

GEOLOGICAL REPORT

FOR

DALE S. BROWN

RUMP NO. B-1

330' FNL, 990' FWL NE/4 SECTION 6, T 21S, R 5W

McPHERSON COUNTY, KANSAS

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GEOLOGICAL REPORT

The Rump No. B-1 was drilled as a field development well to evaluate the "Mississippi" petroleum reservoir. A geologist from Keplinger Operating Company was on location from 2000 feet to total depth, 3513 feet, to examine drill cutting for oil or gas shows. Total depth was 43 feet into the Chattanooga Shale. A copy of the geologist's "strip log" is attached, along with the well-spot map on Section 6.

Drilling time breaks occurred and samples were circulated for examination at the intervals listed below.

Lansing: "Oolitic Zone" 2850 to 2880 feet, driller's depth

Samples were described as follows: Limestone - tan, oolitic, many surface ooids missing, trace of intercrystalline matrix porosity, no oil stain, medium, even, golden yellow fluorescence, no cut with solvent.

"Mississippi":

The top of the "Mississippi" in this area was picked on a drilling break at 3357 feet, driller's depth. Drilling was stopped and samples circulated for examination at 3370 feet. Samples were described as follows:

75 percent Chert: white, dense, except for occasional pin point vug; oil staining was observed on a few pieces, pieces with oil stain had medium gold fluorescence and a fast streaming cut with solvent.

25 percent Tripoli: grey-white, spotty good intergranular porosity, with oil staining; even golden yellow fluorescence from porosity zones. Slow streaming golden cut with solvent.

The quality of the oil show decreased after the 30-minute sample.

The production history of nearby wells was justification to run pipe for production test in the "Mississippi". There were no cores or drill stem tests.

STRUCTURAL COMPARISON  
 (Subsea Depths)

Formation/Member	Rump No. B-1 1534' KB (Feet)	Rump No. 1 1526' KB (Feet)	Rump No. 3 1524' KB (Feet)	Rump No. 4-A 1521' KB (Feet)
Lansing Group	-1204	-1206	-1206	-1209
Stark Shale	-1510	-1510	-1506	-1515
Pleasanton Group	-1570	-1573	-1566	-1577
Marmaton Group	-1598	-1601	-1596	-1605
Cherokee Group	-1706	-1708	-1706	-1717
"Mississippi"	-1826	-1805	-1799	-1862
Chattanooga Shale	-1936	--	--	--
Total Depth	-1979	-1877	-1870	-1934

ELECTRIC LOG TOPS

GR Elevation: 1529 feet  
KB Elevation: 1534 feet  
Picked by: Walter Edwards

Stage	Group	Formation/Member	Depth (Feet)	Subsea (Feet)
Virgilian	Wabaunsee	Howard Lime	2106	(- 572)
		Topeka	2220	(- 686)
	Shawnee	Heebner Shale	2532	(- 998)
		Toronto Lime	2560	(-1026)
		Douglas	2565	(-1031)
		Brown Lime	2716	(-1182)
Missourian	Lansing		2738	(-1204)
		Kansas City		
	Pleasanton (Base of Kansas City)	Stark Shale	3044	(-1510)
		Hushpuckney Shale	3079	(-1545)
Des Moinesian	Marmaton		3104	(-1570)
			3132	(-1598)
		Cherokee	3240	(-1706)
	Pennsylvanian Basal Conglomerate		3354	(-1820)
	Osage ("Mississippi")		3360	(-1826)
	Kinderhook		3470	(-1936)
Total depth	Driller		3510	(-1976)
		PetroLog	3513	(-1979)

Logging Program:

Radiation Guard Log - 2000 to 3512 feet  
Compensated Density - 2000 to 3512 feet



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DALE S. BROWN	
RUMP LEASE	
McPHERSON CO. KANSAS	
T 21S-R 5W	Scales 1"=660'
<b>K</b> KEPLINGER OPERATING CO. TULSA HOUSTON DENVER	

