

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. AI-4

Farm Holtz

KS Miami
(State) (County)

16 186 24
(Section) (Township) (Range)

For Altavista Energy
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Thickness of Strata	Formation	Total Depth	Remarks
0-5	soil-clay	5	
8	lime	13	
14	shale	27	
32	lime	59	
7	shale	66	
21	lime	87	
4	shale	91	
2	lime	93	
4	shale	97	
6	lime	103	Mertha
24	shale	127	
8	sand	135	slight show
31	sandy shale	166	
100	shale	266	
7	sand	273	no s.l
41	shale	314	
4	lime	318	
11	shale	329	
2	lime	331	
8	shale	339	
6	lime	345	
16	shale	361	
3	lime	364	
12	shale	376	
25	lime	401	
7	shale	408	
3	lime	411	



REMIT TO
 Consolidated Oil Well Services, 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# 806798

Invoice Date: 01/07/16 Terms: Net 30 Page 1

ALTAVISTA ENERGY INC
 4595 K-33 HWY, PO BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

holtz # ai-4

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	46.000	810.00
CE0002	Equipment Mileage Charge - Heavy Equipment	30.000	7.1500	46.000	115.83
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	46.000	356.40
WE0853	80 BBL Vacuum Truck (Cement Services)	1.500	100.0000	46.000	81.00
CC5840	Poz-Blend I A (50:50)	68.000	13.5000	46.000	495.72
CC5965	Bentonite	214.000	0.3000	46.000	34.67
CC5326	Sodium Chloride, Salt	132.000	0.7500	46.000	53.46
CC6077	Kolseal	340.000	0.5000	46.000	91.80
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	46.000	24.30
CC6128	Mud Flush - C	0.500	50.0000	46.000	13.50
Subtotal					3,845.70
Discounted Amount					1,769.02
SubTotal After Discount					2,076.68

Amount Due 3,951.40 If paid after 02/06/16

Tax: 57.07
 Total: 2,133.75



CONSOLIDATED
Oil Well Services, LLC

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

FIELD TICKET & TREATMENT REPORT
CEMENT

5108
59.0

TICKET NUMBER 49957
LOCATION Ottawa KS
FOREMAN Fred Mader

INVOICE # 806798

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-5-16	3244	Holtz * A I-4	6w 16	16	24	MI

CUSTOMER	TRUCK #	DRIVER	TRUCK #	DRIVER
Altavista Energy MAILING ADDRESS P.O. Box 128 CITY Wellsville STATE KS ZIP CODE 66092	712	Fred Mader		
	495	Harold		
	675	Ken Dot		
	510	Alta Mader		

JOB TYPE Longstring HOLE SIZE 5 7/8 HOLE DEPTH 580 CASING SIZE & WEIGHT 2 7/8 EUE
 CASING DEPTH 561 DRILL PIPE Baffle in TUBING @ 533 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT 3.1 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 BPM

REMARKS: Hold Safety meeting. Establish pump rate. Pump to Gel Mud Flush. C
& Circulate to condition hole. Mix & Pump 100* Gel Flush. Mix &
pump 68 SKS Por Blend I A Cement 2% Gel 5% Salt 5 * Kol Seal/sk.
Cement to surface. Flush pump & lines clean. Displace 2 1/2" Rubber
plug to casing Baffle. Pressure to 800* PSI.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0456	1	PUMP CHARGE	495	1500.00
CE0002	30 mi	MILEAGE	495	21450.00
CE0711	Minimum	Ten Miles Delving	510	660.00
WE0853	1 1/2	ROBBL Vac Truck	675	150.00
		Sub Total		2524.50
		less 40%		-1161.27
				1363.23
1438 CC 5840	68	Por Blend I A Cement	918.00	918.00
CC 5965	214	Bentonite Gel	64.20	64.20
CC 5326	132	Salt	99.00	99.00
CC 6077	340	Kol Seal	170.00	170.00
CP 8176	1	2 1/2" Rubber Plug	45.00	45.00
CC 6128	1/2 Gal	Mud Flush C	25.00	25.00
		Sub Total		1321.20
		less 46%		-607.25
				713.95
			8%	SALES TAX
				57.00
				ESTIMATED TOTAL
				2133.25

AVIN 5737
 AUTHORIZATION Bryan Miller TITLE _____ DATE _____
 TOTAL 3951.40

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.