



OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS - PHONE HE1-2650

September 9, 1968

Stubbs & Fleming
680 Fourth National Building
Wichita, Kansas 67202

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Morris Lease, Well No. 1, Woodson County, Kansas, and submitted to our laboratory on September 3, 1968.

This core is from virgin territory and was sampled and the samples sealed in plastic bags and submitted to our laboratory by a representative of Oilfield Research Laboratories.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:dp

5 c. - Wichita, Kansas

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GENERAL INFORMATION & SUMMARY

Company Stubbs & Fleming Lease Morris Well No. 1

Location 220' EWL 220' SNL NW NW NW

Section 15 Twp 25S Rge 16E County Woodson State Kansas

Name of Sand	Lower Squirrel
Top of Core	936.0
Bottom of Core	956.0
Top of Sand	936.0
Bottom of Sand	944.0
Total Feet of Permeable Sand	8.0
Total Feet of Floodable Sand	

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 2	2.5	2.5
2 - 15	2.0	4.5
15 - 25	0.6	5.1
25 & above	2.9	8.0

Average Permeability Millidarcys	19.7
Average Percent Porosity	18.6
Average Percent Oil Saturation	57.8
Average Percent Water Saturation	24.8
Average Oil Content, Bbls./A. Ft.	853.
Total Oil Content, Bbls./Acre	6,819.
Average Percent Oil Recovery by Laboratory Flooding Tests	
Average Oil Recovery by Laboratory Flooding Tests, Bbls./A. Ft.	
Total Oil Recovery by Laboratory Flooding Tests, Bbls./Acre	
Total Calculated Oil Recovery, Bbls./Acre	
Packer Setting, Feet	
Viscosity, Centipoises @	
A. P. I. Gravity, degrees @ 60 °F	
Elevation, Feet	

-LOG-

Company Stubbs & Fleming Lease Morris Well No. 1

<u>Depth Interval,</u> <u>Feet</u>	<u>Description</u>
936.0 - 937.0	Dark brown fine grained micaceous finely laminated shaly sandstone.
937.0 - 941.5	Dark brown fine grained micaceous sandstone.
941.5 - 942.5	Dark brown fine grained micaceous carbonaceous sandstone.
942.5 - 944.0	Dark carbonaceous sandstone.
944.0 - 956.0	Gray sandy shale.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Stubbs & Fleming Lease Morris Well No. 1

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbls. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	936.1	13.6	29	57	86	306	0.18	1.0	1.0	306	0.18
2	937.1	16.3	47	40	87	595	21.	0.6	1.6	357	12.60
3	938.1	20.2	61	18	79	957	49.	1.0	2.6	957	49.00
4	939.1	19.6	69	20	89	1,050	12.	1.0	3.6	1,050	12.00
5	940.1	20.6	59	20	79	945	32.	1.0	4.6	945	32.00
6	941.1	19.7	52	24	76	796	45.	0.9	5.5	716	40.50
7	942.1	20.1	60	18	78	938	11.	1.0	6.5	938	11.00
8	943.1	18.2	73	13	86	1,031	0.45	1.5	8.0	1,550	0.68

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company <u>Stubbs & Fleming</u>		Lease <u>Morris</u>		Well No. <u>1</u>	
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.		
936.0 - 937.6	1.6	8.0	12.78		
937.6 - 944.0	6.4	22.7	145.18		
936.0 - 944.0	8.0	19.7	157.96		

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Percent Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
936.0 - 937.6	1.6	14.6	35.8	50.7	413	663
937.6 - 944.0	6.4	19.6	63.4	18.3	963	6,156
936.0 - 944.0	8.0	18.6	57.8	24.8	853	6,819