



# OILFIELD RESEARCH LABORATORIES

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

700 NORTH MISSION - OKMULGEE, OKLAHOMA - PHONE SK6-4444

Chanute, Kansas

March 20, 1965

Fred E. Wood & Associates  
Suite 204, 200 Sixteenth Street  
Denver, Colorado

Gentlemen:

Enclosed herewith are the results of tests run on the Rotary core taken from the Long Lease, Well No. 41-WJ, Wilson County, Kansas, and submitted to our laboratory on March 18, 1965.

This core was sampled and the samples sealed in plastic bags by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

*Benjamin R. Pearman*  
Benjamin R. Pearman *rf*

BRP:rf

4 c. - Denver, Colorado  
1 c. - A.W. Bailey

# Oilfield Research Laboratories

## GENERAL INFORMATION & SUMMARY

Company Fred E. Wood & Associates Lease Long Well No. 41-WJ

Location \_\_\_\_\_

Section \_\_\_\_\_ Twp. \_\_\_\_\_ Rge. \_\_\_\_\_ County Wilson State Kansas

Name of Sand	Bartlesville
Top of Core	761.0
Bottom of Core	777.2
Top of Sand (Tested)	762.0
Bottom of Sand (Tested)	777.2
Total Feet of Permeable Sand	10.8
Total Feet of Floodable Sand	

**Distribution of Permeable Sand:**  
Permeability Range  
Millidarcys

	Feet	Cum. Ft.
0 - 2	3.8	3.8
2 - 8	4.6	8.4
8 & above	2.4	10.8

Average Permeability Millidarcys	4.9
Average Percent Porosity	14.8
Average Percent Oil Saturation	23.0
Average Percent Water Saturation	49.4
Average Oil Content, Bbls./A. Ft.	263.
Total Oil Content, Bbls./Acre	3,059.
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	

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Company Fred E. Wood & Assoc. Lease Long Well No. 41-WJ

Depth Interval, Description  
Feet

761.0 - 762.0 - Sandy shale.

762.0 - 771.0 - Light brown, slightly shaly sandstone.

771.0 - 774.6 - Shale.

774.6 - 777.2 - Light brown, slightly shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Fred E. Wood & Assoc. Lease Long Well No. 41-WJ

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	762.1	15.3	26	53	79	309	5.7	0.6	0.6	185	3.42
2	763.1	15.2	21	53	74	248	9.9	1.0	1.6	248	9.90
3	764.1	12.9	29	53	82	290	4.8	1.0	2.6	290	4.80
4	765.1	15.2	19	56	75	224	7.0	1.0	3.6	224	7.00
5	766.1	13.3	13	58	71	135	1.3	1.0	4.6	135	1.30
6	767.1	16.2	22	60	82	277	0.22	1.0	5.6	277	0.22
7	768.1	15.2	18	57	75	212	6.0	1.0	6.6	212	6.00
8	769.1	16.2	27	50	77	340	3.7	1.0	7.6	340	3.70
9	770.1	16.5	26	43	69	333	10.	1.4	9.0	466	14.00
10	774.8	14.8	19	34	53	218	1.0	0.8	9.8	175	0.80
11	775.8	14.3	26	38	64	289	1.8	1.0	10.8	289	1.80
12	776.8	11.3	31	36	67	272	Imp.	0.8	11.6	218	-
								Total		3,059	

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**SUMMARY OF PERMEABILITY & SATURATION TESTS**

**TABLE III**

Company Fred E. Wood & Associates Lease Long Well No. 41-WJ

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
762.0 - 777.2	10.8	4.9	52.94

  

Depth Interval, Feet	Feet of Core Analyzed	Average Percent Porosity	Average Percent Oil Saturation	Average Water Saturation	Average Oil Content Bbl./A. Ft.	Total Oil Content Bbls./Acre
762.0 - 777.2	11.6	14.8	23.0	49.4	263	3,059