

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**

Enterra Resources  
WSMU 2-1, 1-1, 1-2  
Wellhead

Pro-Stim Chemicals  
Troy Pelton

Report Date: 10-07-2020      Sampled: 10-05-2020 at 0823  
Sample #: 9488                      Sample ID: WBatn

**CATIONS**

Calcium (as Ca)	4565
Magnesium (as Mg)	947.00
Barium (as Ba)	45.00
Strontium (as Sr)	0.00
Sodium (as Na)	46789
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)	16.20
Manganese (as Mn)	0.281
Zinc (as Zn)	0.00
Lead (as Pb)	0.00

**ANIONS**

Chloride (as Cl)	82371
Sulfate (as SO <sub>4</sub> )	1313
Bromine (as Br)	0.00
Dissolved CO <sub>2</sub> (as CO <sub>2</sub> )	99.00
Bicarbonate (as HCO <sub>3</sub> )	200.00
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)	0.00
Fluoride (as F)	0.00
Nitrate (as NO <sub>3</sub> )	0.00
Boron (as B)	0.00

**PARAMETERS**

Calculated T.D.S.	132903
Molar Conductivity	198303
Resistivity	5.04
Sp.Gr.(g/mL)	1.08
Pressure(psia)	14.70
pCO <sub>2</sub> (psia)	0.0315
pH <sub>2</sub> S(atm)	0.00
Temperature (°F)	72.00
pH	6.49

**CORROSION RATE PREDICTION**

CO<sub>2</sub> - H<sub>2</sub>S Rate(mpy)                      0.0107

**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**

Enterra Resources  
 WSMU 2-1  
 Wellhead

Pro-Stim Chemicals  
 Troy Pelton

Report Date: 10-07-2020      Sampled: 10-05-2020 at 0823  
 Sample #: 9488                      Sample ID: WBatn

**SATURATION LEVEL**

Calcite (CaCO <sub>3</sub> )	0.992
Aragonite (CaCO <sub>3</sub> )	0.928
Witherite (BaCO <sub>3</sub> )	0.00186
Strontianite (SrCO <sub>3</sub> )	0.00
Calcium oxalate (CaC <sub>2</sub> O <sub>4</sub> )	0.00
Magnesite (MgCO <sub>3</sub> )	0.207
Anhydrite (CaSO <sub>4</sub> )	0.490
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	0.705
Barite (BaSO <sub>4</sub> )	256.48
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> )	9.08
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0.00
Siderite (FeCO <sub>3</sub> )	2.88
Halite (NaCl)	0.0641
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	< 0.001
Iron sulfide (FeS)	0.00

**FREE ION MOMENTARY EXCESS (ppm)**

Calcite (CaCO <sub>3</sub> )	> -0.001
Aragonite (CaCO <sub>3</sub> )	-0.00600
Witherite (BaCO <sub>3</sub> )	-46.97
Strontianite (SrCO <sub>3</sub> )	-23.46
Calcium oxalate (CaC <sub>2</sub> O <sub>4</sub> )	-0.0376
Magnesite (MgCO <sub>3</sub> )	-0.247
Anhydrite (CaSO <sub>4</sub> )	-691.77
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	-323.61
Barite (BaSO <sub>4</sub> )	76.16
Celestite (SrSO <sub>4</sub> )	-388.74
Fluorite (CaF <sub>2</sub> )	-10.71
Calcium phosphate	> -0.001
Hydroxyapatite	-919.33
Silica (SiO <sub>2</sub> )	-89.94
Brucite (Mg(OH) <sub>2</sub> )	0.00228
Magnesium silicate	-279.61
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> )	0.0581
Halite (NaCl)	-364442
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	-233465
Iron sulfide (FeS)	-0.675

**SIMPLE INDICES**

Langelier	0.394
Ryznar	5.70
Puckorius	4.50
Larson-Skold Index	762.74
Stiff Davis Index	-0.173
Oddo-Tomson	-0.739

**BOUND IONS**

Calcium	4565	4376
Barium	45.00	45.00
Carbonate	3.04	0.0461
Phosphate	0.00	0.00
Sulfate	1313	514.34

**TOTAL      FREE**

**OPERATING CONDITIONS**

Temperature (°F)	72.00
Time(mins)	3.00

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