

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	_____	_____	_____	_____	_____
	<b>TOTAL</b>	_____	_____	_____	_____	_____



**DownHole SAT®**  
**FORMATION WATER CHEMISTRY INPUT**

Prospect Oil  
Herl  
Wellhead

Pro-Stim Chemicals  
Troy Pelton

Report Date: 03-24-2021    Sampled: 03-11-2021 at 1644  
Sample #: 10766                Sample ID: WBaten

**CATIONS**

Calcium (as Ca)	2798
Magnesium (as Mg)	486.00
Barium (as Ba)	9.00
Strontium (as Sr)	0.00
Sodium (as Na)	23772
Potassium (as K)	0.00
Lithium (as Li)	0.00
Ammonia (as NH <sub>3</sub> )	0.00
Aluminum (as Al)	0.00
Iron (as Fe)	4.50
Manganese (as Mn)	0.672
Zinc (as Zn)	0.00
Lead (as Pb)	0.00

**ANIONS**

Chloride (as Cl)	43812
Sulfate (as SO <sub>4</sub> )	755.00
Bromine (as Br)	0.00
Dissolved CO <sub>2</sub> (as CO <sub>2</sub> )	256.00
Bicarbonate (as HCO <sub>3</sub> )	442.00
Carbonate (as CO <sub>3</sub> )	0.00
Oxalic acid (as C <sub>2</sub> O <sub>4</sub> )	0.00
Silica (as SiO <sub>2</sub> )	0.00
Phosphate(as PO <sub>4</sub> )	0.00
H <sub>2</sub> S (as H <sub>2</sub> S)	67.00
Fluoride (as F)	0.00
Nitrate (as NO <sub>3</sub> )	0.00
Boron (as B)	0.00

**PARAMETERS**

Calculated T.D.S.	71300
Molar Conductivity	97783
Resistivity	10.23
Sp.Gr.(g/mL)	1.04
Pressure(psia)	14.70
pCO <sub>2</sub> (psia)	0.0727
pH <sub>2</sub> S(atm)	0.0117
Temperature (°F)	65.00
pH	6.48

**CORROSION RATE PREDICTION**

CO <sub>2</sub> - H <sub>2</sub> S Rate(mpy)	0.0319
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**COMMENTS** All anions & cations are in mg/l

**SGB Solutions**  
**5918 S County Road 1273, Midland, TX 79706**



**DownHole SAT®**  
**FORMATION WATER**  
**DEPOSITION POTENTIAL INDICATORS**

Prospect Oil  
 Herl  
 Wellhead

Pro-Stim Chemicals  
 Troy Pelton

Report Date: 03-24-2021    Sampled: 03-11-2021 at 1644  
 Sample #: 10766                Sample ID: WBaten

**SATURATION LEVEL**

Calcite (CaCO <sub>3</sub> )	1.34
Aragonite (CaCO <sub>3</sub> )	1.28
Witherite (BaCO <sub>3</sub> )	0.00145
Strontianite (SrCO <sub>3</sub> )	0.00
Calcium oxalate (CaC <sub>2</sub> O <sub>4</sub> )	0.00
Magnesite (MgCO <sub>3</sub> )	0.194
Anhydrite (CaSO <sub>4</sub> )	0.234
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	0.376
Barite (BaSO <sub>4</sub> )	76.02
Celestite (SrSO <sub>4</sub> )	0.00
Fluorite (CaF <sub>2</sub> )	0.00
Calcium phosphate	0.00
Hydroxyapatite	0.00
Silica (SiO <sub>2</sub> )	0.00
Brucite (Mg(OH) <sub>2</sub> )	< 0.001
Magnesium silicate	0.00
Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0.00
Siderite (FeCO <sub>3</sub> )	2.54
Halite (NaCl)	0.0156
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	< 0.001
Iron sulfide (FeS)	9.60

**FREE ION MOMENTARY EXCESS (ppm)**

Calcite (CaCO <sub>3</sub> )	0.0520
Aragonite (CaCO <sub>3</sub> )	0.0448
Witherite (BaCO <sub>3</sub> )	-53.92
Strontianite (SrCO <sub>3</sub> )	-19.77
Calcium oxalate (CaC <sub>2</sub> O <sub>4</sub> )	-0.0695
Magnesite (MgCO <sub>3</sub> )	-0.720
Anhydrite (CaSO <sub>4</sub> )	-1533
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	-940.92
Barite (BaSO <sub>4</sub> )	15.09
Celestite (SrSO <sub>4</sub> )	-311.80
Fluorite (CaF <sub>2</sub> )	-14.67
Calcium phosphate	>-0.001
Hydroxyapatite	-950.34
Silica (SiO <sub>2</sub> )	-90.73
Brucite (Mg(OH) <sub>2</sub> )	0.00162
Magnesium silicate	-283.11
Iron hydroxide (Fe(OH) <sub>3</sub> )	< 0.001
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	>-0.001
Siderite (FeCO <sub>3</sub> )	0.143
Halite (NaCl)	-457113
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	-210763
Iron sulfide (FeS)	1.19

**SIMPLE INDICES**

Langelier	0.341
Ryznar	5.80
Puckorius	4.04
Larson-Skold Index	179.54
Stiff Davis Index	-0.387
Oddo-Tomson	-0.603

**BOUND IONS**

Calcium	2798	2683
Barium	9.00	9.00
Carbonate	1.78	0.124
Phosphate	0.00	0.00
Sulfate	755.00	407.04

**OPERATING CONDITIONS**

Temperature (°F)	65.00
Time(mins)	3.00