

**GEOLOGISTS REPORT**

*for*

**BEYER No. 1B**

**NW ¼, NE ¼, SW ¼,  
sec. 29, T22S, R14E  
COFFEY COUNTY, KANSAS**  
2310 FSL 1650 FWL

**API-15-031-22135**

**November, 2005**

**By**

**George E. Petersen, C.P.G., R.G.  
DEACON GEOLOGY INC.**

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API 15-031-14E  
NW NE SW

**GEOLOGISTS REPORT: BEYER No.1B**

*November 8, 2005: Arrived on location at 8 AM, drilling at 822'.*

*November 9, 2005: Arrived on location at 7:15 AM, drilling at 1402'. Left location upon completion of logging at 11:55 P.M.*

*All measurements were from a ground level elevation of 1162' (topo. elevation).*

<b><u>FORMATION TOPS</u></b>	<b><u>LOG DEPTH</u></b>	<b><u>DATUM</u></b>	<b><u>THICKNESS</u></b>
<i>Heebner</i>	<i>297</i>	<i>+8765</i>	<i>3'</i>
<i>Lansing</i>	<i>622</i>	<i>+540</i>	
<i>Stark sh</i>	<i>1018</i>	<i>+144</i>	<i>4'</i>
<i>Hushpuckney sh</i>	<i>1047</i>	<i>+115</i>	<i>4'</i>
<i>Base KC</i>	<i>1068</i>	<i>+ 94</i>	
<i>Lexington coal</i>	<i>1337</i>	<i>-175</i>	<i>3'</i>
<i>Summit coal</i>	<i>1373</i>	<i>-211</i>	<i>4'</i>
<i>Mulkey coal</i>	<i>1382</i>	<i>-220</i>	<i>4'</i>
<i>U Squirrel sd</i>	<i>1388</i>	<i>-226</i>	<i>10'</i>
<i>L Squirrel sd</i>	<i>1428</i>	<i>-266</i>	<i>12'</i>
<i>Bevier coal</i>	<i>1474</i>	<i>-312</i>	<i>2'</i>
<i>Crowberg coal</i>	<i>1486</i>	<i>-324</i>	<i>4'</i>
<i>Mineral coal</i>	<i>1516</i>	<i>-354</i>	<i>2'</i>
<i>Scammon coal</i>	<i>1535</i>	<i>-373</i>	<i>3'</i>
<i>Tebo coal</i>	<i>1580</i>	<i>-418</i>	<i>3'</i>
<i>Weir-Pittsburg</i>	<i>Appears to be absent</i>		
<i>AW coal</i>	<i>1707</i>	<i>-545</i>	<i>3'</i>
<i>CW coal</i>	<i>1714</i>	<i>-552</i>	<i>3'</i>
<i>Riverton coal</i>	<i>1723</i>	<i>-561</i>	<i>4'</i>
<i>Un-named coal</i>	<i>1732</i>	<i>-570</i>	<i>2'</i>
<i>Miss. Cht.</i>	<i>1740</i>	<i>-576</i>	<i>20'</i>
<i>Miss. Lm.</i>	<i>1760</i>	<i>-598</i>	
<i>RTD &amp; LTD 1822</i>			

*Sample returns were examined microscopically from a drilled depth of 1000 feet to TD for the presence of visible hydrocarbons. Potential units capable of carrying oil or gas were examined under a black light for visible fluorescence. Various tops of units were derived from the drilling time log, sample returns, and the electric logs run on this well. A gas detector unit was operational during the drilling of this well and the gas response curves were compared with the sample returns and the electric logs.*

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**DOUGLAS GROUP:**

*The various beds within the Douglas group of sediments appear to be non productive.*

**LANSING and KANSAS CITY GROUPS:**

*The top of the Lansing Group was reached at a log depth of 622' (+540 ). There has been no oil or gas production from any of the limestone units in the Lansing and Kansas City units in this area. Gas kicks were noted from some of the black shale units. The first gas kick may have come from a thin black shale near a depth of 848'. The gas kick at a chart depth of 916' appears to be from the black shale at the base of the Lansing Group at a log depth of 902'.*

*There have been reports that gas is being produced from the black Stark Shale Member in the SE Kansas portion of the Cherokee Basin. Both the Stark and Hushpuckney units had good strong gas kicks. The Stark at log depth of 1018' (+144), and the Hushpuckney at log depth of 1047' (+115), need to be tested at some point to evaluate their potential to produce commercial quantities of gas.*

**MARMATON GROUP:**

*The top of the Marmaton group was topped at a log depth of 1216' (-54). There was a moderate gas kick from the black shale at a log depth of 1252'. An additional gas kick was observed from the black shale at a log depth of 1276' (-114). The Lexington goal at log depth of 1337' (-175) had a strong gas kick. Other black shales in this interval also had gas kicks of varying intensities. The Summit and Mulkey coals should all be tested before eventual abandonment of the well as they also had good gas kicks.*

**CHEROKEE GROUP:**

*The Cherokee section is composed of marine and non-marine sandstones and shales, marine carbonates and coal beds. This section contains the majority of the potential productive intervals in this well.*

*The uppermost unit of interest in this area is the upper Squirrel sand. This sand was topped at a log depth of 1388' (-226). The sample returns had a slight petroleum odor and there was a show of oil on the pits. The samples had a slight show of medium brown free oil. The samples and the log both indicate that the 10 foot thick sand had good porosity. Water saturations could be favorable for a completion attempt for oil at some point in the life of this well. Both the resistivity and porosity log curves suggest that it is possible to produce oil from this interval. There was also a gas kick from this sand.*

*The lower Squirrel sand was found at a log depth of 1428' (-266), and had a thickness of approximately 12 feet. This sand had very good visible porosity and a slight show of heavy brown oil. When the samples were being washed, a substantial amount of oil was observed in the rinse water. There was a strong odor present in the samples. Based on the observed samples and the log response, it should be possible to*

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*produce oil from this interval; but until the zone is tested and water samples are obtained, it is not possible to determine the water saturation values.*

*Many of the coals found below the lower Squirrel sand had strong shows of gas. There were nine different coals that were identified in the Cherokee section in this well. It was not possible to identify the Wier-Pittsburg from either the samples or the logs. It is probable that there may be other thin coals that could not be identified on the logs or in the samples. The composite thickness of these coals is approximately 26 feet. The coals in the Bevier to Scammon interval were hard bright coals and the strongest kicks were generally from this sequence and the interval where the AW, CW, and Riverton coals were found just above the Mississippian Chat.*

*It is suggested that due to the fact that production has not been established to date from any coal interval in this project, that testing begin in the lower coal sequence with the AW, CW, and Riverton coals.*

#### **MISSISSIPPIAN:**

*The Mississippian chat was reached at a log depth of 1740' (-576). Sample returns consisted of white to gray tripolitic chert. There were no shows of oil from this interval. There is no possibility of commercial production of oil from the chat section in this well.*

*The Mississippian lime was called at a log depth of 1760' (-598). There were no shows of hydrocarbons present in the drilled portion of the Mississippian in this well. The drilling of this lime was to provide a rat hole for completion attempts in upper horizons of the well. The sample returns and logs indicate that the drilled interval consisted of alternating intervals of limestone and dolomite with some thin shale partings. The dolomitic intervals that were penetrated in this section appear to have sufficient porosity and permeability so serve as a good reservoir. Production from the upper Mississippian can be found to the south west of this area.*

#### **CONCLUSIONS AND RECOMMENDATIONS:**

*This well had good shows of gas from many of the coal and black shale intervals. Based on the responses observed on the gas chart, it appears that the gas kicks were stronger in many of the coal seams than those recorded on the OCHS No. 2 immediately to the east. Until the various intervals have been tested in this well and other wells in this field, all zones should be completed starting with the Riverton, AW and Cw coals.*

*The Squirrel sand may hold the potential to produce oil at a later date in this well. Water samples should be retained from each completed interval to allow for better evaluation of each bed.*

*It is becoming more important with each well that accurate well elevations be established. Using elevations from a U.S.G.S. topographic map does not allow for the accuracy required for detailed mapping and plotting of cross sections.*

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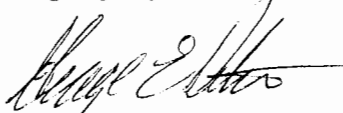
*The coal were generally formed in a shallow water environment and for the most part are flat lying. The difference of a very few feet in elevation of the bed may determine whether commercial quantities of gas are producible. This is why accurate cross sections can help to determine where future development wells are placed.*

*Should additional information be required, please contact me.*

**DISCLAIMER:**

*The author of this report has no working or overriding royalty interest in this or any other well on this lease.*

*Respectfully submitted;*



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