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GEOLOGISTS REPORT

for

Mike Nickels #2-85

CE2, NE4, NE4, Sec. 26, T9S, R19E

Jefferson County, Kansas

March 1985

by

George E. Petersen C.P.G.S .

DEACON GEOLOGY INC.

professional geologists

GEOLOGISTS REPORT

Mike Nickels #2-85

March 20, 1985: Called to well at 8:15 AM.
March 21, 1985: Released from location at 7 AM.

Elevation: 1128 GR

Formation Tops	Log Depth(GL)	Datum	Thickness
Hushpuckney Sh.	864	+264	---
Marmaton Gp.	1,003	+125	91'
Cherokee Sh.	1,094	+34	521'
"McLouth Sd."	1,570	-442	---
Mississippian Lm.	1,615	-487	---
RTD	1,635		
LTD	1,637		

Sample returns were examined from a drilled depth of 800' to TD for the presence of visible hydrocarbons. Formation tops and intervals for this report were picked from the sample returns, drilling time log, and the Neutron-Density Porosity log. There was no visible evidence of the presence of hydrocarbons in any of the geologic units above the "McLouth Sand".

CHEROKEE GROUP:

There were several sand intervals in the Cherokee section; however, only the "McLouth Sand" contained visible evidence of the presence of hydrocarbons.

The "McLouth Sand" was topped at a log depth of 1570 feet (-442). The upper portion of the sand seen in the Mike Nickels #1-85 has not developed in this well.. The sand consisted of medium grained, tan quartz with light brown free oil coming to the surface of the samples. The upper six feet was very shaly as shown on the log and then graded to a clean sand for the remainder of the interval. Visible porosity appeared good and log porosity values ranged from 16% in the shaly upper part to 30% in the clean middle portion. The lower six feet consisted of a clear, medium grained quartz sand which contained dark

brown to black oil.

The upper three quarters of the sand had a faint petroleum odor while the lower quarter had a good odor. Fluorescence was faint throughout the interval and was enhanced by the application of trichlorethane which yielded streaming cuts and bright fluorescence.

Log calculations for the "McLouth" were prepared on location by Great Guns personnel using the following values; Rw= .2, M=1.8.

Interval	Ø	Rt	Sw
1576-78	16	13	64
78-80	18	20	45
80-82	28	30	26
82-84	26	35	26
84-86	27	28	27
86-88	26	28	29
88-90	22	35	24
90-92	30	32	23
92-94	28	35	24
94-96	24	70	19
96-98	24	50	23
98-1600	22	35	29
1600-02	23	28	34
02-04	24	20	36
04-06	26	23	23
06-08	24	25	33
08-1610	20	23	38

A good cross-over indicating a gas effect was noted on the log from 1580 to 1596. This interval should produce good quantities of gas in this well.

MISSISSIPPIAN LIME:

The Mississippian Lime was reached at a logged depth of 1615 feet (-478). Sample returns consisted of white tripolitic chert and white to light tan very coarsley crystaline limestone. The limestone had a greenish tint in many pieces. There were

no visible shows of hydrocarbons in the penetrated interval, however, sufficient depth was not achieved to allow a log evaluation of much of the Mississippian.

There does not appear to be any potential for production from the drilled interval.

CONCLUSIONS AND RECOMMENDATIONS:

The "McLouth Sand" interval should produce gas in this well. The improved mud program has had a noticable effect on the log response which allows for better interpretation.

Sample returns were of a much better quality and quantity in this well and this made sample examinations easier and improved the quality of the examination.

A continued review of the mud program should be made after each well until optimum results are obtained for the protection of any potential producing zones.

The bit program on this well did make the interpretation of the drilling time relate to the formations penetrated as should be expected. The addition of a good long toothed button bit for the bottom portion of the well will allow sufficient hole to be drilled into the Mississippian to evaluate any potential pay intervals.

Should any additional information be required, please contact me.

Respectfully submitted,

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DEACON GEOLOGY INC.

mrp/GEP