

OILFIELD RESEARCH LABORATORIES

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

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

Chanute, Kansas

May 13, 1965

33-30-16E

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 Wolfe Lease, Well No. 43-Z, Wilson County, Kansas, and submitted to our laboratory on May 8, 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

John L. Pate
John L. Pate

JLP:rf

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

Wolfe 43-Z

Oilfield Research Laboratories

GENERAL INFORMATION & SUMMARY

Company Fred E. Wood & Associates Lease Wolfe Well No. 43-Z

Location _____

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

Name of Sand	-	Bartlesville
Top of Core	-	763.0
Bottom of Core	-	783.3
Top of Sand	-	763.0
Bottom of Sand	-	782.4
Total Feet of Permeable Sand		16.3
Total Feet of Floodable Sand		-

Distribution of Permeable Sand:
Permeability Range
Millidarcys

	Feet	Cum. Ft.
0 - 1	4.3	4.3
1 - 10	10.6	14.9
10 & above	1.4	16.3

Average Permeability Millidarcys	-	7.2
Average Percent Porosity	-	14.3
Average Percent Oil Saturation	-	40.3
Average Percent Water Saturation	-	37.4
Average Oil Content, Bbls./A. Ft.	-	443.
Total Oil Content, Bbls./Acre	-	8,319.
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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-LOG-

Company Fred E. Wood & Assoc. Lease Wolfe Well No. 43-Z

Depth Interval, Description
Feet

763.0 - 769.0 - Brown shaly sandstone

769.0 - 770.3 - Laminated sandstone and shale.

770.3 - 780.6 - Brown shaly sandstone.

780.6 - 781.4 - Dark carbonaceous, shaly sandstone.

781.4 - 782.0 - Sandy shale.

782.0 - 783.3 - Dark carbonaceous, shaly sandstone.

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RESULTS OF SATURATION & PERMEABILITY TESTS

TABLE 1-B

Company Fred E. Wood & Associates Lease Wolfe Well No. 43-Z

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.		
1	763.1	12.4	40	45	384	1.0	0.6	0.6	230	0.60
2	764.1	11.5	33	42	294	0.21	1.0	1.6	294	0.21
3	765.1	13.7	33	46	350	2.5	1.0	2.6	350	2.50
4	766.1	14.4	33	47	368	8.5	1.0	3.6	368	8.50
5	767.1	15.8	33	42	403	9.4	1.0	4.6	403	9.40
6	768.1	17.2	24	47	320	46.	1.4	6.0	448	64.40
7	769.1	11.8	45	40	411	Imp.	1.3	7.3	535	0.00
8	771.1	15.7	47	39	572	0.31	1.3	8.6	744	0.40
9	772.1	12.6	48	27	469	5.4	1.0	9.6	469	5.40
10	773.1	8.6	41	41	273	0.38	1.0	10.6	273	0.38
11	774.1	13.2	57	29	583	2.0	1.0	11.6	583	2.00
12	775.1	13.7	51	33	542	3.6	1.0	12.6	542	3.60
13	776.1	17.4	44	34	594	3.0	1.0	13.6	594	3.00
14	777.1	18.4	32	29	456	4.3	1.0	14.6	456	4.30
15	778.1	14.7	51	33	581	6.5	1.0	15.6	581	6.50
16	779.1	17.3	41	27	550	5.4	1.0	16.6	550	5.40
17	780.1	14.5	33	36	371	0.40	1.0	17.6	371	0.40
18	781.1	15.1	41	35	480	Imp.	0.8	18.4	384	0.00
19	782.1	10.8	43	36	360	Imp.	0.4	18.8	144	0.00
							Total		8,319	

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SUMMARY OF PERMEABILITY & SATURATION TESTS

TABLE III

Company Fred E. Wood & Associates Lease Wolfe Well No. 43-Z

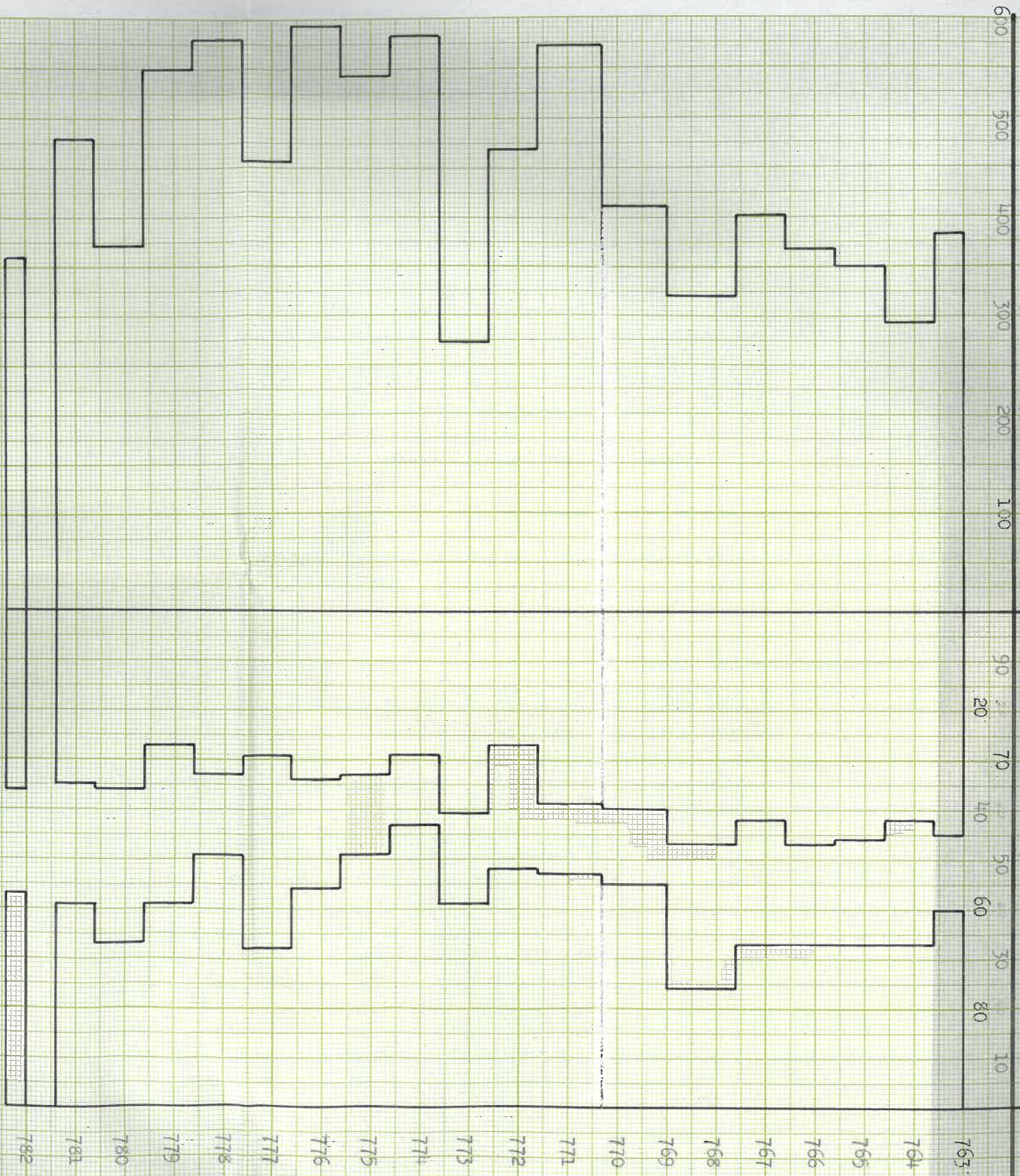
Depth Interval, Feet	Feet of Core Analyzed	Average Permeability, Millidarcys	Permeability Capacity Ft. x Md.
763.0 - 773.6	9.3	9.9	91.79
773.6 - 782.4	7.0	3.6	25.20
763.0 - 782.4	16.3	7.2	116.99

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
763.0 - 773.6	10.6	13.6	37.6	41.5	388	4,114
773.6 - 782.4	8.2	15.3	43.8	32.1	514	4,205
763.0 - 782.4	18.8	14.3	40.3	37.4	443	8,319

OIL CONTENT,
FBIS./A. FT.

WATER SAT.,
PERCENT

OIL SAT.,
PERCENT



SHALY SANDSTONE
CARBONACEOUS SHALY SANDSTONE

FRED E. WOOD

WOLFE LEASE

WILSON COUNTY

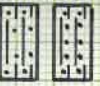
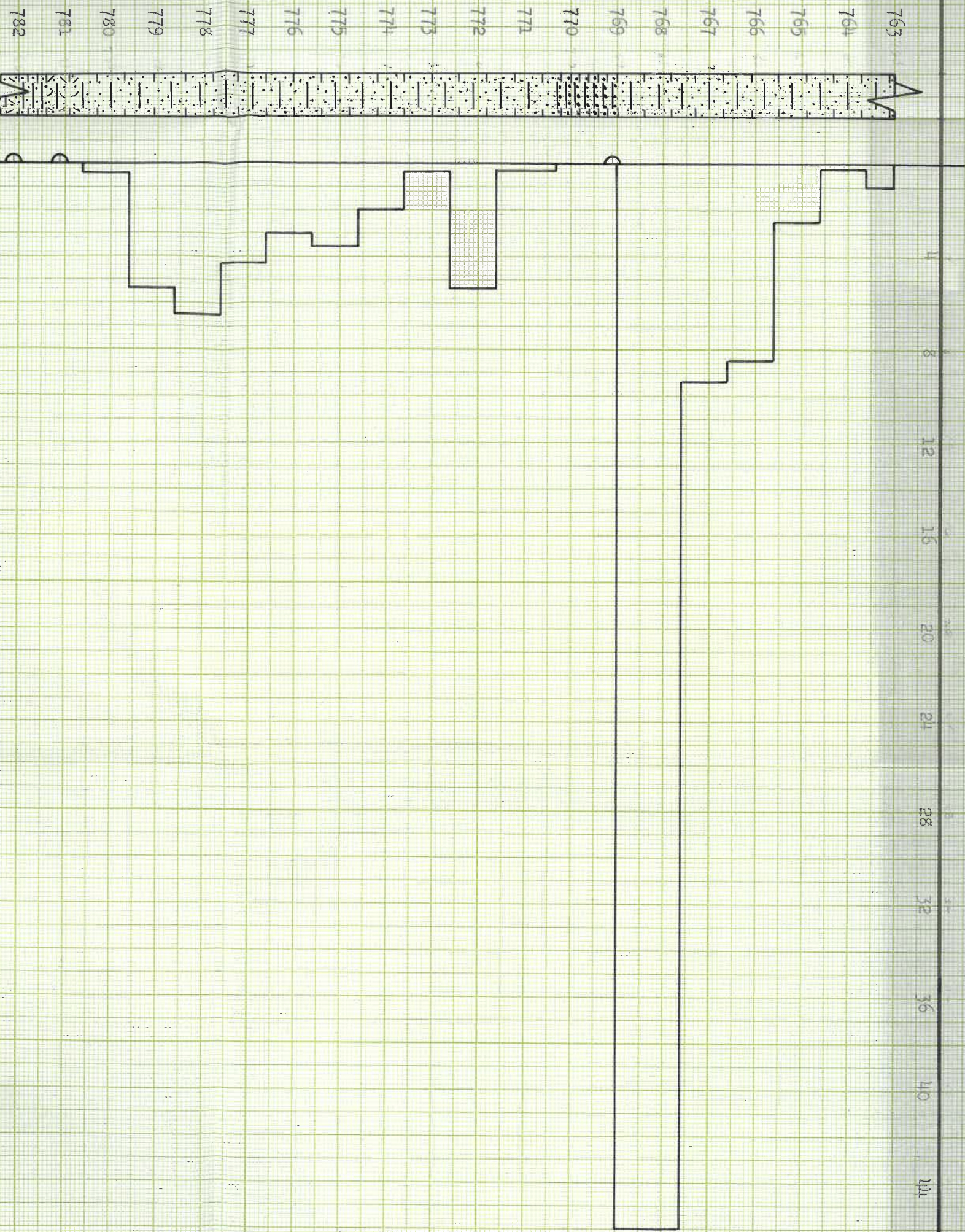
DEPTH INTERVAL, FEET	FEET OF CORE ANALYZED	AVERAGE POROSITY PERCENT	AVG. OIL SATURATION PERCENT
763.0 - 773.6	10.6	13.6	37.6
773.6 - 782.4	8.2	15.3	43.8
782.4 - 788.2	18.8	14.3	40.3

KEUFFEL & ESSER CO.
MADE IN U.S.A.

STANDARD © CROSS SECTION
MILLIMETER

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AIR PERMEABILITY, IN MILLIDARCY



LAMINATED SANDSTONE & SHALE
SANDY SHALE

○ IMPERMEABLE TO AIR

WOOD & ASSOCIATES

WILSON COUNTY, KANSAS

WELL NO. 43-2

DEPTH, FEET	AVG. OIL SATURATION PERCENT	AVG. WATER SATURATION PERCENT	AVG. OIL CONTENT BBLS./A. FT.	TOTAL OIL CONTENT BBLS./ACRE	AVG. AIR PERMEABILITY, MILLIDARCY
6	37.6	41.5	388	4,114	9.9
3	43.8	32.1	514	4,205	3.6
3	40.3	37.4	413	8,319	7.2

OILFIELD RESEARCH LABORATORIES
CHAUTAUQUE, KANSAS
MAY, 1965