

Johnson County, KS
Well: E. Gordon N2
Lease Owner: D Z

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

Commenced Spudding:
11/22/2013

WELL LOG

Thickness of Strata	Formation	Total Depth
21	Soil-Clay	21
19	Shale	40
6	Lime	46
6	Sand	52
14	Lime	66
8	Sandy Shale	74
9	Lime	83
9	Sandy Shale	92
17	Lime	109
3	Shale	112
14	Sand	126
20	Lime	146
7	Shale	153
54	Lime	207
24	Shale	231
7	Lime	238
20	Shale	258
7	Lime	265
4	Shale	269
9	Lime	278
34	Shale	312
2	Lime	314
11	Shale	325
25	Lime	350
6	Shale	356
24	Lime	380
4	Shale	384
5	Lime	389
5	Shale	394
7	Lime	401
4	Shale	405
7	Sand	412
16	Sandy Shale	428
87	Shale	515
12	Sand	527
7	Sandy Shale	534
42	Shale	576
3	Lime	579
7	Shale	586
6	Lime	592

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 - $\text{RPM} \times d$ over $\text{SPM} \times R$

d - $\text{SPM} \times R \times D$ over RPM

SPM - $\text{RPM} \times D$ over $R \times D$

R - $\text{RPM} \times D$ over $\text{SPM} \times D$

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

* Need these to figure belt length

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

746 WATTS equal 1 HP

Log Book

Well No. N2

Farm East Garden

KS Johnson
(State) (County)

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

For DIZ Exploration
(Well Owner)

Town Oilfield Services, Inc.

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

Thickness of Strata	Formation	Total Depth	Remarks
21	oil/clay	21	
19	shale	40	
6	lime	46	
6	sandy shale	52	
14	lime	66	
8	sandy shale	74	
9	lime	83	
9	sandy shale	92	
17	lime	109	
3	shale	112	
14	sand	126	grey, hard
20	lime	146	
7	shale	153	
54	lime	207	
24	shale	231	
7	lime	238	
20	shale	258	
7	lime	265	
4	shale	269	
9	lime	278	
24	shale	312	
2	lime	314	
11	shale	325	
25	lime	350	334' - 335' oil
6	shale	356	
24	lime	380	
4	shale	384	

384

Thickness of Strata	Formation	Total Depth	Remarks
5	Lime	389	
5	shale	394	
7	Lime	401	Harder
4	shale	405	
7	sand	412	
16	sandy shale	428	grey, no oil
87	shale	515	
12	sand	527	
7	sandy shale	534	grey, no oil
42	shale	576	
3	Lime	579	
7	shale	586	
6	Lime	592	
17	shale	609	
3	Lime	612	
7	shale	619	
10	Lime + shale	629	
34	shale	663	red bed - 633'
21	sand	684	
10	sandy shale	694	grey, no oil
39	shale	733	
6	Broken sand	739	edge, very little oil
10	sandy shale	749	
21	shale	770	
5	sand	775	no oil
6	sandy shale	781	
	shale	848	

848

Thickness of Strata	Formation	Total Depth	Remarks
1	Lime	849	
1	sandy lime	850	no oil
1	sandy Lime	851	odor, 10%-15% slight bleeding
13	cone	864	press - 8
6	sand	870	no oil
8	sandy shale	878	
42	shale	920	TD

Thickness of Strata	Formation	Total Depth	Remarks
2	sand	853	50% - 40% , laminated
2	sand	855	90% solid , good bleeding
2	sand	857	50% - 60% , laminated
0.5	sand	857.5	20%
1.5	sand	859	40% - 40%
1	sand	860	25% , laminated
1	sand	861	2% , laminated
2	sandy shale	863	no oil
1	sand	864	no oil