

OILFIELD RESEARCH LABORATORIES

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

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

Chanute, Kansas

January 4, 1965

21-30-10E

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

Gentlemen:

Enclosed herewith are the results of tests run on the Cable Tool core taken from the Barnes Lease, Well No. 14-IEP, Wilson County, Kansas, and submitted to our laboratory on December 30, 1964.

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

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Benjamin R. Pearman
Benjamin R. Pearman

BRP:rf

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

BARNES 14-IEP

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Fred E. Wood & Assoc. Lease Barnes Well No. 14-IEP

Location _____

Section 21 Twp. 30S Rge. 16E County Wilson State Kansas

Name of Sand - - - - - Bartlesville

Top of Core - - - - - 760.1

Bottom of Core - - - - - 775.6

Top of Sand - - - - - (Tested) 760.1

Bottom of Sand - - - - - 775.6

Total Feet of Permeable Sand - - - - - 12.1

Total Feet of Floodable Sand - - - - -

Distribution of Permeable Sand:
Permeability Range
Millidarcys

Feet

Cum. Ft.

0 - 5	3.0	3.0
5 - 20	5.1	8.1
20 - 100	3.0	11.1
100 & above	1.0	12.1

Average Permeability Millidarcys - - - - - 30.4

Average Percent Porosity - - - - - 16.5

Average Percent Oil Saturation - - - - - 32.6

Average Percent Water Saturation - - - - - 48.9

Average Oil Content, Bbls./A. Ft. - - - - - 420.

Total Oil Content, Bbls./Acre - - - - - 6,506

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 - - - - -

OILFIELD RESEARCH LABORATORIES

-LOG-

Company Fred E. Wood & Assoc. Lease Barnes Well No. 14-IEP

Depth Interval, Description
Feet

760.1 - 762.9 - Gray shaly sandstone.

762.9 - 775.0 - Light brown, shaly sandstone.

775.0 - 775.6 - Dark carbonaceous sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Fred E. Wood & Assoc. Lease Barnes Well No. 14-IEP

Sample No.	Depth, Feet	Effective Porosity Percent	Percent Saturation			Oil Content Bbbs. / A Ft.	Perm., Mill.	Feet of Sand		Total Oil Content	Perm. Capacity Ft. X md.
			Oil	Water	Total			Ft.	Cum. Ft.		
1	760.6	11.2	30	66	96	261	-	1.4	1.4	365	-
2	762.0	11.0	38	58	96	324	-	1.4	2.8	454	-
3	763.4	17.3	31	50	81	416	5.2	1.1	3.9	458	5.72
4	764.4	15.1	31	45	76	363	12.	1.0	4.9	363	12.00
5	765.4	15.6	28	45	73	339	4.9	1.0	5.9	339	4.90
6	766.5	16.0	36	51	87	446	1.7	1.0	6.9	446	1.70
7	767.5	15.8	42	42	84	514	46.	1.0	7.9	514	46.00
8	768.5	22.5	27	42	69	471	11.	1.0	8.9	471	11.00
9	769.5	17.4	32	46	78	431	17.	1.0	9.9	431	17.00
10	770.5	19.4	28	45	73	421	118.	1.0	10.9	421	118.00
11	771.5	19.0	30	42	72	442	80.	1.0	11.9	442	80.00
12	772.5	21.6	34	44	78	569	54.	1.0	12.9	569	54.00
13	773.5	16.6	21	58	89	399	4.7	1.0	13.9	399	4.70
14	774.5	16.3	31	49	80	391	13.	1.0	14.9	391	13.00
15	775.3	15.6	61	33	94	738	Imp.	0.6	15.5	443	0.00
								Total	-----	6,506	

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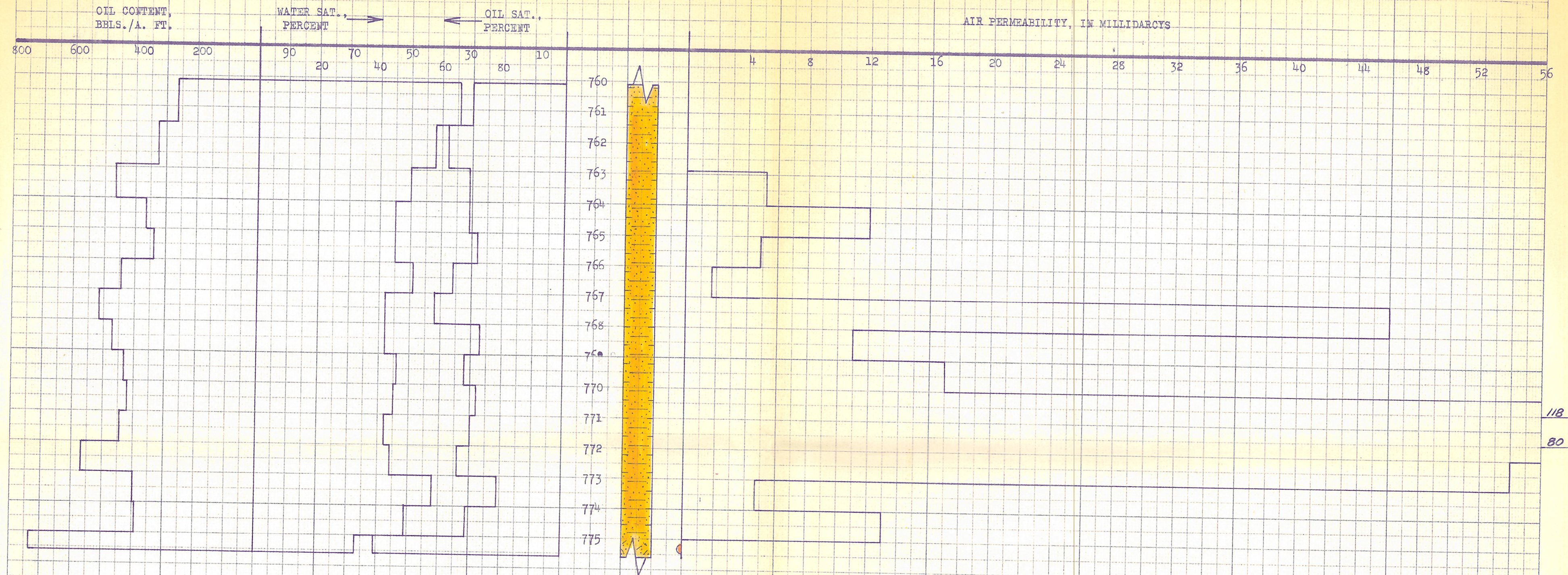
SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Fred E. Wood & Assoc. Lease Barnes Well No. 14-IEP

Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
760.1 - 767.0	4.1	5.9	24.32
767.0 - 775.6	8.0	43.0	343.70
760.1 - 775.6	12.1	30.4	368.02

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
760.1 - 767.0	6.9	14.0	32.6	53.5	352	2,425
767.0 - 775.6	8.6	18.4	32.6	45.0	474	4,081
760.1 - 775.6	15.5	16.5	32.6	48.9	420	6,506



K&M STANDARD © CROSS SECTION
 MILLIMETER

SHALY SANDSTONE
 CARBONACEOUS SANDSTONE
 IMPERMEABLE TO AIR

FRED E. WOOD & ASSOC.

BARNES LEASE WELL NO. 14-IEP
 WILSON COUNTY, KANSAS

DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY, PERCENT	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBL./A. FT.	TOTAL OIL CONTENT BBL./ACRE	AVG. AIR PERMEABILITY MILLIDARCY
760.1 - 767.0	6.9	14.0	32.6	53.5	352	2,425	5.9
767.0 - 775.6	8.6	18.4	32.6	45.0	474	4,081	43.0
760.1 - 775.6	15.5	16.5	32.6	48.9	420	6,506	30.4