Deacon
Geology

George E. Petersen c.p.g.s.
consulting geologist

3223 Mc Clure Rd.
Topeka, Kansas 66614

913-272-4383

GEOLOGISTS REPORT

for

Joseph Noll #1-84

660' FSL, 660' FEL, NW^4, Sec. 9, T9S, R20E

Jefferson County, Kansas

by

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

DEACON GEOLOGY INC.

GEOLOGISTS REPORT

Joseph Noll #1-84
July 24, 1984: On location at 9:00 AM.
July 25, 1984: Released from location 7:00 PM.

Elevation: 1056.0 GL (all measurments from GL)

Formation Tops	Depth(GL)	Datum	Thickness
Base Kansas City Gp.	763	+293	
Marmaton Gp.	900	+156	96
Cherokee Sh.	996	+60	509
Middle Chero. Sd.	1396	-340	16
Base Mid. Cher. Sd.	1412	-356	
McLouth Sd.	1465	-409	23
Base McLouth Sd.	1488	-432	
Mississippian Lm.	1505	-449	
LTD	1612		
RTD	1613		

Sample returns were examined from a drilled depth of 600' to 1613' for the presence of visible hydrocarbons. Formation tops and intervals for this report were picked from the drilling time log, sample returns, and the R.A. Guard Log. There was no evidence of the presence of producable hydrocarbons in any of the geologic units above the Cherokee Group.

CHEROKEE GROUP:

Several sands were noted in the samples and on the log between 996 and 1395; however, there was no evidence of the presence of hydrocarbons in any of these zones.

A clean white, very fine grained sand containing some dark mica was found from 1396 to 1412. A cross over was noted on the logs between 1407 and 1411.

Calculations were prepared on location for this interval by Great Guns personnel. The following values were used for these calculations: Rw= .2, M=1.8

Interval	Ø	Rt	Sw
1404-06	19	10	64
06-08	21	9	63
08-1410	20	10	59

It appears that similar values may be calculated for the upper portion of this zone; however, there were no visible indications of hydrocarbons present.

This lower interval from 1404-1410 should be tested before abandonment of this well.

The "McLouth Sand" was topped at a drilled depth of 1465 (-409) where a fine to medium grained tan quartz sand was found. This upper sand contained a light brown oil and some free oil was noted on the pit. The lower portion of this sand beginning at 1479 is a coarse grained clear quartz sand with dark brown to black oil present in the pore spaces. An excellent cross over is present from 1480-1486 on the density-porosity log.

Log calculations for this sand were prepared using the following values: Rw=.2, M=1.8

Interval	Ø	Rt	Sw
1466-68	14	9	88
68-70	12	9	100
70-72	14	10	82
72-74	14	9	88
74-1476	15	15	65
1480-82	22	40	27
82-84	24	70	23
84-86	24	15	42

It appears from the logs and the samples that the gas cap lies underneath the oil in this sand, possibly separated by a thin shale from 1477-79.

The oil present in the sand fluoresced under black light after applications of trichlorethane. The "McLouth" oils had little odor.

The zone needs to be tested to fully evaluate the potential of this interval although all information indicates the sand should produce marketable quantities of gas.

MISSISSIPPIAN LIME:

The top of the Mississippian was reached at a depth of 1505' (-449). An excellent show of free oil and a strong odor was observed in the samples from the upper 8 to 10' of the zone. Cuts with trichlorethane yielded flourescence in the samples. Porosity was observed in the oölitic lime, in fractures and in fossil casts; however, the visible porosity observed in the samples was not shown on the porosity log.

Calculations for this interval were prepared by Mr. Glenn Schmeidler of Great Guns using the following values:

Rw= .2, M=1.8

Interval	Ø	Rt	Sw
1506-08	3	120	90
08-10	4	120	75
10-12	4	80	92
12-14	4	80	92
14-1516	2	70	100

The shows of free oil in the samples along with the visible porosity make it important that this interval be tested at some point in the life of the well as it may produce oil from this zone.

No other shows were found between the upper zone and TD and thus there is no potential for production below the upper 10 to 12' of the zone.

CONCLUSIONS AND RECOMMENDATIONS:

This well is considered a wildcat as there are no wells in the immediate vicinity to serve as reference well as was the case

on the Kimmel Leases.

The strong cross over in the "McLouth Sand", the cross over in the sand at 1400' and the good oil shows in the "McLouth" and upper Mississippian make it probable that this well will be a good producer of gas and possibly oil.

This well will serve as a key to further drilling in this area and will make the adjoining leases very attractive for further exploration attempts.

If further information is required, please contact me.

Respectfully submitted,

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

DEACON GEOLOGY INC.

mrp/GEP