

Johnson County, KS
 Well: TEA 11-A
 Lease Owner: DE Exploration

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

Commenced Spudding:
 07/14/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
0-12	soil/clay	12
22	shale	34
24	lime	58
7	shale	65
9	lime	74
5	shale	79
19	lime	98
22	shale-redbud	120
2	sand	122
25	lime	147
7	shale	154
13	sandy shale	167
13	shale	180
12	lime	192
20	shale	212
9	lime	221
7	shale	228
11	lime	239
14	shale	253
6	shale and lime	259
6	lime	265
7	shale	272
5	lime	277
32	shale	309
2	lime	311
9	shale	320
9	lime	329
1	shale	330
15	lime	345
7	shale	352
23	lime	375
4	shale	379
5	lime	384
3	shale	387
7	lime	394
26	shale	420
10	sandy shale	430
7	sand and sandy shale	437
8	sandy shale	445
58	shale	503

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. 11-A

Farm TEA

KS Johnson
(State) (County)

1 15 21
(Section) (Township) (Range)

For D.E. Exploration
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East

Louisburg, KS 66053

913-710-5400

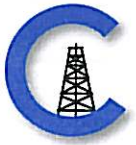
Thickness of Strata	Formation	Total Depth	Remarks
0-12	Soil-Clay	12	
22	Shale	34	
24	Lime	58	
7	Shale	65	
9	Lime	74	
5	Shale	79	
19	Lime	98	
22	Shale - Redbed	120	
2	Sand	122	No Oil
25	Lime	147	
7	Shale	154	
13	Sandy Shale	167	
13	Shale	180	
12	Lime	192	
20	Shale	212	
9	Lime	221	
7	Shale	228	
11	Lime	239	
14	Shale	253	
6	Shale & Lime	259	
6	Lime	265	
7	Shale	272	
5	Lime	277	
32	Shale	309	
2	Lime	311	
9	Shale	320	
9	Lime	329	

329

Thickness of Strata	Formation	Total Depth	Remarks
1	Shale	330	
15	Lime	345	
7	Shale	352	
23	Lime	375	
4	Shale	379	
5	Lime	384	
3	Shale	387	
7	Lime	394	
26	Shale	420	Hartha
10	Sandy Shale	430	
7	Sandy Sandy Shale	437	
8	Sandy Shale	445	
58	Shale	503	
2	Sand	507	
2	Sandy Shale	509	
52	Shale	557	
3	Sandy Shale	560	
6	Shale	566	
5	Lime	571	
4	Shale	575	
2	Lime	577	
10	Shale	587	
7	Lime	594	
15	Shale	609	
3	Lime	612	
10	Shale	622	
6	Lime	628	

628

Thickness of Strata	Formation	Total Depth	Remarks
30	Shale	658	
3	Lime	661	
65	Shale	726	
11	Sand	737	No Oil
4	Sandy Shale	741	
45	Shale	786	
4	Sandy Shale	790	
54	Shale	844	
1	Sandy Lime	845	Broken - Good Saturation
5	Sand	850	Broken - Good Saturation
90	Shale	940	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 # 269730

Invoice Date: 07/28/2014 Terms: 30/0/10,n/30

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D.E. EXPLORATION
DOUG EVANS
P.O. BOX 128
WELLSVILLE KS 66092
(785) 883-4057

TEA #11A
47442
NE1-15-21
07/15/2014

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	114.00	11.5000	1311.00
1118B	PREMIUM GEL / BENTONITE	292.00	.2200	64.24
1111	SODIUM CHLORIDE (GRANULA	220.00	.3900	85.80
1110A	KOL SEAL (50# BAG)	570.00	.4600	262.20
4402	2 1/2" RUBBER PLUG	1.00	29.5000	29.50

Sublet Performed	Description	Total
9996-120	CEMENT MATERIAL DISCOUNT	-516.97

Description	Hours	Unit Price	Total
495 CEMENT PUMP	1.00	1085.00	1085.00
495 EQUIPMENT MILEAGE (ONE WAY)	30.00	4.20	126.00
495 CASING FOOTAGE	901.00	.00	.00
548 MIN. BULK DELIVERY	1.00	368.00	368.00
675 80 BBL VACUUM TRUCK (CEMENT)	1.50	100.00	150.00

Amount Due 3611.02 if paid after 08/07/2014

Parts:	1752.74	Freight:	.00	Tax:	91.15	AR	3055.92
Labor:	.00	Misc:	.00	Total:	3055.92		
Sublt:	-516.97	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

269730

TICKET NUMBER 47442

LOCATION Ottawa KS

FOREMAN Fred Maden

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
7-15-14	2355	TEA # 11A	NE 1	15	21	JD

CUSTOMER	MAILING ADDRESS	CITY	STATE	ZIP CODE
DE Exploration	P.O. Box 128	Wellsville	KS	66092

TRUCK #	DRIVER	TRUCK #	DRIVER
712	Fred Maden		
495	Har Bee		
675	Ki Det		
548	Breman/Dan Wita		

JOB TYPE Longstring HOLE SIZE 5 1/8 HOLE DEPTH 940 CASING SIZE & WEIGHT 2 1/8
CASING DEPTH 901 DRILL PIPE Baffle in TUBING @ 871 OTHER _____
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 30' + Plug
DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 BPM

REMARKS: Hold Crew Safety meeting. Establish circulation. Mix Pump 100# Gel Flush. Mix & Pump 114 sks 50/50 Poz Mix 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. Close in annulus w/ 1/2 BBL left. Squeeze 1/2 BBL Slurry into water zone @ 300 PSI. Pressure plug to 700 PSI. Release inside pressure to set float valve.

TOS Drilling

Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	495	1085 ⁰⁰
5406	30 mi	MILEAGE	495	126 ⁰⁰
5402	901	Casing footage		N/C
5407	Minimum	Ton Miles	548	368 ⁰⁰
5502C	1 1/2 hrs	80 BBL Vac Truck	675	150 ⁰⁰
1124	114 sks	50/50 Poz Mix Cement	1311 ⁰⁰	
7118B	292 [#]	Premium Gel	6424	
1111	220 [#]	Granulated Salt	858 ⁰⁰	
1110A	570 [#]	Kol Seal Material	262 ²⁰	
		less 30%	1723 ²⁴	
		Total	- 516 ²⁷	
4402	1	2 1/2" Rubber Plug		1206 ²⁷
				292 ⁰⁰
				3611.00
			7.375%	SALES TAX
				ESTIMATED
				TOTAL
				91.44.15 ✓
				3055.81 92 ✓

Ravin 3737

AUTHORIZATION Bryan Mills 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.