

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. 2-3

Farm Zummulen

Kansas
(State)

Crowford
(County)

36 28

(Section)

(Township)

21

(Range)

For Town Oil Co

(Well Owner)

Town Oil Company, Inc.

16205 W. 287th St.

Paola, KS 66071

913-294-2125

Zumwalt Farm: Crowford County
KS State; Well No. 2-3

Elevation _____

Commenced Spudding 10-26 2017

Finished Drilling 10-31 2017

Driller's Name Scott Kirkland

Driller's Name _____

Driller's Name _____

Tool Dresser's Name Derrick Holstein

Tool Dresser's Name _____

Tool Dresser's Name _____

Contractor's Name Town Oil Co
36 28 21

(Section) (Township) (Range)

Distance from _____ line, _____ ft.

Distance from _____ line, _____ ft.

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
30	7				
33	9				
30	4				
30	7				
33	7				
32	1				
29	1				
30	5				
33	4				
30	9				
31	1				
33	4				
33	3				
413	20	4 1/2"			

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____
 8" Set 20' 350's 8" Pulled _____
 6 1/2" Set _____ 6 1/2" Pulled _____
 4" Set 413.2 4" Pulled _____
 2" Set _____ 2" Pulled _____

Thickness of Strata	Formation	Total Depth	Remarks
8	soil & clay	8	
4	shale	12	
10	Lime	22	
5	shale	27	
5	Lime	32	Hertha
21	shale	53	
6	sandy lime	59	
4	shale	63	
2	Lime	65	
43	shale	108	
1	Lime	109	
1	slate	110	
7	shale	117	
30	Lime	147 155	
67	shale	214	
21	Lime	235	
11	shale	246	
3	Lime	249	
164	shale	413	
18	sand	431	Broken good oil shows & bleed
11	shale	442	T.O.



PRESSURE PUMPING LLC
 O Box 884, Chanute, KS 66720
 620-431-9210 or 800-467-8676

9357
 9251

TICKET NUMBER 53908
 LOCATION Ottawa KS
 FOREMAN Fred Maden

FIELD TICKET & TREATMENT REPORT
 CEMENT

Invoice #811636

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10/31/17	7823	Zumwalt # 2-3	NW 36	21	28	CR
CUSTOMER			TRUCK #			
Town Oil Co.			DRIVER			
MAILING ADDRESS			TRUCK #			
16205 W 287th St.			DRIVER			
CITY			TRUCK #			
Paola			DRIVER			
STATE			TRUCK #			
KS			DRIVER			
ZIP CODE			TRUCK #			
66071			DRIVER			

JOB TYPE long string HOLE SIZE 6 3/4 HOLE DEPTH 430' CASING SIZE & WEIGHT 4 1/2
 CASING DEPTH 413' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 6.30 Bls SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT IN CASING 25'
 DISPLACEMENT 4.6 Bls DISPLACEMENT PSI _____ MIX PSI _____ RATE 3 BPM

REMARKS: Hold Safety meeting. Rig run 4 1/2" casing open ended.
 Establish circulation. Mix Pump 80 SKs Per Blend JA
 Cement 2% Cel. Cement to surface. Displace 4" casing clean
 w/ 6.3 Bls water. Shut in casing.

Customer Supplied Water

Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
FE0450	1	PUMP CHARGE 495	1500.00	
LE0002	-	MILEAGE	NIC	
CE0711	1/2 Minimum	Ten Miles Delivery 804	65.320	
		Sub Total	1830.00	
		less 47%	-860.00	969.00
4110	80 SKs	Per Blend JA Cement	1080.00	
CC5965	135	Bentonite Cel.	40.00	
		Sub Total	1120.00	
		less 47%	-526.64	593.36
		7.5%		
		SALES TAX		44.54
		ESTIMATED TOTAL		1608.36

Ravin 3737

AUTHORIZATION _____ TITLE _____ DATE (303454)

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.