

Miami County, KS
 Well: O'Brien AI-34
 Lease Owner: AltaVista

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

Commenced Spudding:
 4/13/16

WELL LOG

Thickness of Strata	Formation	Total Depth
0-16	Soil-Clay	16
20	Lime	36
9	Shale	45
2	Lime	47
7	Shale	54
9	Lime	63
42	Shale	105
15	Lime	120
9	Shale	129
13	Lime	142
2	Shale	144
15	Lime	159
8	Shale	167
21	Lime	188
5	Shale	193
4	Lime	197
2	Shale	199
6	Lime	205
23	Shale	228
6	Sand	234
110	Shale	344
6	Sand	350
3	Shale	353
2	Lime	355
7	Shale	362
1	Lime	363
3	Shale	366
6	Lime	372
4	Shale	376
3	Lime	379
43	Shale	422
6	Lime	428
12	Shale	440
3	Lime	443
15	Shale	458
5	Lime	463
23	Shale	486
2	Lime	488
3	Shale	491
6	Lime	497

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-34

Farm O'Brien

KS Miami
(State) (County)

1 18 21
(Section) (Township) (Range)

For Altavista Energy inc
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East
Louisburg, KS 66053
913-710-5400

O'Brien Farm: Miami County
 KS State; Well No. A1-34

Elevation 892

Commenced Spuding 4-13 2016

Finished Drilling 4-14 2016

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

1 18 21

(Section) (Township) (Range)

Distance from S line, 1250 ft.

Distance from E line, 1300 ft.

3 sacks
 8 hrs
 5 5/8 barshole
 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 _____

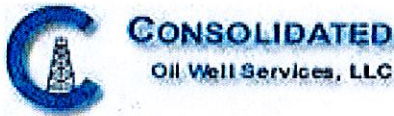
2" Set _____ 2" Pulled _____

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
580	-	Barrie			
613	-	Float			
620	TD			2 7/8	

Thickness of Strata	Formation	Total Depth	Remarks
0-16	soil - clay	16	
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7	Shale	54	
9	Lime	63	
42	Shale	105	
15	Lime	120	
9	Shale	129	
13	Lime	142	
2	Shale	144	
15	Lime	159	
8	Shale	167	
21	Lime	188	
5	Shale	193	
4	Lime	197	
2	Shale	199	
6	Lime	205	Heitha
23	Shale	228	
6	sand	234	no oil
110	Shale	344	
6	sand	350	no oil
3	Shale	353	
2	Lime	355	
7	Shale	362	
1	Lime	363	
3	Shale	366	

Thickness of Strata	Formation	Total Depth	Remarks
		366	
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3	Lime	443	
15	Shale	458	
5	Lime	463	
23	Shale	486	
2	Lime	488	
3	Shale	491	
6	Lime	497	odor
7	Shale	504	
1	sand	505	no oil
2	sand	507	broken - good saturation
6	sand	513	solid - good saturation
3	sand	516	broken - ok oil show
7	sand	523	broken - very little oil
15	sandy shale	538	
82	shale	620	TD



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#

807440

Invoice Date: 04/15/16

Terms: Net 30

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ALTAVISTA ENERGY INC
 PO BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

OBRIEN #AI-34

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	62.000	570.00
CE0002	Equipment Mileage Charge - Heavy Equipment	20.000	7.1500	62.000	54.34
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	62.000	250.80
WE0853	80 BBL Vacuum Truck (Cement Services)	1.500	100.0000	62.000	57.00
CC5840	Poz-Blend I A (50:50)	79.000	13.5000	62.000	405.27
CC5965	Bentonite	233.000	0.3000	62.000	26.56
CC5326	Sodium Chloride, Salt	153.000	1.0000	62.000	58.14
CC6077	Kolseal	395.000	0.5000	62.000	75.05
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	62.000	17.10
CC6128	Mud Flush - C	0.500	50.0000	62.000	9.50

Subtotal 4,009.90

Discounted Amount 2,486.14

SubTotal After Discount 1,523.76

Amount Due 4,134.45 If paid after 05/15/16

Tax: 47.33

Total: 1,571.09



CONSOLIDATED
Oil Well Services, LLC

5645
5519

TICKET NUMBER 50040
LOCATION Ottawa KS
FOREMAN Fred Mader

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

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice # 807440

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-14-16	3244	O'Brien # A I-34	SE 1	18	21	M1
CUSTOMER			TRUCK #			
Aika Vista Energy			DRIVER			
MAILING ADDRESS			TRUCK #			
P.O. Box 128			DRIVER			
CITY			TRUCK #			
Wellsville			DRIVER			
STATE			TRUCK #			
KS			DRIVER			
ZIP CODE			TRUCK #			
66092			DRIVER			

JOB TYPE Logstring HOLE SIZE _____ HOLE DEPTH 620 CASING SIZE & WEIGHT 2 1/2 EUE
 CASING DEPTH 613 DRILL PIPE Baffle TUBING @ 580 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 30' + Plug
 DISPLACEMENT 3-37 BB DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 BPM

REMARKS: Hold safety meeting, Establish pump rate. Pump 1/2 Gal Mud Flush
"C" Polymer. Circulate well to condition hole. Mix Pump 100* Gal
Flush. Mix Pump 79 sks Per Blend Cement 270 Gal 5% Salt. 5*
Kal Seal/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 - Wes

Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	475	1500.00
CE0002	20 mi	MILEAGE	475	1430.00
CE07H	Minimum	Ten Miles Delivery	510	1660.00
WE0853	1/hr	80 GAL Vac Truck	675	160.00
		Sub Total		2453.00
		Less 62%		-1520.24
				932.14
CC 5840	79 sks	Per Blend I A Cement	1066.50	
CC 5265	233**	Bentonite Gel	69.20	
CC 5326	150**	Salt	152.00	
CC 6077	395**	Kal Seal	197.50	
CP 8176	1	2 1/2" Rubber Plug	45.00	
CC 6128	1/2 Gal	Mud Flush "C"	26.00	
		Sub Total		1556.20
		Less 62%		-965.28
				591.62
			8%	SALES TAX
				47.83
				ESTIMATED TOTAL
				1571.09

Ravin 3737

AUTHORIZATION Bryan Mills TITLE _____ DATE 4/13/16

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.