

Miami County, KS  
Well: Duane Beets AI-11  
Lease Owner: AltaVista

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

Commenced Spudding:  
2/25/16

WELL LOG

| Thickness of Strata | Formation   | Total Depth |
|---------------------|-------------|-------------|
| 0-6                 | Soil-Clay   | 6           |
| 23                  | Lime        | 29          |
| 11                  | Sand        | 40          |
| 81                  | Shale       | 121         |
| 21                  | Lime        | 142         |
| 8                   | Shale       | 150         |
| 2                   | Lime        | 152         |
| 8                   | Shale       | 160         |
| 7                   | Lime        | 167         |
| 42                  | Shale       | 209         |
| 16                  | Lime        | 225         |
| 9                   | Shale       | 234         |
| 28                  | Lime        | 262         |
| 8                   | Shale       | 270         |
| 22                  | Lime        | 292         |
| 5                   | Shale       | 297         |
| 4                   | Lime        | 301         |
| 2                   | Shale       | 303         |
| 5                   | Lime        | 308         |
| 141                 | Shale       | 449         |
| 15                  | Sand        | 464         |
| 9                   | Shale       | 473         |
| 13                  | Lime        | 486         |
| 4                   | Shale       | 490         |
| 5                   | Sand        | 495         |
| 34                  | Shale       | 529         |
| 8                   | Lime        | 537         |
| 10                  | Shale       | 547         |
| 3                   | Lime        | 550         |
| 19                  | Shale       | 569         |
| 8                   | Lime        | 577         |
| 18                  | Shale       | 595         |
| 3                   | Lime        | 598         |
| 3                   | Shale       | 601         |
| 6                   | Lime        | 607         |
| 4                   | Shale       | 611         |
| 3                   | Sand & Lime | 614         |
| 1                   | Limey Sand  | 615         |
| 7                   | Sand        | 622         |
| 1                   | Sand        | 623         |



# 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-11

Farm Duane Beets

KS Miami  
(State) (County)

12 18 21  
(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              |
|---------------------|-----------|-------------|----------------------|
| 0-6                 | soil-clay | 6           |                      |
| 23                  | Lime      | 29          |                      |
| 11                  | sand      | 40          | no oil               |
| 81                  | shale     | 121         |                      |
| 21                  | Lime      | 142         |                      |
| 8                   | shale     | 150         |                      |
| 2                   | Lime      | 152         |                      |
| 8                   | shale     | 160         |                      |
| 7                   | Lime      | 167         |                      |
| 42                  | shale     | 209         |                      |
| 16                  | Lime      | 225         |                      |
| 9                   | shale     | 234         |                      |
| 28                  | Lime      | 262         |                      |
| 8                   | shale     | 270         |                      |
| 22                  | Lime      | 292         |                      |
| 5                   | shale     | 297         |                      |
| 4                   | Lime      | 301         |                      |
| 2                   | shale     | 303         |                      |
| 5                   | Lime      | 308         | Hertha               |
| 141                 | shale     | 449         |                      |
| 15                  | sand      | 464         | slight slow - broken |
| 9                   | shale     | 473         |                      |
| 13                  | Lime      | 486         |                      |
| 4                   | shale     | 490         |                      |
| 5                   | sand      | 495         | no oil               |
| 34                  | shale     | 529         |                      |
| 8                   | Lime      | 537         |                      |

537

| Thickness of Strata | Formation    | Total Depth | Remarks                        |
|---------------------|--------------|-------------|--------------------------------|
| 10                  | Shale        | 547         |                                |
| 3                   | Lime         | 550         |                                |
| 19                  | Shale        | 569         |                                |
| 8                   | Lime         | 577         |                                |
| 18                  | Shale        | 595         |                                |
| 3                   | Lime         | 598         |                                |
| 3                   | Shale        | 601         |                                |
| 6                   | Lime         | 607         | odor                           |
| 4                   | Shale        | 611         |                                |
| 3                   | sand & Lime  | 614         | no Oil                         |
| 1                   | Limey sand   | 615         | broken oil                     |
| 7                   | Sand         | 622         | mostly solid - good saturation |
| 1                   | Sand         | 623         | no Oil                         |
| 2                   | sand         | 625         | broken oil - good show         |
| 4                   | sand & shale | 629         | laminated - very little Oil    |
| 23                  | sandy shale  | 652         |                                |
| 68                  | Shale        | 720         | TD                             |
|                     |              |             |                                |
|                     |              |             |                                |
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|                     |              |             |                                |



**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.Box884  
Chanute,KS 66720  
620/431-9210,1-800/467-8676  
Fax 620/431-0012

Invoice

Invoice#

807135

Invoice Date: 02/29/16

Terms: Net 30

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ALTAVISTA ENERGY INC

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

Duane Beets #AI-11

| Part No | Description                                | Quantity | Unit Price | Discount(%) | Total  |
|---------|--------------------------------------------|----------|------------|-------------|--------|
| CE0450  | Cement Pump Charge 0 - 1500'               | 1.000    | 1,500.0000 | 64.000      | 540.00 |
| CE0002  | Equipment Mileage Charge - Heavy Equipment | 20.000   | 7.1500     | 64.000      | 51.48  |
| CE0711  | Minimum Cement Delivery Charge             | 1.000    | 660.0000   | 64.000      | 237.60 |
| WE0853  | 80 BBL Vacuum Truck (Cement Services)      | 1.500    | 100.0000   | 64.000      | 54.00  |
| CC5840  | Poz-Blend I A (50:50)                      | 92.000   | 13.5000    | 64.000      | 447.12 |
| CC5965  | Bentonite                                  | 255.000  | 0.3000     | 64.000      | 27.54  |
| CC5326  | Sodium Chloride, Salt                      | 178.000  | 0.7500     | 64.000      | 48.06  |
| CC6077  | Kolseal                                    | 460.000  | 0.5000     | 64.000      | 82.80  |
| CP8176  | 2 7/8" Top Rubber Plug                     | 1.000    | 45.0000    | 64.000      | 16.20  |
| CC6128  | Mud Flush - C                              | 0.500    | 50.0000    | 64.000      | 9.00   |

Subtotal 4,205.00

Discounted Amount 2,691.20

SubTotal After Discount 1,513.80

Amount Due 4,345.16 If paid after 03/30/16

Tax: 50.46

Total: 1,564.26



5405  
5311

TICKET NUMBER 49991  
 LOCATION Ottawa KS  
 FOREMAN Fred Mader

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

FIELD TICKET & TREATMENT REPORT  
 CEMENT

Invoice #807135

| DATE              | CUSTOMER # | WELL NAME & NUMBER    | SECTION       | TOWNSHIP | RANGE | COUNTY |
|-------------------|------------|-----------------------|---------------|----------|-------|--------|
| 2-26-16           | 3244       | Duane Beets # A.I. 11 | NE 12         | 18       | 21    | M1     |
| CUSTOMER          |            |                       | TRUCK #       |          |       |        |
| Alta Vista Energy |            |                       | 712 / Fre Mod |          |       |        |
| MAILING ADDRESS   |            |                       | 495 / Har Bec |          |       |        |
| P.O. Box 128      |            |                       | 675 / Kai Dot |          |       |        |
| CITY              |            |                       | 510 / MikHaa  |          |       |        |
| Wellsville        |            |                       |               |          |       |        |
| STATE             |            |                       |               |          |       |        |
| KS                |            |                       |               |          |       |        |
| ZIP CODE          |            |                       |               |          |       |        |
| 66092             |            |                       |               |          |       |        |

JOB TYPE Logging HOLE SIZE 5 7/8 HOLE DEPTH 720 CASING SIZE & WEIGHT 2 3/8 FOF  
 CASING DEPTH 711 DRILL PIPE Baffle in TUBING @ 679 OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 30' + Plug  
 DISPLACEMENT 395 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 48PM

REMARKS: Hold Safety meeting Establish pump rate. Pump 1/2 Gal Mod  
 Flush "C" Circulate well to condition hole. Mix + Pump  
 100# Gel Flush. Mix + Pump 92 sks Poz Blend IA Cement  
 2% Gel 5% Salt 5# Kol 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

TDS Drilling. Wes

Fred Mader

| ACCOUNT CODE | QUANTITY or UNITS | DESCRIPTION of SERVICES or PRODUCT | UNIT PRICE | TOTAL                   |
|--------------|-------------------|------------------------------------|------------|-------------------------|
| CE0450       | 1                 | PUMP CHARGE                        | 495        | 1500.00                 |
| CE0002       | 20 mi             | MILEAGE                            | 495        | 143.00                  |
| CE0711       | Minimum           | Ten Miles Delivery                 | 510        | 660.00                  |
| WE0853       | 1 1/2 hr          | 80 BBL Vac Truck                   | 675        | 150.00                  |
|              |                   | Sub Total                          |            | 2453.00                 |
|              |                   | Less 64%                           |            | 1569.22                 |
|              |                   |                                    |            | 883.78                  |
| CC5440       | 92 sks            | Poz Blend IA Cement                |            | 1242.00                 |
| CC5965       | 255#              | Bentonite Gel                      |            | 76.00                   |
| CC5326       | 178#              | Salt                               |            | 133.50                  |
| CC6077       | 460#              | Kol Seal                           |            | 230.00                  |
| CP8176       | 1                 | 2 1/2" Rubber Plug                 |            | 45.00                   |
| CC6128       | 1/2 Gal           | Mod Flush "C"                      |            | 25.00                   |
|              |                   | Sub Total                          |            | 1752.00                 |
|              |                   | Less 64%                           |            | 1121.28                 |
|              |                   |                                    |            | 630.72                  |
|              |                   |                                    | 8%         | 50.46                   |
|              |                   |                                    |            | ESTIMATED TOTAL 1564.26 |

Ravin 3737

AUTHORIZATION X Bryan Mills

TITLE \_\_\_\_\_

DATE (4/3/15)

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.