





# 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. A-9

Farm Holtz

KS

(State)

Miami

(County)

16

(Section)

18

(Township)

24

(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-9  
 Elevation 955  
 Commenced Spuding 12-18 20 17  
 Finished Drilling 12-19 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 21

(Section) (Township) (Range)  
 Distance from S line, 495 ft.  
 Distance from E line, 3505 ft.  
 3 secks 2 7/8 casing  
 1 core  
 9 hrs  
 5 5/8 borehole

**CASING AND TUBING RECORD**

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

**CASING AND TUBING MEASUREMENTS**

Feet	In.	Feet	In.	Feet	In.
497-		Seat nipple			
528.	70	Bottle			
560.	40	Float	2 7/8		
580		TD			

Thickness of Strata	Formation	Total Depth	Remarks
0-20	soil-clay	20	
14	Shale	34	
9	Lime	43	
12	Shale	55	
33	Lime	88	
5	Shale	93	
23	Lime	116	
5	Shale	121	
2	Lime	123	
4	Shale	127	
6	Lime	133	Heitha
27	Shale	160	
15	sandy shale	175	
114	Shale	289	
11	sandy Lime	300	white - no oil
39	Shale	339	
5	Lime	344	
19	Shale	363	
11	Lime	374	
14	Shale	388	
4	Lime	392	
13	Shale	405	
24	Lime	429	
6	Shale	435	
2	Lime	437	
11	Shale	448	
4	Lime	452	

452

Thickness of Strata	Formation	Total Depth	Remarks
40	Shale	492	
1	Lime	493	
8	Shale	501	
1	sand	502	gas - no oil
<del>15</del>	core	<del>506</del>	517
63	Shale	580	TD
	Core		
		502	<del>502</del>
1	sand	503	<del>503</del>
6	sand	509	<del>509</del>
.5	Lime	509.5	<del>509.5</del>
1	sand	510.5	<del>510.5</del>
6.5	sandy shale	<del>516.5</del>	broken - good saturation
		517	no oil



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#

812063

Invoice Date: 12/20/17

Terms: Net 30

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ALTAVISTA ENERGY INC  
 PO BOX 128  
 WELLSVILLE KS 66092  
 USA  
 7858834057

HOLTZ #A-9

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 01/19/18

Tax: 60.60

Total: 2,234.15



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

9742  
9637

TICKET NUMBER 53944  
LOCATION Ottawa KS  
FOREMAN Fred Maden  
**812063**

FIELD TICKET & TREATMENT REPORT  
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-19-12	3244	Holtz # <del>10</del> # A-9	SW 16	15	24	M1
CUSTOMER Alhavista Energy Inc			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS P.O. Box 128			712 Fre Mad			
CITY STATE ZIP CODE Wellsville KS 66092			495 Hoe Bac			
			675 Kai Det			
			558 MiK Hea			

JOB TYPE Longstring HOLE SIZE 5 7/8" HOLE DEPTH 540 CASING SIZE & WEIGHT 2 7/8 EUE  
CASING DEPTH 560 DRILL PIPE Baffle in TUBING @ 529 OTHER \_\_\_\_\_  
SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 31' + Plug  
DISPLACEMENT 3.13BL DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4BPM

REMARKS: Hold Safety meeting. Establish circulation. Mix + Pump 100#  
Por Flush. Mix + Pump 70 SKs Por Blend IA Cement 2% Gel  
5" Kol Seal 5% Salt. Cement to surface. Flush pump lines  
clean. Displace 2 1/2" Rubber plug to baffle in casing. Pressure  
to 800# PSI. Release pressure to set float valve. Show in  
Casing.

TOS Drilling: Wesley Dillard

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 Treat	695	200 <sup>00</sup>
		Sub Total		2574 <sup>50</sup>
		less 45% -		1158 <sup>53</sup>
				1415 <sup>97</sup>
15735 CC5840	70 SKs	Por Blend IA Cement	945 <sup>00</sup>	
CC5965	218 #	Bauxite Gel	65 <sup>40</sup>	
CC5326	147 #	Salt	147 <sup>00</sup>	
CC6077	353 #	Kol Seal	175 <sup>00</sup>	
CP8176	1	2 1/2" Rubber Plug	45 <sup>00</sup>	
		Sub Total		1377 <sup>40</sup>
		less 45% -		619 <sup>82</sup>
				757 <sup>57</sup>
		8%	SALES TAX	60 <sup>60</sup>
			ESTIMATED TOTAL	2234 <sup>17</sup>

Revin 3737

AUTHORIZATION \_\_\_\_\_ TITLE \_\_\_\_\_ DATE (406209)

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.