

Miami County, KS
 Well: Barkis AI-12
 Lease Owner: Altavista Energy

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

Commenced Spudding:
 4-21-2015

WELL LOG

Thickness of Strata	Formation	Total Depth
0 - 5	Soil - Clay	5
1	Lime	6
3	Clay	9
3	Lime	12
70	Shale	82
21	Lime	103
12	Shale	115
11	Lime	126
31	Shale	157
4	Lime	161
39	Shale	200
11	Lime	211
14	Shale	225
25	Lime	250
8	Shale	258
21	Lime	279
4	Shale	283
2	Lime	285
5	Shale	290
8	Lime	298
33	Shale	331
3	Sandy Shale	334
1	Sand	335
1	Sandy Lime	336
3	Sand	339
11	Sand	350
26	Sandy Shale	376
113	Shale	489
5	Lime	494
1	Shale	495
2	Lime	497
3	Shale	500
2	Lime	502
5	Shale	507
7	Lime	514
20	Shale	534
4	Lime	538
10	Shale	548
2	Lime	550
10	Shale	560

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. AI-12

Farm Barkis

KS Miami
(State) (County)

17 16 24
(Section) (Township) (Range)

For Altavista Energy inc
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Barkis Farm: Miami County
 KS State; Well No. AI-12

Elevation 1045
 Commenced Spuding 4-21 20 15
 Finished Drilling 4-22 20 15
 Driller's Name Wesley Dollard
 Driller's Name _____
 Driller's Name _____
 Tool Dresser's Name Ryan Ward
 Tool Dresser's Name Cole Holcom
 Tool Dresser's Name _____
 Contractor's Name TOS
17 16 24

(Section) (Township) (Range)
 Distance from S line, 3795 ft.
 Distance from E line, 511.5 ft.
 4 sacks 2 1/8 casing
 1 core
 9 hrs
 5 5/8 borehole

CASING AND TUBING
 RECORD

10" Set _____ 10" Pulled _____
 8" Set _____ 8" Pulled _____
~~7 1/2~~" Set 23 6 1/2" Pulled _____
 4" Set _____ 4" Pulled _____
 2" Set _____ 2" Pulled _____

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
691.	70	Buffer			
723.	20	Float			2 1/8
740	70				

Thickness of Strata	Formation	Total Depth	Remarks
0-5	soil-clay	5	
1	Lime	6	
3	clay	9	
3	Lime	12	
70	shale	82	
21	Lime	103	
12	shale	115	
11	Lime	126	
31	shale	157	
4	Lime	161	
39	shale	200	
11	Lime	211	
14	shale	225	
25	Lime	250	
8	shale	258	
21	Lime	279	
4	shale	283	
2	Lime	285	
5	shale	290	
8	Lime	298	Heating
33	shale	331	
3	sandy shale	334	
1	sand	335	solid oil
1	sandy lime	336	no oil
3	sand	339	broken oil
11	sand	350	
26	sandy shale	376	

376

Thickness of Strata	Formation	Total Depth	Remarks
113	Shale	489	
5	Lime	494	
1	Shale	495	
2	Lime	497	
3	Shale	500	
2	Lime	502	
5	Shale	507	
7	Lime	514	
20	Shale	534	
4	Lime	538	
10	Shale	548	
2	Lime	550	
10	Shale	560	
6	Lime	566	
68	Shale	634	
20	Core	654	
6	sandy shale	660	
80	Shale	740	TD

Thickness of Strata	Formation	Total Depth	Remarks
	core		
		634	
4.5	shale	638.5	
10	sand	648.5	laminated - good oil - perf
5.5	sandy shale	654	



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# 804056

Invoice Date: 04/24/15 Terms: Net 30 Page 1

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

BARKIS #AI-12

Part No	Description	Quantity	Unit Price	Discount(%)	Total
5401	Cement Pumper	1.000	1,085.0000	30.000	759.50
5406	Mileage Charge	30.000	4.2000	30.000	88.20
5402	Casing Footage	723.000	0.0000	0.000	0.00
5407	Min. Bulk Delivery Charge	1.000	368.0000	30.000	257.60
5502C	80 Vacuum Truck Cement	2.000	100.0000	30.000	140.00
1124	Poz Cement Mix	96.000	11.5000	30.000	772.80
1118B	Premium Gel / Bentonite	261.000	0.2200	30.000	40.19
1111	Sodium Chloride (Granulated Salt)	202.000	0.3900	30.000	55.15
1110A	Kol Seal (50# BAG)	480.000	0.4600	30.000	154.56
1401	HE 100 Polymer	0.500	47.2500	30.000	16.54
4402	2 1/2 Rubber Plug	1.000	29.5000	30.000	20.65

Subtotal 3,293.13
 Discounted Amount 987.94
 SubTotal After Discount 2,305.19

Amount Due 3,408.96 If paid after 05/24/15

Tax: 81.08

Total: 2,386.27



CONSOLIDATED
Oil Well Services, LLC

INVOICE # 2717
2648
2717
2648

TICKET NUMBER 50947
LOCATION Offshoots
FOREMAN Cassey Kennedy

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

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4/22/15	3244	Barkis #AI-12	NE 17	16	24	MI
CUSTOMER A1tevista Energy			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS PO Box 128			729 Caskey ✓ Safety, Macking			
CITY STATE ZIP CODE Wellsville KS 66092			467 KeiCar ✓			
			558 HarBec ✓			
			369 Mikhaa ✓			

JOB TYPE lengthening HOLE SIZE 5 5/8" HOLE DEPTH 740' CASING SIZE & WEIGHT 27 1/8" EUE
CASING DEPTH 723' DRILL PIPE _____ TUBING baffle - 682' OTHER _____
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT IN CASING 31'
DISPLACEMENT 4.00 bbls DISPLACEMENT PSI _____ MIX PSI _____ RATE 5.5 bpm

REMARKS: held safety macking, established circulation, mixed + pumped 1/2 gal Polymer, circulated to condition hole, mixed + pumped 100# Gel, mixed + pumped 96 sks 50/50 Pozmix cement w/ 2% gel, 5% salt, + 5# Kalsol per sk cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to baffle w/ 4.00 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

Handwritten signature

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	1085.00	1085.00
5406	36 mi	MILEAGE	126.00	126.00
5402	723'	casing footage		
5407	mi	ten mileage	368.00	368.00
5502c	2 hrs	80 Vac	200.00	200.00
		trucks	1779.00	
		-30%	533.70	
		subtotal		1245.30
1124	96 sks	50/50 Pozmix cement	1104.00	1104.00
1118B	261 #	Gel	57.42	57.42
1111	202 #	Salt	78.78	78.78
1110A	480 #	Kalsol	220.80	220.80
1401	1/2 gal	Polymer	23.63	23.63
4402	1	2 1/2" rubber plug	29.50	29.50
		materials	1514.13	
		-30%	454.24	
		subtotal		1059.89
		7.65%		81.08
		SALES TAX		81.08
		ESTIMATED TOTAL		2386.27

Completed

Flavin 3737
AUTHORIZATION Bryan Mills TITLE _____ DATE 3408.96

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.