

Johnson County, KS
Well: Meyer #30
Lease Owner: DZ Exploration

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

Commenced Spudding:
11-19-2014

WELL LOG

Thickness of Strata	Formation	Total Depth
0 - 14	Soil & Clay	14
11	Shale	25
5	Lime	30
7	Shale	37
17	Lime	54
8	Shale	62
9	Lime	71
9	Shale	80
24	Lime	104
15	Shale	119
21	Lime	138
12	Shale	150
12	Lime	162
8	Shale	170
37	Lime	207
17	Shale	224
9	Lime	233
20	Shale	253
7	Lime	260
5	Shale	265
7	Lime	272
35	Shale	307
1	Lime	308
11	Shale	319
11	Lime	328
3	Shale	331
16	Lime	347
9	Shale	356
19	Lime	375
5	Shale	380
4	Lime	384
5	Shale	389
7	Lime	396
173	Shale	569
9	Lime	578
12	Shale	590
7	Lime	597
15	Shale	612
4	Lime	616
15	Shale	631

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. 30

Farm Meyer

KS Johnson
(State) (County)

28 14 22
(Section) (Township) (Range)

For D+Z Exploration
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Thickness of Strata	Formation	Total Depth	Remarks
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7	shale	37	
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347

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7	lime	597	
15	shale	612	
4	lime	616	
15	shale	631	
4	lime	635	
104	shale	739	
1	grey sand	740	no oil
6	brown sand	746	no oil, very lite odor
5	grey sand	751	no oil
5	sandy shale	756	
105	shale	861	
1	broken sand	862	lite bleed, good saturation
3	limy sand	865	white, very lite oil 90% limy 10% oil
8	oil sand	873	good bleed, great saturation
2	broken sand	875	good bleed, good saturation 100% sandy shale
5	sandy shale	880	40% oil sand
80	shale	960	TD

NOTES:

960' TD
 5⁵/₈ hole
 919.90 2⁷/₈ pipe

 20' 7" surface
 3 sacks cement
 Bonus well

Rules of Thumb

CEMENTING ANNULUS

2" ID - 6 ¹ / ₄ " - 1 Sack	5.8'
2" ID - 8" - 1 Sack	3.1'
3" ID - 8" - 1 Sack	3.5'
4" ID - 8" - 1 Sack	4.0'

CAPACITY

2" - 1 BBL. equals	256'
2 ¹ / ₂ " - 1 BBL. equals	164'
3" - 1 BBL. equals	115'
4" - 1 BBL. equals	64'
4 ⁷ / ₈ " - 1 BBL. equals	43'
6 ¹ / ₄ " - 1 BBL. equals	26'
8" - 1 BBL. equals	16'

WATER - CEMENT RATIO

5.5 gals. to 1 sack - 2¹/₂ hours
 to thicken slurry

7.7 gals. to 1 sack - 2 hours
 to thicken slurry