



Fueling American Prosperity™

# Oil and Gas Well Drilling

3137 Virginia Rd, Wellsville KS 66092

Owners: Clay Hughes  
Isaac Burbank

## Well Log

DE & TZ LLC

Knabe Well #: I-23

Sec. 31 Twp. 14 Rng. 22

FSL: 4090 FEL: 620

API: 15-091-24411

Start: 03/16/15

End: 03/17/15

Phone: (785) 979-9493

(913) 963-9127

Fax: (785) 883-2305

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
24	Soil and Clay	24
1	Lime	25
5	Shale	30
1	Lime	31
36	Shale	67
4	Lime	71
1	Shale	72
17	Lime	89
7	Shale	96
8	Lime	104
7	Shale	111
19	Lime	130
21	Shale	151
14	Lime	165
2	Shale	167
12	Lime	179
36	Shale	215
31	Lime	246
14	Shale	260
9	Lime	269
21	Shale	290
5	Lime	295
2	Shale	297
10	Lime	307
32	Shale	339
1	Lime	340
10	Shale	350
7	Lime	357
3	Shale	360
17	Lime	377
5	Shale	382
24	Lime	406
3	Shale	409

5	Lime	414	
3	Shale	417	
7	Lime	424	Base of Kansas City / Hertha
30	Shale	454	
2	Silty Shale	456	
4	Broken Sand	460	Grey sand & shale, very light gas odor
2	Silty Shale	462	
73	Shale	535	
7	Silty Shale	542	
52	Shale	594	
6	Lime	600	
3	Shale	603	
1	Lime	604	
11	Shale	615	
3	Lime	618	Light oil show
4	Shale	622	
1	Lime	623	
14	Shale	637	
3	Lime	640	
3	Shale	643	
1	Coal	644	
11	Shale	655	
1	Lime	656	
9	Shale	665	
13	Shale	678	Red bed
7	Lime	685	
2	Shale	687	
3	Lime	690	
3	Shale	693	
3	Silty Shale	696	
2	Sand	698	Grey, no odor
2	Silty Shale	700	
35	Shale	735	
1	Lime & Shells	736	
12	Shale	748	
1	Lime & Shells	749	
10	Shale	759	
1	Broken Sand	760	10% brown sand, 90% shale, faint oil odor, no bleed
2	Silty Shale	762	
3	Broken Sand	765	Brown & grey sand, no oil, no gas
8	Silty Shale	773	
11	Shale	784	
1	Coal	785	
4	Shale	789	
3	Lime	792	

30	Shale	822	
4	Silty Shale	826	
13	Shale	839	
5	Silty Shale	844	
16	Shale	860	
1	Coal	861	
23	Shale	884	
3	Lime	887	
2	Lime & Shale	889	
1	Sand	890	White soft sand, no oil
1	Broken Sand	891	80% white sand, 20% black sand, light bleed
2	Oil Sand	893	Black, minimal oil show
3	Broken Sand	896	Black & white sand, minimal oil show
5	Sand	901	Black sand, no oil show
1	Broken Sand	902	Laminated grey & black sand, no show
5	Silty Shale	907	
2	Shale	909	
1	Coal	910	
54	Shale	964	
3	Lime	967	
11	Shale	978	TD

Drilled an 11" hole to 45'

Drilled a 5 5/8" hole to 978'

03/16/15 set 45' of 7" surface casing, cemented with 14 sacks of cement.

03/17/15 chip sampled Bartlesville zone.

03/17/15 set 963' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 clamp, 1 float-shoe, and baffle.

Baffle set at 935'.



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 # 803756

Invoice Date: 03/25/15 Terms: C.O.D. Page 1

D.E. EXPLORATION

P.O. BOX 128  
 WELLSVILLE KS 66092  
 USA  
 7858834057

23  
 KNABE #-28

Part No	Description	Quantity	Unit Price	Discount(%)	Total
5401	Cement Pumper	1.000	1,085.0000	10.000	976.50
5406	Mileage Charge	1.000	0.0000	0.000	0.00
5402	Casing Footage	963.000	0.0000	0.000	0.00
5407	Min. Bulk Delivery Charge	1.000	368.0000	10.000	331.20
1124	Poz Cement Mix	136.000	11.5000	30.000	1,094.80
1118B	Premium Gel / Bentonite	329.000	0.2200	30.000	50.67
1111	Sodium Chloride (Granulated Salt)	274.000	0.3900	30.000	74.80
1110A	Kol Seal (50# BAG)	680.000	0.4600	30.000	218.96
4402	2 1/2 Rubber Plug	1.000	29.5000	0.000	29.50
1401	HE 100 Polymer	0.500	47.2500	0.000	23.63
5502C	80 Vacuum Truck Cement	1.500	100.0000	10.000	135.00
Subtotal					3,712.17
Discounted Amount					777.11
SubTotal After Discount					2,935.06

Amount Due 3,867.72 If paid after 03/25/15

Tax: 110.06  
 Total: 3,045.12



**CONSOLIDATED**  
Oil Well Services, LLC

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

2456  
7342

**INVOICE # 803756**

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

TICKET NUMBER 50894  
LOCATION Ottawa KS  
FOREMAN Fred Mader

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
3-17-15	2355	Knabe # I-23.23	NE 31	14	22	JO
CUSTOMER			TRUCK # DRIVER TRUCK # DRIVER			
DE+T2 % DE Exploration			<del>712</del> Fred Mader			
MAILING ADDRESS			<del>495</del> Alar Bee			
P.O. Box 128			<del>675</del> Kai Det			
CITY			<del>804</del> Gar Man			
Wellsville						
STATE						
KS						
ZIP CODE						
66092						

JOB TYPE Long string HOLE SIZE 5 7/8 HOLE DEPTH 978 CASING SIZE & WEIGHT 2 7/8" EUE  
 CASING DEPTH 9 6/8 DRILL PIPE Baffle in TUBING @ 935 OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 28' + Plug  
 DISPLACEMENT 5.4488 DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 5 BPM

REMARKS: Hold Safety meeting Establish pump rate. Pump 1/2 Gal HE 100 Polymer  
 Flush. Circulate well to condition hole. Mix + Pump 100# Gal  
 Flush. Mix + Pump 136 sks 50/50 for Mix Cement 2% Gal 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.

Witnessed by Phil Frick  
H B Energy

Fred Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	1495	1085 <sup>00</sup>
5406	NIC	MILEAGE	495	NIC
5402	963	Casing Footage		NIC
5407	Minimum	Ton Miles		
5502C	1 1/2 hr	80 BBL Vec Truck	675	1500 <sup>00</sup>
		Less 10%		-160 <sup>00</sup>
		Sub Total		1442 <sup>00</sup>
1124	136 sks	50/50 Por Mix Cement		1564 <sup>00</sup>
1188	329#	Premium Gel		723 <sup>80</sup>
1111	274#	Granulated Salt		106 <sup>86</sup>
1110A	680#	Kol Seal		312 <sup>80</sup>
		Material		2056 <sup>84</sup>
		Less 30%		616 <sup>81</sup>
		Total		1439 <sup>23</sup>
4402	1	2 1/2" Rubber Plug		29 <sup>50</sup>
1401	1/2 Gal	HE 100 Polymer		23 <sup>53</sup>
		7.375%	SALES TAX	110 <sup>06</sup>
			ESTIMATED TOTAL	3045 <sup>12</sup>

Ravin 3737 AUTHORIZATION Buyer Miller TITLE \_\_\_\_\_ DATE 386272

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.