

Woodson County, KS
Well: Strahm West AI-5
Lease Owner: AltaVista

Town Oilfield Service, Inc.
(913) 294-2125

Commenced Spudding:
8/23/2018

WELL LOG

Thickness of Strata	Formation	Total Depth
0-30	Soil-Clay	30
127	Shale	157
13	Lime	170
10	Sand	180
13	Lime	193
7	Shale	200
21	Lime	221
15	Shale	236
134	Lime	370
4	Shale	374
20	Lime	394
49	Lime	443
55	Shale	498
3	Lime	501
9	Shale	510
68	Lime	578
8	Shale	586
23	Lime	609
4	Shale	613
18	Lime	631
2	Shale	633
5	Lime	638
164	Shale	802
7	Lime	809
16	Shale	825
11	Lime	836
6	Shale	842
38	Sand	880
18	Shale	898
3	Lime	901
7	Shale	908
10	Lime	918
9	Shale	927
4	Lime	931
14	Shale	945
9	Lime	954
11	Shale	965
9	Lime	974
12	Shale	986
10	Sand	996

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 - $\text{RPM} \times d$ over $\text{SPM} \times R$

d - $\text{SPM} \times R \times D$ over RPM

SPM - $\text{RPM} \times D$ over $R \times d$

R - $\text{RPM} \times D$ over $\text{SPM} \times d$

BELT LENGTH - $2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$

* Need these to figure belt length

TO FIGURE AMPS: $\frac{\text{WATTS}}{\text{VOLTS}} = \text{AMPS}$

746 WATTS equal 1 HP

Log Book

Well No.

AI-5

Farm

Strahn West

KS
(State)

Wardson
(County)

11
(Section)

24
(Township)

16
(Range)

For

Altavista Energy Inc
(Well Owner)

15-207-29635

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

Strakon
West KS Farm: Woodson County
State; Well No. AI-5

Elevation 1059
Commenced Spuding 8-23 18 20
9-12 18 20
Finished Drilling
Driller's Name Wesley Dollard
Driller's Name Ryan Wood
Driller's Name _____
Tool Dresser's Name _____
Tool Dresser's Name _____
Tool Dresser's Name _____
Contractor's Name TOS
11 24 16

(Section) (Township) (Range)
Distance from S line, 4630 ft.
Distance from E line, 3010 ft.

5 sacks
14 hrs
5 7/8 borehole
2 1/4 casing

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____
8" Set _____ 8" Pulled _____
7 1/2" Set 40 6 1/2" Pulled _____
4" Set _____ 4" Pulled _____
2" Set _____ 2" Pulled _____

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
<u>1140</u>	<u>TD</u>				
<u>1017</u>	<u>sect nipple</u>				
<u>1081</u>	<u>Baffle</u>			<u>2 1/8</u>	
<u>1112</u>	<u>Float</u>				

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0-30	soil - clay	30	
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13	Lime	193	
7	Shale	200	
21	Lime	221	
15	Shale	236	
134	Lime	370	
4	Shale	374	
20	Lime	394	
49	Lime	443	shells
55	Shale	498	
3	Lime	501	
9	Shale	510	
68	Lime	578	
8	Shale	586	
23	Lime	609	
4	Shale	613	
18	Lime	631	
2	Shale	633	
5	Lime	638	Hertha
164	Shale	802	
7	Lime	809	
16	Shale	825	
11	Lime	836	
6	Shale	842	

842

Thickness of Strata	Formation	Total Depth	Remarks
38	Sand	880	grey - no oil
16	Shale	898	
3	Lime	901	
7	Shale	908	
10	Lime	918	
9	Shale	927	
4	Lime	931	
14	Shale	945	
9	Lime	954	
11	Shale	965	
9	Lime	974	
12	Shale	986	
10	Sand	996	broken - slight oil show
23	sandy shale	1019	
1	Lime	1020	
2	Shale	1022	
7	Sand	1029	mostly solid - good oil show TD
111	sandy shale	1140	



REMIT TO
 QES Pressure Pumping 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# 814118

Invoice Date: 09/18/18 Terms: Net 30 Page 1

ALTAVISTA ENERGY INC
 PO BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

STRAHM WEST AI-5

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	45.000	825.00
CE0002	Equipment Mileage Charge - Heavy Equipment	1.000	0.0000	0.000	0.00
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	45.000	363.00
WE0853	80 BBL Vacuum Truck (Cement Services)	2.000	100.0000	45.000	110.00
CC5840	Poz-Blend I A (50:50)	112.000	13.5000	45.000	831.60
CC5965	Bentonite	188.000	0.3000	45.000	31.02
CC5326	Sodium Chloride, Salt	270.000	1.0000	45.000	148.50
CC6077	Kolseal	560.000	0.5000	45.000	154.00
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	45.000	24.75
CC5965	Bentonite	100.000	0.3000	45.000	16.50

Subtotal 4,553.40
 Discounted Amount 2,049.03
 SubTotal After Discount 2,504.37

Amount Due 4,717.91 If paid after 10/18/18

Tax: 90.47
 Total: 2,594.84



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

11576
11462

TICKET NUMBER 55435
LOCATION OTTAWA, Ks
FOREMAN Brad Butler

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice #81418

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
9-12-18	3244	STRAHM West AI-5	NW11	24	16	Woodson
CUSTOMER			TRUCK #			
MAILING ADDRESS			DRIVER			
CITY			TRUCK #			
STATE			DRIVER			
ZIP CODE			TRUCK #			
Wellsville			Ks.			
66092			675			
			804			

JOB TYPE LongString HOLE SIZE 5 7/8" HOLE DEPTH 1140" CASING SIZE & WEIGHT
CASING DEPTH _____ DRILL PIPE _____ TUBING 2 7/8" x 112" OTHER BAGS 1080"
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 32"
DISPLACEMENT 6 1/4 Bbls DISPLACEMENT PSI 275 MIX PSI _____ RATE _____

REMARKS: Safety Meeting: Rig up to 2 7/8" Tubing, pumped 7 Bbls water ahead, 4 Bbls gel flush followed with 10 Bbls water spacer. Mixed 112 sks 50/50 Pozmix cement w/ 22 gal, 5 1/2 P/SK KDI-SEAL + 5% SALT. Shut down - wash out Pump + lines - Drop Rubber Plug, displace Plug with 6 1/4 Bbls WATER. Signal pumping at 275 psi - Land Plug with 800 psi wait a few minutes - Release Pressure. FLOAT Held Job complete with good cement returns = 6 Bbl slurry to pit

"Thank you"

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE 0450	1	PUMP CHARGE	1500.00	1500.00
CE 0002	0	MILEAGE > Truck in field	7.15	M/C
CE 0711	M/C	Bulk Truck charge	660.00	660.00
WE 0853	2 Hrs	Water Truck	100.00	200.00
CC 5840	112 SACKS	50/50 Pozmix cement	13.50	1512.00
CC 5965	188 lbs	Gel 2%	.30	56.40
CC 5326	270 lbs	SALT 5% water weight	1.00	270.00
CC 6077	560 lbs	KDI-SEAL 5 1/2 P/SK	.50	280.00
CP 8176	1	2 7/8" Top Rubber Plug	45.00	45.00
CC 5965	100 lbs	Bentonite - Gel Flush	.30	30.00
			Sub Total	4553.40
			Less 45%	-2049.03
			total	2504.37
			SALES TAX	90.48
			ESTIMATED TOTAL	2594.85

SCANNED

Ravin 3737

AUTHORIZATION Bryan Miller TITLE _____ DATE 9/17/18

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.