

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.

I-3

Farm

Ed Flake

KS
(State)

Miami
(County)

9
(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

Thickness of Strata	Formation	Total Depth	Remarks
0-18	soil-clay	18	
25	shale	43	
8	Lime	51	
12	Shale	63	
32	Lime	95	
8	shale	103	
20	Lime	123	
3	Shale	126	
2	Lime	128	
5	shale	133	
5	Lime	138	
24	Shale	162	Hertha
28	sand	190	gas odor
108	Shale	298	
10	sandy Lime	308	white
41	shale	349	334-red bed
6	Lime	355	
5	Shale	360	
2	Lime	362	
2	shale	364	
2	Lime	366	
8	Shale	374	
13	Lime	387	
12	Shale	399	
4	Lime	403	
10	Shale	413	
23	Lime	436	



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#

809744

Invoice Date: 03/06/17

Terms: Net 30

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ALTAVISTA ENERGY INC

PO BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

ed flake # i3

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	55.000	675.00
CE0002	Equipment Mileage Charge - Heavy Equipment	30.000	7.1500	55.000	96.53
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	55.000	297.00
WE0853	80 BBL Vacuum Truck (Cement Services)	2.000	100.0000	55.000	90.00
CC5840	Poz-Blend I A (50:50)	79.000	13.5000	55.000	479.93
CC5965	Bentonite	233.000	0.3000	55.000	31.46
CC5326	Sodium Chloride, Salt	159.000	1.0000	55.000	71.55
CC6077	Kolseal	395.000	0.5000	55.000	88.88
CC6128	Mud Flush - C	0.500	50.0000	55.000	11.25
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	55.000	20.25

Subtotal 4,137.40

Discounted Amount 2,275.57

SubTotal After Discount 1,861.83

Amount Due 4,262.43 If paid after 04/05/17

Tax: 56.27

Total: 1,918.12



CONSOLIDATED
Oil Well Services, LLC

1675
7574

TICKET NUMBER 50427
LOCATION Atchawa KS
FOREMAN Fred Maden

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

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice # 809744

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
3-3-17	3244	Ed Flake # 13	sw 9	18	24	Ma Mi
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Alto Vista Energy Inc			712	Fremad		
MAILING ADDRESS			495	Nar Bee		
P.O. Box 128			675	Kel Det		
CITY			558	Arv Mcb		
STATE		ZIP CODE				
KS		66092				

JOB TYPE Long string HOLE SIZE _____ HOLE DEPTH 620 CASING SIZE & WEIGHT 2 7/8 EUE
 CASING DEPTH 600 DRILL PIPE _____ TUBING 5 7/8 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 30' + Plug
 DISPLACEMENT 3.32 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 43 PPM

REMARKS: Hold safety meeting. Establish pump rate. Pump 1/2 Gal Mud
 Flush "C". Circulate to condition hole. Mix & Pump 100# Gel
 Flush. Mix & Pump 79 sks Por Blend IA Cement 2% Gel 5% Salt
 5# Kol Seal /sk. 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. Shut in casing.

To Drilling

Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	495	1500.00
CE0002	30 mi	MILEAGE	495	214.50
CE0711	Minimum	Ten Miles Delivery	558	660.00
WE0853	2 hrs	80 BBL Vac Truck	675	200.00
		Sub Total		2574.50
		less 55%		1158.53
CC5840	79 sks	Por Blend IA Cement		1066.50
CC5965	233 #	Bentonite Gel		69.20
CC5326	159 #	Salt		159.00
CC6077	395 #	Kol Seal		197.50
CC6128	1/2 Gal	Mud Flush "C"		25.00
CP8176	1	2 1/2" Rubber Plug		45.00
		Sub Total		1562.20
		less 55%		703.21
		6%	SALES TAX	56.29

Ravin 8737

AUTHORIZATION Bryan Mills TITLE _____ DATE 1918
 ESTIMATED TOTAL 4262.43

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.