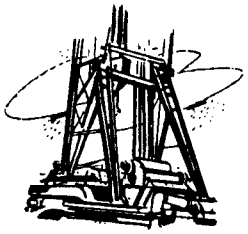
15-093-21171 31-22s-37w



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GEOLOGIC REPORT
BEREXCO INC. #4-31 Modie
C NW NE SW Sec. 31-22s-37w
Kearny County, Kansas

Spud date: February 20, 1991
Comp. date: March 1, 1991

FORMATION TOPS

Elevation: 3321' KB
3319' DF
3309' GL

Structural Comparison Well: BEREXCO INC. #1-31 George T.
C NE SE SW Sec. 31-23s-37w
(Producing well 1475' south/southeast)

Formation	Modie #4-31 Sample Tops	Log Tops (Datum)	Comp. to #1-31 George T.
Base/Heebner	3803	3798 (- 477)	14' low
Toronto	3818	3814 (- 493)	14' low
Lansing	3858	3854 (- 533)	14' low
Lansing "B" Zn.	3909	3904 (- 583)	9' low
Lansing "E" Zn.	4013	4009 (- 688)	11' low
Lansing "I" Zn.	4128	4122 (- 801)	7' low
Kansas City "A"	4182	4180 (- 859)	13' low
Kansas City "C"	4274	4274 (- 953)	11' low
BKC	4305	4304 (- 983)	9' low
Marmaton	4338	4331 (-1010)	2' low
Pawnee	4436	4432 (-1111)	13' low
Fort Scott	4470	4466 (-1145)	12' low
Cherokee	4480	4478 (-1157)	14' low
Atoka	4614	4610 (-1289)	11' low
Morrow	4736	4732 (-1411)	10' low
Morrow Sand	4740	4736 (-1415)	10' low
St. Genevieve	4866	4875 (-1554)	22' low
St. Louis	4929	4938 (-1617)	24' high
Total Depth	5050	5049 (-1728)	---

#4-31 Modie
C NW NE SW Sec. 31-22s-37w
Kearny County, Kansas

ZONES OF INTEREST

All the following depths are electrical log depths.

TORONTO 3814 - 3820

Limestone, white, finely crystalline, cherty, fossiliferous, tripolitic with good intercrystal, interfossil and weathered vuggy porosity. No show.

LANSING "A" ZONE 3860 - 3870

Limestone, white, dolomitic, finely crystalline, very fossiliferous, oolitic, oomoldic with good intercrystal, interoolitic and oomoldic porosity. No show.

LANSING "B" ZONE 3916 - 3924

Limestone, gray to buff, very finely crystalline, oomoldic with small lined molds, good oomoldic porosity. No show.

LANSING "D" ZONE 3983 - 3990

Limestone, white, very finely crystalline, chalky, oolitic and oomoldic, good oomoldic porosity. No show.

LANSING "E" ZONE 4011 - 4016

Limestone, buff, finely crystalline, oolitic, good interoolitic porosity. No show.

LANSING "F" ZONE 4032 - 4036

Limestone, white, finely crystalline, dolomitic, micro-oomoldic with good intercrystal and oomoldic porosity. No show.

LANSING "I" ZONE 4124 - 4128

Dolomite, buff, finely crystalline, oomoldic with medium to large molds, good intercrystal and excellent oomoldic porosity. No show.

KANSAS CITY "A" ZONE 4182 - 4187

Dolomite, buff, finely crystalline, fossiliferous, oomoldic, good intercrystal, interfossil and oomoldic porosity. No show.

KANSAS CITY "C" ZONE 4274 - 4284

Limestone, buff, very finely crystalline, fossiliferous, hard, rugose, oomoldic with very small molds, good oomoldic and weathered vuggy porosity. No show.

MORROW 4736 - 4762

Sand, clear to gray with a reddish tinge, variegrained, mostly medium to coarse grained, ill sorted, angular, non-calcareous, mostly clean with very small amounts of fluorite, pyrite, magnetite, glauconite, mica and red mudstone, soft and friable, fair intergrain porosity; light even stain, good show of free oil, faint odor, dull gold fluorescence, flush cut. 147 unit gas increase.

DRILL STEM TEST #1 4712 - 4750

Tool open 75 minutes.
Gas to surface 4 minutes into second opening. Gauged 8.2 mcfgpd 30 minutes into second opening, decreased to TSTM at end of second opening.

Recovered: 1020 feet of clean gassy oil
540 feet of muddy gassy oil

IFP	303 - 312 PSI	15 min.
ISIP	366 PSI	30 min.
FFP	355 - 387 PSI	60 min.
FSIP	387 PSI	120 min.
HH	2324 - 2302 PSI	
BHT	119°	

REMARK AND RECOMMENDATIONS

It was recommended that 5½" production casing be set near bottom and that the well be further tested.

Charles B. Spradlin, Sr.
March 6, 1991