

Miami County, KS  
 Well: O'Brien AI-38  
 Lease Owner: AltaVista

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

Commenced Spudding:  
 4/12/16

WELL LOG

Thickness of Strata	Formation	Total Depth
0-26	Soil-Clay	26
20	Lime	46
9	Shale	55
1	Lime	56
10	Shale	66
7	Lime	73
42	Shale	115
16	Lime	131
9	Shale	140
29	Lime	169
10	Shale	179
20	Lime	199
4	Shale	203
4	Lime	207
2	Shale	209
5	Lime	214
26	Shale	240
10	Sand	250
104	Shale	354
8	Sand	362
3	Limey Sand	365
11	Shale	376
11	Lime	387
56	Shale	433
9	Lime	442
10	Shale	452
3	Lime	455
16	Shale	471
7	Lime	478
19	Shale	497
2	Lime	499
6	Shale	505
8	Lime	513
1	Shale	514
2	Sand	516
1	Limey Sand	517
10	Sand	527
7	Sand	534
16	Sandy Shale	550
70	Shale	620-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.

AI-38

Farm

O'Brien

KS  
(State)

Miami  
(County)

1  
(Section)

18  
(Township)

21  
(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. AI-38  
 Elevation 903  
 Commenced Spuding 4-12 20 1/8  
 Finished Drilling 4-13 20 1/8  
 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 K8 21

(Section) (Township) (Range)  
 Distance from S line, 880 ft.  
 Distance from E line, 1320 ft.

3 sacks  
 8 hrs  
 5 7/8 borehole  
 2 1/8 casing

**CASING AND TUBING RECORD**

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

**CASING AND TUBING MEASUREMENTS**

Feet	In.	Feet	In.	Feet	In.
578		Bore	1/8		
609		Float			
620		TD		2 7/8	

455

Thickness of Strata	Formation	Total Depth	Remarks
16	Shale	471	
7	Lime	478	
19	Shale	497	
2	Lime	499	
6	Shale	505	
8	Lime	513	odor
1	Shale	514	
2	Sand	516	broken - good saturation
1	limy sand	517	no oil
10	sand	527	mostly solid - good saturation
7	sand	534	broken - good saturation
16	sandy shale	550	
70	Shale	620	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#

807439

Invoice Date: 04/15/16

Terms: Net 30

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ALTAVISTA ENERGY INC  
PO BOX 128  
WELLSVILLE KS 66092  
USA  
7858834057

OBRIAN #AI-38

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)	80.000	13.5000	62.000	410.40
CC5965	Bentonite	235.000	0.3000	62.000	26.79
CC5326	Sodium Chloride, Salt	155.000	1.0000	62.000	58.90
CC6077	Kolseal	400.000	0.5000	62.000	76.00
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 4,028.50

Discounted Amount 2,497.67

SubTotal After Discount 1,530.83

Amount Due 4,154.54 If paid after 05/15/16

Tax: 47.89

Total: 1,578.72

BARTLESVILLE, OK  
918/338-0808

EL DORADO, KS  
316/322-7022

EUREKA, KS  
620/583-7554

PONCA CITY, OK  
580/762-2303

OAKLEY, KS  
785/672-8822

OTTAWA, KS  
785/242-4044

THAYER, KS  
620/839-5269

GILLETTE, WY  
307/686-4914

CUSHING, OK  
918/225-2650



**CONSOLIDATED**  
Oil Well Services, LLC

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

5644  
5548

INVOICE # 87439

TICKET NUMBER 50039

LOCATION Ottawa KS.

FOREMAN Fred Maden

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-13-16	3244	O'Brien # AI-38	SE 1	18	21	MI

  

CUSTOMER	TRUCK #	DRIVER	TRUCK #	DRIVER
Alvasta Energy MAILING ADDRESS P.O. Box 128 CITY Wellsville STATE KS ZIP CODE 66092	712	Fred Maden		
	495	Har Bar		
	675	Ki Pat		
	510	Mik Hoe		

JOB TYPE Long string HOLE SIZE 5 7/8 HOLE DEPTH 620 CASING SIZE & WEIGHT 2 7/8 EUE  
 CASING DEPTH 610 DRILL PIPE Baffle in TUBING @ 578 OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT In CASING 32' + Plug  
 DISPLACEMENT \_\_\_\_\_ 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# Gel Flush. Mix + Pump 80 SKS Per Blend IA Cement 270  
Gal 5% Salt 5# Kol 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.

TOS Drilling - Wes Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	495	1500 <sup>00</sup>
CE0002	20mi	MILEAGE	495	143 <sup>00</sup>
CE0711	Minimum	Toni Miles Delivery	510	660 <sup>00</sup>
WE0853	1/2 hr	80 BBL Vac Truck	675	150 <sup>00</sup>
		Sub Total		2453 <sup>00</sup>
		Less 62%		- 1520 <sup>84</sup>
				932 <sup>14</sup>
8275 CC5840	80 sks	Por Blend IA Cement	1060 <sup>00</sup>	
CC5905	235#	Bentonite Gel	70 <sup>50</sup>	
CC5326	155#	Salt	155 <sup>00</sup>	
CC6077	400#	Kol Seal	200 <sup>00</sup>	
CP8176	1	2 1/2" Rubber Plug	45 <sup>00</sup>	
CC6128	1/2 Gal	Mud Flush "C"	25 <sup>00</sup>	
		Sub Total		1575 <sup>50</sup>
		Less 62%		- 976 <sup>51</sup>
				598 <sup>99</sup>
		8%	SALES TAX	47 <sup>84</sup>
			ESTIMATED TOTAL	1578 <sup>22</sup>
				(4134 <sup>54</sup> )

Revin 3737

AUTHORIZATION No Co Rep on site. TITLE \_\_\_\_\_ DATE \_\_\_\_\_

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.