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Computer Inventoried

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GEOLOGISTS REPORT

for

Farris #1-85

C, S2, SE4, SE4, Sec. 5, T9S, R20E

Jefferson County, Kansas

June 1985

by

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

DEACON GEOLOGY INC.



professional geologists

GEOLOGISTS REPORT

Farris #1-85

June 15, 1985: Completed Logging @ 7:30PM.

Elevation: 950 G.L. (Topo)

Formation Tops	Log Depth	Datum	Thickness
Marmaton Gp.	803	+147	
Cherokee Sh.	896	+54	93'
McLouth Sd.	1,348	-398	21'
Mississippian Lm.	1,389	-439	486'
RTD	1,428		
LTD	1,426		

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 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"; however, several of the Cherokee Sands may contain gas.

CHEROKEE GROUP:

There were several clean sand intervals within the Cherokee Group which had good porosity and may contain gas as there was no evidence of oil staining, free oil or fluorescence. Calculations for the interval from 1186 to 1192 and the "McLouth Sand" were prepared on location by Mr. Greg Rush of Great Guns Inc.

The unnamed sand found from 1186 to 1192 log depth was a clean, medium grained quartz sand which contained no visible traces of oil.

Sw calculations were prepared for this interval using the following values; $R_w = .2$, $M = 1.8$.

Interval	ϕ	Rt	Sw
1186-88	14	8	91
88-90	17	7	81
1190-92	18	10	67
92-94	16	8	81

This zone should be tested before eventual abandonment of this well.

The "McLouth Sand" top was called at a log depth of 1348 (-398) for this report. The sand is actually two sand bodies separated by approximately three feet of shale. The upper sand lies between 1348 to 1352 and the lower sand is between 1355 to 1372 feet. The upper portion of the sand had a tan to silty brown color while the lower sand was the typical clear coarse grained quartz sand normally associated with the "McLouth Sand". There was a good show of free oil and a strong odor throughout as well as good fluorescence and streaming cuts in trichlorethane. Free oil was also observed on the pits during the drilling of this interval. The oil did not have the rust color found in the Strange #1-85 well.

Log calculations for this interval were prepared using the following values: $M=1.8$, $R_w=.2$;

Interval	ϕ	Rt	Sw
1384-50	18	20	46
50-52	15	9	80
1354-56	14	25	52
56-58	25	70	18
58-60	24	60	22
60-62	26	70	18
62-64	21	60	24
64-66	23	60	23
66-68	23	65	21
68-70	22	70	23

This well is very similar to both the J. Noll #1-85 which

is a good gas producer , and the Strange #1-85 drilled two weeks prior to this well. This well appears to have the potential to produce both oil and gas.

MISSISSIPPIAN LIME:

The top of the Mississippian Lime was reached at a log depth of 1389' (-439). The lime is a very finely crystalline to semi-lithographic tan, fractured limestone. The fractures contained a black to very dark brown, heavy oil.

There was a strong odor, streaming cuts and bright yellow fluorescence when cut with trichlorethane. Calculations for the upper portion of the unit were prepared using the following values; $R_w = .25$, $M = 2.0$;

Interval	ϕ	Rt	Sw
1390-92	5	25	100
92-94	8	40	94
94-96	11	25	100
96-98	11	23	100
98-1400	13	21	100
1400-02	11	10	100
02-04	11	15	100

The shows of oil and the odor decrease and finally disappeared in the interval below 1404. Calculations indicate a very wet interval; however, as most of the fracture porosity is not shown in the log response, there is the possibility that oil and/or gas may be produced from this zone.

CONCLUSIONS AND RECOMMENDATIONS:

This well appears to have the potential for the production of both oil and gas with minimal water from the "McLouth Sand" interval. Structurally the well is slightly higher than the Strange #1-85 and slightly lower than the J. Noll #1-84. The following

table is presented to allow this well to be compared to surrounding wells.

Formation	Farris #1-85	Strange #1-85	J. Noll #1-84	Sedlak #1-84
Hushpuckney Sh.	---	+278	+293	+281
Marmaton Gp.	+147	+141	+156	+191
Cherokee Sh.	+54	+50	+60	+49
McLouth Sd.	-398	-413	-409	-407
Miss. Lm.	-439	-445	-449	-448

In a well such as this one, an attempt to produce the Mississippian should be made at some point before eventual abandonment of the well. The fracture porosity does not show on the logs and thus the Sw% may not be as high as shown in the calculations. The oil is very heavy but some gas may be present.

Should additional information be required, please contact me.

Respectfully submitted,

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

DEACON GEOLOGY INC.

mrp/GEP