

Miami County, KS
Well:0'Brien WSW-1
Lease Owner:AltaVista

Town Oilfield Service, Inc.
(913) 294-2125

Commenced Spudding:
1/8/2017

WELL LOG

Thickness of Strata	Formation	Total Depth
0-20	Soil-Clay	20
8	Shale	28
19	Lime	47
9	Shale	56
2	Lime	58
7	Shale	65
6	Lime	71
40	Shale	111
18	Lime	129
9	Shale	138
13	Lime	151
1	Shale	152
16	Lime	168
8	Shale	176
22	Lime	198
5	Shale	203
4	Lime	207
3	Shale	210
5	Shale	215
154	Lime	369
8	Limey Sand	377
13	Lime	390
44	Shale	434
8	Lime	442
10	Shale	452
3	Lime	455
16	Shale	471
7	Lime	478
21	Shale	499
1	Lime	500
5	Shale	505
7	Lime	512
13	Shale	525
10	Sand	535
10	Sandy Shale	545
41	Shale	586
10	Sand & Shale	596
4	Sandy Shale	600
5	Shale	605
2	Lime	607

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 $SPM \times d$

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. WSW-1

Farm O'Brien

KS Miami
(State) (County)

1 18 21
(Section) (Township) (Range)

For Altavista Energy inc
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Thickness of Strata	Formation	Total Depth	Remarks
0-20	soil-clay	20	
8	shale	28	
19	lime	47	
9	shale	56	
2	lime	58	
7	shale	65	
6	lime	71	
40	shale	111	red bed
18	lime	129	
9	shale	138	
13	lime	151	
1	shale	152	
16	lime	168	
8	shale	176	
22	lime	198	
5	shale	203	
4	lime	207	
3	shale	210	
5	lime	215	Halting
154	shale	369	
8	1 meq sand	377	broken - good oil show
13	lime	390	
44	shale	434	
8	lime	442	
10	shale	452	
3	lime	455	
16	shale	471	

471

Thickness of Strata	Formation	Total Depth	Remarks
7	Lime	475	
21	Shale	499	
1	Lime	500	
5	Shale	505	
7	Lime	512	odor - no show
13	Shale	525	
10	sand	535	mostly solid - good saturation
10	sandy shale	545	
41	Shale	586	
10	sand & shale	596	no oil
4	sandy shale	600	
5	Shale	605	
2	Lime	607	Coal seam
13	Shale	620	
3	Lime	623	
7	shale	630	
10	sandy shale	640	
56	Shale	696	
6	sandy shale	702	
18	Shale	720	
71	sandy shale	791	
15	sand	806	grey
14	Sand	820	water
13	sand	833	grey
7	sandy shale	840	
7	shale	847	
8	sandy shale	855	

855

Thickness of Strata	Formation	Total Depth	Remarks
5	sand	860	grey
7	Shale	867	
13	sand	880	brown
21	Shale	901	
3	sand	904	grey
21	Shale	925	
3	Lime	928	
3	sand	931	brown - odor - no show
14	Lime	945	odor - slight oil show
2	sandy Lime	947	
13	sandy shale & Lime	960	
2	Lime	962	
4	sandy shale & Lime	966	
11	sandy Lime	977	
8	Lime	985	
3	sandy Lime	988	
6	Lime	994	
1	sandy shale & Lime	995	
6	sandy Lime	1001	
1	Lime	1002	
2	sandy Lime	1004	
37	Lime	1041	very hard
44	Lime	1085	odor
195	Lime	1280	water - TD