

Miami County, KS
 Well: Owen AI-51
 Lease Owner: Altavista Energy

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

Commenced Spudding:
 1/22/15

WELL LOG

Thickness of Strata	Formation	Total Depth
0 - 10	Soil - Clay	10
1	Lime	11
4	Shale	15
2	Lime	17
41	Shale	58
14	Lime	72
10	Shale	82
29	Lime	111
8	Shale	119
25	Lime	144
5	Shale	149
3	Lime	152
3	Shale	155
6	Lime	161
22	Shale	183
37	Sand & Sandy Shale	220
40	Shale	260
4	Sand	264
28	Shale	292
5	Sandy Lime	297
5	Sandy Shale	302
13	Shale	315
9	Lime	324
52	Shale	376
7	Lime	383
11	Shale	394
3	Lime	397
14	Shale	411
7	Lime	418
26	Shale	444
8	Lime	452
4	Shale	456
14	Sand	470
15	Sandy Shale	485
72	Shale	557
1	Lime	558
15	Shale	573
2	Sand	575
5	Sand	580
6	Sand & Sandy Shale	586

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. AI-51

Farm Owen

KS
(State)

Missi
(County)

8
(Section)

18
(Township)

22
(Range)

For Altavista Energy inc
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Owen Farm: Miami County

KS State; Well No. AI-51

Elevation 886

Commenced Spuding 1-22 20 15

Finished Drilling 1-23 20 15

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
8 18 22

(Section) (Township) (Range)

Distance from S line, 5115 ft.

Distance from E line, 2805 ft.

4 sacks Bonus well

9 hrs

5 5/8 base hole

2 7/8 casing

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____

8" Set _____ 8" Pulled _____

7 3/4" Set 20 6 1/4" Pulled _____

4" Set _____ 4" Pulled _____

2" Set _____ 2" Pulled _____

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
633.60		Baffle			
665.35		Flat			2 7/8
680	TD				

397

Thickness of Strata	Formation	Total Depth	Remarks
14	Shale	411	
7	Lime	418	
26	Shale	444	
8	Lime	452	
4	Shale	456	
14	Sand	470	broken - slight show
15	sandy shale	485	
72	Shale	557	
1	Lime	558	
15	Shale	573	
2	sand	575	broken - 25% oil
5	sand	580	mostly solid - good show
6	sand & sandy shale	586	broken - 50/50 - good show in sand
26	Shale	612	
68	sand	680	water - 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# 803167

Invoice Date: 01/28/15 Terms: Net 30 Page 1

ALTAVISTA ENERGY INC
 4595 K-33 HIGHWAY
 WELLSVILLE KS 66092
 USA
 7858834057

OWEN # AI-51

Part No	Description	Quantity	Unit Price	Discount(%)	Total
5401	Cement Pumper	1.000	1,085.0000	0.000	1,085.00
5406	Mileage Charge	25.000	4.2000	0.000	105.00
5402	Casing Footage	665.000	0.0000	0.000	0.00
5407	Min. Bulk Delivery Charge	1.000	368.0000	0.000	368.00
5502C	80 Vacuum Truck Cement	2.000	100.0000	0.000	200.00
1124	Poz Cement Mix	91.000	11.5000	30.000	732.55
1118B	Premium Gel / Bentonite	253.000	0.2200	30.000	38.96
1111	Sodium Chloride (Granulated Salt)	191.000	0.3900	30.000	52.14
1110A	Kol Seal (50# BAG)	455.000	0.4600	30.000	146.51
4402	2 1/2 Rubber Plug	1.000	29.5000	0.000	29.50
1401	HE 100 Polymer	0.500	47.2500	0.000	23.63

Subtotal 3,197.08
 Discounted Amount 415.79
 SubTotal After Discount 2,781.29

Amount Due 3,307.16 If paid after 02/27/15

Tax: 78.28
 Total: 2,859.57



CONSOLIDATED
Oil Well Services, LLC

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

FIELD TICKET & TREATMENT REPORT
CEMENT

1945
/1889

Invoice #803167

TICKET NUMBER 50765

LOCATION Owens, KS

FOREMAN Cory Kennedy

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1/23/15	3244	Owens # AI-51	NE 8	18	22	L11
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Altavista Energy			729	Cas Ken	Safety	Waiting
MAILING ADDRESS			660	Kei Car		
PO Box 128			558	Bro Bic		
CITY	STATE	ZIP CODE	309	Mik Ha		
Wellsville	KS	66092				

JOB TYPE low string HOLE SIZE 5 7/8" HOLE DEPTH 1080' CASING SIZE & WEIGHT 2 7/8" EVE
 CASING DEPTH 1065' DRILL PIPE -TUBING- 6 1/2" - 1033' OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 32'
 DISPLACEMENT 3.6 bbls DISPLACEMENT PSI _____ MIX PSI _____ RATE 4.5 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 1/2 gal polymer, circulated well for 1 hr, to condition hole, mixed & pumped 1100 # gel followed by 10 bbls fresh water, mixed & pumped 91 sks 50/50 Pozmix cement w/ 2 1/2 gal, 5% salt, & 5 # Kal seal per sk, remount to surface, flushed pump clean, pumped 2 1/2" rubber plug to casing, 1000 bbls w/ 3.6 bbls fresh water, pressured to 200 PSI, released pressure, shut in casing.

BT

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		1085.00
5406	25 mi	MILEAGE		105.00
5402	665'	Casing footage		
5407	minimum	for mileage		368.00
5502c	2 hrs	80 Vac		200.00
1124	91 sks	50/50 Pozmix cement	1046.50	
1118B	253 #	Gel	55.66	
1111	191 #	Salt	74.49	
1110A	455 #	Kal seal	209.30	
		materials	1385.95	
		-30%	415.79	
		subtotal		970.16
4402	1	2 1/2" rubber plug		29.50
1401	1/2 gal	Polymer		23.63
			3307.17	
		7.65%	SALES TAX	78.28
			ESTIMATED TOTAL	2859.57

Ravin 3737

Completed
Bryan Miller

AUTHORIZATION _____ 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.