

Johnson County, KS
Well: Thomas B 4
Lease Owner: ST Petroleum

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

Commenced Spudding:
10/10/2013

WELL LOG

Thickness of Strata	Formation	Total Depth
6	Soil-Clay	6
9	Sandstone	15
69	Shale	84
3	Lime	87
4	Sand	91
15	Lime	106
7	Shale	113
9	Lime	122
5	Shale	127
20	Lime	147
23	Sand	170
24	Lime	194
46	Sandy Shale	240
25	Lime	265
14	Shale	279
9	Lime	288
17	Shale	305
7	Lime	312
5	Shale	317
7	Lime	324
44	Shale	368
26	Lime	394
9	Shale	403
22	Lime	425
3	Shale	428
5	Lime	433
3	Shale	436
7	Lime	443
4	Shale	447
6	Sandy Shale	453
98	Shale	551
6	Sand	557
4	Sandy Shale	561
55	Shale	616
5	Lime	621
3	Shale	624
2	Lime	626
8	Shale	634
6	Lime	640
5	Sand	645

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. 4

Farm Thomas B

KS Johnson
 (State) (County)

31 14 22
 (Section) (Township) (Range)

For ST Petroleum
 (Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Traverse Farm: Johnson County

KS State; Well No. 4

Elevation 1051

Feet

Commenced Spuding 10-10, 2013

Finished Drilling 10-11, 2013

Driller's Name Chad Weaver

Driller's Name _____

Driller's Name _____

Tool Dresser's Name Cole Holcum

Tool Dresser's Name _____

Tool Dresser's Name _____

Contractor's Name TOS

31 R1 22

(Section) (Township) (Range)

Distance from S line, 4830 ft.

Distance from E line, 1951 ft.

3- Sacks

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____

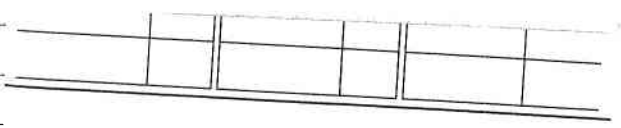
7 7/8" Set 224' 8" Pulled _____

6 1/4" Set _____ 6 1/4" Pulled _____

4" Set _____ 4" Pulled _____

2 7/8" Set 943.50 2" Pulled _____

935.50
870.85 Baffle seat apple
980 TD



430

Thickness of Strata	Formation	Total Depth	Remarks
7	Lime	443	Harder
4	shale	447	
6	sandy shale	453	
98	shale	551	
6	sand	557	
4	sandy shale	561	
35	shale	610	
5	Lime	621	
3	shale	624	
2	Lime	626	
8	shale	634	dry ok show
6	Lime	640	
5	sand	645	
3	sandy shale	648	
8	shale	656	
3	Lime	659	
2	coal	661	
6	shale	667	
9	limestone shale	676	
27	shale	703	
2	Lime	705	no oil
7	shale	712	
4	sand	716	
4	sandy shale	720	
56	shale	776	
7	Broken sand	783	
5	sandy shale	788	

788

Thickness of Strata	Formation	Total Depth	Remarks
25	shale	813	
5	sand	818	
12	shale	830	
2	Broken sand	832	
3	sand	835	no o.i.
1	sand	836	15% - 20% oil
1	sand	837	50% - 60% good bleeding
3	sand	840	90% - solid
3	sandy shale	843	
9	shale	852	
5	sand	857	no oil
27	shale	884	
2	Broken sand	886	
10	shale	896	
1	sandy lime	897	very solid, good bleeding
1	sandy lime	898	75% oil
2	sandy lime	900	10% - 15% o.i.
2	sand	902	solid o.i.
2	Broken sand	904	75%
1	Broken sand	905	2% o.i.
21	Broken sand	926	no o.i.
54	shale	980	TD



CONSOLIDATED
Oil Well Services, LLC

263165

TICKET NUMBER 44750

LOCATION Ottawa KS

FOREMAN Fred Mader

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10-11-13	7532	Thomas "B" #41	NE 31	14	22	JO
CUSTOMER ST Petroleum Inc						
MAILING ADDRESS 18800 Sunflower Rd			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY Edgerton			712	Fred Mader		
STATE KS			495	Nar Bee		
ZIP CODE 66021			675	Kai Det		

JOB TYPE logstring HOLE SIZE 5 7/8 HOLE DEPTH 950' CASING SIZE & WEIGHT 2 7/8 EOE
 CASING DEPTH 943 DRILL PIPE Baffle in TUBING @ 935 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 5' + Plug
 DISPLACEMENT 5.44 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 5 BPM

REMARKS: Hold crew safety meeting. Establish pump rate. Mix Pump 100[#] Gel
 Flush. Mix + Pump 130 SKs 50/50 Poz Mix Cement. 270 Gel 44[#]
 Flo Seal/sk. Cement to surface. Flush pump + lines clean.
 Displace 2" Rubber plug to baffle in casing. Pressure to 800[#]
 PSI. Release pressure to set float valve. Shut in casing.

TDS Drilling - Chad

Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	495	1085 ⁰⁰
5406	30mi	MILEAGE	495	126 ⁰⁰
5402	943	Casing Footage		N/C
5407	Minimum	Tom Miles		368 ⁰⁰
5502	2 hrs	80 BBL Vac Truck	675	180 ⁰⁰
1124	130 SKs	50/50 Poz Mix Cement		1495 ⁰⁰
118B	319 [#]	Premium Gel		70 ¹⁸
1107	33 [#]	Flo Seal		81 ⁵¹
4402	1	2 1/2" Rubber Plug		29 ⁵⁰
			7,375 ⁷⁰	
			SALES TAX	123 ⁶³
			ESTIMATED TOTAL	3558 ⁸²

Rev'n 3737

AUTHORIZATION

[Signature]

TITLE

DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.