

Johnson County, KS
Well:Donovan #I-20
Lease Owner:D and Z

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

Commenced Spudding:
03/21/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
4	soil/clay	4
16	sandstone	20
3	lime	23
17	shale	40
5	lime	45
19	shale	64
5	lime	69
4	shale	73
13	lime	86
9	shale	95
8	lime	103
9	shale	112
20	lime	132
15	shale	147
20	lime	167
8	shale	175
56	lime	231
22	shale	253
9	lime	262
17	shale	279
7	lime	286
5	shale	291
9	lime	300
34	shale	334
1	lime	335
11	shale	346
25	lime	371
7	shale	378
24	lime	402
4	shale	406
4	lime	410
6	shale	416
6	lime	422
5	shale	427
16	sandy shale	443
89	shale	532
7	sand	539
51	shale	590
4	lime	594
3	shale	597

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 $BPH \times PSI \times .0004$

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 $SPM \times d$

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

* 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. # 1-20

Farm Donovan

KS Johnson
(State) (County)

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

For D+2 Exploration
(Well Owner)

Town Oilfield Services, Inc.

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

Thickness of Strata	Formation	Total Depth	Remarks
4	silt/clay	4	
16	sandstone	20	
3	Lime	23	water
17	shale	40	
5	Lime	45	
19	shale	64	
5	Lime	69	
4	shale	73	
13	Lime	86	
9	shale	95	
8	Lime	103	
9	shale	112	
20	Lime	132	
15	shale	147	
20	Lime	167	
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Thickness of Strata	Formation	Total Depth	Remarks
		371	
7	shale	378	
24	lime	402	
4	shale	406	
4	lime	410	
6	shale	416	
6	lime	422	
5	shale	427	Harder
16	sandy shale	443	
89	shale	532	
7	sand	539	
51	shale	590	grey, no oil
4	lime	594	
3	shale	597	
3	lime	600	
8	shale	608	
8	lime	616	
14	shale	630	
3	lime	633	
6	shale	639	
5	lime	644	
3	shale	647	
3	lime	650	
37	shale	687	red bed - 655'
20	sand	707	grey, no oil
7	sandy shale	714	
41	shale	755	
7	broken sand	762	dark, little oil, broken sand

