

Miami County, KS
 Well: Windler AI-40
 Lease Owner: AltaVista

Town Oilfield Service, Inc.
 (913) 294-2125

Commenced Spudding:
 11/8/2017

WELL LOG

Thickness of Strata	Formation	Total Depth
0-11	Soil-Clay	11
7	Lime	18
14	Shale	32
32	Lime	64
6	Shale	70
21	Lime	91
4	Shale	95
2	Lime	97
4	Shale	101
7	Lime	108
20	Shale	128
9	Sand	137
23	Sandy Shale	160
110	Shale	270
10	Limey Sand	280
38	Shale	318
5	Lime	323
5	Shale	328
4	Lime	332
10	Shale	342
8	Lime	350
15	Shale	365
4	Lime	369
13	Shale	382
24	Lime	406
6	Shale	412
3	Lime	415
62	Shale	477
4	Sandy Shale	481
8	Sand	489
2	Sand	491
8	Sandy Shale	498
36	Shale	534
1	Lime	535
45	Shale	580-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-40

Farm Windler

KS Miami
(State) (County)

21 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

Widder Farm: Miami County
KS State; Well No. AI-40

Elevation 930
 Commenced Spudding 11-8 20 17
 Finished Drilling 11-9 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

21 18 24
 (Section) (Township) (Range)

Distance from S line, 4830 ft.
 Distance from E line, 4215 ft.

3 sacks
8 hrs
5 7/8 borehole
2 7/8 casing

CASING AND TUBING RECORD

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

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
540.95		Baffle			
572.70		Float		2 7/8	
580 TD					

Thickness of Strata	Formation	Total Depth	Remarks
0-11	soil-clay	11	
7	Lime	18	
14	Shale	32	
32	Lime	64	
6	Shale	70	
21	Lime	91	
4	Shale	95	
2	Lime	97	
4	Shale	101	
7	Lime	108	Hertha
20	Shale	128	
9	Sand	137	broken - good oil show
23	sandy shale	160	
110	Shale	270	
10	limy sand	280	no oil
38	Shale	318	
5	Lime	323	
5	Shale	328	
4	Lime	332	
10	Shale	342	
8	Lime	350	
15	Shale	365	
4	Lime	369	
13	Shale	382	
24	Lime	406	
6	Shale	412	
3	Lime	415	

415

Thickness of Strata	Formation	Total Depth	Remarks
62	Shale	477	
4	sandy shale	481	
8	sand	489	solid - good saturation
2	sand	491	broken - good saturation
8	sandy shale	498	
36	Shale	534	
1	Lime	535	
45	Shale	580	TD



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#

811708

Invoice Date: 11/13/17

Terms: Net 30

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ALTAVISTA ENERGY INC

PO BOX 128
 WELLSVILLE KS 66092
 USA

7858834057

Windler #AI-40

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	50.000	750.00
CE0002	Equipment Mileage Charge - Heavy Equipment	30.000	7.1500	50.000	107.25
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	50.000	330.00
WE0853	80 BBL Vacuum Truck (Cement Services)	2.500	100.0000	50.000	125.00
CC5840	Poz-Blend I A (50:50)	68.000	13.5000	50.000	459.00
CC5965	Bentonite	214.000	0.3000	50.000	32.10
CC5326	Sodium Chloride, Salt	143.000	1.0000	50.000	71.50
CC6077	Kolseal	340.000	0.5000	50.000	85.00
CC6128	Mud Flush - C	0.500	50.0000	50.000	12.50
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	50.000	22.50

Subtotal 3,989.70

Discounted Amount 1,994.85

SubTotal After Discount 1,994.85

Amount Due 4,098.92 If paid after 12/13/17

Tax: 54.61

Total: 2,049.46



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

9424
 9310

TICKET NUMBER 53911

LOCATION Ottawa KS

FOREMAN Fred Mader

FIELD TICKET & TREATMENT REPORT
 CEMENT

Invoice #811708

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11-9-17	3244	Windler # AI-40	NW 21	18	24	MI
CUSTOMER <u>Altavista Energy Inc</u>			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS <u>P.O. Box 128</u>			<u>712 / Fred Mader</u>			
CITY STATE ZIP CODE <u>Wellsville KS 66092</u>			<u>495 / Har Bee</u>			
			<u>675 / Kai Det</u>			
			<u>558 / Mikhael</u>			

JOB TYPE long string HOLE SIZE 5 7/8 HOLE DEPTH 580' CASING SIZE & WEIGHT 2 1/8" EUE
 CASING DEPTH 572 DRILL PIPE Baffle in TUBING @ 541 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 31' x Plug
 DISPLACEMENT 3.1 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 4.6 BPM

REMARKS: Hold Safety meeting. Establish pump rate. Pump 1/2 Gal
Mod Flush "C" + Circulate to condition hole. Mix + Pump 100#
Gel Flush. Mix + Pump 68 SKs Por Blend 1A Cement 2% Gel
5% Salt 5# Kal Seal/sk. Cement to Surface. Flush pump
x 1/2 hrs clean. Displace 2 1/2" Rubber plug to Baffle in
Casing. Pressure to 800# PSI. Release pressure to set
float valve. Shut in Casing.

TOS Drilling

Fred Mader

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	214.50
CE0711	Minimum	Ten Miles Delivery	558	660.00
WE0853	2 1/2 hrs	80 BBL Vac Truck	675	250.00
		Sub Total		2624.50
		Less 50%		1312.25
CC5840	68 SKs	Por Blend 1A Cement	918.00	62424.00
CC5965	214#	Bentonite Gel	64.20	13748.40
CC5326	143#	Salt	143.00	20451.40
CC6077	340#	Kal Seal	170.00	22621.40
CC6128	1/2 Gal	Mud Flush "C"	25.00	22846.40
CP4176	1	2 1/2" Rubber Plug	45.00	23301.40
		Sub Total		1366.20
		Less 50%		682.10
		8 1/2%	SALES TAX	0.46
			ESTIMATED TOTAL	2049.46

Flavin 3737

AUTHORIZATION Boyan TITLE _____ DATE (4098)

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