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

3223 Mc Clure Rd.
Topeka, Kansas 66614 913-272-4383

GEOLOGISTS REPORT

for

Strange #1-85

C, S2, SW, SW, Sec. 4, T9S, R20E

Jefferson County, Kansas

May 1985

by

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

DEACON GEOLGOY INC

professional geologists

GEOLOGISTS REPORT

Strange #1-85

May 29, 1985: Called to wellsite 11:40 AM.
May 30, 1985: Released from wellsite at 7AM.

Elevation: 948 G.L. (Topo)

Formation Tops	Log Depth	Datum	Thickness
Hushpuckney	670	+278	
Marmaton Gp.	807	+141	91'
Cherokee Gp.	898	+50	495'
McLouth Sd.	1,361	-413	13'
Mississippian Lm.	1,393	-445	
RTD	1,446		
LTD	1,447		

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 which had good porosity and may contain gas as there was no evidence of oil staining, free oil or fluorescence. Calculations for these intervals were prepared by Mr. Glenn Schmeidler of Great Guns at Mr. Dow's office on the morning of May 30, 1985. The following values were used in these calculations: R= .2 and M=1.8.

Interval	Ø	Rt	Sw
1108-10	16	10	75
10-12	10	15	91
12-14	10	12	100
14-16	22	10	55
16-1118	25	7	58

Interval	Ø	Rt	Sw
1292-94	23	7	60
94-96	24	7	69
96-98	22	7	65
98-1300	25	7	53
1300-02	24	6	63
02-04	30	8	46
04-06	21	8	65
06-08	23	10	51

These sand zones should be tested before eventual abandonment of the well.

The "McLouth Sand" was reached at a log depth of 1361 (-413). The upper portion appeared to be a coarse grained clean quartz sand which contained dark brown oil with a slight odor and good fluorescence. As sample returns increased from this approximately 13 foot thick zone the odor became much stronger and the sand appeared to be saturated with oil. The oil became a reddish rust in color toward the bottom of the sand. The color has not been noticed in any of the other wells drilled to date in this program.

Log calculations for this interval were also prepared by Mr. Glenn Schmeidler using the following values: M=1.8, Rw= .2.

interval	Ø	Rt	Sw
1362-64	17	20	48
64-66	26	30	27
66-68	21	35	30
68-70	21	35	30
70-72	22	30	32
72-1374	30	45	20

The McLouth Sand in this well appears to be very similar to that found in the J. Noll #1-84 which is a good producer of gas. It appears that this well has similar potential.

MISSISSIPPIAN LIME:

The top of the Mississippian was reached at a log depth of 1393 (-445). The lime is a tan very finely crystalline to semi-

lithographic limestone that appears highly fractured. The fractures contain good shows of dark brown heavy oil which cut readily in trichlorethane. There was a good odor and good fluorescence. Some very porous limestone fragments containing oil were also observed.

Calculations were prepared by Mr. Schmeidler using the following values: M=2.0, Rw= .2.

Interval	Ø	Rt	Sw
1394-96	6	120	70
96-98	8	80	63
98-1400	7	60	82

The shows of oil diminished with depth and it is probable that those samples containing the oil were probably limited to the upper 10 to 15 feet of the formation.

It is not known at this time if production from this zone is possible as no attempts have been made to date in this area.

CONCLUSIONS AND RECOMMENDATIONS:

This well appears to have excellent potential for production of gas and possibly oil from the "McLouth Sand". Structurally the well is very similar to the J. Noll #1-84. The following table is presented to allow this well to be compared to surrounding wells that have been drilled recently.

	Strange #1-85	J. Noll #1-84	L. Noll #1-85	Sedlack #1-84
Hushpuckney Sh.	+278	+293	+303	+281
Marmaton Gp.	+141	+156	+167	+191
Cherokee Sh.	+50	+60	+70	+49
McLouth Sd.	-413	-409	-402	-407
Mississippian Lm.	-445	-449	-424	-448

In a well such as this one, an attempt to produce the Miss-

issippian should be made either before eventual abandonment of the well or as a first attempt with the McLouth serving as a bailout zone. The fracture porosity present in the Mississippian will not be shown on the porosity logs and thus the apparent porosity is undoubtly less than what is actually present. Gas may be present in these fractures as well as oil.

Should additional information be required, please contact me.

Respectfully submitted,

George E. Petersen C.P.G.S.
DEACON GEOLOGY INC.

mrp/GEP