

Franklin County, KS  
Well: Hoehm I-21  
Lease Owner: TDR

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

Commenced Spudding:  
06/2/2014

15-059-26449-00-00

WELL LOG

Thickness of Strata	Formation	Total Depth
0-41	soil/clay	41
3	lime	44
4	shale	48
16	lime	64
8	shale	72
11	lime	83
6	shale	89
17	lime	106
40	shale	146
22	lime	168
73	shale	241
25	lime	266
21	shale	287
6	lime	293
23	shale	316
3	lime	319
16	shale	335
1	lime	336
17	shale	353
7	lime	360
2	shale	362
12	lime	374
13	shale	387
20	lime	407
4	shale	411
3	lime	414
5	shale	419
6	lime	425
46	shale	471
15	sand	486
59	shale	545
1	sand	540
7	sand	553
3	sandy shale	556
43	shale	549
6	lime	605
20	shale	625
7	lime	632
12	shale	644
4	lime	648



# 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. I-21

Farm Hoehn

KS Franklin  
 (State) (County)

5 16 21  
 (Section) (Township) (Range)

For TDR  
 (Well Owner)

## Town Oilfield Services, Inc.

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

Hoehn Farm: Franklin County

KS State; Well No. I-21

Elevation 9900

Commenced Spuding 06/2 20 14

Finished Drilling 06/3 20 14

Driller's Name Greg Perry

Driller's Name

Driller's Name

Tool Dresser's Name Kenny Gwynn

Tool Dresser's Name Justin Lyons

Tool Dresser's Name

Contractor's Name TDS

S 16 31

(Section) (Township) (Range)

Distance from S line, 2970 ft.

Distance from E line, 4555 ft.

3 bag of cement

CASING AND TUBING RECORD

10" Set \_\_\_\_\_ 10" Pulled \_\_\_\_\_
8" Set \_\_\_\_\_ 8" Pulled \_\_\_\_\_
7" 6 1/2" Set 21' \_\_\_\_\_ 6 1/2" Pulled \_\_\_\_\_
4" Set \_\_\_\_\_ 4" Pulled \_\_\_\_\_
2" Set \_\_\_\_\_ 2" Pulled \_\_\_\_\_

CASING AND TUBING MEASUREMENTS

Table with 6 columns: Feet, In., Feet, In., Feet, In. Handwritten entries include 723, 30, Buffer, 760, Total, 2 7/8".

Thickness of Strata	Formation	Total Depth	Remarks
0-4'	Soil-Claw	4'	
3	Lime	44	
4	Shale	48	
16	Lime	64	
8	Shale	72	
11	Lime	83	
6	Shale	89	
17	Lime	106	
40	Shale	146	
22	Lime	168	
73	Shale	241	
25	Lime	266	
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17	Shale	353	
7	Lime	360	
2	Shale	362	
12	Lime	374	
13	Shale	387	
20	Lime	407	
4	Shale	411	
3	Lime	414	
5	Shale	419	

419

Thickness of Strata	Formation	Total Depth	Remarks
6	Lime	425	
46	Shale	471	Hertha
15	Sand	486	
59	Shale	545	No Oil
1	Sand	546	
7	Sand	553	No Oil
3	Sandy Shale	556	Broken - Poor Saturation
43	Shale	599	
6	Lime	605	
20	Shale	625	
7	Lime	632	
12	Shale	644	
4	Lime	648	
19	Shale	667	
2	Lime	669	
27	Shale	696	
2	Sand	698	Broken - Poor Saturation
6	Sand	704	Solid - Good Saturation
3	Sand	707	Broken - Good Saturation
3	Sandy Shale	710	
70	Shale	780	TD

# Town Oilfield Service

P.O Box 339 Louisburg, Ks 66053  
913-837-8400

Ticket Number \_\_\_\_\_  
Location \_\_\_\_\_  
Foreman \_\_\_\_\_

## Field Ticket & Treatment Report Cement

Date	Customer#	Well Name & Number	Section	Township	Range	County
6-3-14	Hackn	I-21	5	16	21	Franklin
Customer TDR Cont.		Mailing Address				
		City	State	Zip Code		

Job Type long string Hole Size 5 5/8 Hole Depth 780 Casing Size & Weight 2 7/8  
Casing Depth 760 Drill Pipe \_\_\_\_\_ Tubing \_\_\_\_\_ Other \_\_\_\_\_  
Displacement 4.6 Displacement PSI 300 Mix PSI 200 Rate 4 BPM

Remarks Bigged up, Established Rate down casing. Mixed & pumped 100% cement, circulated cement, Flushed pump & pumped Plug.

Account Code	Quantity or Units	Description of Services or Product	Unit Price	Total
		Pump Charge		700
		Cement Truck		250
		Water Truck		150
	120	Cement	8.5	1020
		Gel		
	1	Plug	25	25
			Sales Tax	
			Estimated Total	

Authorization  Title \_\_\_\_\_ Date 6-3-14

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.