	0.07	4.512	-2.63	0.000	1.66	5.271	0.50	5.011
85°F	100 psi	0.07	4.504	-2.64	0.000	1.66	5.276	0.54	5.193

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

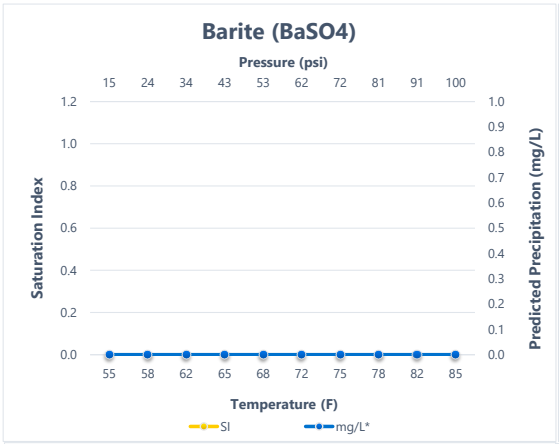
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the eight (8) scales.

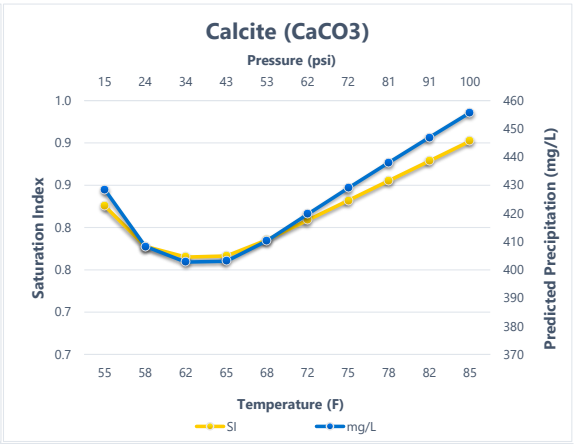
Note 3: Saturation Index predictions on this sheet use pH and alkalinity; $\%CO_2$ is not included in the calculations.

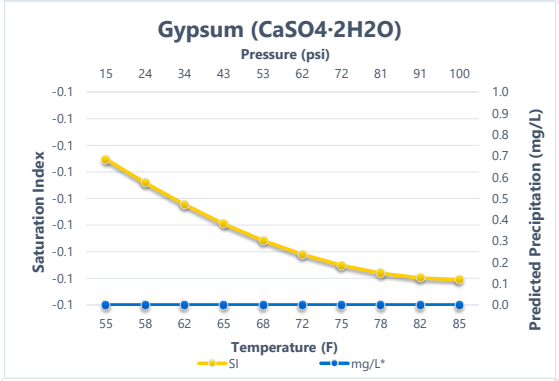
EESI ScaleSoftPitzer™ SSP2010

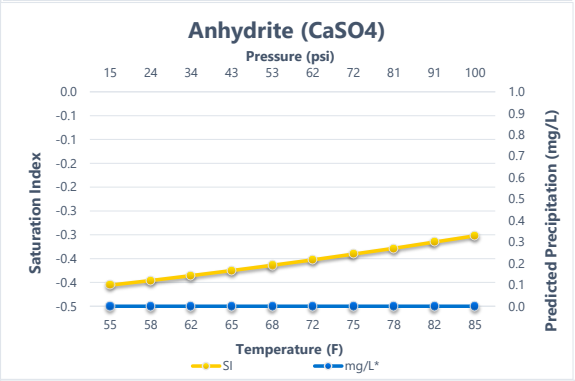
Comments:

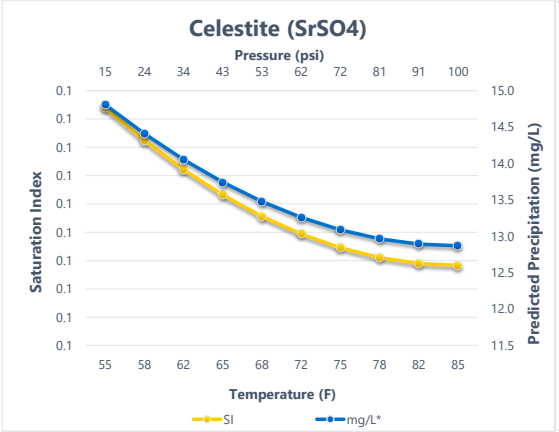
SAMPLE ID: 202310008100 US OIL, POWERS, POWERS 1-2 SWD

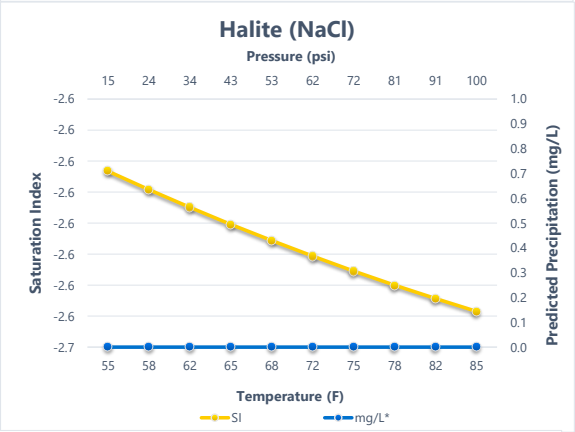


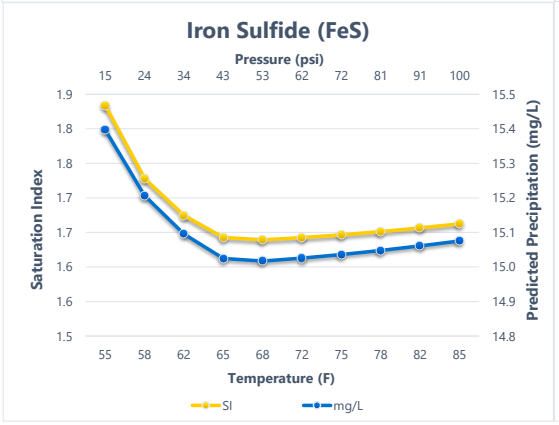


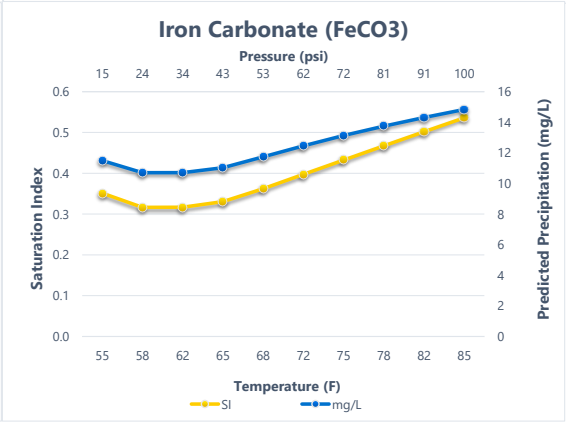












SCALE PREDICTIONS BASED ON FIELD PROVIDED DATA; FUTHER MODELING MAY BE REQUIRED FOR VALIDATION OF SCALE PREDICTION RESULTS.