

Johnson County, KS  
Well: E. Gordon W-4  
Lease Owner: D and E Ex

Town Oilfield Service, Inc.  
(913) 837-8400

Commenced Spudding:  
03/18/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
9	soil/clay	9
13	sand stone	22
25	shale	47
3	lime	50
15	shale	65
6	lime	71
5	shale	76
16	lime	92
10	shale	102
8	lime	110
9	sandy shale	119
17	lime	136
9	shale	145
7	sand and sandy shale	152
20	lime	172
9	shale	181
57	lime	238
20	shale	258
8	lime	266
19	shale	285
8	lime	293
4	shale	297
9	lime	206
34	shale	340
1	lime	3471
12	shale	353
24	lime	377
8	shale	385
24	lime	409
4	shale	413
5	lime	418
4	shale	422
6	lime	428
5	shale	433
11	sandy shale	444
97	shale	541
9	sandy shale	550
50	shale	600
7	lime	607
2	shale	609



# Short Cuts

## TANK CAPACITY

BBLs. (42 gal.) equals  $D^2 \times .14 \times h$   
 D equals diameter in feet.  
 h equals height in feet.

## BARRELS PER DAY

Multiply gals. per minute x 34.2

HP equals BPH x PSI x .0004

BPH - barrels per hour

PSI - pounds square inch

## TO FIGURE PUMP DRIVES

- \* D - Diameter of Pump Sheave
- \* d - Diameter of Engine Sheave
- SPM - Strokes per minute
- RPM - Engine Speed
- R - Gear Box Ratio
- \*C - Shaft Center Distance

D -  $RPM \times d$  over  $SPM \times R$

d -  $SPM \times R \times D$  over RPM

SPM -  $RPM \times D$  over  $R \times d$

R -  $RPM \times D$  over  $SPM \times d$

BELT LENGTH -  $2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$

\* Need these to figure belt length

TO FIGURE AMPS:  $\frac{WATTS}{VOLTS} = AMPS$

746 WATTS equal 1 HP

# Log Book

Well No. W-4

Farm East Garden

KS Johnson  
 (State) (County)

27 14 22  
 (Section) (Township) (Range)

For D&E Exploration  
 (Well Owner)

## Town Oilfield Services, Inc.

1207 N. 1st East  
 Louisburg, KS 66053  
 913-710-5400

Best Grade Farm: 3 uninc County

KS State; Well No. W-4

Elevation 1002

Commenced Spudding 2-18 20 14

Finished Drilling 3-19 20 14

Driller's Name Charles Warner

Driller's Name \_\_\_\_\_

Driller's Name \_\_\_\_\_

Tool Dresser's Name Eric Helton

Tool Dresser's Name Jordan Thompson

Tool Dresser's Name \_\_\_\_\_

Contractor's Name POS

27                      14                      22

(Section)                  (Township)                  (Range)

Distance from 0 line, 3520 ft.

Distance from E line, 5280 ft.

3-24-15

## CASING AND TUBING RECORD

10" Set \_\_\_\_\_ 10" Pulled \_\_\_\_\_

~~7~~ 8" Set 21.3' 8" Pulled \_\_\_\_\_

6 1/4" Set \_\_\_\_\_ 6 1/4" Pulled \_\_\_\_\_

4" Set \_\_\_\_\_ 4" Pulled \_\_\_\_\_

2 7/8" Set 929' 2" Pulled \_\_\_\_\_

## CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.

Thickness of Strata	Formation	Total Depth	Remarks
9	soil/clay	9	
12	sandstone	22	
25	shale	47	
3	Lime	50	
15	shale	65	
6	Lime	71	
5	shale	76	
16	Lime	92	
10	shale	102	Drank
✓	Lime	110	
9	sandy shale	119	
17	Lime	126	
9	shale	145	
7	sand & sandy shale	152	no oil
20	Lime	172	
9	shale	181	
57	Lime	238	
20	shale	258	
8	Lime	266	
19	shale	285	
8	Lime	293	
4	shale	297	
9	Lime	306	
34	shale	340	
1	Lime	341	
12	shale	353	
24	Lime	377	

Thickness of Strata	Formation	Total Depth	Remarks
8	shale	385	
24	Lime	409	
4	shale	413	
5	Lime	418	
4	shale	422	
6	Lime	428	Weather
5	shale	433	
11	sandy shale	444	
97	shale	541	
9	sandy shale	550	
50	shale	600	
7	Lime	607	
2	shale	609	
2	Lime	611	
5	shale	616	
9	Lime	625	
15	shale	640	
4	Lime	644	
8	shale	652	
2	Lime	654	
5	shale	659	
2	Lime	661	
41	shale	702	red bed - 667'
12	sand	714	grey, no oil
10	sandy shale	724	
44	shale	768	
5	Burken sand	773	little color, no oil, porous sand

773

Thickness of Strata	Formation	Total Depth	Remarks
7	sandy shale	780	
13	shale	793	
3	Lime	796	
5	shale	801	
8	sand	809	fine oil
34	shale	843	
7	Broken sand	850	with Brown sand
37	shale	887	
2	sandy lime	889	oil, 60% - 70% oil, at bleeding
2	sandy Lime	891	40% oil
2	sand	893	60% - 70% oil good bleeding
2	sand	895	50% - 90% oil
1	sand	896	75% oil
1	sand	897	20% - 30% oil } Laminated
2	Broken sand	899	40 - 5% oil
10	sandy shale	909	
22	shale	931	
10	sand	941	white & gray sand, 10% oil
	shale		