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GEOLOGISTS REPORT

for

Joe Noll #2-86

API #15-087-20258

C, S2, NW4, NW4, Sec. 9, T9S, R20E

Jefferson County, Kansas

February 1986

by

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

DEACON GEOLOGY INC.

professional geologists

GEOLOGISTS REPORT

Joe Noll #2-86

February 25, 1986: Checked rig @ 9:40PM.
February 26, 1986: On location, released from location @ 3:30PM.

Elevation: 945 G.L. (Topo)

Formation Tops	Log Depth	Datum	Thickness
Base KC	653	+292	---
Marmaton	789	+156	91'
Cherokee Gp.	880	+65	497'
"U. McLouth Sd."	1,331	-386	3'
"M. McLouth Sd."	1,334	-390	7'
"L. McLouth Sd."	1,341	-396	19'
Mississippian Lm.	1,377	-432	---
RTD	1,401		
LTD	1,400		

Sample returns were examined microscopically from a drilled depth of 800 feet to T.D. for the presence of visible hydrocarbons. Formation tops and intervals for this report were picked from sample returns, the drilling time log, 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 may be commercial quantities of gas in some of the sands in the middle Cherokee Group and these intervals need to be thoroughly evaluated before eventual abandonment of the well.

CHEROKEE GROUP:

There were several clean to slightly shaly sands found between 1080 and 1175 that had good porosity. There was no show of oil or oil staining in these sands. Each of these intervals should have a detailed log analysis made and the zones should then be tested before eventual abandonment of this well.

The "McLouth Sands" were reached at a log depth of 1331

feet (-386). The upper (1331-1334) and middle (1334-1341) units are very shaly and show a low porosity on the logs. There was a slight show of heavy brown oil and a slight odor from samples in this interval. No production is anticipated from the upper or middle sands in this well.

The "Lower McLouth" was reached at a log depth of 1341 feet (-396) and it has a thickness of 19 feet in this well. The sample returns consisted of tan, medium to coarse grained, sub-rounded, quartz sand. There was a good show of medium brown oil and a strong odor. The application of trichlorethane yielded a good cut and bright fluorescence. There was also evidence of gas present in the sand as bubbles were observed coming out of the samples.

Log calculations were prepared on location by Log-Tech Inc. personnel using the following values; M=1.8, Rw= .2.

Interval	Ø	Rt	Sw
1340-42	22	40	33
42-44	24	50	23
44-46	23	50	24
46-48	24	40	22
48-50	24	60	21
50-52	23	70	20
52-54	23	60	22
54-56	23	65	21
56-58	22	25	38
58-60	26	20	35

Based on the excellent show of oil and gas in the samples along with the good Sw values, it is expected that this interval will produce good commercial quantities of gas and possibly some oil.

MISSISSIPPIAN LIME:

The Mississippian was reached at a log depth of 1377 feet (-432). Sample returns consisted of a white to light tan, very coarsely crystalline limestone which contained a slight show of heavy dark brown oil on fracture faces and had a slight odor.

No production attempts in the Mississippian are anticipated at this time.

CONCLUSIONS AND RECOMMENDATIONS:

Based on the log results, sample returns and structural position to other wells in the immediate area, and the 19 feet of clean sand in the "Lower McLouth", this well should be one of the best gas producers which has been discovered in this portion of the field to date.

Sample returns were of excellent quality on this well as the result of recent repairs to the mud pump.

As has been stated previously, this well and all previously drilled wells should be surveyed in to establish accurate elevations and locations.

Should additional information be required, please contact me.

Respectfully submitted

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

DEACON GEOLOGY INC.

mrp/GEP