



*Fueling American Prosperity™*

## Oil and Gas Well Drilling

3137 Virginia Rd, Wellsville KS 66092

Owners: Clay Hughes

Isaac Burbank

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### Well Log

HB Energy, LLC/T&B Energy, LLC

Schultz HB I-1

Sec. 13 Twp. 14 Rng. 20

15-045-22235

Start: 01/19/15

End: 01/20/15

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
6	Soil and Clay	6
99	Shale	105
7	Lime	112
6	Shale	118
18	Lime	136
9	Shale	145
6	Lime	151
8	Shale	159
30	Lime	189
16	Shale	205
15	Lime	220
45	Shale	265
6	Lime	271
3	Shale	274
15	Lime	289
1	Shale	290
2	Lime	292
41	Shale	333
7	Lime	340
29	Shale	369
8	Lime	377
13	Shale	390
7	Lime	397
3	Shale	400
14	Lime	414
7	Shale	421
24	Lime	445
4	Shale	449
5	Lime	454
5	Shale	459
4	Lime	463

Base of Kansas City

37	Shale	500	
24	Sand	524	Green, making water, making little gas
68	Shale	602	
6	Red Bed	608	
2	Broken Lime	610	
1	Broken Sand	611	80% brown, 20% shale, light bleed, gas
2	Oil Sand	613	Light brown, light bleed, gas
16	Shale	629	
4	Lime	633	
10	Shale	643	
3	Lime	646	
3	Shale	649	
14	Lime	663	
4	Silty Shale	667	
6	Shale	673	
4	Lime	677	
6	Shale	683	
1	Limey Sand	684	
3	Lime	687	
5	Shale	692	
4	Lime	696	
24	Shale	720	
1	Lime	721	
2	Shale	723	
2	Silty Shale	725	
9	Broken Sand	734	10% brown sand, 90% shale, light oil odor, gassy
5	Broken Sand	739	40% brown sand, 60% shale, light bleed, gassy
12	Broken Sand	751	90% light brown sand, 10% shale, light bleed
3	Broken Sand	754	50% shale, 50% brown sand, ok bleed
2	Broken Sand	756	75% brown sand, 25% shale, ok bleed
1	Oil Sand	757	Brown sand, ok bleed
3	Broken Sand	760	50% brown sand, 50% shale, ok bleed
10	Oil Sand	770	Brown sand, good bleed, good saturation
2	Limey Sand	772	
2	Oil Sand	774	Brown sand, light bleed, thin shale laminations
1	Shale	775	
1	Lime	776	
21	Shale	797	
1	Broken Sand	798	50% brown sand, 50% shale, ok bleed
2	Silty Shale	800	
2	Broken Sand	802	40% brown sand, 60% shale, minimal show
3	Silty Shale	805	
33	Shale	838	TD

Drilled an 11" hole to 45'  
Drilled a 5 5/8" hole to 838'

Set 45' of 7" surface casing, cemented with 14 sacks of cement.

Set 822' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 clamp, 1 float-shoe, and baffle.  
Baffle set at 792'.



1896  
1837

TICKET NUMBER 50810  
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
1-20-15	3645	Schultz # HB-21	SE 13	14	20	DG
CUSTOMER <u>H B Energy LLC</u>			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>3131 Virginia Rd</u>			<u>712</u>	<u>Fred Mad</u>		
CITY <u>Wellsville</u>	STATE <u>Ks</u>	ZIP CODE <u>66092</u>	<u>495</u>	<u>Gar Mad</u>		
			<u>548</u>	<u>Dan Wha</u>		

JOB TYPE Longstring HOLE SIZE \_\_\_\_\_ HOLE DEPTH 838 CASING SIZE & WEIGHT 2 7/8 EUE  
CASING DEPTH 822 DRILL PIPE Baffle Tubing @ 72 OTHER \_\_\_\_\_  
SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT IN CASING 30'  
DISPLACEMENT 4.6 BBL DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 4 BPM

REMARKS: Hold Safety meeting. Establish pump rate. Mix + Pump 100% Gel  
Flush. Mix + Pump 110 sks 50/50 Poz Mix Cement 2% Gel 1/4"  
Flo Seal/sk. Cement to Surface. Flush pump & lines clean.  
Displace 2 1/2" Rubber plug to Baffle in casing. Pressure to  
800# PSI. Monitor pressure for 30 min M.T. Release  
Pressure to set float valves shut in casing.

Rtg Supplied Water  
HCC Repi Taylor Herman. Fred Maden

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	495	1085 <sup>00</sup>
5406	25mi	MILEAGE	495	105 <sup>00</sup>
5402	822	Casing footage		N/C
5407	Minimum	Ten Miles	548	368 <sup>00</sup>
1124	2838 110 sks	50/50 Poz Mix Cement	12.65 <sup>00</sup>	
115B	285 <sup>00</sup>	Premium Gel	62 <sup>20</sup>	
1107	28 <sup>00</sup>	Flo Seal	69 <sup>15</sup>	
		Material	1396 <sup>85</sup>	
		Less 30%	- 419 <sup>05</sup>	
		Total		977 <sup>80</sup>
4402	1	2 1/2" Rubber Plug		29 <sup>50</sup>
				3086.34
			7.15%	SALES TAX
				ESTIMATED
				TOTAL
				2637 <sup>30</sup>

Rev'n 9797

AUTHORIZATION [Signature] 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!