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GEOLOGISTS REPORT

for

Eldon Farris #2-86

API #15-087-20237

C, NW4, SW4, Sec. 33, T8S, R20E

Jefferson County, Kansas

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by

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DEACON GEOLOGY INC.



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GEOLOGISTS REPORT

Eldon Farris #2-86

Elevation: 1045 G.L. (Topo)

FORMATION TOPS	DEPTH	DATUM	THICKNESS
Base KC	752	+293	---
Marmaton	890	+155	94'
Cherokee	984	+61	489'
"U. McLouth"	1,424	-379	8'
"L. McLouth"	1,432	-387	24'
Burgess	1,458	-413	8'
Mississippian Lm.	1,473	-428	---
RTD	1,514		
LTD	1,518		

Sample returns were examined from a drilled depth of 1000 feet to T.D. for the presence of visible hydrocarbons. Formation tops and intervals for this well were picked from the drilling time log, sample returns and the Neutron-Density Porosity Log. There was no visible evidence of oil or oil staining in any of the geologic units above the "McLouth Sands"; however, there are some sand intervals in the middle Cherokee that should have a detailed log analysis and a possible test before the eventual abandonment of this well.

CHEROKEE GROUP:

The various sand intervals within the Cherokee Group deserve a detailed evaluation and possible attempt at production. A log analysis can be accomplished at such time as it may be required for such an attempt.

The "U/M McLouth" was reached at a log depth of 1424 feet (-379). This upper portion of the "McLouth" is a clean coarse grained quartz sand. There was a slight show of dark brown, heavy oil along with a slight odor. Due to the shaly response and low porosity values shown on the Density-Porosity Log, no calculations were prepared for this interval.

The "Lower McLouth" began at a log depth of 1432 feet (-387). The sand had a thickness of approximately 24 feet. It was composed of a clear to tan, coarse grained quartz sand which had a slight to good show of dark brown oil and a good odor. The application of trichlorethane yielded streaming cuts and bright fluorescence.

Log calculations were prepared on location by Mr. Glenn Schmeidler of Log-Tech Inc. using the following values;  $M=1.8$ ,  $R_w = .2$ .

Interval	$\phi$	Rt	Sw
1432-34	9	15	99
34-36	10	15	89
36-38	11	15	89
38-40	12	11	90
40-42	11	15	83
42-44	11	14	89
44-46	10	12	100
46-48	9	12	100
48-50	9	16	94
50-52	11	11	100
52-54	12	15	79

The shaly nature of this sand undoubtedly caused the Sw values to be higher than they actually are. Based on the oil show and odor, it appears that the "McLouth Sands" are capable of producing either oil or gas or both.

The Burgess Sand was topped at a log depth of 1458 feet (-413). This sand was a clear, coarse grained quartz sand which contained a show of dark brown free oil and a slight odor.

Log calculations were prepared utilizing the following values:  $M=1.8$ ,  $R_w = .2$ .

Interval	$\emptyset$	Rt	Sw
1458-60	17	35	37
60-62	11	70	38
62-64	8	15	100

Based on the samples and the good Rt values in the upper four feet and the low Sw values, it appears that this zone has the potential to produce either oil or gas or both.

#### MISSISSIPPIAN LIME:

The top of the Mississippian Lime was reached at a log depth of 1473 feet (-428). Sample returns consisted of a white to light tan, semi-lithographic to very coarsely crystalline limestone. There was a show of free oil on fractures and in pin point porosity. There was a slight odor. The oil appeared to be confined to the interval above 1500 feet.

There has been no oil production from the upper Mississippian in the immediate area and therefore no attempt at production from the lime is anticipated in this well.

#### CONCLUSIONS AND RECOMMENDATIONS:

The "McLouth Sands" were the primary zone of interest in this well and these sands appear to have the potential to produce commercial quantities of oil and/or gas. The Burgess also appears to have good potential.

The upper Cherokee sands should be tested for gas before the eventual abandonment of this well.

Should additional information be required, please contact me.

Respectfully submitted,

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