

Johnson County, KS
 Well: Evans # 9
 Lease Owner: DE Exploration

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

Commenced Spudding:
 2/2/17

WELL LOG

Thickness of Strata	Formation	Total Depth
0-35	Soil-Clay	35
22	Shale	57
21	Lime	78
7	Shale	85
8	Lime	93
6	Shale	99
18	Lime	117
15	Shale	132
11	Sand	143
25	Lime	168
5	Shale	173
11	Sandy Shale	184
16	Shale	200
11	Lime	211
19	Shale	230
9	Lime	239
9	Shale	248
11	Lime	259
18	Shale	277
7	Lime	284
7	Shale	291
5	Lime	296
33	Shale	329
1	Lime	330
9	Shale	339
26	Lime	365
10	Shale	375
20	Lime	395
3	Shale	398
3	Lime	401
5	Shale	406
6	Lime	412
28	Shale	440
8	Sand	448
12	Sandy Shale	460
122	Shale	582
5	Lime	587
4	Shale	591
2	Lime	593
11	Shale	604

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. 9

Farm Evans

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
0-35	soil-clay	35	25-35 sandy-water
22	shale	57	
21	Lime	78	
7	shale	85	
8	Lime	93	
6	Shale	99	
18	Lime	117	
15	Shale	132	redbed water
11	sand	143	
25	Lime	168	
5	shale	173	
11	sandy shale	184	
16	shale	200	
11	Lime	211	
19	shale	230	
9	Lime	239	
9	shale	248	
11	Lime	259	
18	shale	277	
7	Lime	284	
7	shale	291	
5	Lime	296	
33	shale	329	
1	Lime	330	
9	shale	339	
26	Lime	365	
10	shale	375	

375

Thickness of Strata	Formation	Total Depth	Remarks
20	Lime	395	
3	shale	398	
3	Lime	401	
5	shale	406	
6	Lime	412	Heatha
28	shale	440	
8	sand	448	no oil
12	sandy shale	460	
122	shale	582	
5	Lime	587	
4	shale	591	
2	Lime	593	
11	shale	604	
6	Lime	610	
15	shale	625	
3	Lime	628	
13	shale	641	
2	Lime	643	
22	shale	665	redbed
1	Lime	666	
2	shale	668	
1	Lime	669	
69	shale	738	
8	sand & sandy shale	746	gas odor
10	sandy shale	756	
104	shale	860	
1	sandy lime	861	



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# 809510

Invoice Date: 02/07/17 Terms: Net 30 Page 1

D.E. EXPLORATION

P.O. BOX 128
 WELLSVILLE KS 66092
 USA
 7858834057

Evans #9

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	60.000	600.00
CE0002	Equipment Mileage Charge - Heavy Equipment	25.000	7.1500	60.000	71.50
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	60.000	264.00
WE0853	80 BBL Vacuum Truck (Cement Services)	2.000	100.0000	60.000	80.00
CC5800A	Class A Cement - Sack	52.000	20.0000	60.000	416.00
CC5965	*Bentonite*	98.000	0.3000	60.000	11.76
CC5325	Calcium Chloride	98.000	1.2500	60.000	49.00

Subtotal 3,730.65
 Discounted Amount 2,238.39
 SubTotal After Discount 1,492.26
 Amount Due 3,822.72 If paid after 03/09/17

Tax: 36.83
 Total: 1,529.09



CONSOLIDATED
Oil Well Services, LLC

7461
/ 7358

TICKET NUMBER 50384
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 #809510

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-3-17	2355	Evans # 9	NE 1	15	21	JO
CUSTOMER DE Exploration			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS P.O. Box 128			712	Fro Mad		
CITY Wellsville			495	Har Bee		
STATE KS			675	Ki Det.		
ZIP CODE 66092			503	Ki Car		

JOB TYPE Surface HOLE SIZE 9 7/8" HOLE DEPTH 45' CASING SIZE & WEIGHT 7"
CASING DEPTH 45' DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 10' ±
DISPLACEMENT 1.8 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 4BPM

REMARKS: Hold safety meeting. Established circulation thru 7" casing.
Mix + Pump 52 sacks Class "A" Cement 2% Gel 2% Calcium Chloride
Cement to surface. Displace 7" casing clean w/ 1.8 BBL Water
Shut in casing.

TOS Drilling

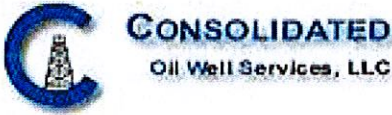
Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	495	1500 ⁰⁰
CE0002	25 mi	MILEAGE	495	178 ⁷⁵
CE0711	Minimum	Ten Miles Delivery	503	660 ⁰⁰
WE0853	2 hrs	80 BBL Vac Truck	675	200 ⁰⁰
		Sub Total		2538 ⁷⁵
		Less 60%		1015 ⁵⁰
CC5507B	52 sacks	Class "A" Cement	1040 ⁰⁰	
CC5965	98#	Bentonite Gel	2940	
CC5325	98#	Calcium Chloride	122 ⁵⁰	
		Sub Total		1191 ⁹⁰
		Less 60%		476 ⁷²
		7.725	SALES TAX	36 ⁵³
			ESTIMATED TOTAL	1529 ⁰⁹

Revin 3797

AUTHORIZATION _____ TITLE _____ DATE (3922⁷²)

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



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# 809540

Invoice Date: 02/09/17 Terms: C.O.D. Page 1

D.E. EXPLORATION
 P.O. BOX 128 evans #9
 WELLSVILLE KS 66092
 USA
 7858834057

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	60.000	600.00
CE0002	Equipment Mileage Charge - Heavy Equipment	25.000	7.1500	60.000	71.50
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	60.000	264.00
WE0853	80 BBL Vacuum Truck (Cement Services)	2.000	100.0000	60.000	80.00
CC5840	Poz-Blend I A (50:50)	116.000	13.5000	60.000	626.40
CC5965	*Bentonite*	295.000	0.3000	60.000	35.40
CC5326	Sodium Chloride, Salt	234.000	1.0000	60.000	93.60
CC6077	Kolseal	580.000	0.5000	60.000	116.00
CP8176	2 7/8" Top Rubber Plug	1.000	45.0000	60.000	18.00

Subtotal 4,762.25
 Discounted Amount 2,857.35
 SubTotal After Discount 1,904.90

Amount Due 4,934.02 If paid after 02/09/17

Tax: 68.71
 Total: 1,973.61



CONSOLIDATED
Oil Well Services, LLC

7488 / 7305

TICKET NUMBER 50387
LOCATION Ottawa KS
FOREMAN Fred Maden

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

**FIELD TICKET & TREATMENT REPORT
CEMENT**

Invoice #809540

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
2-6-17	2355	Evans #9	NE 1	15	21	JO
CUSTOMER DE Exploration						
MAILING ADDRESS P.O. Box 128						
CITY Wellsville		STATE KS	ZIP CODE 66092			
		TRUCK #	DRIVER	TRUCK #	DRIVER	
		712	Fred Mad			
		467	Kei Kar			
		675	Kei Pat			
		548	Mik Hoa			

JOB TYPE Longstring HOLE SIZE 5 9/8 HOLE DEPTH 940' CASING SIZE & WEIGHT 2 7/8 EUS
CASING DEPTH 921' DRILL PIPE Baffle in TUBING @ 889 OTHER _____
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 32' x Plug
DISPLACEMENT 5.16 BBL DISPLACEMENT PSI _____ MIX PSI _____ RATE 4BPM

REMARKS: Hold Safety meeting Establish pump rate. Mix + Pump 100# Gel Flush. Mix + Pump 116 SKs Por 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.

TO US Drilling.

Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	467	1500 ⁰⁰
CE0002	25 mi	MILEAGE	467	17875
CE0711	Minimum	Ten Miles Delivery	510	660 ⁰⁰
WE0853	2 hrs	80 BBL Vac Truck	675	200 ⁰⁰
		Sub Total		253875
		Less 60%		101550
CC5840	116 SKs	Por Blend IA Cement		1566 ⁰⁰
CC5965	295 #	Bentonite Gel		88 ⁰⁰
CC5326	234 #	Salt		234 ⁰⁰
CC6077	580 #	Kol Seal		290 ⁰⁰
CP8176	1	2 1/2" Rubber Plug		45 ⁰⁰
		Sub Total		222350
		Less 60%		88940
		SALES TAX		687
		ESTIMATED TOTAL		197861

Ravin 3737

AUTHORIZATION _____ TITLE _____ DATE 6/21/17

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.