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GEOLOGICAL REPORT

Horizon Oil & Gas Co. of Texas
and
Edwin L. Cox

Hallock G1-36
Sec. 36-32S-29W
Meade County, Kansas

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by

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Meade County, Kansas
North Borchers Extension

Commencement Date: 6/18/66
Completion Date: 6/29/66
Elevation: 2620 K.B.
2617 D.F.
2608 G.L.

Casing:
Surface: 8 5/8" @ 1435'
Production: None

Total Depth: 5825 Driller
5816 Schlumberger
Contractor: Moran Bros., Rig #2
Electrical Surveys: Schlumberger:
Dual Induction-
Laterolog and
Compensated Formation
Density-Caliper with
Gamma Ray.

Production: Dry

Drilling was witnessed and samples examined by the writer through the Drum limestone from approximately 4800-4850 and the Morrow and Chester sections from approximately 5600 to total depth. Samples were examined from the Toronto and Lansing intervals as well.

FORMATION TOPS AND STRUCTURAL COMPARISONS

	<u>Horizon and Cox Hallock #1-36C</u>	<u>Horizon and Cox Hallock #1-36B</u>
Toronto	4425 (-1805)	4406 (-1824)
Lansing	4562 (-1942)	4526 (-1944)
Drum	4832 (-2212)	4799 (-2217)
Marmaton	5192 (-2572)	5150 (-2568)
Cherokee	5353 (-2733)	5318 (-2736)
Morrow	5640 (-3020)	5606 (-3024)
Chester	5681 (-3061)	5656 (-3074)
Chester "C" Zone	5749 (-3129)	5729 (-3147)
Base of Chester "C" Zone	5784 (-3164)	5746 (-3164)

SAMPLE DESCRIPTIONS AND DRILL STEM TESTS

No shows of oil were detected in the samples from the Toronto or Lansing, with the possible exception of a trace of gillsonite or dead

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oil residue observed in the Toronto at 4436-4444. This limestone was described as light gray, very slightly chalky, granular to crystalline lime with slight to fair visible porosity.

Drum Limestone
4832-4842

Light buff to tan very fine crystalline, finely oolitic and oolitic lime. Good oolitic porosity. No show of oil, no fluorescence or cut.

Because of the favorable log calculations of this zone in nearby wells, the decision was made to run a drill stem test in order to evaluate its productive potential.

D.S.T. #1 4827-4850 = 4819-4842 log depths.
(Eight feet of up-hole depth correction between driller's depths and log depths is necessary at this point.)
Tool open 15 minutes, shutin 30 minutes, open 60 minutes, shutin 45 minutes.
Tool opened with weak blow increasing to good. No gas to surface.
Recovered 720' muddy salt water.
Flow pressure = 58-389
Initial shutin pressure = 1617 in 30 minutes.
Final shutin pressure = 1617 in 45 minutes.

Morrow

5644-5649

Gray, fine grained, micaceous, friable sand. Poor to fair visible porosity. No shows, fluorescence or cut.

5651-5668

Gray to clear, silty and micaceous sand as above. Shaley and limey for most part. Poor visible porosity. Some tan, crystalline, slightly sandy, slightly glauconitic, tight limestone.

The Morrow section was covered by D.S.T. #2 5634-5685, which was a straddle test run after logs at total depth.

D.S.T. #2 5634-5685 straddle test. Total depth 5816.
Tool open 60 minutes, shutin 75 minutes.
Tool opened with very weak blow throughout test. No gas to surface.
Recovered 20' of drilling mud with no shows.
Flow pressure = 8-17
Bottom hole pressure = 33 in 75 minutes.

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Mississippian Chester

5681-5816 T.D. The Chester consisted of white to gray and some brown, crystalline, chalky, fossiliferous tight limestones with no shows and interbedded gray, black and some green shales.

Conclusion:

Due to the lack of shows of oil or gas and the poor reservoir conditions in the Morrow, the hole was plugged and abandoned as a dry hole.

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