

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	_____	_____	_____	_____	_____



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
Sample #: 9488

Sampled: 10-05-2020 at 0823
Sample ID: WBaten

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 ₃)	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 ₄)	1313
Bromine (as Br)	0.00
Dissolved CO ₂ (as CO ₂)	99.00
Bicarbonate (as HCO ₃)	200.00
Carbonate (as CO ₃)	0.00
Oxalic acid (as C ₂ O ₄)	0.00
Silica (as SiO ₂)	0.00
Phosphate(as PO ₄)	0.00
H ₂ S (as H ₂ S)	0.00
Fluoride (as F)	0.00
Nitrate (as NO ₃)	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 ₂ (psia)	0.0315
pH ₂ S(atm)	0.00
Temperature (°F)	72.00
pH	6.49

CORROSION RATE PREDICTION

CO ₂ - H ₂ S Rate(mpy)	0.0107
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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

Enterra Resources
 WSMU 2-1
 Wellhead

Pro-Stim Chemicals
 Troy Pelton

Report Date: 10-07-2020
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SATURATION LEVEL

Calcite (CaCO ₃)	0.992
Aragonite (CaCO ₃)	0.928
Witherite (BaCO ₃)	0.00186
Strontianite (SrCO ₃)	0.00
Calcium oxalate (CaC ₂ O ₄)	0.00
Magnesite (MgCO ₃)	0.207
Anhydrite (CaSO ₄)	0.490
Gypsum (CaSO ₄ *2H ₂ O)	0.705
Barite (BaSO ₄)	256.48
Celestite (SrSO ₄)	0.00
Fluorite (CaF ₂)	0.00
Calcium phosphate	0.00
Hydroxyapatite	0.00
Silica (SiO ₂)	0.00
Brucite (Mg(OH) ₂)	< 0.001
Magnesium silicate	0.00
Iron hydroxide (Fe(OH) ₃)	9.08
Strengite (FePO ₄ *2H ₂ O)	0.00
Siderite (FeCO ₃)	2.88
Halite (NaCl)	0.0641
Thenardite (Na ₂ SO ₄)	< 0.001
Iron sulfide (FeS)	0.00

FREE ION MOMENTARY EXCESS (ppm)

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

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

OPERATING CONDITIONS

Temperature (°F)	72.00
Time(mins)	3.00

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