

Miami County, KS  
Well: Morrow A-9  
Lease Owner: Altavista Energy

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

Commenced Spudding:  
7-27-2015

WELL LOG

Thickness of Strata	Formation	Total Depth
0 - 4	Soil - Clay	4
8	Lime	12
7	Shale	19
41	Lime	60
38	Shale	98
14	Lime	112
12	Shale	124
4	Lime	128
41	Shale	169
10	Lime	179
16	Shale	195
25	Lime	220
7	Shale	227
21	Lime	248
4	Shale	252
2	Lime	254
6	Shale	260
5	Lime	265
9	Shale	274
3	Lime	277
15	Shale	292
3	Sand	295
17	Sand	312
3	Sand	315
62	Sand	377
9	Shale	386
32	Shale	418
5	Limey Sand	423
26	Shale	449
2	Limey Sand	451
17	Shale	468
5	Lime	473
2	Shale	475
6	Lime	481
6	Shale	487
9	Lime	496
17	Shale	513
4	Lime	517
11	Shale	528
5	Lime	533





# 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-9

Farm Morrow

KS Miami  
 (State) (County)

17 16 24  
 (Section) (Township) (Range)

For Altavilla 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
0-4	Soil-clay	4	
8	Lime	12	
7	Shale	19	
41	Lime	60	
38	Shale	98	
14	Lime	112	
12	Shale	124	
4	Lime	128	
41	Shale	169	
10	Lime	179	
16	Shale	195	
25	Lime	220	
7	Shale	227	
21	Lime	248	
4	Shale	252	
2	Lime	254	
6	Shale	260	
5	Lime	265	Hertha
9	Shale	274	
3	Sand	277	broken Oil
15	Shale	292	
3	Sand	295	
17	Sand	312	grey
3	Sand	315	gas
62	Shale	377	oil show
9	Sand	386	
32	Shale	418	grey

418

Thickness of Strata	Formation	Total Depth	Remarks
5	limy sand	423	
26	Shale	449	
2	limy sand	451	oil show
17	Shale	468	
5	Lime	473	
2	Shale	475	
6	Lime	481	
6	Shale	487	
9	Lime	496	
17	Shale	513	
4	Lime	517	
11	Shale	528	
5	Lime	533	
7	Shale	540	
8	Lime	548	
7	Shale	555	
1	Lime	556	
6	Shale	562	
3	Lime	565	
15	Shale	580	
2	Lime	582	
43	Shale	625	
5	sand	630	gas
19	core	649	page 6
91	Shale	740	







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# 805165

Invoice Date: 07/31/15 Terms: Net 30 Page 1

ALTAVISTA ENERGY INC  
 4595 K-33 HWY, PO BOX 128  
 WELLSVILLE KS 66092  
 USA  
 7858834057

MORROW # A-9

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	46.000	810.00
CE0002	Equipment Mileage Charge - Heavy Equipment	30.000	7.1500	46.000	115.83
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	46.000	356.40
WE0853	80 BBL Vacuum Truck (Cement Services)	2.000	100.0000	46.000	108.00
CC5840	Poz-Blend I A (50:50)	100.000	13.5000	46.000	729.00
CC5965	Bentonite	368.000	0.3000	46.000	59.62
CC5326	Sodium Chloride, Salt	210.000	0.7500	46.000	85.05
CC6077	Kolseal	500.000	0.5000	46.000	135.00
CP8178	4 1/2" Top Rubber Plug	1.000	75.0000	46.000	40.50

Subtotal 4,517.40  
 Discounted Amount 2,078.00  
 SubTotal After Discount 2,439.40

Amount Due 4,672.83 If paid after 08/30/15

Tax: 83.94  
 Total: 2,523.34



**CONSOLIDATED**  
Oil Well Services, LLC

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

3729  
3/15

TICKET NUMBER 49751  
LOCATION Atauva, KS  
FOREMAN Casey Kennedy

**FIELD TICKET & TREATMENT REPORT  
CEMENT**

Invoice # 85165

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7/28/15	3244	Morrow # A-9	SE 17	16	24	MI
CUSTOMER <u>Atauva Energy</u>			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS <u>PO Box 128</u>			729 <u>Kas Ken</u> ✓ <u>Safety Meeting</u>			
CITY <u>Wellsville</u>			467 <u>Kei Car</u> ✓			
STATE <u>KS</u>			503 <u>Har Bee</u> ✓			
ZIP CODE <u>66092</u>			1075 <u>Kei Det</u> ✓			

JOB TYPE longstring HOLE SIZE 6 3/4" HOLE DEPTH 740' CASING SIZE & WEIGHT 4 1/2"  
 CASING DEPTH 714' DRILL PIPE \_\_\_\_\_ TUBING baffle - 1080' OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT IN CASING 34'  
 DISPLACEMENT 10.85 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 200# coal followed by 5 bbls fresh water, mixed & pumped 4 bbls dye marker, mixed & pumped 100 sks 50/50 Portblend cement w/ 2% gel, 5% salt, & 5# Kalscal per sk, dye marker to surface, flushed pump clean, pumped 4 1/2" rubber plug to baffle w/ 10.85 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing, cement to surface.

*[Handwritten signature]*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	1500.00	
CE0002	30 mi	MILEAGE	214.50	
CE0711	min	ton mileage	600.00	
WE0853	2 hrs	80 Vac	200.00	
		trucks	2574.50	
		= 46%	1184.27	
		subtotal		1390.23
CC5840	100 sks	50/50 Portblend	1350.00	
CC5965	3 lbs	Gel	110.40	
CC5326	210	Salt	157.50	
CC6077	500	Kalscal	250.00	
CP8178	1	4 1/2" rubber plug	75.00	
		materials	1942.90	
		= 46%	893.73	
		subtotal		1049.17
		8%		83.94
		SALES TAX		83.94
		ESTIMATED TOTAL		2523.34
				(4672.83)

Revin 3737

AUTHORIZATION Bryan Mally TITLE \_\_\_\_\_ DATE 7/28/15

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.