

Johnson County, KS Town Oilfield Service, Inc.
 Well: Schroeder 16 (913) 837-8400
 Lease Owner: DEExploration

Commenced Spuding:
 03/12/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
38	soil/shale	38
6	lime	44
6	shale	50
15	lime	65
8	shale	73
9	lime	82
4	shale	86
23	lime	109
24	shale/red bed	135
22	lime	157
42	shale	199
10	lime	209
18	shale	227
6	lime	233
2	shale	235
14	lime	249
19	shale	28
6	lime	274
8	shale	282
6	lime	288
32	shale	32
2	lime	322
10	shale	332
25	lime	357
7	shale	364
22	lime	386
4	shale	390
5	lime	395
3	shale	398
7	lime	405
29	shale	434
8	sand shale	442
135	shale	577
4	lime	581
6	shale	587
2	lime	589
6	shale	598
3	lime	601
20	shale	621
2	lime	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. 16

Farm Schroeder

KS JO
(State) (County)

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

For DE Ex.
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East
Louisburg, KS 66053
913-710-5400

Thickness of Strata	Formation	Total Depth	Remarks
38	Soil / Shale	38	
6	Lime	44	
6	Shale	50	
15	Lime	65	
8	Shale	73	
9	Lime	82	
4	Shale	86	
23	Lime	109	
24	Shale / Red bed	135	
22	Lime	157	
42	Shale	199	
10	Lime	209	
18	Shale	227	
6	Lime	233	
2	Shale	235	
14	Lime	249	
19	Shale	268	
6	Lime	274	
8	Shale	282	
6	Lime	288	
32	Shale	320	
2	Lime	322	
10	Shale	332	
25	Lime	357	
7	Shale	364	
22	Lime	386	
4	Shale	390	

390

Thickness of Strata	Formation	Total Depth	Remarks
5	Lime	395	ICC
3	Shale	398	
7	Lime	405	Hertna
29	Shale	434	
8	Sandy Shale	442	Cassy.
135	Shale	577	
4	Lime	581	
6	Shale	587	
2	Lime	589	
9	Shale	598	
3	Lime	601	
20	Shale	621	
2	Lime	623	
10	Shale	633	
3	Lime	636	
223	Shale	859	Streaks of lime.
9	Sand	868	Good bleed. 70% + oil.
1	Lime	869	
71	Shale	940	TD - Red bed



CONSOLIDATED
Oil Well Services, LLC

REMIT TO
P.L.N.V.
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 # 266633

Invoice Date: 03/19/2014 Terms: 0/30/10,n/30

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

SCHROEDER #16
42703
SW 1-15-21
03-13-2014
KS

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	127.00	11.5000	1460.50
1118B	PREMIUM GEL / BENTONITE	313.00	.2200	68.86
1111	SODIUM CHLORIDE (GRANULA	245.00	.3900	95.55
1110A	KOL SEAL (50# BAG)	635.00	.4600	292.10
4402	2 1/2" RUBBER PLUG	1.00	29.5000	29.50

Sublet Performed	Description	Total
9996-120	CEMENT MATERIAL DISCOUNT	-575.10

Description	Hours	Unit Price	Total
368 CEMENT PUMP	1.00	1085.00	1085.00
368 EQUIPMENT MILEAGE (ONE WAY)	.00	4.20	.00
368 CASING FOOTAGE	919.00	.00	.00
369 80 BBL VACUUM TRUCK (CEMENT)	1.50	100.00	150.00
510 MIN. BULK DELIVERY	1.00	368.00	368.00

Amount Due 3693.07 if paid after 03/29/2014

Parts:	1946.51	Freight:	.00	Tax:	101.15	AR	3075.56
Labor:	.00	Misc:	.00	Total:	3075.56		
Sublt:	-575.10	Supplies:	.00	Change:	.00		

Signed _____ Date _____



CONSOLIDATED
Oil Well Services, LLC

266633

TICKET NUMBER 42703
LOCATION Ottawa
FOREMAN Alan Mader

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
3-13-14	2355	Schroeder 16	SW 1	15	21	IO
CUSTOMER D.E. Exploration			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS P.O. Box 128			730 Al Mad Safety Meet			
CITY STATE ZIP CODE			368 Al Mad			
Wellsville KS 66792			369 Dec Mas			
			510 Set Trc			

JOB TYPE long string HOLE SIZE 5 1/8 HOLE DEPTH 940 CASING SIZE & WEIGHT 2.73
CASING DEPTH 919 DRILL PIPE _____ TUBING _____ OTHER bottle 888
SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT IN CASING yes
DISPLACEMENT _____ DISPLACEMENT PSI 200 MIX PSI 200 RATE 4.6 gpm

REMARKS: Hold meeting. Established rate. Mixed & pumped 100 # gel followed by 127 ck 50/50 cement plus 20% gel, 5 # salt, 5 # Kolseal per secks. Circulated cement flushed pump. Pumped plus to bottle well held 500 PSI. Set float. Closed valve.

TDS Wes Alan Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	368	1085.00
5406		MILEAGE	368	
5402	919	casing footage	368	
5407	mi	ton miles	510	368.00
5302L	1 1/2	800 gal	369	150.00
1124	127 #	50/50 cement	1460.50	
1118B	313 #	gel	68.86	
1111	245 #	salt	95.55	
1112A	635 #	Kolseal	292.10	
		material sub	1917.01	
		loss 30%	575.10	1344.91
14402	1	2 1/2 ply		29.50
			3549.51-575.10 =	2974.41
			7.375 SALES TAX	101.15
			ESTIMATED TOTAL	3075.56

Flavin 3737

AUTHORIZATION Bryan Mills TITLE completed 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.