

# GEOLOGICAL REPORT

Habit Petroleum LLC  
Pelton A #~~3~~ *Changed to #4*  
4320 FSL + 2310 FEL  
SEC. 14 TWP 105 RGE 19W  
Rooks County, Kansas

COMMENCED: 10-18-10  
COMPLETED: 10-24-10  
CONTRACTOR: American Eagle Drilling  
SURFACE PIPE: 8  $\frac{5}{8}$  at 304'  
PRODUCTION PIPE: ~~8-5/8~~ at 5  $\frac{1}{2}$ '

November 30, 2010

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## Formation Data

Elevation: (2121' G.L.) – (2128' K.B.)  
All top formations measured from 2128' K.B.

<u>FORMATION</u>	<u>SAMPLE TOPS</u>	<u>SEA-LEVEL DATUM</u>
Topeka	3068	-940
Heebner	3284	-1156
Toronto	3307	-1179
Lansing-K.C.	3323	-1195
Base-K.C.	3552	-1424
Arbuckle	3641	-1513
R.T.D.	3712	-1584

<u>FORMATION</u>	<u>LOG TOPS</u>	<u>SEA-LEVEL DATUM</u>
Anhydrite Top	1478	+ 650
Base Anhydrite	1511	+ 617
Topeka	3068	- 940
Heebner	3285	-1157
Toronto	3306	-1180
Lansing-K.C.	3324	-1196
Base-K.C.	3552	-1424
Arbuckle	3642	-1514
R.T.D.	3712	-1584

All samples were examined and described by me on actual location and did not start until a depth of 3050' was reached. All zones and sample tops examined are all true and accurate according to drillers' depth.

One foot drilling time was logged from a depth of 3000' to 3712', and all zones were examined by ten foot samples at a rotary depth of 3050' to 3300'. Five foot samples were examined from a rotary depth of 3305' to 3712'.

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## Sample Description

Following are the pertinent geological formations and all zones of subject well Pelton A #1.4

### THE FOLLOWING ZONES WERE NOTED:

TOPEKA	3068-3094	Limestone – gray to buff, fine tight crystalline, poor to no inter porosity, no show of oil.
	3098-3110	Limestone – buff to tan, very dense lime, poor to no inter porosity, very small show of fine crystalline with a show of free oil, slight odor when broken.
DEER CREEK	3121-3130	Limestone – buff to cream, fine crystalline to dense lime, poor to no inter porosity, no show of oil.
	3135-3144	Limestone – buff to gray, dense lime, no inter porosity, no show of oil.
	3153-3164	Limestone – tan, fine tight crystalline, poor to no inter porosity, no show of oil.
LECOMPTON	3183-3209	Limestone – white, very dense, no inter porosity, no show of oil.
	3112-3118	Limestone – buff to cream, fine crystalline to dense lime, poor to no inter porosity, no show of oil.
OREAD LIME	3228-3235	Limestone – cream to white, fine to medium crystalline, good show of dark oil saturation and free oil and odor.
	3250-3260	Limestone – same as above, chalky in part.

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	3272-3283	Limestone – cream, fine crystalline to dense lime, poor to no inter porosity, no show of oil.
TORONTO	3307-3316	Limestone – cream to white, very dense lime to cherty, very slight show of oil stain, no free oil or odor, poor inter porosity.
LANSING – K.C.		
(A-Zone)	3323-3330	Limestone – white, fine crystalline to dense lime, poor inter porosity, small show of oil stain.
(B-Zone)	3340-3344	Limestone – same as above.
(C-Zone)	3360-3366	Limestone – cream to white, very fine crystalline to dense lime, poor inter porosity with a very small show of oil stain, cherty.
(D-Zone)	3378-3389	Limestone – same as above.
(F-Zone)	3404-3410	Limestone – cream to white, fine crystalline to dense lime with vuggs, show of heavy oil to a tar oil, good odor.
(G-Zone)	3918-3434	Limestone – same as above.
(H-Zone)	3456-3468	Limestone – cream to white, dense lime, poor to no inter porosity, no show of oil.
(I-Zone)	3474-3482	Limestone – cream, fine crystalline to dense lime, chalky in part, show of light oil stain, no free oil.
(J-Zone)	3490-3500	Limestone – cream, same as above with a fair show of light oil stain.
(K-Zone)	3517-3526	Limestone – cream to white, same as above.
BASE K.C.		
(L-Zone)	3548-3552	Limestone – white to cream, very dense lime, no show of oil.

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CONGLOMERATE	3566-3571	Red Clay and Chert – show of black residual stain on chert and heavy tar.
	3572-3585	Chert – yellow and white, good show of black residual stain and tar, no odor.
SAND	3604-3635	Sand – translucent, subrounded, friable, good show of black residual stain to a tar oil, no oil.
ARBUCKLE	3641-3646	Dolomite – cream, medium crystalline, fair inter porosity with a good show of oil stain to free heavy oil, fair odor, sucrosic and friable in part.
	3648-3664	Dolomite – same as above, looks more tight.
	3665-3676	Dolomite – cream, dense to cherty, fine to medium crystalline in part, scattered saturated oil, very faint odor, mostly barren.
	3677-3684	Dolomite – pink, mostly barren, no odor.

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## Remarks and Conclusion

During the drilling of the Pelton A #3<sup>H</sup>, the subject well ran 12' lower in the Lansing K.C., and 14' lower in the Arbuckle Dolomite. Due to the fact that the oil shows in Topeka, Lansing Kansas City and Arbuckle, operator of Habit Petroleum decided to set pipe to further test the Pelton A #3<sup>H</sup>.

Zones of interest in the Pelton A #3<sup>H</sup>,

Oread Lime	3228-3234 3252-3260
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Lansing K.C.	
C-Zone	3362-3364
F-Zone	3408-3412
G-Zone	3418-3420
I-Zone	3476-3480
J-Zone	3492-3494

Respectfully submitted,

Duane Stecklein, Geologist

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