

Miami County, KS  
Well: Knoche AI-2  
Lease Owner: AltaVista

Town Oilfield Service, Inc.  
(913) 837-8400

Commenced Spudding:  
1/25/16

WELL LOG

Thickness of Strata	Formation	Total Depth
0-16	Soil-Clay	16
3	Lime	19
46	Shale	65
9	Lime	74
13	Shale	87
31	Lime	118
8	Shale	126
21	Lime	147
5	Shale	152
2	Lime	154
4	Shale	158
6	Lime	164
25	Shale	189
9	Sand	198
34	Sandy Shale	232
55	Shale	287
13	Sandy Shale	300
20	Shale	320
17	Sand	337
36	Shale	373
5	Lime	378
7	Shale	385
5	Lime	390
10	Shale	400
5	Lime	405
16	Shale	421
5	Lime	426
11	Shale	437
24	Lime	461
8	Shale	469
2	Lime	471
9	Shale	480
3	Lime	483
49	Shale	532
3	Sandy Shale	535
10	Sand	545
10	Sandy Shale	555
85	Shale	640-TD

# 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-2

Farm Knoche

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
0-16	soil - clay	16	
3	lime	19	
46	shale	65	
9	lime	74	
13	shale	87	
31	lime	118	
8	shale	126	
21	lime	147	
5	shale	152	
2	lime	154	
4	shale	158	
6	lime	164	Heating
25	shale	189	
9	sand	198	no oil
34	sandy shale	232	
55	shale	287	
13	sandy shale	300	
20	shale	320	
17	sand	337	water
36	shale	373	
5	lime	378	
7	shale	385	
5	lime	390	
10	shale	400	
5	lime	405	
16	shale	421	
5	lime	426	



**CONSOLIDATED**  
Oil Well Services, LLC

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#

806907

Invoice Date: 01/29/16

Terms: Net 30

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

knoche # ai-2

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)	1.000	100.0000	46.000	54.00
CC5840	Poz-Blend I A (50:50)	80.000	13.5000	46.000	583.20
CC5965	Bentonite	234.000	0.3000	46.000	37.91
CC5326	Sodium Chloride, Salt	155.000	0.7500	46.000	62.78
CC6077	Kolseal	400.000	0.5000	46.000	108.00
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 4,010.95

Discounted Amount 1,845.04

SubTotal After Discount 2,165.91

Amount Due 4,133.87 If paid after 02/28/16

Tax: 66.38

Total: 2,232.30

BARTLESVILLE, OK  
918/338-0808

EL DORADO, KS  
316/322-7022

EUREKA, KS  
620/583-7554

PONCA CITY, OK  
580/762-2303

OAKLEY, KS  
785/672-8822

OTTAWA, KS  
785/242-4044

THAYER, KS  
620/839-5269

GILLETTE, WY  
307/686-4914

CUSHING, OK  
918/225-2650

5215  
522



**CONSOLIDATED**  
Oil Well Services, LLC

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

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

TICKET NUMBER 49976  
LOCATION Ottawa KS  
FOREMAN Fred Madu

**INVOICE #806907**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-26-16	3244	Knoche # AI-2	SW 16	18	24	MI
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Mailing Address			712	Fred Madu		
CITY			495	Har Bac		
STATE			675	Kid Det		
ZIP CODE			510	Art Mad		
Wellsville						
KS						
66092						

JOB TYPE hang string HOLE SIZE 5 7/8 HOLE DEPTH 640' CASING SIZE & WEIGHT 2 7/8 EUE  
 CASING DEPTH 635.10 DRILL PIPE Baffle in TUBING 2603.25 OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 32' + Plug  
 DISPLACEMENT 3.588 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4BPM

REMARKS: Hold Safety meeting. Establish pump rate. Pump 1/2 Gal Mud Flush. C  
+ Circulate to condition hole. Mix + Pump 100\* Gal Flush.  
Mix + Pump 80 sks for blend IA Cement 7% 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. Hold pressure.  
Release pressure to set float valve. Shut in casing.

TOS Drilling. - Wes.

Fred Madu

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	510	600 <sup>00</sup>
WE0853	1 hr	80 BBL Vac Truck	675	100 <sup>00</sup>
		Sub Total		2474 <sup>50</sup>
		Less 46%		1138 <sup>27</sup>
				1326 <sup>23</sup>
CC5840	80 sks	Pow Blend IA Cement	1060 <sup>00</sup>	
CC5965	234*	Bentonite Gel	70 <sup>30</sup>	
CC5326	155*	Salt	116 <sup>25</sup>	
CC6077	400*	Kol Seal	200 <sup>00</sup>	
CP8176	1	2 1/2" Rubber Plug	45 <sup>00</sup>	
CC6128	1/2 Gal	Mud Flush-C	25 <sup>00</sup>	
		Sub Total		1536 <sup>45</sup>
		Less 46%		706 <sup>27</sup>
				829 <sup>68</sup>
			8%	SALES TAX
				ESTIMATED
				TOTAL
				2232 <sup>30</sup>
				4133 <sup>87</sup>

7607

Ravin 3737

AUTHORIZATION Benjamin Mills TITLE \_\_\_\_\_ DATE 1-26-16

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