



Fueling American
Responsibility

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

HB Well #: HB1

Sec. 34 Twp. 16 Rng. 21

Franklin County

FSL: 565 FEL: 3415

API: 15-059-26999

Start: 4/22/15

End: 4/23/15

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>	
8	Soil & Clay	8	
43	Shale	51	
17	Lime	68	
1	Shale	69	
2	Lime	71	
5	Shale	76	
2	Lime	78	
1	Shale	79	
8	Sand	87	Making a little water, grey
1	Lime	88	
11	Shale	99	
14	Lime	113	
16	Shale	129	
10	Lime	139	
2	Shale	141	
2	Lime	143	
15	Shale	158	
9	Lime	167	Some porosity, good oil show, making some water
2	Shale	169	
15	Lime	184	
11	Shale	195	
18	Lime	213	
6	Shale	219	
3	Lime	222	
5	Shale	227	
4	Lime	231	Base of Kansas City / Hertha
21	Shale	252	
2	Limey Sand	254	Hard
2	Sand	256	Making good amount of gas
1	Silty Shale	257	
8	Sand	265	Thin shale seems, making good amount of gas
70	Shale	335	

HB Lease - HB1

4	Silty Shale	339	
24	Shale	363	
9	Red Bed	372	
10	Shale	382	
15	Lime	397	
34	Shale	431	
1	Coal	432	
6	Shale	438	
6	Lime	444	
3	Broken Sand	447	Grey sand & laminated shale, ok bleed
12	Shale	459	
2	Lime	461	
7	Shale	468	
8	Lime	476	
12	Shale	488	
1	Lime	489	
4	Shale	493	
1	Lime	494	Brown, hard, good bleed
3	Lime	497	Brown, lots of porosity, soft, great bleed
3	Lime	500	Hard, light show
1	Shale	501	
2	Silty Shale	503	Core point - 504
3	Broken Sand	506	85% light brown sand, 15% green shale, no show
16	Sand	522	Light brown, no bleeding
1	Black Sand	523	No oil
1	Silty Shale	524	
2	Broken Sand	526	5% brown sand, 95% shale, light show
30	Shale	556	
1	Lime & Shells	557	
11	Shale	568	Core point
.5	Limey Sand	568.5	No show, grey
3.5	Broken Sand	572	60% brown sand, 40% shale, light bleed
13	Shale	585	
1	Silty Shale	586	Oil trace
28	Shale	614	
1	Silty Shale	615	
42	Broken Sand	657	Light brown sand & shale, no oil
2	Shale	659	
19	Broken Sand	678	Light brown sand & shale, no oil
		TD	

Drilled an 11" hole to 22'
Drilled a 5 5/8" hole to 678'

04/22/15 set 21.6' of 7" surface casing, cemented with 8 sacks of cement.

04/23/15 Cored 1st Squirrel zone.

04/23/15 Cored 2nd/3rd Squirrel zones.

04/23/15 The open hole below permanent casing (555'-678') was filled with cement by Consolidated Oil Well Services, prior to cementing permanent casing.

04/23/15 set 555' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 clamp, 1 float-shoe, and baffle.

Baffle set at 526'



CONSOLIDATED
OIL WELL SERVICES, LLC

2723
2053

TICKET NUMBER 50950
LOCATION Olney, KS
FOREMAN Casoy, Kennedy

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
4/8/15	3645	HB # HB-1	SW 34	18	21	FR
CUSTOMER <u>HB Energy</u>			TRUCK #		DRIVER	
MAILING ADDRESS <u>3131 Virginia Rd</u>			TRUCK #		DRIVER	
CITY <u>Wellbrite</u>			TRUCK #		DRIVER	
STATE <u>KS</u>			TRUCK #		DRIVER	
ZIP CODE <u>66092</u>			TRUCK #		DRIVER	

JOB TYPE long string HOLE SIZE 5 5/8" HOLE DEPTH 678' CASING SIZE & WEIGHT 2 7/8"
 CASING DEPTH 555' DRILL PIPE _____ TUBING plug back to 555' OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/hk _____ CEMENT LEFT IN CASING _____
 DISPLACEMENT 3.21 bbls DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 bpm

REMARKS: held safety, making, established circulation, mixed & pumped 100 ft gal, mixed & pumped 20 sks 80/50 Pozmix cement w/ 2% gel & 1/4 lb Flo-sol per sk through tubing hung on 120' drill steel to plug back open hole, pulled drill steel from well & hung tubing on clamp, mixed & pumped 100 ft gal, mixed & pumped 85 sks cement, cement to surface, pushed pump down, pumped 2 1/2" rubber plug to casing TB w/ 3.21 bbls fresh water, pressure to 800 PSI, released pressure, shut in casing.

Rig supplied H₂O

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	1085.00	
5406	15 mi	MILEAGE	63.00	
5402	555'	casing footage		
5407	min	1 mi mileage	368.00	
5502C	2 hrs	80 Vac	200.00	
		trucks	1716.00	
		-10%	171.60	
		Subtotal		1544.40
1124	105	80/50 Pozmix cement	1207.50	
118B	376 #	Gel	82.72	
1107	26 #	Flo-sol	64.22	
		materials	1354.44	
		-30%	406.33	
		Subtotal		948.11
4402	1	2 1/2" rubber plug		29.50
			2.65%	
		SALES TAX		74.79
		ESTIMATED TOTAL		2596.80

AUTHORIZATION [Signature] TITLE _____ DATE (3/25/21)

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.