#### WELL LOG

Thickness of Strata	Formation	Total Depth	
23	soil/clay	23	
28	shale	51	
5	lime	56	
7	sandy shale and sand	63	
15	lime	78	
8	shale	85	
9	lime	94	
9	sandy shale and sand	103	
18	lime	121	
3	shale	124	
13	sand	137	
20	lime	157	
7	shale	164	
54	lime	218	
23	shale	241	
8	lime	249	
20	shale	269	
5	lime	274	
5	shale	279 288	
9	lime		
46	shale	334	
25	lime	359	
6	shale	365	
24	lime	389	
4	shale	393 398	
5	lime		
5	shale	403	
5	lime	408	
4	shale	412	
6	sand	418	
12	sandy shale	430	
94	shale	527	
7	sand	531	
6	sandy shale	537	
42	shale	579	
5	lime	584	
14	shale	598	
7	lime	605	
15	shale	620	
4	lime	624	

### Town Oilfield Service, Inc.

Commenced Spudding: 11/20/2013

(913) 837-8400

8	shale	632
2	lime	634
3	shale	637
2	lime	639
36	shale	675
15	sand	690
22	sandy shale	712
33	shale	745
6	sand	751
10	sandy shale	761
22	shale	783
5	sand	788
7	sandy shale	795
26	shale	821
10	broken sand	831
34	shale	865
1	sandy lime	866
2	sandy lime	868
3	sand	871
1	sand	872
2	broken sand	874
14	sandy shale	888
40	shale	928
19	sand	947
13	shale	960-TD

## Short Cuts

**TANK CAPACITY** 

BBLS. (42 gal.) equals D<sup>2</sup>x.14xh
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 - RPMxd over SPMxR

d - SPMxRxD over RPM

SPM - RPMXD over RxD

R - RPMXD over SPMxD

BELT LENGTH - 2C + 1.57(D + d) + (D-d)<sup>2</sup>

\* Need these to figure belt length

WATTS = AMPS

TO FIGURE AMPS:

VOLTS

746 WATTS equal 1 HP

# Log Book

Well No.	<u> </u>	
Farm Ess	Condon	
LS.	50	NOSNA
(State)		(County)
27	1,7	22
(Section)	(Township)	(Range)
		· · · · · · · · · · · · · · · · · · ·
For 042	Expland	1000
,	(Well Owner)	

## Town Oilfield Services, Inc.

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

East Garderarm: <u>Jahnson</u> County	
State; Well No	
Elevation 1039	
Commenced Spuding 11-20 2013	
Finished Drilling	
Driller's Name Chad Weave	
Driller's Name	
Driller's Name	
Tool Dresser's Name Cole Holow	
Tool Dresser's Name	
Tool Dresser's Name	
Contractor's Name 505	
27 34 22	
(Section) (Township) (Range)	
Distance from Sine,ft.	
Distance from E line, _5280 _ft.	
3- Sects	
CASING AND TUBING	
RECORD	
10" Set 10" Pulled	
78" Set 34' 8" Pulled	
6¼" Set 6¼" Pulled	
A" Cot	
27/2Set 915 2" Pulled	
960 TD	-1-

Topics the same and the

Take .

Thickness of Strata	Formation	Total Depth	Remarks
23	soil Iday	33	
28	shale	51	
5	1 inc	50	
-1	and sak Jean	4 63	
. )5	Lime	78	
8	shale	85	
9	ime	149	
9	sud shales	2003	
18	Live	121	
3	shale	13,4	
13	sand	137	Lie on par
20	Line	157	
7	eliche	1634	
514	Line	218	
23	shale	3.41	
8	Line	249	
20	shale	269	
5	Linc	2714	
5	shale	279	
9	Lime	288	
)+C	shale	334	
25	1 Swe	359	
	shale	365	
2:4	Liwe	389	
1,	escale	393	
5	Lima	398	
5	shale	1403	

		403	
Thickness of Strata	Formation	Total Depth	Remarks
5	Lime	408	Was Marie .
14	shale	1412	Hantha
	sond	1418	
12	sendy shale	430	ency, monil
49	Shale	524	
7	sand	531	
6	sandyshale	537	
173	shale	579	
5	Lime	584	
114	Shala	598	
7	Lime	GOS	
15	shale	620	
17	Lime	624	*
	shale	632	
2	Lime	634	
3	shale	(37	
2	Line	639	
36	Shale	675	~edbed - 643'
15	said	690	
22	sandyshale	712	
33	ahale	745	
	soud	751	odor, 1:44/2 0:1
10	scindy shale	761	
22	shale	783	
5	sand	788	no 0,1
	exud, shalo	795	
	Sheile	821	

Thickness of Strata	Formation	Total	Remarks
10	Ruckan sond	831.	no o.1.
3'4	shale	865	
	sand I lime	866	adon 25% o.1 ok Weeding
2	sand 4 lime	868	60%-20% on cood bleeding
3	sand	871	80% -90% 0.1
	5 cm	872	75% 0.1
2	Broken send	874	20% 61
14	sand y chale	888	no o. 1
140	shale	928	
19	sand	947	no ail
13	shale	960	OT.
-			
		The state of the s	
	-6-		7