Miami County, KS
Well: Windler AI-10
Lease Owner: AltaVista

Town Oilfield Service, Inc.

(913) 837-8400

Commenced Spudding:
12/21/2015

WELL LOG

Thickness of Strata	Formation	Total Depth
0-16	Soil-Clay	16
9	Lime	25
12	Shale	37
34	Lime	71
6	Shale	77
22	Lime	99
4	Shale	103
2	Lime	105
4	Shale	109
6	Lime	115
25	Shale	140
26	Sandy Shale	166
115	Shale	281
7	Sandy Shale	288
35	Shale	323
5	Lime	328
10	Shale	338
2	Lime	340
10	Shale	350
6	Lime	356
16	Shale	372
3	Lime	375
13	Shale	388
26	Lime	414
7	Shale	421
2	Lime	423
66	Shale	489
9	Sand	498
10	Sandy Shale	508
72	Shale	580-TD

Short Cuts

TANK CAPACITY

BBLS. (42 gal.) equals D^2x.14xh
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 - RPMxd over SPMxR
d - SPMxRxD over RPM
SPM - RPMXD over RxD
R - RPMXD over SPMxD

BELT LENGTH - $2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$

* Need these to figure belt length

TO FIGURE AMPS: $\frac{\text{WATTS}}{\text{VOLTS}}$ = AMPS

~~746 WATTS equal 1 HP~~

Log Book

Well No. AI-10

Farm Windler

KS (State) Miami (County)

21 (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

Windler Farm: Miami County

KS State; Well No. AI-10

Elevation 919

Commenced Spuding 12-21 20 15

Finished Drilling 12-22 20 15

Driller's Name Wesley Dollard

Driller's Name

Driller's Name

Tool Dresser's Name Ryan Ward

Tool Dresser's Name

Tool Dresser's Name

Contractor's Name TOS

21 18 24

(Section) (Township) (Range)

Distance from S line, 4550 ft.

Distance from E line, 3250 ft.

3 sacks 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 6¼" Set	23	6¼" Pulled	
4" Set		4" Pulled	
2" Set		2" Pulled	

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
531.	60	Baffle			
556.	80	Float			
580	TD			2	7/8

Thickness of Strata	Formation	Total Depth	Remarks
0-16	soil-clay	16	
9	Lime	25	
12	Shale	37	
34	Lime	71	
6	Shale	77	
22	Lime	99	
4	Shale	103	
2	Lime	105	
4	Shale	109	
6	Lime	115	Hertha
25	Shale	140	
26	sandy shale	166	
115	Shale	281	
7	Sand	288	no Oil
35	Shale	323	
5	Lime	328	
10	Shale	338	
2	Lime	340	
10	Shale	350	
6	Lime	356	
16	Shale	372	
3	Lime	375	
13	Shale	388	
26	Lime	414	
7	Shale	421	
2	Lime	423	
66	Shale	489	

489

Thickness of Strata	Formation	Total Depth	Remarks
9	sand	498	solid- good saturation -perf
10	sandy shale	508	
72	shale	580	TD

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# 806693

Invoice Date: 12/28/15 Terms: Net 30 Page 1

ALTAVISTA ENERGY INC

4595 K-33 HWY, PO BOX 128
WELLSVILLE KS 66092
USA

7858834057

windler # ai-10

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)	74.000	13.5000	46.000	539.46
CC5965	Bentonite	224.000	0.3000	46.000	36.29
CC5326	Sodium Chloride, Salt	143.000	0.7500	46.000	57.92
CC6077	Kolseal	370.000	0.5000	46.000	99.90
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	3,952.95
Discounted Amount	1,818.36
SubTotal After Discount	2,134.59

Amount Due 4,067.23 If paid after 01/27/16

Tax:	61.71
Total:	2,196.31

CONSOLIDATED
Oil Well Services, LLC

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

5049
4956

Invoice # 806693

TICKET NUMBER 49935
LOCATION Ottawa KS
FOREMAN Fred Mader

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-22-15	3244	Windler # A:-10	NE 21	18	24	MI

CUSTOMER: Altavista Energy
MAILING ADDRESS: P.O. Box 128
CITY: Wellsville | STATE: KS | ZIP CODE: 66092

TRUCK #	DRIVER	TRUCK #	DRIVER
712	FreMad		
495	HarBec		
675	KriDex		
510	AriMcD		

JOB TYPE Longstring HOLE SIZE 5 7/8 HOLE DEPTH 580' CASING SIZE & WEIGHT 2 7/8
CASING DEPTH 555 DRILL PIPE Baffle TUBING @ 531 OTHER
SLURRY WEIGHT SLURRY VOL WATER gal/sk CEMENT LEFT In CASING 25' + Plug
DISPLACEMENT 3.09 DISPLACEMENT PSI MIX PSI RATE 4BPM

REMARKS: Held Safety mtg. Establish pump rate. Pump 1/2 Gal Mud Flush C. Polymer. Circulate to condition hole. Mix & Pump 100# Gel Flush. Mix & Pump 74 sks Por Blend I A Cement 2% Gel 5% Salt 5# Kolseal/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

TOS Drilling - (Wes)

Fred Mader

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT		UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	495	1500.00	
CE0002	30mi	MILEAGE	495	214.50	
CE07K	Minimum	Ton miles Delivery	510	660.00	
WE0853	1 1/2	80 BBL Vac Tidex	675	150.00	
		Sub Total		2524.50	
		Less 46%		-1161.27	1363.23
CC5840	745Ks	Por Blend I A Cement		999.00	
CC5965	224#	Bentonite Gel		67.20	
CC5326	143#	Salt		107.25	
CC6027	370#	Kol Seal		185.00	
CP5176	1	2 1/2" Rubber Plug		45.00	
CC6128	1/2 Gal	Mud Flush-C		25.00	
		Sub Total		1428.45	
		Less 46%		-657.09	771.36
			8%	SALES TAX	61.71
				ESTIMATED TOTAL	2196.30

Ravin 3737

AUTHORIZTION Per Co Rep on Site. TITLE DATE (406733)

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.