

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

TEMPORARY ABANDONMENT WELL APPLICATION

OPERATOR: License# \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Address 1: \_\_\_\_\_  
 Address 2: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_  
 Contact Person: \_\_\_\_\_  
 Phone: ( \_\_\_\_\_ ) \_\_\_\_\_  
 Contact Person Email: \_\_\_\_\_  
 Field Contact Person: \_\_\_\_\_  
 Field Contact Person Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

API No. 15- \_\_\_\_\_  
 Spot Description: \_\_\_\_\_  
 \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  E  W  
 \_\_\_\_\_ feet from  N /  S Line of Section  
 \_\_\_\_\_ feet from  E /  W Line of Section  
 GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)  
 Datum:  NAD27  NAD83  WGS84  
 County: \_\_\_\_\_ Elevation: \_\_\_\_\_  GL  KB  
 Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_  
 Well Type: (check one)  Oil  Gas  OG  WSW  Other: \_\_\_\_\_  
 SWD Permit #: \_\_\_\_\_  ENHR Permit #: \_\_\_\_\_  
 Gas Storage Permit #: \_\_\_\_\_  
 Spud Date: \_\_\_\_\_ Date Shut-In: \_\_\_\_\_

	Conductor	Surface	Production	Intermediate	Liner	Tubing
Size						
Setting Depth						
Amount of Cement						
Top of Cement						
Bottom of Cement						

Casing Fluid Level from Surface: \_\_\_\_\_ How Determined? \_\_\_\_\_ Date: \_\_\_\_\_  
 Casing Squeeze(s): \_\_\_\_\_ to \_\_\_\_\_ w / \_\_\_\_\_ sacks of cement, \_\_\_\_\_ to \_\_\_\_\_ w / \_\_\_\_\_ sacks of cement. Date: \_\_\_\_\_  
(top) (bottom) (top) (bottom)  
 Do you have a valid Oil & Gas Lease?  Yes  No  
 Depth and Type:  Junk in Hole at \_\_\_\_\_  Tools in Hole at \_\_\_\_\_ Casing Leaks:  Yes  No Depth of casing leak(s): \_\_\_\_\_  
(depth) (depth)  
 Type Completion:  ALT. I  ALT. II Depth of:  DV Tool: \_\_\_\_\_ w / \_\_\_\_\_ sacks of cement  Port Collar: \_\_\_\_\_ w / \_\_\_\_\_ sack of cement  
(depth) (depth)  
 Packer Type: \_\_\_\_\_ Size: \_\_\_\_\_ Inch Set at: \_\_\_\_\_ Feet  
 Total Depth: \_\_\_\_\_ Plug Back Depth: \_\_\_\_\_ Plug Back Method: \_\_\_\_\_

**Geological Data:**

Formation Name	Formation Top	Formation Base	Completion Information
1. _____	At: _____	to _____ Feet	Perforation Interval _____ to _____ Feet or Open Hole Interval _____ to _____ Feet
2. _____	At: _____	to _____ Feet	Perforation Interval _____ to _____ Feet or Open Hole Interval _____ to _____ Feet

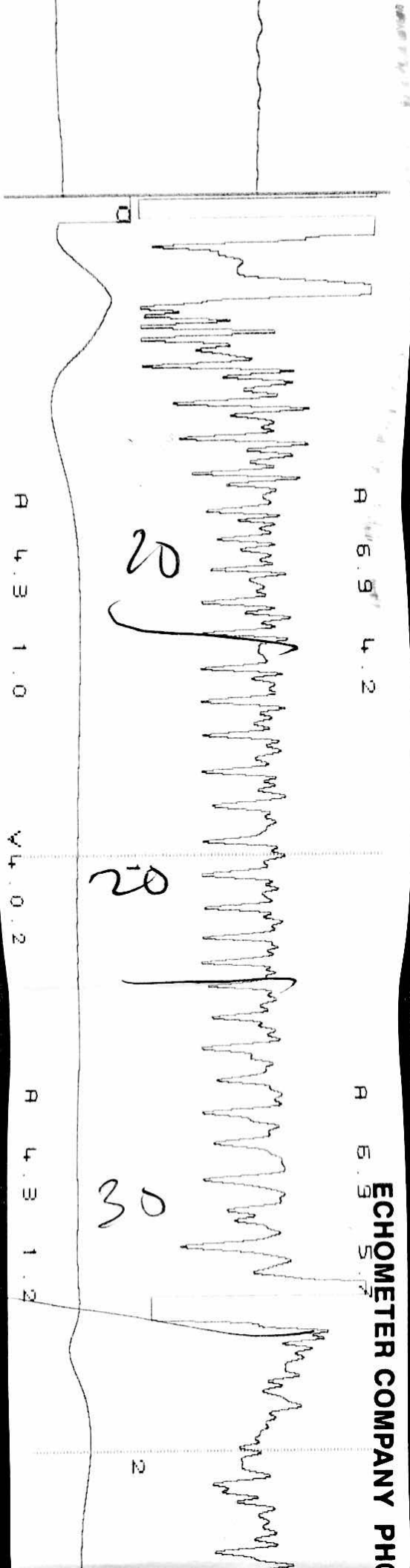
UNDER PENALTY OF PERJURY I HEREBY ATTEST THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE

Submitted Electronically

<b>Do NOT Write in This Space - KCC USE ONLY</b>	Date Tested: _____	Results: _____	Date Plugged: _____	Date Repaired: _____	Date Put Back in Service: _____
	Review Completed by: _____ Comments: _____				
TA Approved: <input type="checkbox"/> Yes <input type="checkbox"/> Denied Date: _____					

Mail to the Appropriate KCC Conservation Office:

	KCC District Office #1 - 210 E. Frontview, Suite A, Dodge City, KS 67801	Phone 620.682.7933
	KCC District Office #2 - 3450 N. Rock Road, Building 600, Suite 601, Wichita, KS 67226	Phone 316.337.7400
	KCC District Office #3 - 137 E. 21st St., Chanute, KS 66720	Phone 620.902.6450
	KCC District Office #4 - 2301 E. 13th Street, Hays, KS 67601-2651	Phone 785.261.6250



ECHOMETER COMPANY PHO

GLM Company

WELL Tidwell #3  
CASING PRESSURE.....  
 $\Delta P$  .....  
 $\Delta T$  .....  
PRODUCTION RATE.....

JOINTS TO LIQUID..... 30  
DISTANCE TO LIQUID..... 600  
FBHP .....  
SBHP .....  
PROD RATE EFF, % .....  
MAX PRODUCTION .....

ECHOMETER COMPANY

07/20/2020 17:40:49

UPPER COLLARS A: 6.9  
P-P 0.567 mV  
  
LIQUID LEVEL A: 4.3  
P-P 3.60 mV

G L M COMPANY  
Nathan Zimmerman  
TREGO KSTIDBALL 3  
BLEEDERReport Date: 08-10-2020    Sampled: 08-07-2020 at 0000  
Sample #: 1458    Sample ID: 262062**CATIONS**

Calcium (as Ca)	1559
Magnesium (as Mg)	584.20
Barium (as Ba)	0.251
Strontium (as Sr)	53.78
Sodium (as Na)	48455
Potassium (as K)	350.00
Lithium (as Li)	3.77
Ammonia (as NH <sub>3</sub> )	0.00
Aluminum (as Al)	0.00
Iron (as Fe)	0.301
Manganese (as Mn)	0.412
Zinc (as Zn)	0.411
Lead (as Pb)	0.00

**ANIONS**

Chloride (as Cl)	78000
Sulfate (as SO <sub>4</sub> )	1825
Bromine (as Br)	0.00
Dissolved CO <sub>2</sub> (as CO <sub>2</sub> )	140.00
Bicarbonate (as HCO <sub>3</sub> )	390.00
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)	22.00
Fluoride (as F)	0.00
Nitrate (as NO <sub>3</sub> )	0.00
Boron (as B)	22.01

**PARAMETERS**

Calculated T.D.S.	138620
Molar Conductivity	141321
Resistivity	7.08
Sp.Gr.(g/mL)	1.08
Pressure(atm)	1.00
pCO <sub>2</sub> (atm)	0.0143
pH <sub>2</sub> S(atm)	0.0146
Temperature (°F)	72.00
pH	7.30

**CORROSION RATE PREDICTION**

CO <sub>2</sub> - H <sub>2</sub> S Rate(mpy)	0.0209
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**COMMENTS**

TREGO KS

G L M COMPANY  
 Nathan Zimmerman  
 TREGO KS

TIDBALL 3  
 BLEEDER

Report Date: 08-10-2020    Sampled: 08-07-2020 at 0000  
 Sample #: 1458    Sample ID: 262062

**SATURATION RATIO as IAP/Ksp**

Calcite (CaCO <sub>3</sub> )	5.41
Aragonite (CaCO <sub>3</sub> )	5.06
Witherite (BaCO <sub>3</sub> )	0.00
Strontianite (SrCO <sub>3</sub> )	0.31
Calcium oxalate (CaC <sub>2</sub> O <sub>4</sub> )	0.00
Magnesite (MgCO <sub>3</sub> )	2.03
Anhydrite (CaSO <sub>4</sub> )	0.34
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	0.48
Barite (BaSO <sub>4</sub> )	2.98
Celestite (SrSO <sub>4</sub> )	0.43
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> )	0.00
Strengite (FePO <sub>4</sub> *2H <sub>2</sub> O)	0.00
Siderite (FeCO <sub>3</sub> )	0.88
Halite (NaCl)	0.07
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	0.00
Iron sulfide (FeS)	2.56

**MOMENTARY EXCESS (Lbs/1000 Barrels)**

Calcite (CaCO <sub>3</sub> )	0.331
Aragonite (CaCO <sub>3</sub> )	0.326
Witherite (BaCO <sub>3</sub> )	-24.70
Strontianite (SrCO <sub>3</sub> )	-1.27
Calcium oxalate (CaC <sub>2</sub> O <sub>4</sub> )	-0.0364
Magnesite (MgCO <sub>3</sub> )	0.174
Anhydrite (CaSO <sub>4</sub> )	-602.66
Gypsum (CaSO <sub>4</sub> *2H <sub>2</sub> O)	-410.80
Barite (BaSO <sub>4</sub> )	0.107
Celestite (SrSO <sub>4</sub> )	-49.01
Fluorite (CaF <sub>2</sub> )	-6.19
Calcium phosphate	>-0.001
Hydroxyapatite	-318.20
Silica (SiO <sub>2</sub> )	-30.87
Brucite (Mg(OH) <sub>2</sub> )	0.00508
Magnesium silicate	-97.27
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> )	-0.0211
Halite (NaCl)	-123128
Thenardite (Na <sub>2</sub> SO <sub>4</sub> )	-80812
Iron sulfide (FeS)	0.0174

**SIMPLE INDICES**

Langelier	1.19
Ryznar	4.93
Puckorius	3.94
Larson-Skold Index	311.57
Stiff Davis Index	0.622
Oddo-Tomson	0.0535

**BOUND IONS**

Calcium	1690	1556
Barium	0.272	0.272
Carbonate	51.00	0.699
Phosphate	0.00	0.00
Sulfate	1978	979.08

**OPERATING CONDITIONS**

Temperature (°F)	72.00
Time(secs)	0.00

# DownHole SAT™ Water Analysis Report

## SYSTEM IDENTIFICATION

G L M COMPANY  
TIDBALL 3  
Nathan Zimmerman  
BLEEDER  
TREGO SK

Sample ID#: 1458  
Sample ID: 262062  
Sample Date: 08-07-2020 at 0000  
Report Date: 08-10-2020

## WATER CHEMISTRY

### CATIONS

Calcium(as Ca)	1559
Magnesium(as Mg)	584.20
Barium(as Ba)	0.251
Strontium(as Sr)	53.78
Sodium(as Na)	48455
Potassium(as K)	350.00
Lithium(as Li)	3.77
Iron(as Fe)	0.301
Field Iron(as Fe)	0.00
Ammonia(as NH <sub>3</sub> )	0.00
Aluminum(as Al)	0.00
Manganese(as Mn)	0.412
Zinc(as Zn)	0.411
Lead(as Pb)	0.00

### ANIONS

Chloride(as Cl)	78000
Sulfate(as SO <sub>4</sub> )	1825
Bromine(as Br)	0.00
Dissolved CO <sub>2</sub> (as CO <sub>2</sub> )	140.00
Bicarbonate(as HCO <sub>3</sub> )	390.00
Carbonate(as CO <sub>3</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)	22.00
Fluoride(as F)	0.00
Nitrate(as NO <sub>3</sub> )	0.00
Boron(as B)	22.01

### PARAMETERS

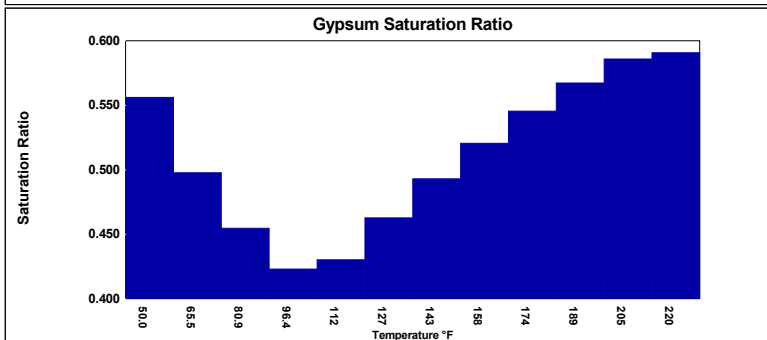
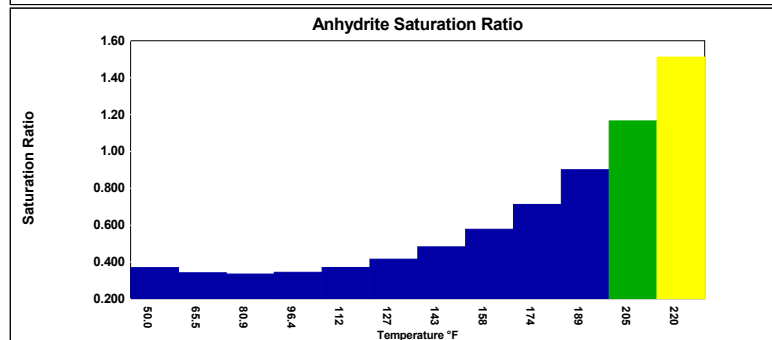
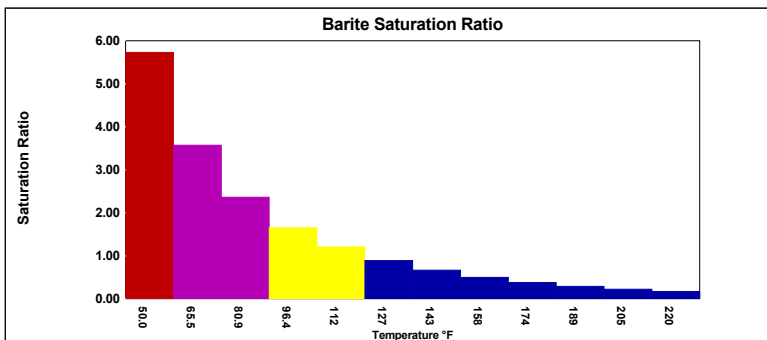
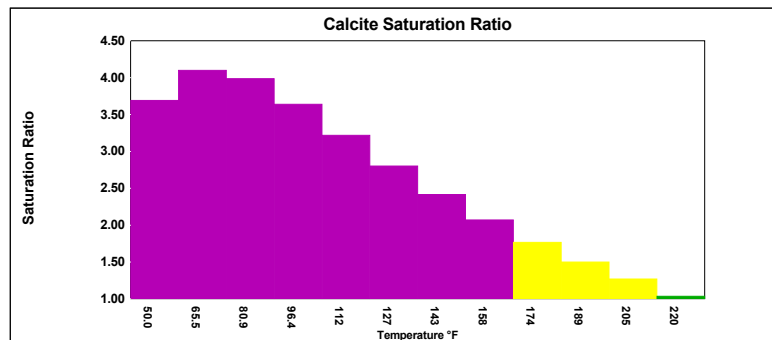
Temperature(°F)	72.00	Sample pH	7.30
Conductivity	141321	Sp.Gr.(g/mL)	1.08
Resistivity	7.08	T.D.S.	138620

## SCALE AND CORROSION POTENTIAL

Temp. (°F)	Press. (atm)	Calcite CaCO <sub>3</sub>		Anhydrite CaSO <sub>4</sub>		Gypsum CaSO <sub>4</sub> *2H <sub>2</sub> O		Barite BaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Siderite FeCO <sub>3</sub>		Mackawenite FeS		CO <sub>2</sub> (mpy)	pCO <sub>2</sub> (atm)
50.00	0.00	3.69	0.240	0.368	-558.32	0.556	-324.72	5.73	0.133	0.495	-38.86	0.506	-0.117	16.03	0.0274	0.0254	0.0143
65.45	0.00	4.10	0.244	0.341	-598.25	0.498	-387.71	3.57	0.116	0.444	-47.00	0.632	-0.0737	9.31	0.0257	0.0476	0.0143
80.91	0.00	3.98	0.210	0.334	-596.03	0.455	-437.39	2.36	0.0928	0.422	-50.81	0.686	-0.0558	5.05	0.0226	0.0255	0.0143
96.36	0.00	3.64	0.168	0.344	-558.03	0.423	-474.50	1.65	0.0633	0.415	-52.06	0.695	-0.0493	2.75	0.0176	0.0333	0.0143
111.82	0.00	3.22	0.129	0.370	-492.48	0.430	-449.43	1.20	0.0270	0.413	-52.18	0.678	-0.0479	1.55	0.00953	0.0392	0.0143
127.27	0.00	2.80	0.0970	0.415	-408.23	0.463	-389.65	0.888	-0.0203	0.409	-52.66	0.647	-0.0483	0.890	-0.00325	0.0489	0.0143
142.73	0.00	2.41	0.0711	0.481	-313.62	0.493	-340.87	0.663	-0.0821	0.403	-53.63	0.609	-0.0494	0.526	-0.0230	0.01000	0.0143
158.18	0.00	2.07	0.0507	0.577	-216.03	0.520	-301.25	0.498	-0.162	0.395	-55.06	0.567	-0.0507	0.319	-0.0527	0.0265	0.0143
173.64	0.00	1.76	0.0345	0.712	-121.28	0.545	-269.13	0.378	-0.265	0.385	-56.89	0.523	-0.0518	0.198	-0.0960	0.0474	0.0143
189.09	0.00	1.50	0.0216	0.900	-33.78	0.567	-243.38	0.289	-0.397	0.374	-59.13	0.478	-0.0527	0.126	-0.157	0.0334	0.0143
204.55	0.00	1.27	0.0112	1.16	43.67	0.586	-223.11	0.222	-0.563	0.362	-61.79	0.434	-0.0536	0.0814	-0.242	0.0345	0.0143
220.00	0.171	1.03	0.00146	1.51	107.36	0.591	-218.69	0.169	-0.792	0.343	-66.70	0.380	-0.0566	0.0595	-0.318	0.0578	0.0168
		Lbs per xSAT 1000 Barrels		Lbs per xSAT 1000 Barrels		Lbs per xSAT 1000 Barrels		Lbs per xSAT 1000 Barrels		Lbs per xSAT 1000 Barrels		Lbs per xSAT 1000 Barrels		Lbs per xSAT 1000 Barrels			

Saturation Levels (xSAT) are the ratio of ion activity to solubility, e.g. {Ca}{CO<sub>3</sub>}/K<sub>sp</sub>. pCO<sub>2</sub> (atm) is the partial pressure of CO<sub>2</sub> in the gas phase.

Lbs/1000 Barrels scale is the quantity of precipitation (or dissolution) required to instantaneously bring the water to equilibrium.



Conservation Division  
District Office No. 4  
2301 E. 13th Street  
Hays, KS 67601-2651



Phone: 785-261-6250  
Fax: 785-625-0564  
<http://kcc.ks.gov/>

Susan K. Duffy, Chair  
Dwight D. Keen, Commissioner  
Andrew J. French, Commissioner

Laura Kelly, Governor

August 11, 2020

Terry E. Morris  
Morris, Terry E. dba G L M Company  
PO BOX 193  
RUSSELL, KS 67665-0193

Re: Temporary Abandonment  
API 15-195-20370-00-00  
TIDBALL 3  
NW/4 Sec.12-11S-25W  
Trego County, Kansas

Dear Terry E. Morris:

"Your temporary abandonment (TA) application for the well listed above has been approved. In accordance with K.A.R. 82-3-111 the TA status of this well will expire 08/11/2021.

- \* If you return this well to service or plug it, please notify the District Office.
- \* If you sell this well you are required to file a Transfer of Operator form, T-1.
- \* If the well will remain temporarily abandoned, you must submit a new TA application, CP-111, before 08/11/2021.

You may contact me at the number above if you have questions.

Very truly yours,

RICHARD WILLIAMS"