



OILFIELD RESEARCH LABORATORIES

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

April 17, 1968

Russell Operating Company
614 Adolphus Tower
Dallas, Texas 75202

Gentlemen:

Enclosed herewith are the results of permeability and porosity tests run on the Rotary core taken from the Wolfe Lease, Well No. 0-1, Anderson County, Kansas, and submitted to our laboratory on April 11, 1968.

This core was sampled and submitted to the laboratory by a representative of the client.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES

Carl L. Pate

CLP:bjo

2 c. - Dallas, Texas
2 c. - Houston, Texas
1 c. - Chanute, Kansas
1 c. - Iola, Kansas

- REGISTERED ENGINEERS -

CORE ANALYSIS - WATER ANALYSIS - REPRESSURING ENGINEERING - SURVEYING & MAPPING - PROPERTY EVALUATION & OPERATION

- LOG -

Company Russell Operating Co. Lease Wolfe Well No. 0-1

<u>Depth Interval,</u>	<u>Description</u>
<u>Feet</u>	

863.0 - 865.8	- Light brown slightly shaly sandstone.
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865.8 - 866.7	- Sandy shale.
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866.7 - 867.0	- Light brown slightly shaly sandstone.
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867.0 - 869.0	- Sandy shale.
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869.0 - 881.0	- Light brown slightly shaly sandstone.
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881.0 - 887.0	- Brown slightly shaly sandstone.
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Oilfield Research Laboratories

RESULTS OF PERMEABILITY AND POROSITY TESTS

TABLE I A

Company Russell Operating Company Lease Wolfe Well No. 0-1

Sample No.	Depth Feet	Permeability Millidarcys	Feet of Core		Permeability Capacity Ft. x Md.	Percent Porosity
			Ft.	Cum. Ft.		
1	863.5	4.8	1.0	1.0	4.80	20.1
2	864.5	10.	1.0	2.0	10.00	19.5
3	865.5	7.1	0.8	2.8	5.68	20.3
4	869.5	3.9	1.0	3.8	3.90	20.0
5	870.5	0.98	1.0	4.8	0.98	15.3
6	871.5	6.5	1.0	5.8	6.50	20.2
7	872.5	2.0	1.0	6.8	2.00	15.9
8	873.5	4.2	1.0	7.8	4.20	18.4
9	874.5	5.0	1.0	8.8	5.00	18.7
10	875.5	8.0	1.0	9.8	8.00	19.8
11	876.5	4.7	1.0	10.8	4.70	18.1
12	877.5	3.9	1.0	11.8	3.90	19.0
13	878.5	6.2	1.0	12.8	6.20	19.5
14	879.5	1.3	1.0	13.8	1.30	17.2
15	880.5	8.7	1.0	14.8	8.70	19.3
16	881.5	12.	1.0	15.8	12.00	19.6
17	882.5	14.	1.0	16.8	14.00	20.3
18	883.5	17.	1.0	17.8	17.00	20.5
19	884.5	12.	1.0	18.8	12.00	19.3
20	885.5	9.5	1.0	19.8	9.50	18.7
21	886.5	6.2	1.0	20.8	6.20	14.9

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SUMMARY OF PERMEABILITY & POROSITY TESTS

TABLE II A

Company	Russell Operating Company	Lease	Wolfe	Well No.	
Depth Interval, Feet	Feet of Core Analyzed	Average Air Permeability, Millidarcys	Average Effective Permeability, Millidarcys	Permeability Capacity Ft. x Md.	Average Percent Porosity
863.0 - 880.0	13.8	4.9			18.7
880.0 - 887.0	7.0	11.3			18.9
863.0 - 887.0	20.8	7.0			18.8

PERCENT
POROSITY

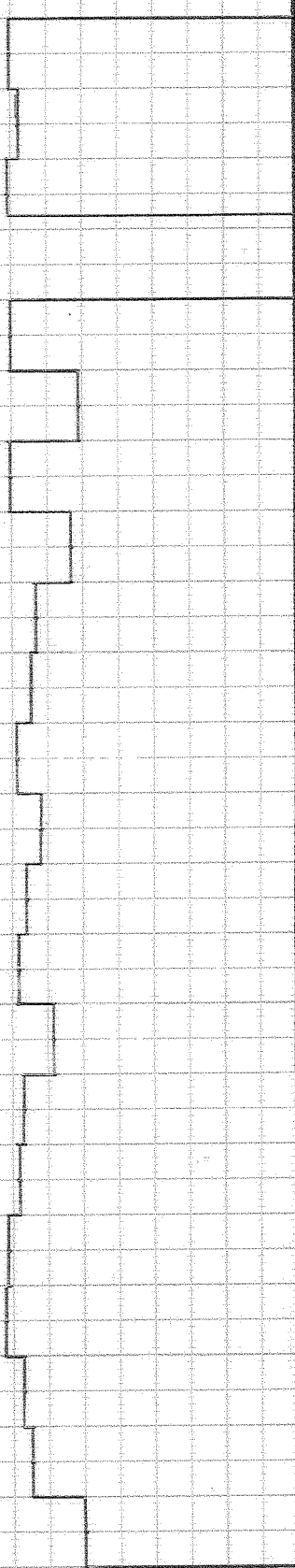
AIR PERMEABILITY, MILLIDARCYS

20 10

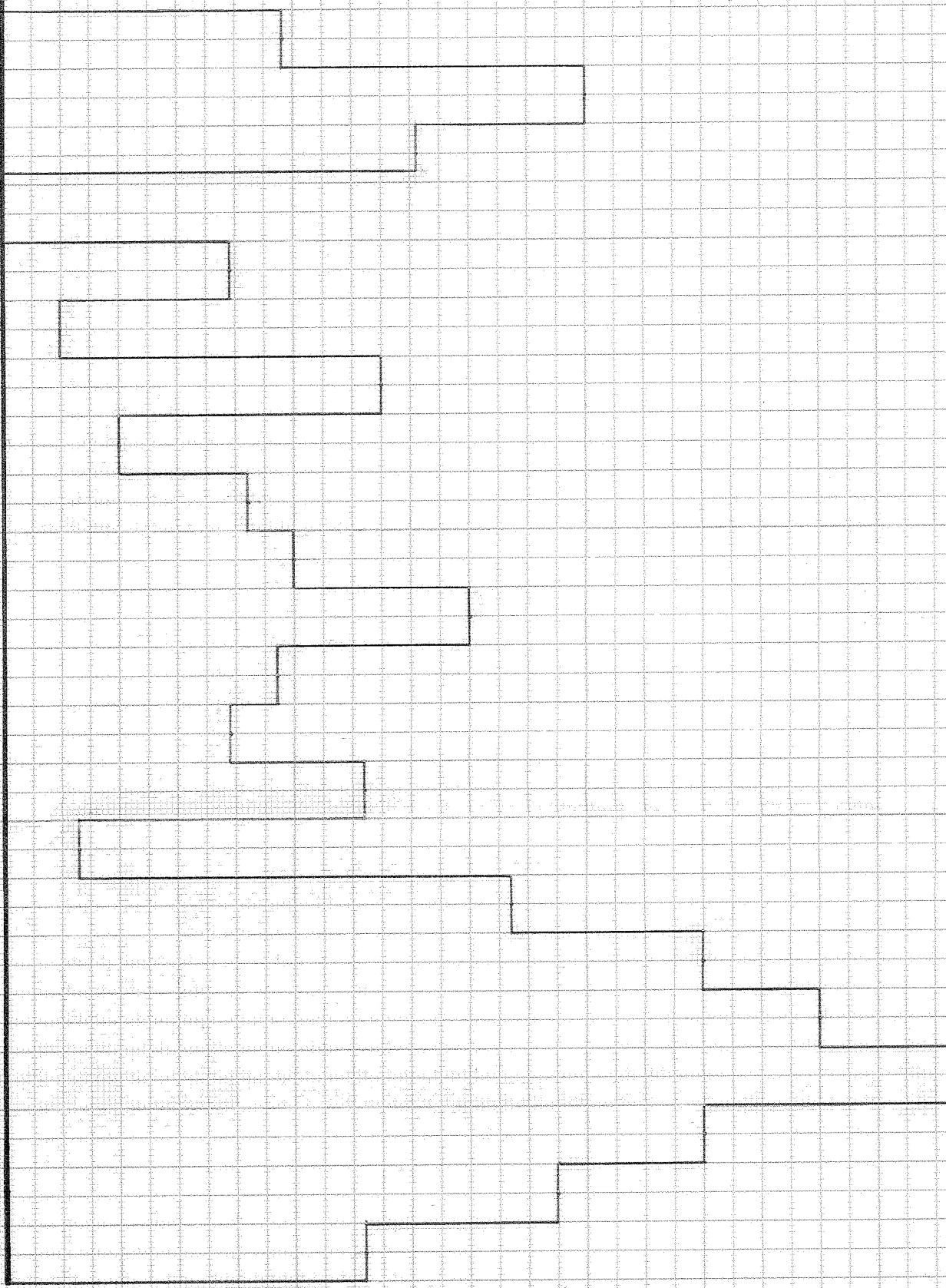
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KEY:
BREAK



RUSSELL OPERA

WOLFE LEASE

ANDERSON COUNTY, K

DEPTH INTERVAL	FEET OF CORE ANALYZED	AVERAGE PERMEABILITY MILLIDAR
863.0 - 880.0	13.8	4.9
880.0 - 887.0	7.0	11.3
863.0 - 887.0	20.8	7.0

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 SHALY SANDSTONE

OPERATING COMPANY

WELL NO. 0-1

ON COUNTY, KANSAS

AVERAGE AIR PERMEABILITY MILLIDARCYS	AVERAGE PERCENT POROSITY
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4.9	18.7
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11.3	18.9
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7.0	18.8
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CHANUTE, KANSAS
APRIL, 1968