

Miami County, KS
 Well: Windler A-41
 Lease Owner: AltaVista

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

Commenced Spudding:
 11/6/2017

WELL LOG

Thickness of Strata	Formation	Total Depth
0-16	Soil-Clay	16
9	Lime	25
12	Shale	37
32	Lime	69
6	Shale	75
21	Lime	96
4	Shale	100
2	Lime	102
4	Shale	106
7	Lime	113
21	Shale	134
10	Sand	144
36	Sandy Shale	180
94	Shale	274
14	Sand	288
35	Shale	323
5	Lime	328
6	Shale	334
7	Lime	341
8	Shale	349
9	Lime	358
13	Shale	371
4	Lime	375
15	Shale	390
24	Lime	414
6	Shale	420
3	Lime	423
10	Shale	433
5	Lime	438
46	Shale	484
5	Sandy Shale	489
1	Sand	490
18	Core	508
2	Sandy Shale	510
32	Shale	542
4	Lime	546
14	Shale	560-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 $BPH \times PSI \times .0004$

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 $SPM \times d$

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

* Need these to figure belt length

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

746 WATTS equal 1 HP

Log Book

Well No. A-41

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

Thickness of Strata	Formation	Total Depth	Remarks
0-16	soil - clay	16	
9	Lime	25	
12	Shale	37	
32	Lime	69	
6	Shale	75	
21	Lime	96	
4	Shale	100	
2	Lime	102	
4	Shale	106	
7	Lime	113	Hertha
21	Shale	134	
10	Sand	144	solid - good oil show
36	sandy shale	180	
94	Shale	274	
14	Sand	288	Limey - no oil
35	Shale	323	
5	Lime	328	
6	Shale	334	
7	Lime	341	
8	Shale	349	
9	Lime	358	
13	Shale	371	
4	Lime	375	
15	Shale	390	
24	Lime	414	
6	Shale	420	
3	Lime	423	



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# 811771

Invoice Date: 11/20/17 Terms: Net 30 Page 1

ALTAVISTA ENERGY INC
 PO BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

WINDLER #A-41

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)	2.000	100.0000	50.000	100.00
CC5840	Poz-Blend I A (50:50)	80.000	13.5000	50.000	540.00
CC5965	Bentonite	234.000	0.3000	50.000	35.10
CC5326	Sodium Chloride, Salt	168.000	1.0000	50.000	84.00
CC6077	Kolseal	400.000	0.5000	50.000	100.00
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	50.000	22.50

Subtotal 4,137.70
 Discounted Amount 2,068.85
 SubTotal After Discount 2,068.85

Amount Due 4,262.76 If paid after 12/20/17

Tax: 62.52
 Total: 2,131.37



PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
820-431-9210 or 800-467-8676

9468
9313

TICKET NUMBER 53855
LOCATION Ottawa, KS
FOREMAN Casey Kennedy

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice # 811771

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11/7/17	3244	Windler # A-41	NW10	18	24	M1
CUSTOMER Attavista Energy			TRUCK #			
MAILING ADDRESS PO Box 128			DRIVER			
CITY Wellsville			TRUCK #			
STATE KS			DRIVER			
ZIP CODE 66092			TRUCK #			
			DRIVER			

JOB TYPE longstring HOLE SIZE 5 5/8" HOLE DEPTH 560' CASING SIZE & WEIGHT 2 7/8" EUE
CASING DEPTH 548' DRILL PIPE _____ TUBING baffle- 516' OTHER _____
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 32'
DISPLACEMENT 2.99 bbls DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 100 # gel followed by 5 bbls fresh water, mixed & pumped 80 sks Pozblend 1A cement w/ 2% gel, 5% salt, + 5 # Kolreal per sk, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to baffle w/ 2.99 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

[Signature]

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	1500.00	
CE0002	30 mi	MILEAGE	214.50	
CE0711	min	ton mileage	660.00	
WE0853	2 hrs	80 Vac	200.00	
		trucks	2574.50	
		- 50 %	1287.25	
		subtotal		1287.25
CC5840	80 sks	Pozblend 1A cement	50.00	
CC5965	234 #	Gel	.30	
CC5326	168 #	Salt	1.00	
CCL6077	400 #	Kolreal	.50	
CP8176	1	2 1/2" rubber plug	45.00	
		materials	1563.20	
		- 50 %	781.60	
		subtotal		781.60
		8%		62.53
		SALES TAX		62.53
		ESTIMATED TOTAL		2131.38

Ravin 3737

AUTHORIZATION No Co Rep on location TITLE _____ DATE 11/7/17

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.