

Miami County, KS
 Well: O'Brien AI-32
 Lease Owner: AltaVista

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

Commenced Spudding:
 6/21/16

WELL LOG

Thickness of Strata	Formation	Total Depth
0-11	Soil-Clay	11
20	Lime	31
9	Shale	40
2	Lime	42
8	Shale	50
8	Lime	58
43	Shale	101
16	Lime	117
9	Shale	126
12	Lime	138
1	Shale	139
17	Lime	156
8	Shale	164
17	Lime	181
5	Shale	186
5	Lime	191
2	Shale	193
5	Lime	198
153	Shale	351
7	Limey Sand	358
14	Lime	372
7	Shale	379
1	Lime	380
41	Shale	421
4	Lime	425
12	Shale	437
2	Lime	439
15	Shale	454
8	Lime	462
20	Shale	482
1	Lime	483
5	Shale	488
7	Lime	495
5	Shale	500
8	Sandy Shale	508
11	Sand	519
2	Sand	521
2	Sand	523
11	Sandy Shale	534
86	Shale	620-TD

Short Cuts

TANK CAPACITY

BBLs. (42 gal.) equals $D^2 \times 1.4 \times h$

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. AI-32

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

Thickness of Strata	Formation	Total Depth	Remarks
0-11	Soil - clay	11	
20	Lime	31	
9	Shale	40	
2	Lime	42	
8	Shale	50	
8	Lime	58	
43	Shale	101	
16	Lime	117	
9	Shale	126	
12	Lime	138	
1	Shale	139	
17	Lime	156	
8	Shale	164	
17	Lime	181	
5	Shale	186	
5	Lime	191	
2	Shale	193	
5	Lime	198	Harder
153	Shale	351	
7	limey sand	358	good oil show
14	Lime	372	
7	Shale	379	
1	Lime	380	
41	Shale	421	
4	Lime	425	
12	Shale	437	
2	Lime	439	



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#

807890

Invoice Date: 06/28/16

Terms: Net 30

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ALTAVISTA ENERGY INC
 PO BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

OBRIAN #AI-32

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)	77.000	13.5000	62.000	395.01
CC5965	Bentonite	229.000	0.3000	62.000	26.11
CC5326	Sodium Chloride, Salt	155.000	1.0000	62.000	58.90
CC6077	Kolseal	385.000	0.5000	62.000	73.15
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 3,978.70

Discounted Amount 2,466.79

SubTotal After Discount 1,511.91

Amount Due 4,100.76 If paid after 07/28/16

Tax: 46.39

Total: 1,558.30



CONSOLIDATED
Oil Well Services, LLC

W038
5943

TICKET NUMBER 50137
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 # 87890

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-22-16	3244	O'Brian # A1-32	W038-55	18	21	MI
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Altavista Energy Inc.			712	Fred Mader		
MAILING ADDRESS			463	Kei Car		
P.O. Box 128			675	Ki Det		
CITY	STATE	ZIP CODE	558	Har Bec		
Wellsville	KS	66092				

JOB TYPE Longstring HOLE SIZE 5 7/8 HOLE DEPTH 620' CASING SIZE & WEIGHT 2 7/8 EUE
 CASING DEPTH 597' DRILL PIPE Baffle in TUBING 2 5/8 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING Full
 DISPLACEMENT 3.3 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 BPM

REMARKS: Hold Safety meeting. Establish pump rate. Pump 1/2 Gal
Mud Flush "C". Circulate well to condition hole. Mix + Pump
100# Gel Flush Mix + Pump 77 sks. Por Blend IA 2% Gel
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.

Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	467	1500.00
CE0002	20 mi	MILEAGE	467	143.00
CE0711	Minimum	Ten Miles Delivery	558	660.00
WE0853	1 1/2 hr	80 BBL Vae Truck	675	150.00
		Sub Total		2453.00
		Less 62%		-1520.86
				932.14
<i>8412</i> CC5840	77 sks	Por Blend IA Cement		1039.50
CC5965	229#	Bentonite Gel		682.00
CC5326	155#	Salt		155.00
CC6077	385#	Kal Seal		192.50
CP8176	1	2 1/2" Rubber Plug		45.00
CC6128	1/2 Gal	Mud Flush "C"		25.00
		Sub Total		1525.20
		Less 62%		-945.93
				579.27
			870	SALES TAX 46.38
				ESTIMATED TOTAL 1558.30

Ravin 3737

AUTHORIZATION _____ TITLE _____ DATE (4100 29)

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.