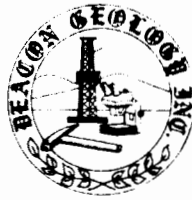


Computer Inventoried

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GEOLOGISTS REPORT

for

Ron Scott #3-84
SW4, SE4, NW4, Sec. 25, T9S, R19E
Jefferson County, Kansas

December 1984

by

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

DEACON GEOLOGY INC.



professional geologists

GEOLOGISTS REPORT

Ron Scott #3-84

December 11, 1984: Called to wellsite @ 11:30 AM.

December 12, 1984: Released from wellsite @ 5:25 PM.

Elevation: 1144 G.L. (Topo) All measurements from G.L.

Formation Tops:	Log Depth	Datum	Thickness
*Hushpuckney Sh.	874	+270	---
Marmaton Gp.	1,012	+132	93'
Cherokee Gp.	1,105	+39	511'
"Upper McLouth Sd."	1,563	-419	16'
"Lower McLouth Sd."	1,593	-449	22'
Mississippian Lm.	1,616	-472	---
RTD	1,655		
LTD	1,659		

*Used as the base of the Kansas City Group for all of the wells drilled by Reese Exploration Inc. to date.

Sample returns were examined 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 the drilling time log, sample returns, and the Neutron-Density Porosity Log. There was no visible evidence of the presence of hydrocarbons in any of the geologic units above the Cherokee Group.

CHEROKEE GROUP:

There are several sands within the Cherokee Group that show some evidence of a gas effect on the Neutron-Density Porosity cross-plot. The tops of these sands are located at 1232, 1307, 1348, 1384, 1502 and 1550. There were no shows of oil in any of these intervals; however, there were increased Rt values in parts of each sand which suggest the presence of hydrocarbons.

The "Upper McLouth Sand" was reached at a drilled depth of 1563 feet (-419). The sand is a medium to coarse grained white to tan quartz sandstone which contained oil staining, free black oil and a strong odor through the lower part of the sand. There

was faint fluorescence.

The "Lower McLouth Sand" was topped at a logged depth of 1593 feet (-449). The upper part of this sand was shaly at the top and decreased in shale content until a clean sand was found at 1603. The lower part of this sand is a coarse clear quartz sand which contained abundant shows of heavy black free oil. There was a rainbow on the pit during the drilling of this interval. The oil exhibited a slight fluorescence and faint odor. Application of trichlorethane to samples from both the upper and lower sands yielded streaming cuts. Upon drying, samples from both sands became heavily oil stained.

Log calculations for the "Upper and Lower McLouth Sands" were prepared on location by Mr. Bill Saric of Great Guns using the following values: $R_w = .2$, $M = 1.8$.

Interval	ϕ	Rt	Sw
1564-66	17	6	90
66-68	13	6	100
68-70	11	6	100
70-72	12	7	100
72-74	13	6	100
74-76	15	6	100
76-78	15	6	100
78-80	8	7	100
1594-96	13	7	100
96-98	13	7	100
98-1600	13	8	100
1600-02	19	10	62
02-04	21	15	46
04-06	26	20	34
06-08	24	16	40
08-10	23	15	43
10-12	24	38	26
12-14	22	28	33
14-16	19	35	34

The upper sand and the top six feet of the lower sand calculate as 100% wet; however, it should be noted that the

shale content can adversely affect the calculations by giving an erroneously low R_t value which gives a high S_w value and low hydrocarbon saturation value. The very strong odor and show of oil in the upper sand indicate the presence of hydrocarbons and should be carefully evaluated before abandoning this zone.

The good cross-over on the log and good S_w values in the "Lower McLouth" make this sand the best candidate for a completion attempt. It appears from available data that this sand should produce gas in economical quantities.

MISSISSIPPISN LIME:

The Mississippian Lime was topped at a log depth of 1616 (-472) where a tan, semi-lithographic limestone was found. Fragments also included white to tan fragmental limestone and abundant shale. It is probable that the upper part of the lime is a heavily weathered and possibly reworked zone. There were no indications of hydrocarbons in any of the samples from the drilled portion of the Mississippian. This interval has no potential for production in this well.

CONCLUSIONS AND RECOMMENDATIONS:

The "Lower McLouth Sand" appears to have the best potential to produce gas, and possibly some oil and water. The "Upper McLouth" and sands above it should be carefully examined for gas before eventual abandonment of the well. The shale content in these sands will cause lower R_t values and thus the S_w values will appear much higher than what they actually are.

The mud system was kept under much better control in this well than in some of the previous wells. The cost of the mud may run a little higher, however, the end results when the well is put into production will more than offset this.

The sample catching methods and preparation were discussed with Mr. Michaels on location, and improvements in both the catching and washing facilities should be upgraded before the drilling program resumes in the spring.

A comparison of the nearby wells to this well is given in the following table.

Well name	BKC*	Marm.	Chero.	UMc	LMc	Miss.
**R. Scott #3-84	+270	+132	+39	-419	-449	-472
R. Scott #1-84	+266	+129	+28	-436	-476	-491
R. Scott #2-83	+273	+130	+39	-422	-459	-471
S.Bracksick#1-84	+290	+128	+32	-435	-462	-480
Shepard #1-84	+273	+132	+35	-416	---	-462
G. Kelly #1-84	+274	+130	+31	-433	-471	-523

*Hushpuckney Sh.

**This well.

All wells which have not been accurately surveyed in both for location and elevation in this drilling program to date, should be surveyed in before drilling resumes. Elevations taken from a topographic map are not accurate enough to allow for the detailed subsurface mapping which must be done.

Should additional information be required please contact me.

Respectfully submitted,

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

DEACON GEOLOGY IND.