

Douglas County, KS
Well: Early AI-4
Lease Owner:Altavista

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

Commenced Spudding:
04/21/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
0-4	soil/clay	4
106	sand	110
92	shale	218
4	lime	222
9	shale	231
13	lime	244
8	shale	252
7	lime	259
6	shale	265
20	lime	285
28	shale	313
18	lime	331
5	shale	336
7	sand	343
62	shale	405
22	lime	427
15	shale	442
9	lime	451
17	shale	468
5	sand	473
2	shale	475
12	lime	492
5	shale	497
1	lime	498
12	shale	510
6	lime	516
1	lime and crystal	517
16	lime	523
9	shale	542
22	lime	564
5	shale	569
3	lime	572
3	shale	575
6	lime	581
6	shale	587
2	sand	589
1	sandy shale	590
8	sand	598
102	shale	700
11	sand	711

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-4

Farm Early

KS Douglas
(State) (County)

11 15 20
(Section) (Township) (Range)

For Altavista
(Well Owner)

Town Oilfield Services, Inc.
1207 N. 1st East
Louisburg, KS 66053
913-710-5400

Early Farm: Douglas County
 KS State: Well No. AI-4

Elevation 1092

Commenced Spuding 04/21/2014

Finished Drilling 20

Driller's Name Greg Perry

Driller's Name

Driller's Name

Tool Dresser's Name Kenny Quinn

Tool Dresser's Name Wes Dollard

Tool Dresser's Name

Contractor's Name TDS

11 15 20

(Section) (Township) (Range)
 Distance from S line, 4180 ft.

Distance from E line, 580 ft.

CASING AND TUBING MEASUREMENTS

Feet	In.	Feet	In.	Feet	In.
935		Buffle			
964	70	Total			

CASING AND TUBING RECORD

10" Set _____ 10" Pulled _____
 8" Set _____ 8" Pulled _____
 7 1/4" Set 1203' 6 1/4" Pulled _____
 4" Set _____ 4" Pulled _____
 2" Set _____ 2" Pulled _____

Thickness of Strata	Formation	Total Depth	Remarks
0-4	Soil-Clay	4	
106	Sand	110	
92	Shale	218	
4	Lime	222	
9	Shale	231	
13	Lime	244	
8	Shale	252	
7	Lime	259	
6	Shale	265	
20	Lime	285	Shells
28	Shale	313	
18	Lime	331	Shells
5	Shale	336	
7	Sand	343	No Oil
62	Shale	405	
22	Lime	427	
15	Shale	442	
9	Lime	451	
17	Shale	468	
5	Sand	473	
2	Shale	475	
12	Lime	492	
5	Shale	497	
1	Lime	498	
12	Shale	510	
6	Lime	516	
1	Lime & Crystal	517	

517

Thickness of Strata	Formation	Total Depth	Remarks
16	Lime	533	
9	Shale	542	
22	Lime	564	
5	Shale	569	
3	Lime	572	
3	Shale	575	
6	Lime	581	
6	Shale	587	Heather
2	Sand	589	No Oil
1	Sandy Shale	590	
8	Sand	598	No Oil
10	Shale	700	
11	Sand	711	No Oil
21	Shale	732	
10	Shale & Lime	742	
12	Shale	754	
8	Lime	762	
6	Shale	768	
5	Lime	773	
8	Shale	781	
9	Lime	790	
13	Shale	803	
4	Lime	807	
11	Shale	818	
4	Shale & Lime	822	
3	Lime	825	
5	Shale & Lime	830	

830

Thickness of Strata	Formation	Total Depth	Remarks
13	Shale	843	
1	Lime	844	
8	Shale	852	
1	Lime	853	
2	Shale	855	
2	Lime	857	
25	Shale	882	
4	Coal	886	
4	Sand	890	Broken - OK Saturation
8	Sand	898	Solid - Good Saturation
4	Sand	902	Broken - Good Saturation
1	Sandy Shale	903	Broken
1	Lime	904	
47	Shale	951	
2	Lime	953	
4	Sandy Shale	957	
5	Sand	962	No Oil
4	Sand	966	Broken
2	Sand	968	No Oil
32	Shale	1000	TD



CONSOLIDATED
Oil Well Services, LLC

REMIT TO
FINV
Consolidated Oil Well Services, LLC
Dept. 970
P.O. Box 4346
Houston, TX 77210-4346

MAIN OFFICE
P.O. Box 884
Chanute, KS 66720
620/431-9210 • 1-800/467-8676
Fax 620/431-0012

INVOICE

Invoice # 267595

Invoice Date: 04/24/2014 Terms: 0/30/10,n/30

Page 1

ALTAVISTA ENERGY INC
4595 K-33 HIGHWAY
P.O. BOX 128
WELLSVILLE KS 66092
(785) 883-4057

EARLY AI-4
47113
NE 11-15-20
04-21-2014
KS

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	45.00	11.5000	517.50
1118B	PREMIUM GEL / BENTONITE	76.00	.2200	16.72
1111	SODIUM CHLORIDE (GRANULA	87.00	.3900	33.93
1110A	KOL SEAL (50# BAG)	225.00	.4600	103.50

Sublet Performed	Description	Total
9996-120	CEMENT MATERIAL DISCOUNT	-201.50

Description	Hours	Unit Price	Total
369 80 BBL VACUUM TRUCK (CEMENT)	2.00	100.00	200.00
495 CEMENT PUMP (SURFACE)	1.00	870.00	870.00
495 EQUIPMENT MILEAGE (ONE WAY)	.00	4.20	.00
495 CASING FOOTAGE	122.00	.00	.00
548 MIN. BULK DELIVERY	.50	368.00	184.00

Amount Due 1973.68 if paid after 05/04/2014

Parts:	671.65	Freight:	.00	Tax:	33.62	AR	1757.77
Labor:	.00	Misc:	.00	Total:	1757.77		
Sublt:	-201.50	Supplies:	.00	Change:	.00		

Signed _____

Date _____

BARTLESVILLE, OK
918/338-0808

EL DORADO, KS
316/322-7022

EUREKA, KS
620/583-7664

PONCA CITY, OK
580/762-2303

OAKLEY, KS
785/672-8822

OTTAWA, KS
785/242-4044

THAYER, KS
620/839-5269

GILLETTE, WY
307/686-4914

CUSHING, OK
918/225-2650



CONSOLIDATED
Oil Well Services, LLC

267595

TICKET NUMBER 47113

LOCATION Ottawa KS

FOREMAN Fred Mader

**FIELD TICKET & TREATMENT REPORT
CEMENT**

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

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-21-17	3244	Early # AI-4	NE 11	15	20	DG
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Alta Vista Energy			712	Fred Mad		
MAILING ADDRESS			495	Har Bes		
P.O. Box 128			369	Der Mas		
CITY	STATE	ZIP CODE	548	Mik Hoa		
Wellsville	KS	66092				

JOB TYPE Surface HOLE SIZE 9 7/8 HOLE DEPTH 126' CASING SIZE & WEIGHT 7'
 CASING DEPTH 122' DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 10' +
 DISPLACEMENT 4.5 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 5 BPM

REMARKS: Hold crew safety meeting. Establish circulation thru 7" casing. Mix + Pump 45% 1/2" 50/50 Por Mix Cement 2% Gel 5% Salt 5# Kol Seal/sk. Cement to surface. Flush ~~7"~~ casing clean with 4.5 BBL water. Shut in casing.

JTC Drilling

Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE Surface Cement 495	870.00	1000.00
5406	-	MILEAGE		N/C
5402	122'	Casing footage		N/C
54070	1/2 Minimum	Ten Miles 548		184.00
5502C	2 hrs	80 BBL Vac Truck		200.00
1124	45 s/ks	50/50 Por Mix Cement	517.50	
1118B	76#	Premium Gel	16.22	
1111	87#	Granulated Salt	33.93	
1110A	225#	Kol Seal	103.50	100
		Material	671.65	
		Less 30%	-201.50	
		Total Material		470.15
			1973.68	
			715	
			SALES TAX	33.62
			ESTIMATED TOTAL	1757.72

completed

Ok'd by J. Green
AUTHORIZATION No Co Rep on Site.

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



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. Box 884
Chanute, KS 66720
620/431-9210 • 1-800/467-8676
Fax 620/431-0012

INVOICE

Invoice # 267596

Invoice Date: 04/24/2014 Terms: 0/30/10,n/30

Page 1

ALTAVISTA ENERGY INC
4595 K-33 HIGHWAY
P.O. BOX 128
WELLSVILLE KS 66092
(785) 883-4057

EARLY AI-4
47114
NE 11-15-20
04-22-2014
KS

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	135.00	11.5000	1552.50
1118B	PREMIUM GEL / BENTONITE	327.00	.2200	71.94
1111	SODIUM CHLORIDE (GRANULA	261.00	.3900	101.79
1110A	KOL SEAL (50# BAG)	675.00	.4600	310.50
4402	2 1/2" RUBBER PLUG	1.00	29.5000	29.50
1401	HE 100 POLYMER	.50	47.2500	23.63

Sublet Performed	Description	Total
9996-120	CEMENT MATERIAL DISCOUNT	-611.02

Description	Hours	Unit Price	Total
495 CEMENT PUMP	1.00	1085.00	1085.00
495 EQUIPMENT MILEAGE (ONE WAY)	25.00	4.20	105.00
495 CASING FOOTAGE	965.00	.00	.00
548 MIN. BULK DELIVERY	.50	368.00	184.00
675 80 BBL VACUUM TRUCK (CEMENT)	2.00	100.00	200.00

Amount Due 3813.28 if paid after 05/04/2014

Parts:	2089.86	Freight:	.00	Tax:	105.73	AR	3158.57
Labor:	.00	Misc:	.00	Total:	3158.57		
Sublt:	-611.02	Supplies:	.00	Change:	.00		

Signed _____

Date _____

BARTLESVILLE, OK 918/338-0808 EL DORADO, KS 316/322-7022 EUREKA, KS 620/583-7664 PONCA CITY, OK 580/762-2303 OAKLEY, KS 785/672-8822 OTTAWA, KS 785/242-4044 THAYER, KS 620/839-5269 GILLETTE, WY 307/686-4914 CUSHING, OK 918/225-2650



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

267596

TICKET NUMBER 47114
LOCATION Ottawa KS
FOREMAN Fred Mader

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-22-14	3244	Early # AI-4	NE 11	15	20	DG

CUSTOMER
Altavista Energy

MAILING ADDRESS
P.O. Box 128

CITY	STATE	ZIP CODE
<u>Wellsville</u>	<u>KS</u>	<u>66092</u>

TRUCK #	DRIVER	TRUCK #	DRIVER
<u>712</u>	<u>Fred Mad</u>		
<u>495</u>	<u>Har Bec</u>		
<u>675</u>	<u>Ki Det</u>		
<u>548</u>	<u>Mik Haa</u>		

JOB TYPE long string HOLE SIZE 5 7/8 HOLE DEPTH 1000' CASING SIZE & WEIGHT 2 7/8 EUE
 CASING DEPTH 965' DRILL PIPE Baffle in TUBING 935 OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 30' + Plug
 DISPLACEMENT 5.44 BB DISPLACEMENT PSI _____ MIX PSI _____ RATE 5BPM

REMARKS: Hold crew safety meeting. Establish pump rate. Mix + Pump 1/2 Gal HE-100 Polymer flush. Circulate well to condition hole. Mix + Pump 100# Gel Flush. Mix + Pump 135 sks 50/50 for mix Cement 2% Gel 5% Salt 5# Kal Seal/sk. Cement to surface. Flush pump + lines clean. Displace 2 1/2" Rubber plug to baffle in casing. Pressure to 500 # PSI. Release pressure to set float valve. Shut in Casing.

TOS Drilling - Greg Perry Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	495	1025.00 ✓
5406	25mi	MILEAGE	495	105.00 ✓
5402	965'	Casing Footage		N/C ✓
5407	1/2 Minimum	Ten Miles	548	184.40 ✓
5502C	2hrs	50 BBC Vac Truck	675	200.00 ✓
1124	135sks	50/50 for Mix Cement	1552.50	✓
118B	327#	Premium Gel	71.24	✓
1111	261#	Granulated Salt	101.79	✓
110A	675#	Kal Seal	310.50	✓
		Material	2036.23	✓
		less 30%	611.02	✓
		Total Material		1425.21
4402	1	2 1/2" Rubber Plug		29.50 ✓
1401	1/2 Gal	HE-100 Polymer		23.63 ✓
			3813.28	
			7.1520	SALES TAX
				ESTIMATED TOTAL
				3158.57 ✓

AVIN 3737

AUTHORIZATION Bryan Miller 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 for