





# Short Cuts

## TANK CAPACITY

BBLs. (42 gal.) equals  $D^2 \times 1.4 \times h$   
 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. A-8

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



Thickness of Strata	Formation	Total Depth	Remarks
0-7	soil-clay	7	
3	Lime	10	
47	Shale	57	
9	Lime	66	
12	Shale	78	
34	Lime	112	
4	Shale	116	
23	Lime	139	
4	Shale	143	
2	Lime	145	
6	Shale	151	
4	Lime	155	Herthe
25	Shale	180	
17	sandy shale	197	
115	Shale	312	redbed - 308
10	sandy Lime	322	white - no oil
39	Shale	361	
5	Lime	366	
8	Shale	374	
5	Lime	379	
7	Shale	386	
11	Lime	397	
12	Shale	409	
3	Lime	412	
12	Shale	424	
26	Lime	450	
7	Shale	457	





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#

812113

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-8

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)	74.000	13.5000	45.000	549.45
CC5965	Bentonite	225.000	0.3000	45.000	37.13
CC5326	Sodium Chloride, Salt	155.000	1.0000	45.000	85.25
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	45.000	24.75
CC6077	Kolseal	370.000	0.5000	45.000	101.75

Subtotal 4,026.00  
 Discounted Amount 1,811.70  
 SubTotal After Discount 2,214.30

Amount Due 4,142.12 If paid after 01/27/18

Tax: 63.86

Total: 2,278.17



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

9784  
9677

TICKET NUMBER 53949

LOCATION O-Hanna KS

FOREMAN Fred Maden

FIELD TICKET & TREATMENT REPORT  
CEMENT

Invoice # 812113

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-21-17	3244	Holtz # A-8	SW 16	18	24	Mi
CUSTOMER <u>A Havis Energy Inc</u>			TRUCK #			
MAILING ADDRESS <u>P.O. Box 128</u>			DRIVER			
CITY <u>Wellsville</u>			TRUCK #			
STATE <u>KS</u>			DRIVER			
ZIP CODE <u>66092</u>			TRUCK #			
			DRIVER			

JOB TYPE Long string HOLE SIZE 5 7/8 HOLE DEPTH 600 CASING SIZE & WEIGHT 2 7/8 EUE  
CASING DEPTH 582 DRILL PIPE Baffle in tubing @ 551 OTHER \_\_\_\_\_  
SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 32' + Plug  
DISPLACEMENT 3.2 BBL DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4 BPM

REMARKS: Hold safety meeting. Establish circulation. Mix Pump 100\*  
Gel Flush. Mix + Pump 74 sks Por Blend IA Cement 2% Gel  
5% Salt 5# Kol Seal /sk. Cement to surface. Flush pump  
+ 1 hr clean. Displace 2 1/2" Rubber Plug to Baffle in  
Casing. Pressure to 700+ PSI. Release pressure to set  
float valve. Shut in Casing.

IOS Drilling - Wesley & Ryan.

Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION OF SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	495	1500 <sup>00</sup>
CE0002	30 mi	MILEAGE	495	2145 <sup>00</sup>
CE0711	Minimum	Ten Miles Delivery	558	660 <sup>00</sup>
WE0853	2 hrs	80 BBL Vac Truck	675	200 <sup>00</sup>
		Sub Total		2574 <sup>50</sup>
		less 45% -	1158 <sup>53</sup>	1415 <sup>92</sup>
152113 CC5840	74 sks	Por Blend IA Cement	999 <sup>00</sup>	
CC5965	225 <sup>#</sup>	Bentonite Gel	675 <sup>00</sup>	
CC5326	155 <sup>#</sup>	Salt	155 <sup>00</sup>	
CC6077	370 <sup>#</sup>	Kol Seal	185 <sup>00</sup>	
CP8176	1	2 1/2" Rubber Plug	45 <sup>00</sup>	
		Sub Total		1451 <sup>50</sup>
		less 45% -	653 <sup>13</sup>	798 <sup>32</sup>
		6%	SALES TAX	63 <sup>86</sup>
			ESTIMATED TOTAL	2278 <sup>12</sup>
				(4142 <sup>12</sup> )

Ravin 3737

AUTHORIZATION \_\_\_\_\_ 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.