

Douglas County, KS  
Well: Jim Bell AI-10  
Lease Owner: Altavista

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

Commenced Spudding:  
1/03/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
0-18	soil/clay	18
3	lime	21
147	shale	168
7	lime	175
3	shale	178
19	lime	197
8	shale	205
7	lime	212
5	shale	217
38	lime	255
7	shale	262
21	lime	283
71	shale	354
20	lime	374
1	shale	375
2	lime	377
15	shale	392
10	lime	402
14	shale	416
10	sand	426
20	lime	446
16	shale	462
24	lime	486
7	shale	493
25	lime	518
4	shale	522
4	lime	526
4	shale	530
6	lime	536
167	shale	703
6	lime	709
4	shale	713
4	lime	717
7	shale	724
8	lime	732
14	shale	746
3	lime	749
8	shale	757
6	lime	763
30	shale	793



# 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-10

Farm Jim Bell

KS Douglas  
(State) (County)

1 15 20  
(Section) (Township) (Range)

For Altavista Energy inc  
(Well Owner)

## Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Jim Bell Farm: Douglas County  
KS State; Well No. AI-10  
 Elevation 1044  
 Commenced Spuding Jan 3 2014  
 Finished Drilling Jan 8 2014  
 Driller's Name Wesley Dollard  
 Driller's Name \_\_\_\_\_  
 Driller's Name \_\_\_\_\_  
 Tool Dresser's Name Greg Perry  
 Tool Dresser's Name Ryan Ward  
 Tool Dresser's Name Tyler White  
 Contractor's Name TOS  
1 15 20

(Section) (Township) (Range)  
 Distance from S line, 4785 ft.  
 Distance from E line, 4455 ft.

8 sacks  
10 hrs

**CASING AND TUBING RECORD**

10" Set \_\_\_\_\_ 10" Pulled \_\_\_\_\_  
 8" Set \_\_\_\_\_ 8" Pulled \_\_\_\_\_  
~~7 1/2"~~ Set 46 6 1/4" Pulled \_\_\_\_\_  
 4" Set \_\_\_\_\_ 4" Pulled \_\_\_\_\_  
 2" Set \_\_\_\_\_ 2" Pulled \_\_\_\_\_

**CASING AND TUBING MEASUREMENTS**

Feet	In.	Feet	In.	Feet	In.
872.45		Be	Al		
905.50		Float			
				27	8

Thickness of Strata	Formation	Total Depth	Remarks
0-18	Soil-clay	18	
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7	Lime	175	
3	Shale	178	
19	Lime	197	
8	Shale	205	
7	Lime	212	
5	Shale	217	
38	Lime	255	shells
7	Shale	262	
21	Lime	283	
71	Shale	354	
20	Lime	374	
1	Shale	375	
2	Lime	377	
15	Shale	392	
10	Lime	402	
14	Shale	416	
10	Sand	426	no oil
20	Lime	446	
16	Shale	462	
24	Lime	486	
7	Shale	493	
25	Lime	518	
4	Shale	522	
4	Lime	526	

526

Thickness of Strata	Formation	Total Depth	Remarks
4	Shale	530	
6	Lime	536	
167	Shale	703	Heather
6	Lime	709	
4	Shale	713	
4	Lime	717	
7	Shale	724	
8	Lime	732	
14	Shale	746	
3	Lime	749	
8	Shale	757	
6	Lime	763	
30	Shale	793	
1	Lime	794	
7	Shale	801	
1	Sand	802	no Oil
13	Sand	815	mostly solid - dk show
105	Sandy shale	920	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. Box 884  
Chanute, KS 66720  
620/431-9210 • 1-800/467-8676  
Fax 620/431-0012

**INVOICE**

Invoice # 265213

Invoice Date: 01/13/2014 Terms: 0/0/30,n/30

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ALTAVISTA ENERGY INC  
4595 K-33 HIGHWAY  
P.O. BOX 128  
WELLSVILLE KS 66092  
(785) 883-4057

JIM BELL AI-10  
44970  
NW 1-15-20  
01-08-2014  
KS

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	129.00	11.5000	1483.50
1118B	PREMIUM GEL / BENTONITE	317.00	.2200	69.74
1111	SODIUM CHLORIDE (GRANULA	250.00	.3900	97.50
1110A	KOL SEAL (50# BAG)	645.00	.4600	296.70
4402	2 1/2" RUBBER PLUG	1.00	29.5000	29.50
1401	HE 100 POLYMER	.50	47.2500	23.63

  

Description	Hours	Unit Price	Total
495 CEMENT PUMP	1.00	1085.00	1085.00
495 EQUIPMENT MILEAGE (ONE WAY)	25.00	4.20	105.00
495 CASING FOOTAGE	901.00	.00	.00
558 MIN. BULK DELIVERY	1.00	368.00	368.00
675 80 BBL VACUUM TRUCK (CEMENT)	2.50	90.00	225.00

Parts:	2000.57	Freight:	.00	Tax:	143.04	AR	3926.61
Labor:	.00	Misc:	.00	Total:	3926.61		
Sublt:	.00	Supplies:	.00	Change:	.00		

Signed \_\_\_\_\_ Date \_\_\_\_\_



**CONSOLIDATED**  
Oil Well Services, LLC

265213

TICKET NUMBER 44970

LOCATION Ottawa KS

FOREMAN Fred Mader

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

**FIELD TICKET & TREATMENT REPORT  
CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
1-8-14	3244	Jim Bell # AI-10	NW 1	15	20	DG
CUSTOMER			TRUCK#			
Mailing Address			DRIVER			
CITY			TRUCK#			
STATE			DRIVER			
ZIP CODE			TRUCK#			
Wellsville			558			
KS			Mat Coc			
66092						

JOB TYPE Longstring HOLE SIZE 5 7/8 HOLE DEPTH \_\_\_\_\_ CASING SIZE & WEIGHT 2 7/8 EUE  
 CASING DEPTH 905 DRILL PIPE Baffle in TUBING @ 872' OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 2 1/2" x 36"  
 DISPLACEMENT 5.07 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 5 BPM

REMARKS: Hold crew safety meeting. Establish pump rate. Mix 1/2 Gal NE 100 polymer. Circulate well to condition hole. Mix + Pump 100# Gal Flush. Mix + Pump 129 sks 50/50 Poz Mix 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 Drilling - Wesley Dallard

Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	495	1085.00
5406	25mi	MILEAGE	495	105.00
5402	901	Casing Footage		N/C
5407	Minimum	Ton Miles	558	368.00
5502C	2 1/2 hrs	80 BBL Vac Truck	675	225.00
1124	129 SKS	50/50 Poz Mix Cement		1483.50
1118B	317#	Premium Gel		6974
1111	250#	Granulated Salt		97.50
1110A	645#	Kal Seal		296.20
4402	1	2 1/2" Rubber Plug		29.50
1401	1/2 Gal	NE-100 Polymer		23.53
			7.75%	SALES TAX
				ESTIMATED TOTAL

**completed**

Authz'n 3737  
 AUTHORIZATION Bryan Miller TITLE \_\_\_\_\_ DATE 8/14/14  
 ESTIMATED TOTAL \$ 3926.61

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.



CASING MECHANICAL INTEGRITY TEST

DOCKET# E-30944

Disposal Well  Enhanced Recovery:  
 NW-OP Repressuring   
 Flood   
 Tertiary

SW NE NW NW, Sec 1, T 15S, R 20 (E)W  
4785 Feet from South Section Line  
4455 Feet from East Section Line

Date injection started \_\_\_\_\_  
 API #15- 045-22028

Lease Jim Bell Well # AI-10  
 County Douglas

Operator: Altavista Energy, Inc.  
 Name & Address P.O. Box 128  
Wellsville, KS 66092

Operator License# 34350  
 Contact Person Doug Evans  
 Phone 785-883-4057

Max. Auth. Injection Press \_\_\_\_\_ Psi; Max Inj. Rate \_\_\_\_\_ bbl/d;  
 If Dual Completion - Injection above production \_\_\_\_\_ Injection below production \_\_\_\_\_

	Conductor	Surface	Production	Liner	Tubing
Size		<u>7"</u>	<u>2 7/8"</u>		Size _____
Set at		<u>40'</u>	<u>872'</u>		Set at _____
Cement Top		<u>Circ.</u>	<u>Circ.</u>		Type _____
" Bottom		<u>40'</u>	<u>872'</u>		
DV/Perf.				<u>902</u>	ft. depth _____
Packer type		Size _____		Set at _____	
Zone of injection		ft. to ft. _____		Perf. or open hole _____	

Type MIT: Pressure:  Radioactive Tracer Survey:  Temperature Survey:

F Time: Start 10 Min 20 Min 30 Min  
 I Pressures: 800 800 800 Set up 1 System Pres. during test \_\_\_\_\_  
 L Set up 2 Annular Pres. during test \_\_\_\_\_  
 D Set up 3 Fluid loss during test \_\_\_\_\_ bbls.

T Tested: Casing  or Casing - Tubing Annulus

The bottom of the tested zone in shut in with Pressure Test (rubber plug)  
 Test Date 1/9/2014 Using Midwest Surveys Company's Equipment  
 The operator hereby certifies that the zone between 0 feet and 872 feet  
 was the zone tested David Nelson Signature Contractor Title

The results were Satisfactory  Marginal \_\_\_\_\_ Not Satisfactory \_\_\_\_\_  
 State Agent: Laura C. Hermon Title: Perit Witness: YES \_\_\_\_\_ NO

REMARKS: Pressured well up to 800# well not perforated yet

Origin. Conservation Div.:  KDHE/T:  Dist. Office JAN 15 2014  
 Computer Update Is there Chemical Sealant or a Mechanical Casing patch in the annular space? (Y/N)