

County, KS
 Well: 3-4
 Lease Owner: Thomas C

TDR Construction, INC.
 (913) 837-8400

Commenced Spudding:
 03/25/2019

WELL LOG

Thickness of Strata	Formation	Total Depth
0-15	Soil-clay	15
29	Lime	44
7	Shale	51
9	Lime	60
8	Shale	68
15	Lime	83
13	Shale	96
4	Sand	100-no oil
74	Lime	174-water
32	Shale	206
8	Lime	214
20	Shale	234
7	Lime	241
3	Shale	244
9	Lime	253
34	Shale	287
2	Lime	289
9	Shale	298
28	Lime	326
6	Shale	332
23	Lime	355
2	Shale	357
7	Lime	364
4	Shale	368
6	Lime	374-Hertha
173	Shale	547
8	Lime	555
6	Shale	561
5	Lime	566
18	Shale	584
4	Lime	588
6	Shale	594
10	Lime	604
93	Shale	697
1	Lime	698
134	Shale	832
8	Sand	840-mostly solid-good saturation
80	Shale	920-TD

Short Cuts

TANK CAPACITY

BBL.S. (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. 3-4

Farm Thomas C

KS

(State)

Johnson

(County)

14

(Section)

14

(Township)

22

(Range)

For ST Petroleum inc
(Well Owner)

15-091-24510

TDR Construction
**Town Oilfield
Services, Inc.**

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

Thomas C Farm: Johnson County

KS State: Well No. 3-4

Elevation 1040

Commenced Spuding March 25, 1919

Finished Drilling 3-27, 1919

Driller's Name Wesley Dollard

Driller's Name Ryan Ward

Driller's Name

Tool Dresser's Name

Tool Dresser's Name

Tool Dresser's Name

Contractor's Name TDR

14 14 22

(Section) (Township) (Range)
Distance from S line, 1850 ft.

Distance from E line, 3430 ft.

4 sacks
10 hrs
5 5/8 borehole
2 7/8 casing

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____
8" Set _____ 8" Pulled _____
7 6/8" Set 20 6 1/2" Pulled _____
4" Set _____ 4" Pulled _____
2" Set _____ 2" Pulled _____

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
870.2		Baffle			
898.7		Flint		27	8/8
920		TD			

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9	Lime	60	
8	shale	68	
15	Lime	83	
13	shale	96	
4	sand	100	
74	Lime	174	no Oil
32	shale	206	water
8	Lime	214	
20	shale	234	
7	Lime	241	
3	shale	244	
9	Lime	253	
34	shale	287	
2	Lime	289	
9	shale	298	
28	Lime	326	
6	shale	332	
23	Lime	355	
2	shale	357	
7	Lime	364	
4	shale	368	
6	Lime	374	Hertzog
173	shale	547	
8	Lime	555	



PRESSURE PUMPING LLC
 PO Box 884, Chanute, KS 66720
 620-431-9210 or 800-467-9876

100307
 40S12

TICKET NUMBER 55542
 LOCATION Ottawa, KS
 FOREMAN Casey Kennedy

**FIELD TICKET & TREATMENT REPORT
 CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
3/27/19	7532	Thomas C # 3-4	SW 14	14	22	JO
CUSTOMER ST Petroleum			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS 18800 Sunflower Rd			729	Casey	✓	Sally Matting
CITY STATE ZIP CODE Edgerton KS 66621			467	KeiCar	✓	
			804	HarBec	✓	
			675	KeiDet	✓	

JOB TYPE longstring HOLE SIZE 5 5/8" HOLE DEPTH 920' CASING SIZE & WEIGHT 2 7/8" EUE
 CASING DEPTH 898' DRILL PIPE _____ TUBING battle - 870' OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 28'
 DISPLACEMENT 5.04 bbls DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 200 # gel followed by 5 bbls fresh water, mixed & pumped 130 sls Portland IA cement w/ 2% gel + 1/4 # Floseal per sk, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to battle w/ 5.04 bbls fresh water, pressured to 800 PSI, released pressure to set float valve.

Handwritten signature/initials

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	1500.00	
CE0002	30 mi	MILEAGE	214.50	
CE0711	min	ton mileage	660.00	
WE0853	2 hrs	80 Vac	208.00	
		trucks	2574.50	
		- 40%	1029.80	
		subtotal		1544.70
so ^{aa} CC5840	130 sls	Portland IA cement	1755.00	
CC5965	318 #	Gel	95.40	
CC6075	33 #	Floseal	66.00	
CP5176	1	2 1/2" rubber plug	45.00	
		materials	1961.40	
		- 40%	784.56	
		subtotal		1176.84
		7.975%		93.85
		SALES TAX		93.85
		ESTIMATED TOTAL		2815.39

AUTHORIZATION [Signature] TITLE _____ DATE (4692.32)

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.