GEOLOGISTS REPORT

for

YOUNG No. 2

SW ¼, SW ¼, SW ¼,
sec. 32, T22S, R14E
COFFEY COUNTY, KANSAS

API-15-031-22186

February, 2005

By

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DEACON GEOLOGY INC.

GEOLOGISTS REPORT: YOUNG No. 2

February 7, 2006: Arrived on location at 8:10 AM. left location at 7:00 PM.
February 8, 2006: On location at 7:30 AM., left location at 9:45 PM when logging complete.
All measurements were from a ground level elevation of 1122'(topo. elevation).

FORMATION TOPS	LOG DEPTH	DATUM	THICKNESS
Heebner	260	+862	4'
Lansing	596	+526	
Stark sh	988	+134	3'
Hushpuckney sh	1014	+108	4'
Base KC	1034	+ 88	
Altamont	1186	- 64	
Mulberry coal	1220	- 98	3'
? coal	1277	-155	2'
Lexington coal	1312	-190	3'
Summit coal	1349	-227	3'
Mulkey coal	1357	-235	3'
U. Squirrel sd	1364	-242	4'
L. Squirrel sd	1400	-278	8'
Bevier coal	1448	-326	4'
Crowberg coal	1458	-336	4'
Mineral coal	1488	-366	2'
Scammon coal	1514	-392	2'
Tebo coal	1566	-444	3'
Weir-Pittsburg	Not identified in this well		
AW coal	1676	-554	2'
CW coal	1684	-562	3'
Riverton coal	1704	-582	3'
Miss. Lm.	1714	-592	

RTD 1802 & LTD 1801

Sample returns were examined microscopically from a drilled depth of 900 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. The detector was operational from a drilled depth of 200' to TD.

DOUGLAS GROUP:

The various beds within the Douglas group of sediments appear to be non-productive; however, there is a sand interval that bears further study. This interval is between log depths 330' to 350'. Although this sand appears somewhat shaly, it has good porosity and resistivity values. There was a small gas kick from this interval, but it does not appear to be of economic value. No accurate Sw values can be calculated until water samples have been obtained from this sand.

LANSING and KANSAS CITY GROUPS:

The top of the Lansing Group was reached at a log depth of 596' (+526). There has been no oil or gas production from any of the limestone units in the Lansing and Kansas City units in this area. A 200 unit gas kick was noted from the black shale a depth of 635'.

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. There was also a good gas kick from the black shale at the base of the Kansas City Group. The Stark shale at log depth of 988' (+134), the Hushpuckney shale at a log depth of 1014' (+108), and the base shale at a log depth of 1034' (+88) need to be tested at some point to evaluate their potential to produce commercial quantities of gas.

MARMATON GROUP:

The top of the Altamont Limestone was reached at a log depth of 1186' (-64). There were moderate gas kicks from the Mulberry coal and black shales in this sequence. The Lexington coal at log depth of 1288' (-186) had a strong gas kick. The Summit and Mulkey coals should all be tested before eventual abandonment of the well as they also had good gas kicks.

There was a moderately porous clean sand developed between 1232' and 1260'. The logs showed a good build up of filter cake over this interval indicating good porosity. There was a 90 unit gas kick from this interval. The deep induction curve suggests the interval will be too wet to produce. When water samples are obtained from this unit, Sw values can then be calculated.

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 Squirrel sands found in the upper Cherokee were very thin and shaley. There was a show of heavy tar like petroleum in the sand but it was not moveable.

There is no potential for the production of either oil or gas from the interval where the Squirrel sands are found.

Many of the coals found in the middle and lower portions of the Cherokee showed the presence of gas. There were 8 different coals that were identified in the Cherokee section in this well. 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 23 feet. The coals in the Bevier to Scammon interval were hard bright coals. The gas kicks from these coals were not as strong as have been recorded in wells previously drilled in this program: however, they still warrant further testing after the lower most in the Riverton, AW, and CW intervals have been depleted.

Due to the fact that wells tested to date have yielded what appear to be commercial quantities of gas, it is recommended that testing begin in the lower coal sequence with the AW, CW, and Riverton coals.

MISSISSIPPIAN:

The top of the Mississippian was reached at a log depth of 1714' (-592). Sample returns consisted of well rounded brown limestone fragments along with shale and a few fragments of chert.

It appears that this is an erosional surface. The log response on this well and other wells that have been drilled in this program all indicate that the surface of the Mississippian in this area is a weathered surface featuring Karst topography. Sample returns consisted of white to gray tripolitic chert and white to tan very coarsely crystalline limestone. There were no shows of oil from the drilled portion of the Mississippian.

There is no evidence that suggests that any completion attempt is warranted in the drilled portion of the Mississippian.

CONCLUSIONS AND RECOMMENDATIONS:

This well had good shows of gas from many of the coal and black shale intervals. Until the various intervals have been tested in this well and other wells in this field, the Riverton, AW and Cw coals along with the Burgess should be tested if the upper Mississippian proves to be non-productive.

The middle and upper coals and black shales mentioned in the earlier section of this report all have the potential to produce commercial quantities of gas. The total thickness of the 15 coals and black shales that have the potential to produce gas in this well approaches 44 feet.

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.