

Miami County, KS
 Well: Stahl A-12
 Lease Owner: Altavista Energy

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

Commenced Spudding:
 6-15-2015

WELL LOG

Thickness of Strata	Formation	Total Depth
0 - 12	Soil - Clay	12
44	Shale	66
24	Lime	90
13	Shale	103
10	Lime	113
11	Shale	124
2	Lime	126
19	Shale	145
4	Lime	149
39	Shale	188
10	Lime	198
15	Shale	213
25	Lime	238
8	Shale	246
20	Lime	266
3	Shale	269
2	Lime	271
3	Shale	274
10	Lime	284
196	Shale	480
10	Sand	490
2	Shale	492
1	Lime	493
7	Shale	500
6	Lime	506
21	Shale	527
3	Lime	530
11	Shale	541
3	Lime	544
7	Shale	551
1	Lime	552
2	Shale	554
7	Lime	561
70	Shale	631
2	Sandy Shale	633
5	Core	638
6	Sand	644
11	Sandy Shale	655
65	Shale	720 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-12

Farm Stahl

KS Miami
(State) (County)

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

For Altavista Energy inc
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East
Louisburg, KS 66053
913-710-5400

Stahl Farm: Miami County
 KS State; Well No. A-12

Elevation 1000

Commenced Spuding 6-15 20 15

Finished Drilling 6-16 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

17 16 24

(Section) (Township) (Range)
 Distance from 5 line, 2475 ft.

Distance from E line, 5115 ft.

4 sacks 2 7/8 casing
 1 core

9 hrs
 5 7/8 borehole

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____
 8" Set _____ 8" Pulled _____
 7 3/4" Set 23 _____ 6 1/4" Pulled _____
 4" Set _____ 4" Pulled _____
 2" Set _____ 2" Pulled _____

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
631.30		Seat	nipple		
663.05		Baffle			
692.95		Float			
720 TD				2 7/8	

Thickness of Strata	Formation	Total Depth	Remarks
0-12	soil-clay	12	
44	Shale	66	
24	Lime	90	
13	Shale	103	
10	Lime	113	
11	Shale	124	
2	Lime	126	
19	Shale	145	
4	Lime	149	
39	Shale	188	
10	Lime	198	
15	Shale	213	
25	Lime	238	
8	Shale	246	
20	Lime	266	
3	Shale	269	
2	Lime	271	
3	Shale	274	
10	Lime	284	
196	Shale	480	Heatha
10	Lime	490	
2	Shale	492	
1	Lime	493	
7	Shale	500	
6	Lime	506	
21	Shale	527	
3	Lime	530	odor

530

Thickness of Strata	Formation	Total Depth	Remarks
11	Shale	541	
3	Lime	544	
7	Shale	551	
1	Lime	552	
2	Shale	554	
7	Lime	561	
70	Shale	631	
2	Sandy shale	633	odor
5	core	638	page 6
6	Sand	644	broken oil - good show
11	Sandy shale	655	
65	Shale	720	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# 804660

Invoice Date: 06/28/15 Terms: Net 30 Page 1

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

STAHL # A-12

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)	88.000	13.5000	46.000	641.52
CC5965	Bentonite	348.000	0.3000	46.000	56.38
CC5326	Sodium Chloride, Salt	185.000	0.7500	46.000	74.93
CC6077	Kolseal	440.000	0.5000	46.000	118.80
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	46.000	24.30

Subtotal 4,270.65
 Discounted Amount 1,964.50
 SubTotal After Discount 2,306.15

Amount Due 4,400.41 If paid after 07/28/15

Tax: 70.07
 Total: 2,376.23



CONSOLIDATED
Oil Well Services, LLC

3245
3168

Invoice # 84660

TICKET NUMBER 51005
LOCATION Ottawa, KS
FOREMAN Casa Kennedy

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
6/16/15	3244	Stalid # A-12	SW17	16	24	Mi
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Altavista Energy			729	Cesken	Safety Meeting	
MAILING ADDRESS			495	Har Boc		
PO Box 128			558	Bro Bir		
CITY	STATE	ZIP CODE	319	Mikhaa		
Wellsville	KS	66092				

JOB TYPE longstring HOLE SIZE 5 7/8" HOLE DEPTH 720' CASING SIZE & WEIGHT 2 7/8" EUE
 CASING DEPTH 606' DRILL PIPE - TUBING baffle-6063' OTHER -
 SLURRY WEIGHT - SLURRY VOL - WATER gal/sk - CEMENT LEFT in CASING 33'
 DISPLACEMENT 3.84 bbls DISPLACEMENT PSI - MIX PSI - RATE 4 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 200# Gel followed by 5 bbls fresh water, mixed & pumped 80 lbs 50/50 Portland cement w/ 2% gel, 5% salt, & 5# Kalseal for slt, cement to surface. flushed pump clean, pumped 2 1/2" rubber plug to baffle w/ 3.84 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

[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	ten mileage	600.00	
WF0853	2 hrs	80 Vcc	200.00	
		trucks	2575.50	2574.50
		- 46%	1184.23	
		subtotal		1390.27
CC5840	88 lbs	50/50 Portland	1188.00	
CC5965	348 #	Gel	104.40	
CC5326	185 #	Salt	138.75	
CC10077	440 #	Kalseal	220.00	
CP8176	1	2 1/2" rubber plug	45.00	
		materials	11696.15	
		- 46%	780.23	
		subtotal		915.92
		7.165%	SALES TAX	70.07
		ESTIMATED TOTAL		2376.28
				(4401.41)

Ravin 3737

AUTHORIZATION [Signature] 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.