





# 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  $BPH \times PSI \times .0004$

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  $SPM \times d$

$$\text{BELT LENGTH} = 2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$$

\* Need these to figure belt length

$$\text{TO FIGURE AMPS: } \frac{\text{WATTS}}{\text{VOLTS}} = \text{AMPS}$$

746 WATTS equal 1 HP

# Log Book

Well No. A-7

Farm Holtz

KS Miami  
(State) (County)

16 18 24  
(Section) (Township) (Range)

For Altavista Energy Inc  
(Well Owner)

## Town Oilfield Services, Inc.

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

Holtz Farm: Miami County  
 KS State; Well No. A-7  
 Elevation 967  
 Commenced Spuding 12-17 20 17  
 Finished Drilling 12-20 20 17  
 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 TOS  
 16 18 24

(Section) (Township) (Range)  
 Distance from S line, 1155 ft.  
 Distance from E line, 2805 ft.  
 3 sacks 9 hrs  
 1 core  
 5 5/8 borehole  
 2 7/8 casing

### CASING AND TUBING RECORD

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

### CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
528		seat nipple			
559.65		Baffle 2 7/8			
591.30		Float			
600		TD			

Thickness of Strata	Formation	Total Depth	Remarks
0-12	soil-clay	12	
3	shale	15	
2	lime	17	
46	shale	63	
9	lime	72	
12	shale	84	
32	lime	116	
6	shale	122	
24	lime	146	
4	shale	150	
2	lime	152	
4	shale	156	
6	lime	162	Heather
23	shale	185	
20	sandy shale	205	
116	shale	321	red bed - 316
10	sandy lime	331	white - no oil
38	shale	369	
6	lime	375	
21	shale	396	
7	lime	403	
14	shale	417	
4	lime	421	
12	shale	433	
25	lime	458	
73	shale	531	
1	sand	532	solid and saturated

532

Thickness of Strata	Formation	Total Depth	Remarks
16	core	548	
52	shale	600	TD
	core		
		532	
5	sand	537	solid - poor saturation
4	sand	541	mostly solid - good saturation
7	sandy shale	548	



REMIT TO  
 QES Pressure Pumping LLC  
 Dept:970  
 P.O.Box 4346  
 Houston, TX 77210-4346

MAIN OFFICE  
 P.O.Box884  
 Chanute, KS 66720  
 620/431-9210, 1-800/467-8676  
 Fax 620/431-0012

Invoice

Invoice#

812104

Invoice Date: 12/28/17

Terms: Net 30

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ALTAVISTA ENERGY INC

PO BOX 128  
 WELLSVILLE KS 66092  
 USA  
 7858834057

HOLTZ -A-7

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	45.000	825.00
CE0002	Equipment Mileage Charge - Heavy Equipment	30.000	7.1500	45.000	117.98
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	45.000	363.00
WE0853	80 BBL Vacuum Truck (Cement Services)	2.000	100.0000	45.000	110.00
CC5840	Poz-Blend I A (50:50)	70.000	13.5000	45.000	519.75
CC5965	Bentonite	218.000	0.3000	45.000	35.97
CC5326	Sodium Chloride, Salt	147.000	1.0000	45.000	80.85
CC6077	Kolseal	350.000	0.5000	45.000	96.25
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	45.000	24.75

Subtotal 3,951.90  
 Discounted Amount 1,778.36  
 SubTotal After Discount 2,173.54

Amount Due 4,062.09 If paid after 01/27/18

Tax: 60.60

Total: 2,234.15



PRESSURE PUMPING LLC  
 PO Box 884, Chanute, KS 66720  
 820-431-9210 or 800-467-8676

9777  
 9667

TICKET NUMBER 53889  
 LOCATION Dttaug  
 FOREMAN Alan Maden

FIELD TICKET & TREATMENT REPORT  
 CEMENT

Invoice #82104

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-20-17	3244	Holtz A-7	SW 16	18	24	M:
CUSTOMER <u>Altavista Energy</u>			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>P.O. Box 128</u>			467	Kei Car	Safety	Meet
CITY <u>Wellsville</u>			675	Kei Det		
STATE <u>KS</u>			558	Ala Mad		
ZIP CODE						

JOB TYPE Long string HOLE SIZE 5 7/8 HOLE DEPTH 600 CASING SIZE & WEIGHT 2 7/8  
 CASING DEPTH 590 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER bf. 500'  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING yes  
 DISPLACEMENT 3.25 DISPLACEMENT PSI 900 MIX PSI 200 RATE 46 pm

REMARKS: Held meeting. Established rate. Mixed + pumped 100# gel followed by 70 sk Per Blend I-A plus 2% gel. 5# Kol seal, 590 salt. Circulator cement. Flushed pump. Pumped plug to baffle, Well held 800 PSI. Set float

TOS, Was

*Alan Maden*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CR045D	1	PUMP CHARGE	467 1500.00	
CE0002	30	MILEAGE	467 21450.00	
CE011	M:n	for mileage	558 660.00	
WR0853	2	80 UGL	675 200.00	
		sub	2574.50	
		legs 45%	1158.83	1415.97
15208 CL5840	70	Per Blend I	945.00	
CL5965	218	gel	6540.00	
CL5326	147	salt	147.00	
CL6671	350	Kol seal	175.00	
CP8176	1	2 1/2 plug	45.00	
		sub	1377.40	
		legs 45%	619.83	757.57
		8%	SALES TAX	60.60
			ESTIMATED TOTAL	2234.15

Revin 3737

AUTHORIZATION No Rep TITLE \_\_\_\_\_ DATE (4062 09)

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.