

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 | _____ | _____ | _____ | _____ | _____ |



HAYS LAB
Address
HAYS KANSAS, 67601

Report Date: 1/24/2020

Complete Water Analysis Report_ssp v.8

| | | | |
|-------------------|---------------|----------------|---------------|
| Customer: | SCOTT SERVICE | Sample Date: | 1/23/2020 |
| District: | GREAT BEND | Log Out Date: | 1/23/2020 |
| Area: | HAYS KANSAS | Sample ID: | |
| Lease: | SCOTT LEASE | Analyst: | PHIL BENEDICK |
| Sample Point Name | WATER TANK | Chemical Used: | |
| Sales Rep: | PHIL BENEDICK | Comments: | |

SCOTT SERVICE, SCOTT LEASE, WATER TANK

| Field Data | | Analysis of Sample | | | |
|--|--------|---|---------------------|---------------------------------|-------|
| | | Anions: | Cations: | | |
| | | mg/L | meq/L | mg/L | meq/L |
| Initial Temperature (°F): | 140 | Chloride (Cl ⁻): | 46900 | Sodium (Na ⁺): | 27447 |
| Final Temperature (°F): | 70 | Sulfate (SO ₄ ²⁻): | 1810 | Potassium (K ⁺): | 0 |
| Initial Pressure (psi): | 15 | Borate (H ₃ BO ₃): | 0.0 | Magnesium (Mg ²⁺): | 640 |
| Final Pressure (psi): | 15 | Fluoride (F ⁻): | 0.0 | Calcium (Ca ²⁺): | 2260 |
| | | Bromide (Br ⁻): | 0.0 | Strontium (Sr ²⁺): | 0 |
| | | Nitrite (NO ₂ ⁻): | 0.0 | Barium (Ba ²⁺): | 0.0 |
| pH at time of sampling: | 7.0 | Nitrate (NO ₃ ⁻): | 0.0 | Iron (Fe ²⁺): | 0.0 |
| pH at time of analysis: | 7.0 | Phosphate (PO ₄ ³⁻): | 0.0 | Manganese (Mn ²⁺): | 0.00 |
| pH used in Calcs: | 7.0 | Silica (SiO ₂): | 0.0 | Lead (Pb ²⁺): | 0.00 |
| | | | | Zinc (Zn ²⁺): | 0.0 |
| | | | | Aluminum (Al ³⁺): | 0.0 |
| | | | | Chromium (Cr ³⁺): | 0.0 |
| | | | | Cobalt (Co ²⁺): | 0.0 |
| | | | | Copper (Cu ²⁺): | 0.0 |
| | | | | Molybdenum (Mo ²⁺): | 0.0 |
| | | | | Nickel (Ni ²⁺): | 0.0 |
| | | | | Tin (Sn ²⁺): | 0.0 |
| | | | | Titanium (Ti ²⁺): | 0.0 |
| | | | | Vanadium (V ²⁺): | 0.0 |
| | | | | Zirconium (Zr ²⁺): | 0.0 |
| | | | | Total Hardness: | 8090 |
| | | | | | N/A |
| Alkalinity by Titration: | mg/L | meq/L | | | |
| Bicarbonate (HCO ₃ ⁻): | 220 | 3.6 | | | |
| Carbonate (CO ₃ ²⁻): | 0 | 0.0 | | | |
| Hydroxide (OH ⁻): | 0 | 0.0 | | | |
| aqueous CO ₂ (ppm): | | | Organic Acids: | mg/L | meq/L |
| aqueous H ₂ S (ppm): | | | Formate: | 0.0 | 0.0 |
| aqueous O ₂ (ppb): | | | Acetate: | 0.0 | 0.0 |
| | | | Propionate: | 0.0 | 0.0 |
| | | | Butyrate: | 0.0 | 0.0 |
| | | | Valerate: | 0.0 | 0.0 |
| Calculated TDS (mg/L): | 79277 | Valerate: | | | |
| Density/Specific Gravity (g/cm ³): | 1.0509 | | | | |
| Measured Density/Specific Gravity | 0 | | | | |
| Conductivity (µmhos): | 0 | | | | |
| MCF/D: | 0 | | | | |
| BOPD: | 0 | | | | |
| BWPD: | 0 | | | | |
| | | | Anion/Cation Ratio: | 1.00 | |

| Temp | Press. | Barite (BaSO ₄) | | Calcite (CaCO ₃) | | Gypsum (CaSO ₄ ·2H ₂ O) | | Anhydrite (CaSO ₄) | |
|-------|--------|-----------------------------|-----------|------------------------------|-----------|---|--------|--------------------------------|-----------|
| | | Index | Amt (PTB) | Index | Amt (PTB) | Index | Amount | Index | Amt (PTB) |
| 70°F | 15 psi | 0.000 | 0.000 | 0.65 | 25.240 | -0.29 | 0.000 | -0.54 | 0.000 |
| 78°F | 15 psi | 0.000 | 0.000 | 0.72 | 27.564 | -0.29 | 0.000 | -0.50 | 0.000 |
| 86°F | 15 psi | 0.000 | 0.000 | 0.78 | 29.787 | -0.28 | 0.000 | -0.47 | 0.000 |
| 93°F | 15 psi | 0.000 | 0.000 | 0.85 | 31.857 | -0.28 | 0.000 | -0.43 | 0.000 |
| 101°F | 15 psi | 0.000 | 0.000 | 0.91 | 33.802 | -0.28 | 0.000 | -0.40 | 0.000 |
| 109°F | 15 psi | 0.000 | 0.000 | 0.98 | 35.629 | -0.27 | 0.000 | -0.36 | 0.000 |
| 117°F | 15 psi | 0.000 | 0.000 | 1.04 | 37.344 | -0.27 | 0.000 | -0.32 | 0.000 |
| 124°F | 15 psi | 0.000 | 0.000 | 1.10 | 38.952 | -0.26 | 0.000 | -0.28 | 0.000 |
| 132°F | 15 psi | 0.000 | 0.000 | 1.16 | 40.461 | -0.26 | 0.000 | -0.24 | 0.000 |
| 140°F | 15 psi | 0.000 | 0.000 | 1.22 | 41.875 | -0.25 | 0.000 | -0.19 | 0.000 |

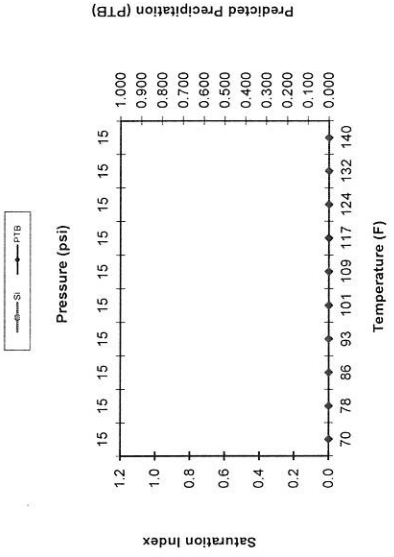
| Temp | Press. | Celestite (SrSO ₄) | | Halite (NaCl) | | Iron Sulfide (FeS) | | Iron Carbonate (FeCO ₃) | |
|-------|--------|--------------------------------|-----------|---------------|-----------|--------------------|-----------|-------------------------------------|-----------|
| | | Index | Amt (PTB) | Index | Amt (PTB) | Index | Amt (PTB) | Index | Amt (PTB) |
| 70°F | 15 psi | 0.000 | 0.000 | -1.72 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 78°F | 15 psi | 0.000 | 0.000 | -1.73 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 86°F | 15 psi | 0.000 | 0.000 | -1.73 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 93°F | 15 psi | 0.000 | 0.000 | -1.74 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 101°F | 15 psi | 0.000 | 0.000 | -1.74 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 109°F | 15 psi | 0.000 | 0.000 | -1.75 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 117°F | 15 psi | 0.000 | 0.000 | -1.75 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 124°F | 15 psi | 0.000 | 0.000 | -1.76 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 132°F | 15 psi | 0.000 | 0.000 | -1.76 | 0.000 | 0 | 0.000 | 0.000 | 0.000 |
| 140°F | 15 psi | 0.000 | 0.000 | -1.76 | 0.000 | 0 | 0.000 | 0.000 | 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. %CO₂ is not included in the calculations.

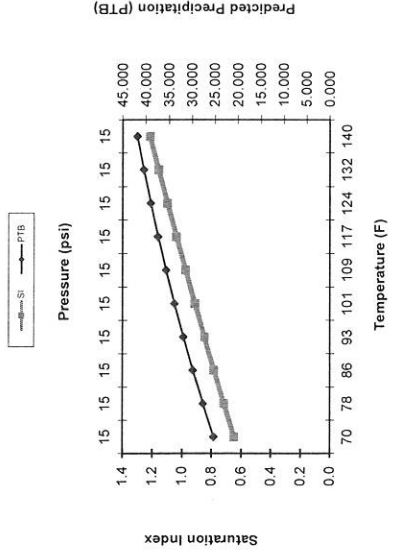


Sample ID: Sample ID SCOTT SERVICE, SCOTT LEASE, WATER TANK

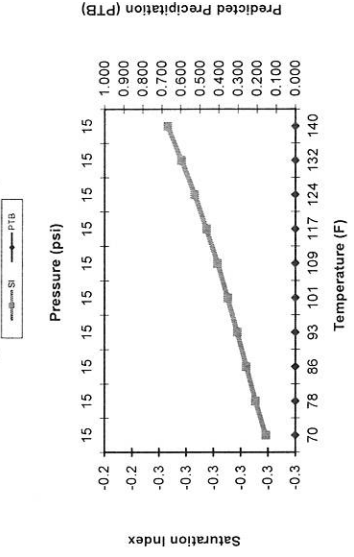
Barite (BaSO4)



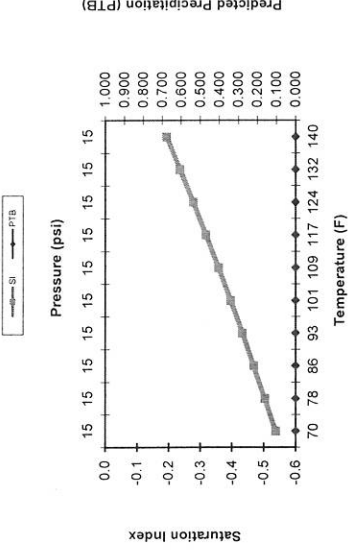
Calcite (CaCO3)



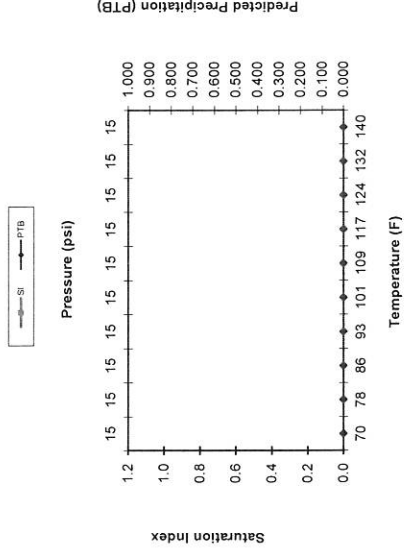
Gypsum (CaSO4·2H2O)



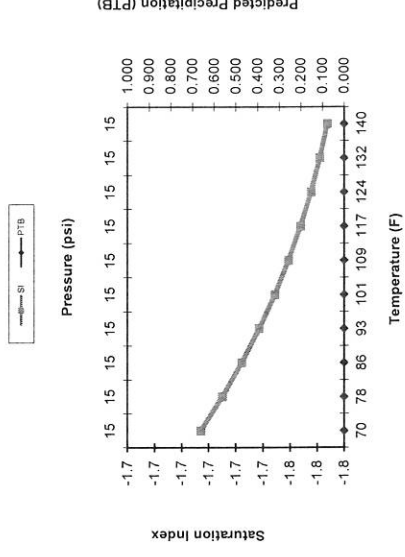
Anhydrite (CaSO4)



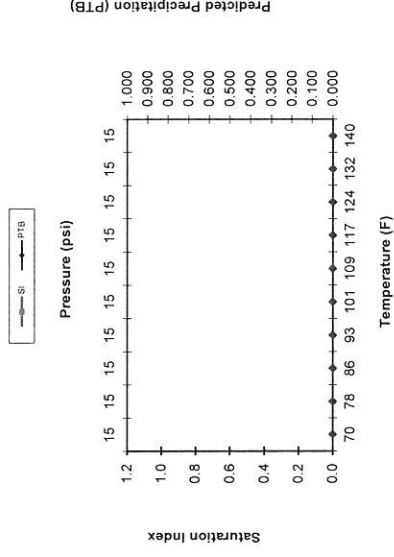
Celestite (SrSO4)



Halite (NaCl)



Iron Sulfide (FeS)



Iron Carbonate (FeCO3)

