

Miami County, KS
 Well: Stahl A-20
 Lease Owner: Altavista Energy

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

Commenced Spudding:
 6-13-2015

WELL LOG

Thickness of Strata	Formation	Total Depth
0 - 8	Soil - Clay	8
5	Lime	13
3	Shale	16
41	Lime	57
25	Shale	82
16	Lime	98
19	Shale	117
4	Lime	121
40	Shale	161
11	Lime	172
15	Shale	187
10	Lime	197
3	Shale	200
12	Lime	212
8	Shale	220
21	Lime	241
3	Shale	244
3	Lime	247
6	Shale	253
8	Lime	261
8	Shale	269
4	Lime	273
14	Shale	287
33	Sand	320
143	Shale	463
4	Lime	467
2	Shale	469
6	Lime	475
6	Shale	481
10	Lime	491
18	Shale	509
5	Lime	514
8	Shale	522
4	Lime	526
8	Shale	534
1	Lime	535
3	Shale	538
5	Lime	543
37	Shale	580
3	Lime	583

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-20

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

Thickness of Strata	Formation	Total Depth	Remarks
0-8	soil - clay	8	
5	Lime	13	
3	Shale	16	
41	Lime	57	
25	Shale	82	
16	Lime	98	
19	shale	117	red bed
4	Lime	121	
40	Shale	161	
11	Lime	172	
15	Shale	187	
10	Lime	197	
3	shale	200	
12	Lime	212	
8	shale	220	
21	Lime	241	
3	shale	244	
3	Lime	247	
6	shale	253	
8	Lime	261	Hestha
8	shale	269	
4	sand	273	odor - slight show
14	shale	287	
33	sand	320	gas odor
143	shale	463	
4	Lime	467	
2	Shale	469	

469

Thickness of Strata	Formation	Total Depth	Remarks
6	Lime	475	
6	Shale	481	
10	Lime	491	
18	Shale	509	
5	Lime	514	odor
8	Shale	522	
4	Lime	526	
8	Shale	534	
1	Lime	535	
3	Shale	538	
5	Lime	543	
37	Shale	580	
3	Lime	583	
21	Shale	604	
1	Lime	605	
8	Shale	613	
21	sandy shale	634	
12	sand	646	grey - no Oil
19	sand	665	water
61	Shale	726	
3	sand	729	grey - no Oil
3	shale	732	
5	sandy shale	737	
51	shale	788	
6	sand	794	gray - no Oil
48	Shale	842	
10	sand	852	grey - no Oil



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# 804657

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-20

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)	3.000	100.0000	46.000	162.00
CC5840	Poz-Blend I A (50:50)	107.000	13.5000	46.000	780.03
CC5965	Bentonite	539.000	0.3000	46.000	87.32

Subtotal 4,280.70
 Discounted Amount 1,969.12
 SubTotal After Discount 2,311.58
 Amount Due 4,403.57 If paid after 07/28/15

Tax: 66.35
 Total: 2,377.93



CONSOLIDATED
Oil Well Services, LLC

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

INVOICE # 804657 ³²⁴¹¹ _{3/16/15}
FIELD TICKET & TREATMENT REPORT
CEMENT

TICKET NUMBER 51003
LOCATION Chanute, KS
FOREMAN Casey Kennedy

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6/15/15	3244	Stahl # A-26	SW17	16	24	M
CUSTOMER Altavista Energy			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS PO Box 128			729 / Coker / ✓ Solidy, Macking			
CITY STATE ZIP CODE Wellsville KS 66092			495 / Har Ber / ✓			
			503 / Ac Med / ✓			
			675 / Kei Det / ✓			

JOB TYPE plug HOLE SIZE 6 3/4" HOLE DEPTH 560' CASING SIZE & WEIGHT _____
 CASING DEPTH _____ DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 bpm

REMARKS: held safety meeting, established circulation through drill steel at hole TD, mixed & pumped 45 sks 50% Portland cement w/ 6% gel per sk, pulled drilled steel to 200', mixed & pumped 45 sks cement to surface, pulled drill steel from hole, topped well off w/ 17 sks cement, washed up equipment & drill steel.

[Handwritten signature]

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0150	1	PUMP CHARGE	1500.00	1500.00
CE0002	30 mi	MILEAGE	214.50	214.50
CE0711	min	ten mileage	1000.00	1000.00
WE0853	3 hrs	80 Vac	300.00	300.00
		trucks	2674.50	
		-46%	1230.27	
		subtotal		1444.23
1747 CC5840	107 sks	50% Portland	1444.50	1444.50
CC5965	539 #	Gel	161.70	161.70
		materials	1606.20	
		-46%	738.85	
		subtotal		867.35
		7.65%	SALES TAX	66.35
			ESTIMATED TOTAL	2377.93
			DATE	(4403.57)

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