

Miami County, KS  
 Well: O'Brien A-40  
 Lease Owner: AltaVista

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

Commenced Spudding:  
 6/8/16

WELL LOG

Thickness of Strata	Formation	Total Depth
0-15	Soil-Clay	15
20	Lime	35
10	Shale	45
3	Lime	48
7	Shale	55
9	Lime	64
41	Shale	105
16	Lime	121
9	Shale	130
12	Lime	142
3	Shale	145
16	Lime	161
7	Shale	168
19	Lime	187
5	Shale	192
4	Lime	196
2	Shale	198
5	Lime	203
144	Shale	347
9	Lime	356
7	Sand	363
2	Shale	365
13	Lime	378
45	Shale	423
7	Lime	430
13	Shale	443
3	Lime	446
14	Shale	460
8	Lime	468
20	Shale	488
2	Lime	490
3	Shale	493
7	Lime	500
2	Shale	502
1	Sand	503
5	Sand	508
7	Sand	515
3	Sand	518
10	Sandy Shale	528
52	Shale	580-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 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 -  $RPM \times d$  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-40

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: Michigan County  
KS State; Well No. A-40  
Elevation 896  
Commenced Spudding 6-8 20 16  
Finished Drilling 6-10 20 16  
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  
i 18 21

(Section) (Township) (Range)  
Distance from S line, 1470 ft.  
Distance from E line, 1825 ft.

3 sacks  
8 his  
5 5/8 borehole  
2 7/8 casing

**CASING AND TUBING  
RECORD**

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

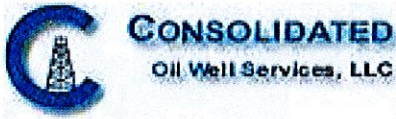
**CASING AND TUBING MEASUREMENTS**

Feet	In.	Feet	In.	Feet	In.
499-		Seat	Whipple		
532-		Baffle			
564-		Float			
580 TD			2 7/8		

Thickness of Strata	Formation	Total Depth	Remarks
0-15	soil-clay	15	
20	Lime	35	
10	Shale	45	
3	Lime	48	
7	Shale	55	
9	Lime	64	
41	Shale	105	
16	Lime	121	
9	Shale	130	
12	Lime	142	
3	Shale	145	
16	Lime	161	
7	Shale	168	
19	Lime	187	
5	Shale	192	
4	Lime	196	
2	Shale	198	
5	Lime	203	Half the
144	Shale	347	
9	Lime	356	
7	Shale	363	slight skew
<del>2</del>	Shale	<del>365</del>	365
13	Lime	378	
45	Shale	423	
7	Lime	430	
13	Shale	443	
3	Lime	446	

446

Thickness of Strata	Formation	Total Depth	Remarks
14	Shale	460	
8	Lime	468	
20	Shale	488	
2	Lime	490	
3	Shale	493	
7	Lime	500	
2	Shale	502	
1	Sand	503	no oil
5	Sand	508	broken oil - good saturation
7	Sand	515	solid - good saturation
3	Sand	518	broken - good saturation
10	sandy shale	528	
52	Shale	580	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# 807790

Invoice Date: 06/16/16

Terms: Net 30

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ALTAVISTA ENERGY INC  
 PO BOX 128  
 WELLSVILLE KS 66092  
 USA  
 7858834057

obrian #a-40

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)	1.000	100.0000	62.000	38.00
CC5840	Poz-Blend I A (50:50)	75.000	13.5000	62.000	384.75
CC5965	Bentonite	226.000	0.3000	62.000	25.76
CC5326	Sodium Chloride, Salt	158.000	1.0000	62.000	60.04
CC6077	Kolseal	375.000	0.5000	62.000	71.25
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	62.000	17.10

Subtotal 3,873.80

Discounted Amount 2,401.76

SubTotal After Discount 1,472.04

Amount Due 3,991.46 If paid after 07/16/16

Tax: 44.71

Total: 1,516.75



**CONSOLIDATED**  
Oil Well Services, LLC

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

**FIELD TICKET & TREATMENT REPORT  
CEMENT**

TICKET NUMBER 50049  
LOCATION Ottawa, KS  
FOREMAN Casey Kennedy

**Invoice #807790**

59350  
5842

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6/10/16	3244	O'Brian # A-40	SE 1	18	21	MI
CUSTOMER Atavista Energy			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS PO Box 128			368	Ala Mac	✓	Safety Meeting
CITY Wellsville			558	CarKen	✓	
STATE KS			369	Ar/McD	✓	
ZIP CODE 66092						

JOB TYPE log string HOLE SIZE 5 5/8" HOLE DEPTH 580' CASING SIZE & WEIGHT 2 1/8" EUE  
 CASING DEPTH 564' DRILL PIPE \_\_\_\_\_ TUBING baffle - 532' OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 32'  
 DISPLACEMENT 3.08 bbls DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 3 gpm

REMARKS: held safety meeting, established circulation, mixed + pumped 100 # gel followed by 5 bbls fresh water, mixed + pumped 75 slcs Pozblend 1A cement w/ 2% gel, 5% salt, + 5 # Kolseal per sk, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to baffle w/ 3.08 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

*PK9*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	1500.00	
CE0002	20 mi	MILEAGE	143.00	
CE0711	min	ten mileage	600.00	
WE0853	1 hr	80 Vac	100.00	
		trucks	2403.00	
		-62%	1489.86	
		subtotal		913.14
CC5840	75 slcs	Pozblend 1A cement	1012.50	
CC5965	226 #	Gel	107.80	
CC5306	158 #	Salt	158.00	
CC6077	375 #	Kolseal .50	187.50	
CP8176	1	2 1/2" rubber plug	45.08	
		materials	1470.82	
		-62%	911.90	
		subtotal		558.90
		8%		44.71
		SALES TAX		44.71

Revln 3737 ESTIMATED TOTAL 1516.75  
 AUTHORIZATION No Co Rep TITLE \_\_\_\_\_ DATE 6/10/16  
 TOTAL (1399.14)

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.